



Montessori At The Secondary Levels

Your children have been in Montessori all their lives. They love school and learn enthusiastically. Montessori has been the perfect match, but your children are approaching the age where they will have to leave Montessori if their school doesn't do something soon! And so you ask, "Why aren't there any Secondary Montessori programs in our town? What would it take to start a middle school class at our school?"

Most Americans have the impression that Montessori is just for early

childhood. Even though Montessori schools have spread all over the world during the last century, most schools in the United States stop after kindergarten. Some schools run through sixth grade, but Secondary Montessori schools are very rare. This is beginning to change as more and more Montessori schools open elementary classes, and many have either opened or are exploring the possibility of developing middle school programs.

This is important to the entire Montessori community because, unfortunately, in the eyes of many people around the world, "real education" begins with high school. Just consider the relative respect given to high school teachers compared to the level of respect given to those who teach preschoolers. Consider the dollars contributed annually to high schools compared to the relative pittance given to early childhood programs.

"The need that is so keenly felt for a reform of secondary schools is not only an educational but also a human and social problem. This can be summed up in one sentence: Schools as they are today are adapted neither to the needs of adolescence nor to the time in which we live."

— Maria Montessori

Today, we know that this prejudice is illogical, as research supports the premise that the most important years of a child's education are not the years of high school and college but those of the first six years of life. This is the foundation of everything that will follow.

Illogical as this prejudice may be, it is a fact of life that Montessorians have not been able to escape. Parents invariably look for evidence that Montessori works, and the evidence that parents would find ultimately compelling is a track record of Montessori preparing students to gain admission to the finest colleges and universities.

For this reason, as Montessori education slowly develops at the high school level, it will finally be able to take credit for those terrific young men and women that we have been sending off for generations to the finest public and private high schools. Think back. Do most people give credit to the preschools and elementary schools that they attended, or do they look back fondly on their high school years? For this reason alone, the expansion of Montessori at the high school level is an important and essential trend in the future development of Montessori around the world. Only the establishment of successful Montessori



High Schools can validate the effectiveness of Montessori as a "whole" in the eyes of the average person.

The Emergence of Secondary Montessori Programs

The first secondary schools organized along Montessori principles were founded in Europe in the 1930s. Anne Frank, the young girl made famous by her poignant diaries, was a student in the first Montessori high school in Amsterdam when it was closed by the Nazis. At last count, there were eight large, highly regarded Montessori High Schools in the Netherlands.

The first American secondary programs influenced by Dr. Montessori's ideas, but not openly identified as "Montessori" began to appear in the 1940s and 1950s. Co-author, Tim Seldin, attended one of the first of these programs at the Barrie School in Silver Spring, Maryland, which established its upper school in the 1950s.

In the late 1970s, a small group of Montessori leaders, interested in the development of an American Montessori secondary model, founded the *Erdkinder* Consortium. This group's discussions led to a consensus that while Dr. Montessori's vision of a residential, farm-based learning com-

