

Blackwood Land Institute: An Adolescent's Prepared Environment

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Every 6 weeks a caravan consisting of a school bus, van, truck, and car, with 60 adolescents and adults, departs the parking lot of School of the Woods. The middle-school class travels to its home-away-from-home: The Blackwood Land Institute. Blackwood is a prepared environment for adolescents similar to the Erdkinder environment described by Maria Montessori (1948/1976) in the appendix of *From Childhood to Adolescence*. Blackwood, which is owned by Cath Conlon, is 23 acres of land with three ecosystems. It offers an opportunity for experiencing interdependence, the permaculture approach to care of the land, a place of meaningful work, having fun with their peers, and a schedule that allows for a rhythm more in tune with nature and free of the artificial lights, "recycled air," and noisy day-to-day, 9-to-5-scheduled life of the city.

This prepared environment began with the brainstorming of ideas with Cath Conlon and the staff from St. Stephen's Episcopal School, where Cath's son was enrolled. School of the Woods was soon involved in the chance to enjoy this unique environment, and now other Montessori schools in Houston and other parts of Texas have the opportunity to participate in this experience. The work on the land is based on the perma-culture or sustainable philosophy, which began in Australia and is now a recommendation of the United Nations. The theory has many parallels to the Montessori philosophy. There is a strong infrastructure of "fire, wind, and water" paths created within Blackwood, just like the hidden structure in



The house and gardens at the Blackwood Land Institute were created almost entirely by middle-school students.

the classroom which is invisible to the visitor. The land is the teacher, and it is our responsibility to learn to listen and respond to the needs of the land.

Why did Dr. Montessori think places like Blackwood were a prepared environment for adolescents? Montessori believed that adolescents, as preparation for entry into society, should experience an environment which allows a microcosm for learning interdependence, life skills, problem-solving skills, adaptability, environmental awareness, and giving back to others. Students make major decisions and are able to see quickly the consequences of their actions. Though many people may fear that this opportunity for adolescents results in their missing out on academics, Montessori believed that the hand and the head must be working collectively and that a balanced person prepared for life knows how to use both.

In traditional middle schools, students change classes approximately every 45 minutes. It takes

valuable time to travel to the next class, take attendance, and then pack up again for the next change. The time used for this activity is about 1 1/2 hours (1/3) of the day, or 1 week out of every 6. At School of the Woods, students have two large blocks of uninterrupted work time each day: morning work period, lunch, and afternoon work period. With this schedule they waste very little time; thus they "earn" 1 week every 6 weeks to continue to learn in another environment, where they can gain many skills not available in the classroom. Montessori noted that most students do not need a vacation from school, but rather a change in pace.

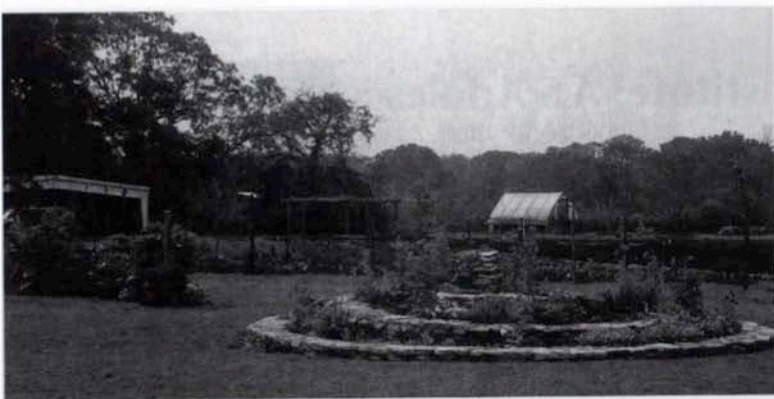
The students began going to Blackwood 5 years ago. At first there was no water or electricity. They camped in tents, built structures to meet their basic needs (e.g., outhouses, water collecting system), and introduced nitrogen-fixing plants to rebuild the soil (a community project with St. Stephen's). Then students decided on what structures were still needed. In 4 years, the Woods



Straw bales were used to build the 5,000-square-foot house, with the students assisting. One can grow three such houses in 1 year, as opposed to a wood-frame house, which takes about 30.



