



## TABLE OF CONTENTS

### ~ Foreword

### ~ Introduction

- Aerial View: An Introduction to the Project*
- Moving On: A New Model for the School*
- Couldn't We Learn This On A Sailboat?: Unique Qualities of Farm Schools*
- Raised Beds: Farm School Precedents*
- Apples to Radishes: How do We Compare Farm Schools?*

### ~Case Studies

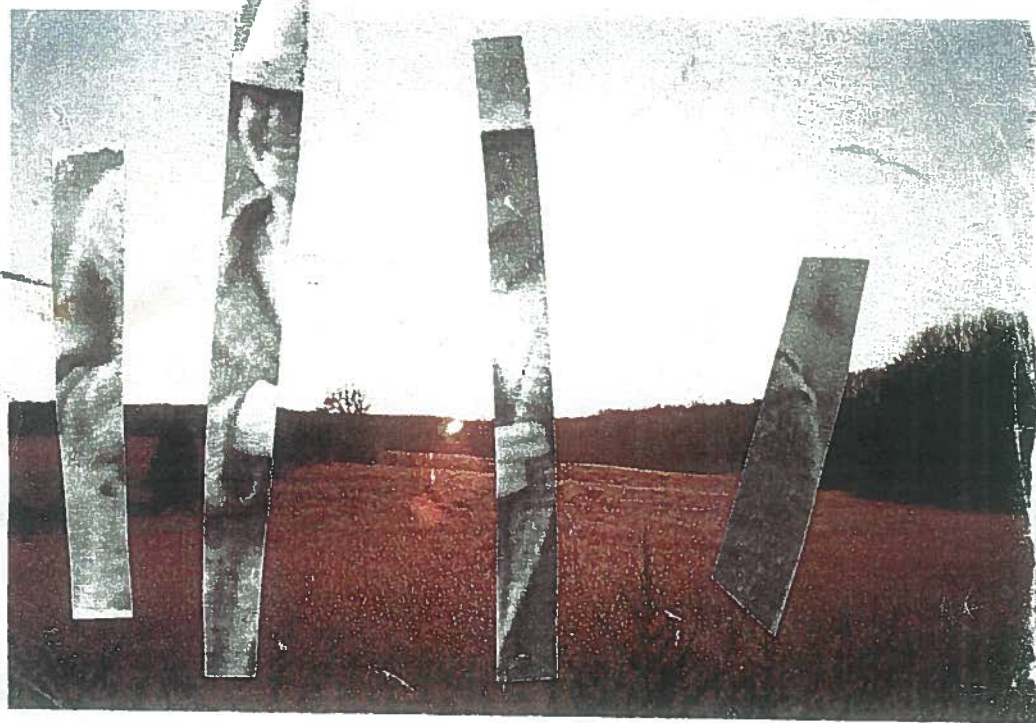
- Putney School, Putney, VT*
- Emandal: A Farm On a River, Willits, CA*
- School-to-Farm Program, Amherst, MA*
- Manhattan Country School Farm, Roxbury, NY*
- Pentridge Children's Garden, Philadelphia, PA*

### ~ Harvest: Distillations and Conclusions

- A Proposal for the Groundwork School*

### ~ Appendix

- A. A Directory of American Farm Schools Contacted or Researched*
- B. The MCS Plan for Tuition Reform in Private Schools*
- C. Schedule and Invitation, Fall Conference 2002*



## GROUNDWORK

Sarah Whitter  
Division II  
Hampshire College, Spring 2007



"To the garden, the world, anew ascending. . ."

-- Whitman, *Leaves of Grass*

"One of the advantages of being disorderly is that  
one is constantly making exciting discoveries."

A. A. Milne

"I cannot cause light; the most I can do is try to put myself in the path of its  
beam. It is possible, in deep space, to sail on solar wind. Light, be it particle or  
wave, has force: you rig a giant sail and go. The secret of seeing is to sail on  
solar wind. Hone and spread your spirit until you yourself are a sail, whetted,  
translucent, broadside to the merest puff."

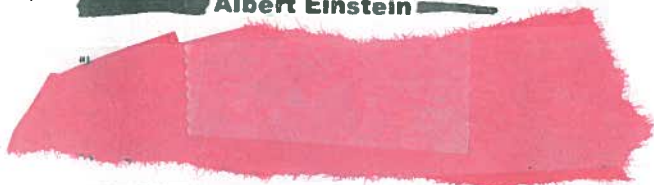
annie dillard, *a pilgrim at tinker creek*

"It is a miracle that  
curiosity survives  
formal education."

"Il faut cultiver notre jardin."

— *Candide*, —

— Albert Einstein —



It is important that students bring a certain ragamuffin,  
barefoot, irreverence to their studies; they are not here  
to worship what is known, but to question it.

--J. Bronowski, *The Ascent of Man*

"Wipe your hand across your mouth, and laugh;  
The worlds revolve like ancient women  
Gathering fuel in vacant lots."

-- Eliot, *Preludes*

"Acts of creation are ordinarily reserved for gods and poets,  
but humbler folk may circumvent this restriction if they know  
how." Aldo Leopold, *Sand County Almanac*



5-11  
started  
000

SPW  
2

### ***Aerial View: An Introduction to the Project***

I began this Division III project in an attempt to practically define education. I wanted to identify the elements that build a whole, functional person with the ability to interpret the world creatively and handle its challenges intelligently. I thought it was important, given my ambitions as an educator, to critically examine the guiding philosophies behind the institutions that shape our early lives. I sought to draw from them a constructive model for late childhood and adolescent teaching and learning, and in doing so I became aware of the potential of farm schools as effective vehicles for teaching. Farm based experiential education is one option in a rich, diverse range of innovations in progressive schooling; farm schools incorporate elements of several traditions, offering unique venues in particular for the manifestations of theories of experiential and interdisciplinary education.