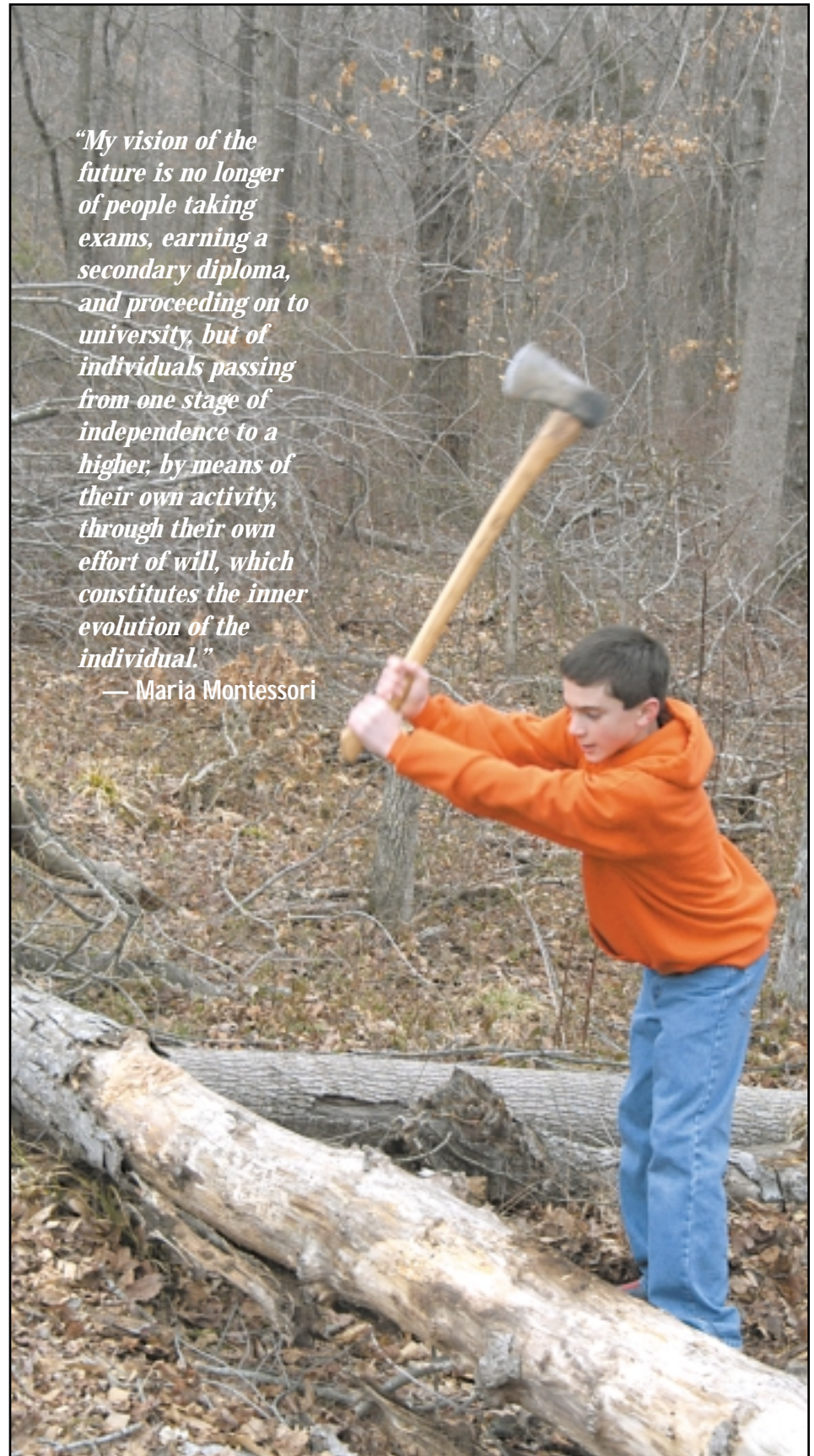
munity would be a model to work toward, schools interested in developing a modified middle school program in the interim should be encouraged to do so. These schools became known as “urban-compromise” programs.

In the 1970s, a number of early adolescent programs openly identified as being “Montessori influenced,” were established in the United States, including Near North Montessori in Chicago, the Ruffing Montessori School in Cleveland, Ohio, and two that are no longer in operation: the Montessori Farm School in Half Moon Bay, California and the Erdkinder School near Atlanta, Georgia.

In 1982, the Barrie School became the first Montessori Junior and Senior High School program officially recognized by the American Montessori Society. That year, the Institute for Advanced Montessori Studies in Silver Spring, Maryland, and the Dallas Montessori Teacher Education Program in Dallas, Texas, opened the first Montessori Secondary teacher education programs.

During the 1980s, a number of other programs for young adolescents opened in the United States and Canada, including the Franciscan Earth School in Portland, Oregon; the School of the Woods in Houston, Texas; St. Joseph’s Montessori in Columbus, Ohio; the Toronto Montessori School in Ontario, Canada; and the Athens Montessori School in Athens, Georgia.