In the first 4 years at Blackwood, the students built this chicken coop, plus outhouses, water collection system, treehouse, Native American sweat lodge, pond, greenhouse, and gardens.



One student project was the spiral rock garden, with the greenhouse visible in the distance.



Varied insects love the butterfly garden.

Middle School students built a greenhouse, a Native American sweat lodge, a treehouse, gardens, butterfly gardens, pond with solar fountain, orchard, natural nursery, cut-flower garden, fences, beehives, and chicken coop. Simultaneously, a 5,000-square-foot bale house was built with the students' assistance. Straw bales were used because they are a regenerative material: one can grow three straw bale houses in 1 year's time, versus one traditional wood-frame house over 30 years; humans must be mindful of how we use our natural resources.

Now that the basic needs have been met, the focus in the next years will be the addition of an economy, with businesses such as making herb soap, gathering eggs and honey, canning, selling produce, and other ideas not yet created. In a sense, the students are recreating the developmental steps of a society and reviewing the elementary history curriculum they had already experienced in theory. Another major goal is for the students to be connected with the community. Some have done a study of the cemetery nearby and will offer their research to the local courthouse. Also, some of the produce is sold to organic restaurants, while some is given to soup kitchens.

A Typical Day

The caravan makes its departure from the school on Monday morning and returns on Friday afternoon. The typical day begins with breakfast available at 7 a.m. Students have developed schedules for bathroom use, meal preparation, and housekeeping tasks. Community meeting begins at 8:15, led by the students. Community meeting is a short period of time in the morning, when students get together with an agenda that includes acknowledgments, sharing, schedule of the day, announcements, and any problem-solving and group decision-making. Then everyone is off to the morning work. Half of the students have class on the porch, and the other half are off to outside work. During midday, students have lunch and time for personal reflection and rest. For the afternoon, those who have been in the classroom go to their field work, and the ones from the field switch to the classroom. At 3, students have free time until dinner at 6. There is a community activity and snack in the evening, and then at 10 it's into the dorm rooms, where everyone is tired and falls asleep easily.

The field work projects are determined at the beginning of the year, when Cath and Val

Luquot, the assistant director, come to the school classroom with ideas about what the land needs. Students dialogue about their interests, and eight projects are chosen, with six to seven students committed to each, plus the land and building maintenance. Each project will take a year to accomplish. Students bring their ideas and are able to add their creative thoughts to the design. They do the actual work on the projects during their stay, with the help of specialists, and do additional research back at the school campus in between visits, with the help of core teachers. All of these projects implement math, geometry, and life science skills, and best of all show the integration of areas. For instance, the students who built the greenhouse know everything about the Pythagorean theorem and how it is used in everyday life. The fence builder group has an in-depth knowledge of geometry; and the beehive group knows a tremendous amount about bees, bacteria, botany, and hives. Students become experts in various areas. These long-term projects allow adolescents to experience delayed gratification and create an awesome project that leaves a legacy—two accomplishments that are hard to provide in a campus classroom.

Along with their outside work, students also do classroom work, for half a day, that is designed to be different and a change in pace from usual classroom work. Time is taken for Socratic discussion on books such as Montessori's *To Educate the Human Potential* (1948/1967) and the appendices of *From Childhood to Adolescence* (1948/1976), and Brian Swimme's (1996) book, *The Hidden Heart of the Cosmos*. The botany, pond study, and astronomy curricula are done at Blackwood. Blackwood is a site for the GLOBE curriculum sponsored by NASA and the National Science Foundation. Water, air, and soil samples are tested according to a defined protocol and entered into an international data bank. These useful, real-life tasks are important to adolescents.