Much has been published in pursuit of a pedagogical structure that educates youth to their full potential. For centuries, educators and philosophers have proposed alternatives the “reductionist” theory that is the foundation of this country’s schools. Reductionist schooling relies on the the belief that knowledge can be directly taught, that accumulation of data has to precede critical thinking about it, and that

behavior defines learning. It follows a specific program of skill acquisition and tries to cover as much material as possible during the schooling years.<sup>3</sup> Far from being an obsolete concept, reductionism in education is espoused today by many social theorists<sup>4</sup> and is put into practice in public and private American schools in countless ways. Reductionist methods could be said, for example, to be the foundation for our current standardized testing systems and rote memorization requirements.

However, educators have long argued that such learning is superficial, disjointed and inapplicable, rendering it an unworthy use of the formative years. As early as 1762, Jean-Jacques Rousseau promoted a method of education that encouraged the natural proclivities of the student instead of striving to eliminate them.<sup>5</sup> In 1901, Maria Montessori began revolutionizing schools in Europe with her efforts to promote the whole "education of human beings<sup>6</sup>" rather than the

<sup>3</sup> Davis-Seaver, J., Smith, T. and Leflore, D. *Constructivism: A Path to Critical Thinking in Early Childhood*. North Carolina, NC A&T University. International Journal of Scholarly Academic Intellectual Diversity, Vol. 7

Stone, J.E.. *Developmentalism: An Obscure but Pervasive Restriction on Educational Improvement*. TN, East Tennessee State University, 1996.

<sup>5</sup> Rousseau, Jean-Jacques. *Émile, ou l'éducation* (1762) Everymans Library, 1993.

<sup>6</sup> Rös, Herman. "Maria Montessori (1870 - 1952)" PROSPECTS: the Quarterly Review of Comparative Education (Paris, UNESCO: International Bureau of Education), vol. XXIV, no 1/2, 1994, p. 169-183

teaching of facts through lecture and repetition; her work brought about a Montessori school movement that today continues to build schools for the education of the "whole individual."<sup>7</sup> Thirty years later, John Dewey became famous for his claim that educators should provide students with valuable and immediately applicable experience in order to prepare them to be active participants in a democratic society.<sup>8</sup> Jean Piaget's pioneering constructivist theory, published in 1963, popularized the idea that intelligence is the capacity to adapt to one's environment<sup>9</sup>, and that organized education should function to build and stretch that capacity. Such educational theories have spawned movements of teachers, administrators, philosophers and researchers struggling to implement these concepts in practical ways in this country's schools. Some, like John Taylor Gatto (*Dumbing Us Down*, 1992) argue that schools as we have established them today are incapable of educating children's true natural intelligence.<sup>10</sup> Others, like Eleanor Duckworth (*The Having of Wonderful Ideas*, 1987) contend that schools can foster real intelligence as

<sup>7</sup> Stoneridge School Home Page, "Montessori Education."  
[http://www.cmschool.org/montessori\\_education.htm](http://www.cmschool.org/montessori_education.htm)

<sup>8</sup> Dewey, John. *Experience and Education*. NY, McMillan Press, 1938.

<sup>9</sup> Gruber, H.E. & Voneche, J.J. (1995). *The Essential Piaget*. Jason Aronson: Northvale, New Jersey

<sup>10</sup> Gatto, John Taylor. *Dumbing Us Down: the Hidden Curriculum of Compulsory Schooling*. VT, Capitol City Press, 1992.

Piaget defines it if they intentionally give children the time and opportunity to make discoveries for themselves.<sup>11</sup>

Such pedagogical theory, though it extrapolates important concepts and examines the nature of a key element of society, can be terrifically dry. During a long night of reading for my fourth or fifth ed theory course, I decided that I wanted to use my background in creative writing to produce a palatable, interesting account of my search for the perfect secondary education. At that time I had just begun work as a teaching aide in the school that would lead me to believe in farms as one of the most effective mediums for wholly educating youth. The two occurrences created my Division III in its current form: a deep dive into the world of farm schools, their culture, history, philosophies and modes of operation, which will ultimately inform a proposal for my ideal farm based school. The trips I took to gain an understanding of each of the case studies here examined were fascinating, and if I am successful I'll be able to communicate some of the alchemical elements of each place along with its basic educational philosophy and history. I believe the farm school model could play a crucial role in the reform of modern elementary and secondary education, and that our schools are in real need of such reform.

<sup>11</sup> Duckworth, E. *The Having of Wonderful Ideas, and Other Essays on Teaching and Learning*. New York: Teachers College Press, Columbia University, 1987.

## ***Moving On: A New Model for the School***

The current school system, I would argue, runs on a corporate model. From the hierarchical structure to the fluorescent lighting and semi coherent memos, from the adherence to formula to the focus on final product, our schools resemble nothing more than a huge nationwide company. What is the function of that company? Presumably, the production of new generations of creative, intelligent, sensitive Americans. However, in 1975, Martin Conroy argued that

“The substance of what is learned -- Plato, zoology, Silas Marner, quadratics, woodwork, and music appreciation -- is less indelible in the young person's mind than the other lessons which are taught and internalized. The student is taught and usually learns the importance of identification papers, records, tardy slips, no whispering to your neighbor, the acceptable dress, signatures, forms and tests. He comes to internalize the notion that papers are more important than the person himself. . . .<sup>12</sup>

His reaction, like those of his predecessors in the earlier progressive movement, was to the ineffectual nature of the reductionist schooling practice and its sometimes painful results in the lives of youth. The movement Conroy was part of inspired a scattering of Free Schools in this country and a

<sup>12</sup> Carnoy, Martin *Schooling in a Corporate Society - the Political Economy of Education in America*. NY, David McCoy Co., 1975 p. 25

youth movement toward self education and empowerment. However, he and other educational thinkers of that era were not successful in effecting real, lasting change in the mass of America's public schools. The same movement reiterated the progressive critique that our corporation style schools "function to preserve class structure. That is, they by and large exemplify a set of rules that operates in society to select people into various relationships defined relative to the productive capacity of the nation."<sup>13</sup> Clearly, this is not a noble goal, nor is it an end toward which most teachers and administrators would consider themselves to be working. Aren't we funding (or working in, or sending our children through) a system designed to help them absorb the culture their ancestors created, and add their own unique contributions? Doesn't school build a foundation for genius? Scholars of Dewey, Montessori and modern education theorists like Howard Gardner would argue that it does not, because it fails to provide space for inquiry driven, challenging, integrated work. "Students will not and cannot feel empowered if everything is done for and to them," one educator remarks. "If they have no opportunity to set goals design strategies, and feel responsible for these decisions, they will leave school with less than a feeling of confidence in their