Today, perhaps half the Montessori schools in America stop after kindergarten, while most of the rest extend to the third or sixth grade. Montessori Middle and High School programs, however, are still very rare. We estimate that there



“My vision of the future is no longer of people taking exams, earning a secondary diploma, and proceeding on to university, but of individuals passing from one stage of independence to a higher, by means of their own activity, through their own effort of will, which constitutes the inner evolution of the individual.”

— Maria Montessori

are now more than two hundred Montessori Middle School programs in North America with numerous others in various stages of development. There are approximately twenty high schools openly identifying themselves as Montessori, and a growing number under development.

Montessori's Vision of the *Erdkinder*

Maria Montessori first proposed her ideas for the reform of secondary education in a series of lectures given at the University of Amsterdam in January 1920. They were later published during the 1930s as part of her work *From Childhood to Adolescence*.

Dr. Montessori's model of secondary education is based on her understanding of the developmental needs and learning tendencies of early adolescents. In addition to conceiving many of the reforms incorporated into today's most innovative programs for early adolescents, Montessori added a unique idea: she recommended a residential school located in a country setting.

Montessori believed that by living independently of their families for a few years in a small rural community, young people could be trained in both the history of technology and civilization, while learning the practical habits, values, and skills needed to assume the role of an adult in today's society.

Envisioning a school where children would grow their own food and live close to nature, she called her program the *Erdkinder*, which translates from the Dutch as "the children of the Earth" or "children of the land."

Dr. Maria Montessori proposed living and working on a residential farm school as the best possible education-

al setting for young adolescents (twelve- to fifteen-year-olds) as they transitioned physically, cognitively, socially, emotionally, and morally to adulthood.

Montessori believed the demands of puberty warranted a holiday from traditional lecture-based instruction. Instead of confining students to classrooms, she proposed a program that would help them accomplish two key developmental tasks: becoming psychologically and economically independent. Only then, she argued, would young adolescents escape from the pettiness of traditional schooling and engage seriously in the realities of life in society.

Montessori envisioned the *Erdkinder* as a small community of teenagers and adults located in a rural setting. Here teachers and students would live and work together throughout the year, growing much of their own food and manufacturing many of the things they would need for life in the country, thereby developing a deep sense of their connection to the land and the nature and value of work.

She envisioned students, under adult supervision, managing a hostel or hotel for visiting parents. The students would sell farm goods and other products in their own store. These farm management and store economics would form the basis of meaningful academic studies.

The *Erdkinder* curriculum would encourage self-expression through music, art, public speaking, and theater. Students would also study languages, mathematics, science, history of civilizations, cultures, and technological innovations. The *Erdkinder* would possess a "museum of machinery," where students could assemble, use, and repair their own farm equipment.

For many years the idea of a residential farm school was explored, but considered impractical. Montessori Secondary schools are now found in urban and suburban settings in the United States, with enrollments ranging from fewer than ten students to public school programs with more than 250 students.

The cost of organizing a residential *Erdkinder* program has been considered far too high for any one school to attempt; instead, Montessori Middle School programs attempt to incorporate as many *Erdkinder* components as possible.

The Montessori community looked on with considerable interest in 2001 when David Kahn, Director of the North American Montessori Teacher's Association (NAMTA), opened the Montessori Farm School in Huntsburg, Ohio in conjunction with the Hershey Montessori School. Serving students from ages twelve to fifteen, the Montessori Farm School is a lovely facility and an exciting project that has attracted widespread attention, including a substantial article in the *London Times*.

Many leaders in Secondary Montessori education believe that the future will lie primarily with non-residential programs. The opening of the Farm School, and others like it that may follow, provides an opportunity to test one of Dr. Montessori's hypotheses. She proposed that the residential community, with its artificially created social laboratory, will prove to be of most value in the completion of the development of mature, well-adjusted young adults.

A piece prepared by David Kahn describing the Montessori Farm School in greater depth follows.