When the students arrive at Blackwood, they are asked to put their things in a house called Bailey Field, which Woods Middle Schoolers helped to build in the course of 4 years. The house is mostly made of wood, concrete, straw, and chicken wire; it can with-



At 7 a.m. breakfast is followed by Community Meeting on the porch, to share ideas, make announcements, and review plans for the day.



The class is split into two groups that alternate between a half-day of maintenance chores and field work and a half-day of class.

stand hurricane-force winds. Students sleep in the bunk beds made by middle-school students, who also contributed to making window frames, doors, and furniture for the house.

Students have chores that are required to maintain a clean environment inside and out. The jobs are split up between groups of two or three people. Some of the jobs consist of cleaning the bathrooms and bedrooms, washing and drying laundry, preparing and cleaning up after meals, gathering produce and herbs from the garden, composting, maintaining trails, and making general repairs.

The community is more environmentally conscious while at Blackwood. No paper products are used in the kitchen. Cloth napkins, cloth dishtowels, real plates and glasses, biodegradable soaps, composting, and recycling are an integral part of the routine. The tables are decorated with wildflowers that are collected as part of sharing meals with a calm, beautiful atmosphere.

Free time is also an important part to the adolescents. They are able to explore "wild places," which is very rare in the city. Students can build debris huts, watch a butterfly, learn survival skills, investigate tracks, and of course just talk and hang out with their friends. As in the home campus, there is a 30-minute time period set aside for personal reflection—journaling, drawing, being quiet. Nature is a

perfect place for developing self-knowledge as Montessori describes it. In the evening, there are community-building activities such as carving pumpkins, hayrides, games, and campfires. Students value this special time, and many parents have said that their child will not let anything get in the way of going to Blackwood.

The Impact on the Students

After 5 years, what kind of impact has this environment had on the young people? Here is what they say.

Working by yourself gets you somewhere, working with others gets you everywhere. There is no *i* in team or Blackwood.

To get the job done whether it's building a trailer or making a garden takes the cooperation of others.

At Blackwood when there is a job to be done, you rely on one another.

In every place at Blackwood, there is a new skill to be learned.

Blackwood creates an environment where the student is forced to become independent and interdependent, relying on oneself and others to get things done. This experience makes students feel great about themselves because they have the ability to accomplish a difficult task.

Life without nature wouldn't be any fun,

because nature provides us with places to learn. Recently I tasted honeysuckle, one of life's great pleasures.

At first it was hard and I was bored without my music. Now, we listen to the creatures within the environment instead of the daily radio and CDs.

A recent Brown University newsletter talked about early adolescence being a "defining moment"—a period of time that has a great impact in shaping a person's life. Montessori describes the task of adolescence as "valorization of the personality." Blackwood is a great place for middle-school students to experience their "defining moments" and "valorization."

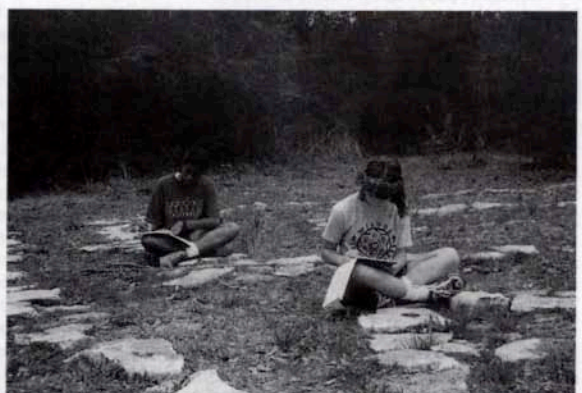
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Small teams plan and prepare the meals using mostly their home-grown foods. Extra produce is sold to organic food restaurants or given to soup kitchens.



A 30-minute period is set aside for rest and personal reflection—journaling, drawing, and being quiet, followed by 3 hours of free time before dinner.