<sup>13</sup> Muchelson, Stephan: *The Political Economy of Public School Finance* in Gross, Ronald, and Osterman, Paul, Eds. *High School*. NY: Simon & Schuster, 1971.

own ability to take control of their lives."<sup>14</sup>

As children become young adults, they absorb and process the environment around them hungrily, regardless of their surroundings. This is not the time to surround our kids with mediocrity, with tedium, with conformity. Yet that is the reality of the public school: a universally applied formula for "learning," state and nation wide standardized tests, frazzled teachers and distant, institutional administration. The differences between communities (and larger regions) become irrelevant in the mind frame of national school administration; we are all expected to absorb the same knowledge base in the same way. This absolves schools of the responsibility of incorporating local custom, culture, history and interest into curriculum, and erases much of what might be really useful for students from their schedules. Henry Levin attacks this approach in "The Case for Community Control of the Schools:"

"The school systems are so large that they cannot view themselves as being accountable to particular schools or parents, especially if those schools serve children whose parents lack political muscle. Since departures from tradition must usually be approved in the offices of the central school administration, bold and imaginative proposals for change are throttled by the

<sup>14</sup> Barell, J. *Teaching for Thoughtfulness: Classroom Strategies to Enhance Intellectual Development*. NY: Longman, 1991.

lack of decision-making power in individual schools and classrooms. In fact, the central school board's obsession for procedural order above other considerations has encrusted schools with a drab and uniform educational approach despite the large variety of educational situations and student needs that are actually present in large cities. To the degree that many of the methods, curriculum and personnel have not been appropriate and have failed to give minority children, in particular, the skills and healthy attitudes that the schools claim as objectives, the failure has become institutionalized and systematic."<sup>15</sup>

Though Levin's work is focused primarily on urban schools and minority communities, his point is widely applicable. The large-corporation-style nationalized curriculum and chain of command makes for a bland, largely irrelevant school experience. His comments are more than two decades old, but his assertions may be more worthy of consideration today than when they were first written. The last few years have seen a momentous trend toward "high stakes" standardized testing, approved by state governments and forced on schools statewide. The result? Teachers with virtually no room to individualize curriculum or incorporate democracy into their classrooms. In short, the corporate model American school

<sup>15</sup> Levin, Henry M. "The Case for Community Control of the Schools" p.256

system lacks the essential freedom that is supposed to be such a part of this country's ethos. A teacher in the public school system who worked with high schoolers for twenty-six years and earned the New York State Teacher of the Year award in 1992 wrote in 1992 that

... no one believes anymore that scientists are trained in science classes or poets in English classes. The truth is that schools don't really teach anything except how to obey orders. This is a great mystery to me because thousands of humane, caring people work in schools, as teachers and aides and administrators, but the abstract logic of the institution overwhelms their individual contributions.<sup>16</sup>

The plague of corporatized education is by no means limited to public schools. Students financially privileged enough to attend private and college preparatory schools often experience the same process, with more pressure and less opportunity for subversion or escape. So where in this structure is the opportunity to learn? John Dewey, father of the experiential education movement, contends that it is difficult to find.

"In critical moments we all realize that the only discipline that stands by us, the only training that becomes intuition, is that got through life itself. . .

But the school has become so set apart,

<sup>16</sup> Gatto, John Taylor. *Dumbing Us Down: the Hidden Curriculum of Compulsory Schooling*. VT, Capitol City Press, 1992.



so isolated from the ordinary conditions and motives of life, that the place where children are sent for discipline is the one place in the world where it is most difficult to get experience -- the mother of all discipline worth the name."<sup>17</sup>

The experience young people need to create a solid understanding of the world is missing in the great prison/office/warehouse of our school system, and much of the turbulence of our current culture can be attributed to that deficiency. Evidently, the corporate model isn't working.

In my teaching and research, I have come to the conclusion that a new model is both possible and necessary. In an excellent retrospective on his career with the Foxfire project, twenty-year veteran teacher Eliot Wigginton makes a fascinating analogy between the in-school behavior of young people and the documented reactions of asylum inmates during the "encompassing" phases of their institutionalization. Reading the kinds of reactions that studies revealed it is easy to imagine the high school equivalent of each archetype. The study highlights "conversion," in which patients begin to internalize the institutional norms forced on them; "intransigence," visible through continuous rebellion and resistance by an inmate;

"situational withdrawal," when a patient becomes numb or

<sup>17</sup> Dewey, *The School and Society*. "The School and Social Progress," Chicago: U of Chicago Press, 1971.p.17

truant; and "colonization," in which the patient adapts but continues to embrace a subversive "underlife."<sup>18</sup> The parallel should not be as clear as it is. These reactions are accurate descriptions of the condition of high school students easily recognizable in today's schools. Such dysfunctional coping should prompt educators to reflect that students need innovative learning experiences, even though creating a positively experiential learning environment can sometimes be "slow, cumbersome, time consuming and frustrating in the extreme."

We have established a society in which schooling plays a central role, and with a nation of working adults unable to take in their offspring as apprentices, as they might have done in an earlier time, abolishing school entirely is not only impossible, it is impractical. Young people have a natural desire to converge and learn from one another, and the accrued wisdom of previous generations doesn't need to be lost in a chaos of un-schooling. Important, enlightening texts have been written on teenage liberation<sup>19</sup> and self guided education, but not all students are equipped to make up a program entirely for themselves, and not all parents are available to guide them

<sup>18</sup> Wigginton, Eliot. *Sometimes a Shining Moment* New York: Anchor Books, 1986. p219 and 211

<sup>19</sup> Llewellyn, Grace. *The Teenage Liberation Handbook: How to Quit School and Get a Real Life*

through it. I contend that a worthwhile school is not an impossibility; the issue is simply that we need a new model. Some organization is necessary to give children and young adults the freedom to learn. John Dewey (in typically thick writing, but with a good point) expounds on this in "What is Freedom,?" from *Ethics in Education*:

I have no desire to add another to the cheap and easy solutions which exist of the seeming conflict between freedom and organization. It is reasonably obvious that organization may become a hindrance to freedom; it does not take us far to say that the trouble lies not in organization but in over-organization. At the same time, it must be admitted that there is no effective or objective freedom without organization. It is easy to criticize the contract theory of the state which states that individuals surrender at least some of their natural liberties in order to make secure as civil liberties what they retain.