The Hershey Montessori Farm School

The Hershey Montessori Farm School is located in Huntsburg, Ohio, one hour east of Cleveland. An outgrowth of over twenty years of Montessori adolescent practice, the Farm School is guided by Maria Montessori's vision of a farm-based community as an optimal place for adolescents to unlock their potential as self-motivated, independent, and fulfilled young learners. The Farm School vision, specifically built according to Maria Montessori's concept, focuses on human interdependency with the natural world. In cooperation with the farm and its related activities, and through participation in surrounding rural life and commerce, students experience practical roles that integrate and engage academic studies, while building a greater connection to society and the world. The Farm School represents the next stage of development that begins with the prepared environment of the "Young Child Community" (age 0-3); Children's House (age 3-6); continues through the culturally expanded program of Montessori Elementary (age 6-12); and culminates with the "Adolescent Community on the Farm" (age 12-15).

Why a Farm School for the Adolescent?

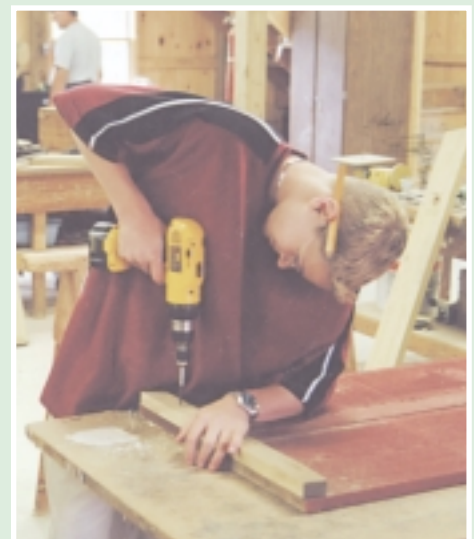
The Hershey Montessori Farm School serves a vital need for adolescents: the need for developing intellectual abilities — abilities to abstract, conjecture, predict, and create; the need for peer interaction and acceptance as well as mentor relationships with adults who are not their parents; the need to form a personal identity, to know how one fits into the world.

Adolescents can meet these needs through a real community experience that will offer them meaningful work — work that will be valued by the community itself. Real work. Work that challenges both the mind and the body. Work that the culture recognizes as legitimate. Work that is made noble by being done with integrity and passion.

The Hershey Montessori Farm School integrates these needs into both academic and work interests. The farm is an exercise in social independence; it teaches lessons of self-sufficiency. At the same time, it provides goods and services to the community. It provides the highest expectations of challenge in both academic and social development, appealing to the very different contributions each individual adolescent has to offer.

The Hershey Montessori Farm School

The Montessori Farm School is a serene, awe-inspiring place, on 97 beautiful, forested, rolling acres. It houses approximately 45 local, national, and international boarding and day students, ranging





in age from twelve to fifteen, and acts as a resource center for local and national Montessori schools. As a program of the Hershey Montessori School, an Association Montessori Internationale (AMI) school established in 1978 and located in Concord Township, Ohio, The Hershey Montessori Farm School is connected to a warm and cohesive community of parents, teachers, and infants through children aged twelve.

The 24,000 square-foot main farm building is an intimate, homelike space designed to resemble an historic farmhouse structure. In addition to living, eating, and sleeping areas, the farmhouse has ample study, utility, and recreation space. The house is designed to allow the students to run the household: to cook, clean, process and preserve food, study, do artwork, reflect, socialize, and be members of a healthy community of adolescents and adults. Two families live on the farm to help build a familial atmosphere.

Students also have the use of barns that house a woodworking shop, performing arts-and-crafts center, and farm animals. A bio-shelter, or alternative energy greenhouse, provides shelter for plants and serves as an educational laboratory. Specialized structures designed and built by students, including barnyard sheds, a maple sugar house, creek bridges, and a produce stand, provide further laboratories for study. Students also run a bed-and-breakfast for visitors. The Farm School is a micro-economy, and all economic activities are tallied, including the harvest. Students may apply for one of nineteen managerial positions, assuming major responsibility for farm operations.

The Educational Program

The Hershey Montessori Farm School has a work and study process that emerges from direct contact with the land. The vast acres of woods and farm at Huntsburg become the "prepared environment" for the adolescent. The farm activities lead the students to a study of farm science, land management and ecology, biology and chemistry, mathematics, accounting, geometry, civilization, economic systems, algebra, physics, energy, environmental issues, and technology and information. In short, the farm activities and their features are the points of departure for formal studies, but the educational syllabus goes well beyond immediate academic extensions that arise out of farm work.

The Hershey Montessori Farm School's curriculum and instructional design are developed so that, within the farm environment, each student is exposed to and well versed in knowledge and skills common to pre-collegiate curricula. Courses of study necessary to meet these standards are available to the students if they are not accomplished through the farm's integrated plan of study. When students graduate from The Hershey Montessori Farm School at ninth grade, they will find themselves more than adequately prepared for their remaining years of high school.

The Administration and Faculty

The Hershey Montessori Farm School has assembled a faculty of AMI Montessori visionaries balanced by academic, art, music, and trade specialists from the surrounding area. Researched and designed since 1996 by some of the best and brightest in the Montessori field, The Hershey Montessori Farm School prototype design work has since received input from the Pedagogical Committee of the Association Montessori Internationale, and the Program Director is in direct consultation with the International Center for Montessori Studies in Bergamo, Italy.

The Course of Study

Humanities (World History and English)

Montessori has three thematic approaches to history: The Study of Living Things; The Study of the History of Mankind; and The Study of Human Progress and the Building Up of Human Civilization (*From Childhood to Adolescence*). Following the orientation to culture suggested by these themes, four representative cultures that form a span of social communities extending from ancient to modern times are selected for study each academic year. The program places strong emphasis on the evolving stages of civilization — from village to megalopolis — with a final goal of seeing our time, place, and culture as part of a continuing endeavor of the whole of humanity. Literary works are included.

The course of study uses period readings for the art of discussion (seminar technique); visual arts, drama, and writing for the internalization and expression of philosophical values; time lines for chronological emphasis; and research papers and essay tests for challenging students to demonstrate their understanding.

Science, Occupations, and Learning by Doing

Occupations are points of engagement for the adolescent on the land. They are a source of meaningful work

valued by the community, work that challenges both mind and body, work that is recognized as legitimate by the culture, work that has economic validity, noble work done with integrity and passion. Occupations not only fulfill the adolescents' need to belong and be valued, but they also provide the motivation for academic study.

“Work on the land is an introduction both to nature and to civilization and gives a limitless field for scientific and historic studies.” — Maria Montessori

The science demanded for project-based, experience-based learning is not a subject to be covered, but rather it is knowledge to be applied for the greater good of the operating farm throughout the seasons. Care of plants and animals, nutrition, small building construction, and simple machines are examples of specific interest centers which can generate specific academic contexts that include zoology, geology, physics, ecology, chemistry, meteorology, history, and archeology and add up to a well-rounded and integrated learning experience.

Thus, the occupation's meaningful work extends to all areas of study and at the same time provides adolescents with the motivation to become “experts” in specific occupational areas. Experts can apply for management positions that follow their expertise and give them a higher profile role in the farm's micro-





economy. The beekeeper becomes the beekeeping manager. The pond tester becomes the pond manager. The occupation converts into a “role,” and the adolescent learns what it means to make a contribution to society.

The ninth graders experience a “place-based” biology course, the goal of which is to integrate land-based activities with high school biology content, including such subject areas as evolution, genetics, taxonomy, physiology, cell structure, animal and plant behavior, environmental science, and biochemistry.

Fine Arts: Opportunities for Self-Expression

Montessori’s original educational syllabus included a category for self-expression through language, music, drama, and art. Adolescents must be given opportunities to channel their natural tendencies to talk, to express, and to create. The Hershey Montessori Farm School facilitates creative projects in which the students set up their own projects in music, videography, photography, drawing, drama, etc. Since coordination of operations in the farm cooperative depends on sharing information, oral presentation, visual display, video recording, and photography are a serious part of the curriculum.

Mathematics (Theoretical and Real World)

Mathematics is an applied science focused on the opportunities for problem solving that arise in the farm

experience. At the same time, mathematics is a theoretical discipline exploring relationships between abstractions. Both theoretical mathematics and applied science address patterns and relationships, and the two studies contribute to one another. For example, science provides mathematics with problems to investigate.