Nevertheless there is some truth in the idea of surrender and exchange. A certain natural freedom is possessed by man. . . Organization tends, however, to become rigid and to limit freedom, In addition to security and energy in action, novelty, risk, change are ingredients of the freedom which men desire. Variety is more than the spice of life; it is largely of its essence, making a difference between the free and the enslaved."<sup>20</sup>

<sup>20</sup> Dewey, John. "What is Freedom?" *Ethics and Education*, John Dewey on Education: Selected Writings (R. Archambault, Ed.) Chicago: U. of Chicago Press, 1963

The challenge, then, is in finding a balance between autonomy and organization, a framework in which students can choose between a great number of positive influences and build their own understanding.

When Eliot Wigginton began his public school teaching career in the north Georgia Appalachian community of Rabun Gap, he became quickly discouraged by the lack of enthusiasm his students showed. His memoir recounts the signs of disrespect and disinterest: doodles, notes, yawns, even a knife buried in his lectern. In frustration, he began to list the kinds of classroom experiences that had made an impression on him, and was shocked to realize that he had incorporated no such experiences into the creation of his lesson plans. His list read like this:

- Times when there was a visitor to the class from the world outside the classroom
- Times when, as students, we left the classroom on assignments or field trips.
- Times when things we did, as students, had an audience beyond the teacher.
- Times when we, as students, were given responsibility of an adult nature and were trusted to fulfill it.
- Times when we, as students, took on major independent research projects that went far beyond simply copying something out of an encyclopedia, or involved ourselves in periods of intense personal

creativity and action.<sup>21</sup>

This kind of list is a solid start for those of us looking to change the way we think of school, and embrace the variety Dewey notes as being so vital. A number of alternatives that embrace integration of diverse subject matter through experience and challenge already exist; a thorough search of internet resources reveals a scattered network of charter schools, ecology and adventure wilderness programs, Waldorf and Montessori schools, arts academies, home schooling groups and traveling education programs. John Gatto calls such experiential choices “miniature, wonderful survivors of a strong and vigorous past.” But such institutions, he notes, are available “only to the resourceful, the courageous, the lucky or the rich.” More alternatives, open to and actively seeking diverse populations of youth, are necessary if we are to renovate a failing educational system. Gatto suggests

... a free market where family schools and small entrepreneurial schools and religious schools and crafts schools and farm schools exist in profusion to compete with government education. I’m trying to describe a free market in schooling exactly like the one the country had until the Civil War, *one in which students*

<sup>21</sup> Wigginton, Eliot. *Sometimes a Shining Moment* New York: Anchor Books, 1986.

*volunteer for the kind of education that suits them.*<sup>22</sup>

I agree with this proposal; I believe that in education, as in farming, diversity promotes strength and health. I have my own idea for a useful school model to replace the corporation, one way to move on from bureaucracy and tedium. I believe strongly in schools that reflect the qualities of the the diverse, small scale organic farm. That is to say, I believe in schools that offer a variety of things, act as important parts of the community around them, nourish in the way best suited to their locations and situations, and manifest the principle of learning a task by performing it. Ingenuity, resourcefulness, creativity and cooperation are key in such systems, as is personal responsibility. I am taken with the idea of schools with farms and gardens to offer their students, but schools that implement the principles of the small organic farm model need not be farm schools. Wigginton’s *Foxfire* program, for example, has had decades of success by engaging students in the process of interviewing natives and researching local history, folklore, art, ecology and practical knowledge to create and publish an extraordinarily popular succession of magazines and full-length books. Kayce Bryce Levy, a Hampshire alumni who graduated in 1997, articulated the principle Division III project. “As a

<sup>22</sup> Gatto, John Taylor. *Dumbing Us Down: the Hidden Curriculum of Compulsory Schooling*. VT, Capitol City Press, 1992.

goal-oriented and integrated approach to life," she contends, "farming is a remarkable model for education."<sup>23</sup>

Changing the way we envision schooling could bring about a new kind of school and a new role for youth, as will be illustrated in the upcoming case studies. Each successful new alternative school program established helps transform a system that lets much of the youth of America down. Joel Denker, who helped in the establishment of an early free school in the northeast, talks in an essay about the importance of "contagious examples,"<sup>24</sup> model programs whose very existence and success will help bring about change in the larger school system. These kinds of schools will thrive on the real experience of living and working in a community. They will have to embody the truth articulated in *How Children Fail*: "Knowledge which is not genuinely discovered by children will likely prove useless and will soon be forgotten."<sup>25</sup>

<sup>23</sup> Levy, Kayce B. *Seeding, Spinning, Splitting: Cultivating Valuable Experience for Youth through Farm-Based Education*. Hampshire College, 1997.

<sup>24</sup> Denker, Joel: "Boredom, Utopia, and 'Unprofessional Conduct'" from *High School*

<sup>25</sup> Holt, John: *How Children Fail*. NY, Pittman, 1964.

## ***Couldn't We Learn This On A Sailboat?: Why Farm Schools?***

"There are two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery and the other that heat comes from the furnace."

- Aldo Leopold, "February"<sup>26</sup>

As I said, a school on the diverse organic farm model does not necessarily need to be a school on a diverse organic farm. However, I see growing food as an affirmation of life and health and a uniquely relevant vehicle for learning. There is a growing movement of educators who think the same way, embracing farms and gardens as settings for real work, real learning and real community. In the opening remarks of a conference I held for representatives of farm based education programs, I drew together examples of the correlation between the work of teachers and that of farmers:

I have found during this project that both must have an understanding of the work they do in the context of a larger time scale (next summer's harvest or the health of the soil in five years, or the emotional growth of a child or the development of his or her interest in natural science or architecture or cooking.) Both require patience, long hours, and a sense of humor. Both pay mostly in intangible rewards. As a beginning farmer or :

<sup>26</sup> Leopold, Aldo. *A Sand County Almanac*. Ballantine Books, 1951.

beginning teacher, the best way to gain skill is to apprentice to someone who has been doing it longer than you have and start doing the work. We are all growing something we know is important.

Small farms are an ideal environment for a community and an individual to grow. They are not the only road to meaningful education, but they are certainly an exciting alternative to the banality of the current American school. Though a small organic farm in today's agri-business economy is a risky investment, and, some would say, a bit of an anachronism, I believe it presents a way to connect students to life on a human scale. Kayce Levy's Division III details the possibilities of farm work as educator and empowerer of youth. She gives a series of examples of the farm in this role: the garden as a venue for getting dirty and sweaty, straining for and subsequently appreciating the offerings of opened ground; picking apples as a physical challenge with more tangible purpose and less competition than most sports; baling hay as a lesson in responsibility for animals and a great builder of students' appreciation for a cold pond; spinning and weaving as a quiet space for reflection and creativity; milking as a life lesson about reproduction, nutrition and strength. She points out that in these ways and many others, farms have a distinctive way of teaching cooperation, respect, self-reliance,

and problem-solving in addition to illustrating academic lessons.<sup>27</sup> In a section in the influential 1973 book *The Environmental Classroom*, authors Donald Hawkins and Dennis Vinton discuss the essential qualities of a school that effectively connects children to their environment. The passage sounds like a prescription for a farm based program:

Learning environments should be designed to accommodate persons at all stages of life, for learning should be a lifelong activity. . . should provide access to relevant information - that is, information about all of man's environment by enabling the learner to have experience out in the environment and by bringing in as much of the environment as possible. . . should be accessible to the total community. . . needs to be open, flexible, and conducive to diverse learning styles . . . should facilitate the acquisition of broad concepts rather than narrow facts. . . activities should be experience-oriented, problem-solving investigations rather than dull, repetitive exercises. . . encourage the development of skills that enable human beings to be productive and happy members of society, to find pleasure in both work and leisure, to exert a measure of control over their environment. . . should be staffed by learning facilitators (professional and nonprofessional) who value individual worth.

All resources in the environment should be viewed as learning resources and should be built into the

<sup>27</sup> Levy, Kayce B. *Seeding, Spinning, Splitting: Cultivating Valuable Experience for Youth through Farm-Based Education*. Hampshire College, 1997.



learning environment. . . should unify or transcend the separate disciplines and focus on sensory stimulations and development. <sup>28</sup>

The work of a farm is also a much needed reality in the lives of secondary students, a place for tangible struggle and reward. Peter Marin's "the Fiery Vehemence of Youth" maintains that

In few other cultures have persons of fifteen or eighteen been so uselessly isolated from participation in the community, or been deemed so unnecessary (in their elders' eyes) or so limited by law. . . They are trapped in the way we see them"<sup>29</sup>

The feelings of futility, detachment and frustration created by a worksheet curriculum begin to dissipate in the context of a working farm, where everyone contributes in a variety of ways for the benefit of the larger community. In Thomas Green's *Work, Leisure and the American Schools*, the author hypothesizes about our progress as a society away from the need for physical work, posing the question of how, "without abandoning the riches of that tradition, we are to think about work in a world in which the central fact of human life is

<sup>28</sup> Hawkins, Donald E. and Vinton, Dennis A.: *The Environmental Classroom*. Prentice-Hall, 1973 p. 139

<sup>29</sup> Marin, Peter. "The Fiery Vehemence of Youth" from *High School* p.33

leisure."<sup>30</sup> Though I would disagree with the assertion that we will eventually evolve completely beyond the need for manual labor, it seems important to observe that for many students, a grounding in farm work will be a unique opportunity in their lives to see the work of their bodies so directly affecting the well-being of the group.

The farm brings abstract ideas into perspective in endless opportunities for exploration. John Dewey's writings describe the necessity of designing the learning environment to facilitate discovery:

It is certainly as futile to expect a child to evolve a universe out of his own mere mind as it is for a philosopher to . . . Development does not just mean getting something out of the mind. It is a development of experience and into experience that is really wanted. . . . The problem of direction is thus the problem of selecting appropriate stimuli for instincts and impulses which it is desired to employ in the gaining of new experience. <sup>31</sup>

The backdrop of a farm creates space for inspiration; even the garden in the center of the city makes room for ideas to be proven or disproved and new creations to be invented. There is a full range of experiences to be gathered and processed and an

<sup>30</sup> Green, Thomas F. (Syracuse University) *Work, Leisure, and the American Schools* NY: Random House, 1968.

<sup>31</sup> Dewey, *The School and Society*, "The School and Social Progress," Chicago: U of Chicago Press, 1971.p.349

endless need for problem-solving skills. As Eleanor Duckworth notes in "The Having of Wonderful Ideas:"

The having of wonderful ideas, which I consider the essence of intellectual development, would depend to an overwhelming extent on the occasions for having them. . . The greater the child's repertoire of actions and thoughts -- in Piaget's terms, schemes -- the more material he or she has for putting things together in his or her own mind.<sup>32</sup>

The material Duckworth refers to in this passage is abundant on a farm; there are lessons in every facet of daily life. The magic of photosynthesis, the politics of food, the aesthetic resonance of zinnias, the art of cooking, and the chemistry of compost production come up naturally in the course of a morning to be examined, processed and explored.

The healing power of the rhythm of farm life is not just the stuff of "back to the land" clichés. Thomas Green's philosophy assures "that the quiet of winter will emerge into spring and spring into the fullness of summer is perhaps as solid an expectation as any we possess."<sup>33</sup> When students invest labor, time and thought in projects and see them naturally

mature, they replace the disjointed collage of a traditional school's work with a continuity unique to the farm environment. There is strength in that continuity, particularly given the unpredictable, packed, turbulent nature of modern life for children and adolescents. I am not exhorting farm schools as the ultimate possibility in education, nor am I ignoring the realities of financial struggle, hard work and unpleasant smells that characterize farm life. Nonetheless, the romantic view of the idyllic farm, the hymns to nature and the spirituality clichés aside, work on a farm is grounding. Through it, I have seen students calm fears, exorcize trauma, strengthen self-esteem and come to terms with the world around with them.