Mathematics provides symbolic systems to help science organize data. Mathematics also provides the structure of scientific laws and formulae. Technology opens up new mathematical explorations, while mathematical operations improve understanding of technology.

The general goals for the utilization of both Algebra I, Algebra II, and Geometry are:

1. to utilize mathematics and real-life problem solving;
2. to increase the application of mathematical reasoning and skills to tasks and occupations on the farm; and
3. to model real-world phenomena with a variety of mathematical functions.

The basis for applied mathematics is the farm. Many jobs on the farm entail specific measurement: for example, quantitative analysis for feed and rate of animal consumption; computation of square footage for pasture in relation to livestock inventory and rate of reproduction; use of computers for producing bar graphs, circle graphs, and line graphs to summarize productivity, etc. The farm micro-economy will also use business math to measure the extent of the enterprise’s self-sufficiency and profit.

Physical Education

Physical Education at the Farm School is found in many areas, physical work being integral to daily living. Generally, the Farm School promotes physical activities at several levels:

Work: Farm work involves physical chores and projects that require significant body exertion, such as animal feeding, stall cleaning, planting, cultivation, trail maintenance, harvesting, building structures, etc.

Sports: Coached team sports are available based on season and student interest.

Specialty Electives: Running, hiking, weight-lifting, fencing, dance, tennis, biking, and horseback riding are examples of rotating options to be selected by students according to their interests.

Vocational Arts

Although farm-based education includes aspects of agricultural education, the essence of the operating farm lies in the experience of community living and community enterprise, which provides a comparison to the history of civilizations both in role playing and economics. In order to be a microcosm for society, the farm must be an operating economy, a true exercise in a challenging life style, and a real attempt at self-sufficiency. The students learn to sew, grow and cook their own food, and build their own special tools and artifacts.

Computers

Computers in the Montessori environment are treated as tools and, generally speaking, are not used for assisted instructional purposes. At the farm, computers interface with the agricultural business (micro-economy), with Global Information Systems and global positioning on the land, and with fine arts especially videography, sound engineering, and photography. They are also used for Internet research and communications. The computer in the context of the Hershey Montessori Farm School is intended to serve agricultural, social, and ecological goals.

Foreign Languages (Spanish)

Spanish is taught in a multi-age classroom, consisting of seventh, eighth, and ninth graders and covers basic information appropriate for beginning and intermediate learners. Lessons are conducted in small groups and are based on both a textbook and multimedia approach. Other languages, including classical languages, may be available for small group work, upon request, depending on personnel availability.

— *by David Kahn, NAMTA**





A number of independent Montessori schools around the world are currently establishing high school programs, including: The Toronto Montessori School in Toronto, Canada; The Claremont School in Boca Raton, Florida; The School of the Woods in Houston, Texas; the New Gate School in Sarasota, Florida; the Brisbane Montessori School in Brisbane, Australia; and the Athena Montessori College in Wellington, New Zealand. Clark Montessori Secondary School, the first American public Montessori High School (located in Cincinnati, Ohio),

recently graduated its first senior class.

The parents of students at Clark Montessori Secondary School speak enthusiastically about the quality of the program and the success of its graduates.

These Secondary Montessori schools are developing their middle and high school programs based on the model of adolescent development Dr. Montessori described in her work *The Erdkinder*. Other design elements for today's Montessori Middle and High School programs have come from secondary school reform efforts of the past decade and recent insights regarding adolescence.

Observations on the Nature of Adolescence

The term *adolescence* is a recent social category. The idea of adolescence as a distinct age group within our population developed during the late 1800s and early 1900s as western countries industrialized, established laws forbidding the use of cheap child labor, and required compulsory school attendance. Unlike our society, few non-western cultures recognize young adolescence (the years from eleven to fourteen) as a social category distinct

from middle adolescence (the years of early sexual maturity between fifteen and eighteen) and later adolescence (now thought to extend to as late as twenty-five or twenty-six). In some cultures, childhood is followed by a young adult stage of life. Many societies traditionally marked the transition from childhood to youth with an initiation ceremony or rite of passage. By comparison, our society offers few benchmarks that either children or adults see as particularly meaningful, other than perhaps passing the driver's test or graduating from high school.