<sup>32</sup> Duckworth, Eleanor: "The Having of Wonderful Ideas" NY, Columbia Press, 1996

<sup>33</sup> Green, Thomas F. (Syracuse University) *Work, Leisure, and the American Schools* NY: Random House, 1968.

### ***Raised Beds: Farm School Precedents***

This generation is not the first to realize the benefits of farm programs, or to establish schools around the farm or garden center. Widely variant groups have begun farm schools in the past, with aims ranging from the rehabilitation of adjudicated youth to the training of young ministers. Marjory Coward's 1998 Harvard Divinity School thesis, *Farm Schools: Journeying Toward a New Mission for Learning and Labor*, outlines the missions of several key early American farm schools, revealing multiple of missions and methods. Though an organic farm school operating in this era must be creative and resourceful in its financing to get by, Coward points out that when some farm schools began at the beginning of the nineteenth century, "the endeavor of beginning a school located on and integrated with a farm was a very different type of project. The population being served by the school, the goals of the school, and the patterns of American life and subsistence, made the inclusion of a farm a practical decision."<sup>34</sup> Oberlin College in Ohio, Warren Wilson College in North Carolina, and the secondary Northfield Mount Hermon School in Massachusetts exemplify schools that were founded to serve underprivileged rural youth by using their farm labor to offset

<sup>34</sup> Coward, Marjory O. *Farm Schools: A New Mission for Learning and Labor*. Harvard Divinity School Sr. Thesis, 1998.

costs while building students' character. These three institutions were begun as missionary endeavors, attempting to establish low cost, self-sustaining learning communities while producing "Christian citizens who were strong in spirit, mind, and body."<sup>35</sup> Later farm schools have begun in the progressive tradition mentioned in the section above, independent of pious ideals but driven with similar zeal by founding principles of experience and labor as valuable educators. This category includes progressive activist Carmelita Hinton's brain child, the Putney School, opened in 1934 on Elm Lea Farm, as well as the Manhattan Country School, founded decades later but embracing a similar ethos (these two schools will be discussed in the Case Studies Section to follow) and the Mountain School, opened in Vermont in the 1970s.

Some of these original American schools failed. Oberlin, for example, abandoned its farm and Manual Labor focus after two decades, realizing that the farm could no longer effectively help offset costs. The Northfield Mt. Hermon School's farm has become largely peripheral to the school's academic activities, serving as background more than curricular focus. Other schools have held on to their farms, using them both as teaching tools and revenue raisers. All the schools have evolved through the years, with their farms and gardens

<sup>35</sup> Ibid

adapting to the forces of culture, administration and climate. My mission in this project was to reflect, like Marjory Coward in her thesis project, on the functions of these farm schools for their student populations and their societies, while expanding the boundaries her project used to include grassroots community garden movements, summer farm immersions, and any other programs I could find that used food production to facilitate students' development as people. I wanted to use this Division III to help all such programs be recognize and connect to one another, as I drew from them those ideas that seemed to work best.

In an effort to create a working definition of farm schools and a mission for my ideal farm school, I explored as many of them as I could, taking the the role of visitor, intern, teacher and student. Halfway through my field study in November of 2002, I was able to organize a conference of farm school representatives from the northeastern and New England states, where directors, teachers, farm employees and students from around the region gathered to discuss the real challenges and benefits of farm based education. I will use some of the questions we addressed in the following case studies, and some of our major conclusions in my final section. I will try to give as complete a description of each case study facility as I can, and

draw together the elements that unite them to define some of the crucial components of a farm school.

### ***Apples to Radishes: How do We Compare Farm Schools?***

In my attempt to identify the essence of a farm school I visited a diverse sample of educational farm and garden programs. I researched facilities scattered across the United States, widely varying in curriculum and philosophy and concerned with all different kinds of food production. The in depth case studies in this Division III include a children's summer camp, a secondary special education program, an urban community garden, a progressive middle school and a wealthy New England boarding school. The wide range is intentional. The unifying factor is this: they all use food production to inspire growth in students. In putting this project together, I wanted to look analytically at any kind of program that could be said to use agriculture as a vehicle for youth education. I went to, stayed at and taught in as many different places as I could, trying to get a feel for the way that they engaged their disparate target populations with their individual programs.

To gather up and knit together such dissimilar case studies, I decided it would be necessary to use a template of

common facets to be explored. Outside of the basic facts about a program ( name, philosophy, history, funding, curriculum, location, major resources, staffing, and student population • makeup) I wanted to identify what works and what doesn't work within each program according to certain criteria that I see as essential. Each case study, then, will include analysis in each of the following categories.

### Introduction of a Land Ethic

*It has never been our national goal to become native to this place. It has never seemed necessary even to begin such a journey. And now, almost too late, we perceive its necessity.*  
- Wes Jackson

I tried to view the schools I worked in through the lens of what Aldo Leopold referred to as a "land ethic" in his 1949 *A Sand County Almanac*. Each program I studied manifested a unique environmental consciousness through a different kind of community. Leopold explains that when respect is fostered for one's community, "the land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land." He goes on to discuss a relevant juxtaposition that has only grown in this country since the time in which he was writing.

This sounds simple: do we not already sing our love for and obligation to the land of the free and the home of the brave? Yes, but just what and whom do we love? Certainly not the soil, which we are sending helter-skelter downriver. Certainly not the waters, which we assume have no function except to turn turbines, float barges, and carry off sewage.

Certainly not the plants, of which we exterminate whole communities without batting an eye. Certainly not the animals, of which we have already extirpated many of the largest and most beautiful species. A land ethic of course cannot prevent the alteration, management, and use of these 'resources,' but it does affirm their right to continued existence, and, at least in spots, their continued existence in a natural state.<sup>36</sup>

This apparent conflict between our country's patriotic sentiments and its disregard for our natural resources can be overcome, some theorists argue, by working to make youth more environmentally literate<sup>37</sup>.

I believe that an educational program that encourages a land ethic is indeed a force for positive change, provided that it teaches through experience rather than dogma and avoids the pitfall of environmentalist self-righteousness. I want to discuss

<sup>36</sup> Leopold, Aldo: *A Sand County Almanac, and Sketches Here and There*, 1948, Oxford University Press, New York, 1987, pg. 204.

<sup>37</sup> Rhodes, Debbie (Dir., Natural Legacy) "In Case You Forgot: The Reason for Environmental Education" Citizens' Environmental Coalition *Environmental Exchange*, Houston, June 2002



the extent to which, in each case study, the farm schools makes decisions in the best interest of the land. I am also interested in how successfully they communicate the tenets of environmental awareness without preaching to their students. Effective incorporation of a land ethic into curriculum can bring about hope for a damaged ecosystem and its inhabitants in the generations to come.

### **Interdisciplinarity and Use of Resources to Develop Multiple Intelligences**

Educational theorists use the term "interdisciplinary" to describe a style of teaching that incorporates different categories of learning or traditional subjects (e.g., history, art, science, language arts) in a lesson focused on one central theme, like food production. Such curricular arrangement is a reaction to the research of Piaget, who discovered in his experiments the ability of students to understand "schema" (units of information) better as part of a unified whole. Subsequent theories have expounded on this, developing ways for teachers to engage students in learning through practical problem-solving and critical thinking about the world. In such a curriculum, students are able to see a subject from many angles, which gives them precedent for the real problems and challenges of modern

human life.<sup>38</sup> It is rare in the world that an issue is as one-dimensional as, for example, the standardized lesson plan of a public high school civics class or biology lab. Interdisciplinary teaching embraces the notion that an integration of fields of study will lead to a more complete understanding of subject matter and, in turn, to a more wholly educated student. I see farms and gardens as an ideal place to cross and meld disciplines and establish a unity of subject.

Intertwined with the idea that subjects are multidimensional is the concept of a student as a multidimensional learner. Piaget and the "differential perspective" theorists who followed him informed the work of Howard Gardner, who describes learners as intelligent in myriad ways. Gardner rejects the prevalent notion that what he calls "logico-mathematical" intelligence is the only real or important one, listing alongside it linguistic, bodily-kinesthetic, spatial, musical, interpersonal, and intrapersonal intelligences. In the last few decades, the theory he popularized has been a catalyst for change in school programs, attacking a system that rates students on only one facet of their wide range of ability and encouraging them to design curriculum around all the

<sup>38</sup> Carlisle, Barbara. "The Community Discovered: Why Interdisciplinary Teaching?" Virginia Tech, July 1995

diverse strengths of the individual.<sup>39</sup> I see Gardner's approach as applicable to a farm setting, where a variety of tasks call for different kinds of strengths and appeal to sundry interests

I would like, in these case studies, to explore the ways in which each program endeavors to inspire the different kinds of intelligence and to evaluate the interdisciplinarity to be found in their teaching and learning styles.

### Traditional Academics

The farm experience can help provide a firm grounding for the concepts of a liberal arts education. It can aid students as they learn the basic facts and stories that comprise their culture and begin to evaluate them critically. The farm serves as a tangible manifestation of large, abstract concepts like labor, hunger, interdependence, beauty and mortality. I don't believe that working a farm precludes the development of a rounded academic education; rather, it gives solid context to lessons of philosophy and science, history and poetry. I will use these case studies to examine the role of the farm school in bringing about real learning in the traditional academic subjects.

The following portraits of farm school environments will address the ways that a farm or garden program enriches or

<sup>39</sup> Gardner, Howard. *Frames of Mind: the Theory of Multiple Intelligences*. New York: Basic Books, 1985

informs the teaching of subjects like math, biology, literature, music and language arts, and their success in investing students with what Dewey calls "the funded capital of civilization."<sup>40</sup>

### Personal Development

The goal of schooling in our society is purportedly the growth of students into intelligent, able adults, capable of successful interaction with their environments, tenets established by early theorists of education like Robert Merton and August Comte.<sup>41</sup> Schooling should therefore instill the important lessons accrued by a society while at the same time preparing a student for life in that society, meaning that the school should be a space that encourages development of a whole individual. Holistic thinkers from Maria Montessori to Rudolph Steiner have included personal development in their descriptions of the aims of an education.

Such personal growth can be prompted by all kinds of experiences, from construction work to semesters on the ocean to weathering the tribulations of twelve years of public school. It is promoted by a farm program (mentally, emotionally and

<sup>40</sup> Dewey, John. Article I -- "What Education Is." *Am I Getting An Education?* Garden City, NY: Doubleday, 1929.

<sup>41</sup> DeWalt, Karen. "The Educational Theory of Auguste Comte." New Foundations, 2000.

physically) through the challenges of working the land, caring for other beings and functioning as part of a community.

The encouragement of personal growth and a sense of self and self worth does not necessarily imply an inordinate softness of curriculum, or an "I'm okay, You're okay" mentality, as Andrew McLaren asserts in "Fitting the School to the Child."<sup>42</sup> Competition, challenge and sometimes conflict are the elements which most effectively function to spur growth within the student. One modern analyst of experiential educational theory phrases it this way:

Intelligence. . . is not an innate given; it is a developed habit of inquiry, reflection, and problem-solving or adapting to an environment; it is the result of attempting to overcome problematic, threatening, and unstable characteristics of experience. Human beings, in the face of precarious situations, work out conceptual frameworks and instruments or tools in order to make these situations more stable and reliable.

Intelligence is the human instrument for adapting to, altering, and refining one's transaction with the environment. Intelligence is for life and the enhancement of life; it is directed to improving the quality of experience.<sup>43</sup>

Applying this principle to curriculum, the farm school

<sup>42</sup> McLaren, Andrew J. , "Fitting the School to the Child: Some Principles of Progressive Education," *Parents League Review* (1995).

<sup>43</sup> Gordon L. Ziniewicz. *John Dewey: Experience, Community, and Communication* 1999

presents a unique opportunity to build and shape intelligence. There are avenues for growth in all different realms: physical work engages the body, experiences with life and death spur contemplation, and a community at work together teaches cooperation and conflict resolution. I would like to evaluate these case studies as vehicles for students' personal growth, and analyze their success in facilitating positive metamorphoses in youth.

### Reality and Applicability

*"The school must represent present life-- life as real and vital to the child as that which he carries on in the home, in the neighborhood, or on the playground. . . education which does not occur through forms of life. . . is always a poor substitute for the genuine reality and tends to cramp and to deaden."*

-- John Dewey

This project will attempt to examine each program's goals and guiding attitudes, identifying what drives each farm school to operate the way that it does. Since I have taken an interest in alternative schooling, I have observed a phenomenon that I believe presents a handicap to real learning. It is a style of teaching and administration that has been described in a number of ways: white bread, campy, cutesy, disneyfied, cheesy, corny. However phrased, it relies on self satisfied, white folk

culture clichés to enlighten youth. Though I realize that this category is subjective, I want to include some assessment of the degree to which a school caters to that population of children whose income is higher than average and whose last names are probably hyphenated. In many situations, including that of Hampshire College, I have noticed the tendency of alternative schools to foist old hippie culture on students to whom it is foreign and irrelevant with a certain missionary zeal. I don't want to say that the wealthy and/or liberal parents of this country don't have the right to seek an innovative education for their children or teenagers; I simply feel that much of the progressive schooling that goes on in this generation is geared toward students of that class and income. I believe that effective programs should strive to include a variety of students of differing political, financial and racial backgrounds that genuinely reflects the world beyond the farm school. I want to note in analyzing each program whether they confront issues of race, class, and inequality directly or gloss over them to avoid conflict. Because a farm is a space in which all students can share responsibility and divide work equally, it is an ideal place to address differences of background without perpetuating injustices.

I am also interested in tracking the change that a farm

school spurs in a student's life. Will the resource of a farm school help a child find his place in the world beyond the facility? Will he be able to apply the realizations of his schooling years to his actions as an adult? A program should graduate students not only with the motivation to make positive change in the world, but with a sense of humility, tolerance, and balance that will allow them to effectively employ that motivation. It should also ingrain some of the skill and knowledge base that is relevant to the work a student may pursue in his life, which may be a more plausible goal in the context of a farm school than in a traditional classroom.

### Community/ Democracy

*If we have equality and nothing else -- no compassion, no magnanimity, no courtesy, no sense of mutual obligation and dependence, no imagination -- then power and wealth will have their way; brutality will rule. -- Wendell Berry*

In the pursuit of a school's vision, I have seen administrators run a program without assigning any autonomy to the faculty and staff who support them. This creates the kind of hierarchy and hostility that can poison a school environment, and introduces one of the worst elements of human society into what should be a safe space for expression

and growth. The researchers at Stanford University's School Redesign project found that

Many schools have achieved their success by ensuring that teachers – and often parents and students as well – have a voice in governance. There is evidence that teacher participation in school decision-making can lead to improved academic achievement for students (Smylie et al, 1996). Democratic decision-making at the school level models the collaborative work that effective teachers expect from their students (and indeed the democratic process of the larger society) and enables small schools to make significant improvements in their practice with the full endorsement and engagement of all members of the school community.<sup>44</sup>

In a strong farm school, as in any strong school structure, decision-making should be shared among teachers (and students and parents.) Community, camaraderie and humor should be encouraged to grow without being forced on a staff; condescending positivity and forced group bonding can kill morale, while allowing school employee's relationships to grow out of the shared experiences of hard work and laughter can make a school great. The same can be said of student relationships, to a different degree. Though sometimes subversive, the bonding behaviors of students are what get them

<sup>44</sup> School Redesign Network at Stanford University:  
<http://www.stanford.edu/dept/SUSE/csm/features/democratic/>

successfully through the school process and help them understand the particulars of human relationships.

I will look at each program that I studied in the light of its willingness to facilitate relationships among their staff and students in healthy, realistic ways, and I will discuss the ways it promotes community through creativity and shared work.

### **Social Justice**

Farm schools in all kinds of settings can be powerful forces in the communities around them, helping promote social change and community growth both practically and politically. The school in a neighborhood, county, city or country is a political entity in itself, capable of helping and contributing to its society in unique ways. The convictions of students and teachers can be manifested in the every day actions and decisions of a farm school to make it a positive force in the community around it, which at once improves the quality of life in the school's surroundings and teaches the students the import of their actions as citizens.

Karen Pittman of the International Youth Foundation contends that "young people, whether from South Africa, Latin America, Eastern Europe, or the United States, have been and perhaps always will be champions of social justice." This, she



says, can be attributed to their newly developed independent morals, fierce sense of right and wrong, and momentous energy.<sup>45</sup> When this energy is directed toward positive change, a farm school can be a model of social justice in itself and a benefit to its environment.

Farms can be teaching tools and meditative spaces in the struggle for social justice, and schools can help channel their force into creative action. This Division III will investigate the ways that these programs use their resources to positively impact in their spheres of existence.

## Conclusion

Each case study, then, will use these evaluative standards:

- \* The success of the program's incorporation of a *land ethic*,
- \*The program's use of *interdisciplinary teaching opportunities and appeal to multiple intelligences*
- \* The program's incorporation of *traditional academic subjects*
- \* The program's facilitation of *personal development*
- \* The program's adherence to *reality* and its *applicability* in students' lives,
- \* The program's commitment to *community and democracy*,

<sup>45</sup> Pittman, K. and Irby, M. "Education for Activism." CYD Journal, Summer 1999, reprinted in *International Insights*

and

- \* The program's work toward *social justice* within itself and in its surrounding community.

Though these categories are broad and deep, I hope they will bring some unity to this constellation of farm based education programs and introduce some common critical themes. Beginning with these criteria, this project will extract from the following case studies what makes a farm school function successfully.

C

p

le

48