Montessori described the young adolescent years as a period of vulnerability and self-construction. It is a time marked by uncertainty and self-consciousness; it can also be an awkward time. They have to cope with emerging sexuality and hormonally driven conflicting emotions. More recently, adolescent psychologists have described the pattern of physical growth as generally "outside-in." The child's feet and hands grow before the arms and legs; the nose and ears grow before the face. There is an increase in weight, height, heart size, lung capacity, and muscular strength. Coordination is a challenge for many young adolescents as bones lengthen prior to muscular development. Some young adolescents are physically awkward as their body's center of balance is thrown off. As their muscular development proceeds, many literally don't know their own strength.

Recent studies of adolescent development also suggest there are several "normal" overall patterns of physical growth. In general, while physical growth occurs in girls before boys, cognitive growth may occur similarly across gender. Young adolescents may grow rapidly and attain their adult height after several months. Still at twelve or thirteen, they have to learn to deal with a "new" body of a sixteen-

year-old and the way that it affects their social relationships with peers and older teens. Others grow very gradually and require several years to reach their adult height and body proportions.

Young adolescents have the potential for new thinking capabilities. They are learning to reason hypothetically, plan ahead, understand analogies, and construct metaphors. Concentration is, however, often difficult; young adolescents are easily distracted.

Young adolescents are also concerned (and sometimes overly preoccupied) with justice and fairness. It matters and bothers them when injustice (as they define it) occurs. They have a strong desire to contribute to and help others. It's an age of idealism; they assume friends, family, and society can and should be perfect. Finding their place in the world is an enormous undertaking, and they will try on many roles and activities as a way to create personal identities.

Friends are exceedingly important for most young adolescents. Friends provide one another an emotional safety net as they venture out of childhood and try out new ideas, roles, and behaviors. Friends will take new risks. To them, the gravest wrong that can occur is to have their trust betrayed by someone whom they consider a true friend. As a result, young adolescents often test one another's friendship to determine whether or not a secret will be broken, whether a practical joke or teasing will end a friend-

ship, or whether their friends will stand by them. Many are also anxious to make and keep commitments to friends.

Young adolescents are consciously beginning to learn how to choose to live and work interdependently. In adult terms, interdependence involves being trustworthy and being trusted. Interdependence requires being able to give and keep your word; to be someone who can be trusted and depended on. Effective communication skills, shared inquiry, problem definitions, and multiple approaches to generating and adopting solutions rest on reliability.

Young adolescents seek to develop interpersonal reliability. Their chief approach for this is through self-expression. Amongst themselves they talk, write notes, and also write and exchange emails. Psychological research documents that when teenagers talk and pass notes to one another, they are exchanging personal

information that is understood to be communicated in strict confidence. Young teenagers often fail, however, to keep their word; young adolescents do not keep all of their promises. Young adolescents require caring and respectful adults who prepare environments in which the promises young adolescents keep result with successful activities that truly matter. For new beginners in living interdependently, their environment must allow for moments of not keeping promises as key opportunities for examining intentions, commitments, and forgiveness — qualities of an interdependent life.

Secondary Montessori programs are primarily intended to serve as the logical next step for a child who has come up through the Early Childhood and Elementary Montessori programs. One Montessori Secondary program might even serve an entire community, drawing students from several different Montessori Elementary schools. It is possible to accept a limited number of



older students who are coming from other more traditional schools, but only after consideration for their potential success in the Montessori Secondary program.

The Basic Elements of a Secondary Montessori Program

Montessori Middle and High Schools today blend various aspects of the *Erdkinder* model with elements developed by exemplary secondary schools during the past twenty years. For example, middle school students at the School of the Woods in Houston, Texas, spend one week out of every six living at the school's Land Lab, where they study, build shelters, cultivate crops, and recycle. Students in another program run a baby-sitting business. These kinds of "Practical Life" activities are essential. They provide direct learning experiences that involve the young adolescent with meaningful learning activities.

Other basic elements of Montessori Secondary programs include interdisciplinary, thematic instruction; dis-

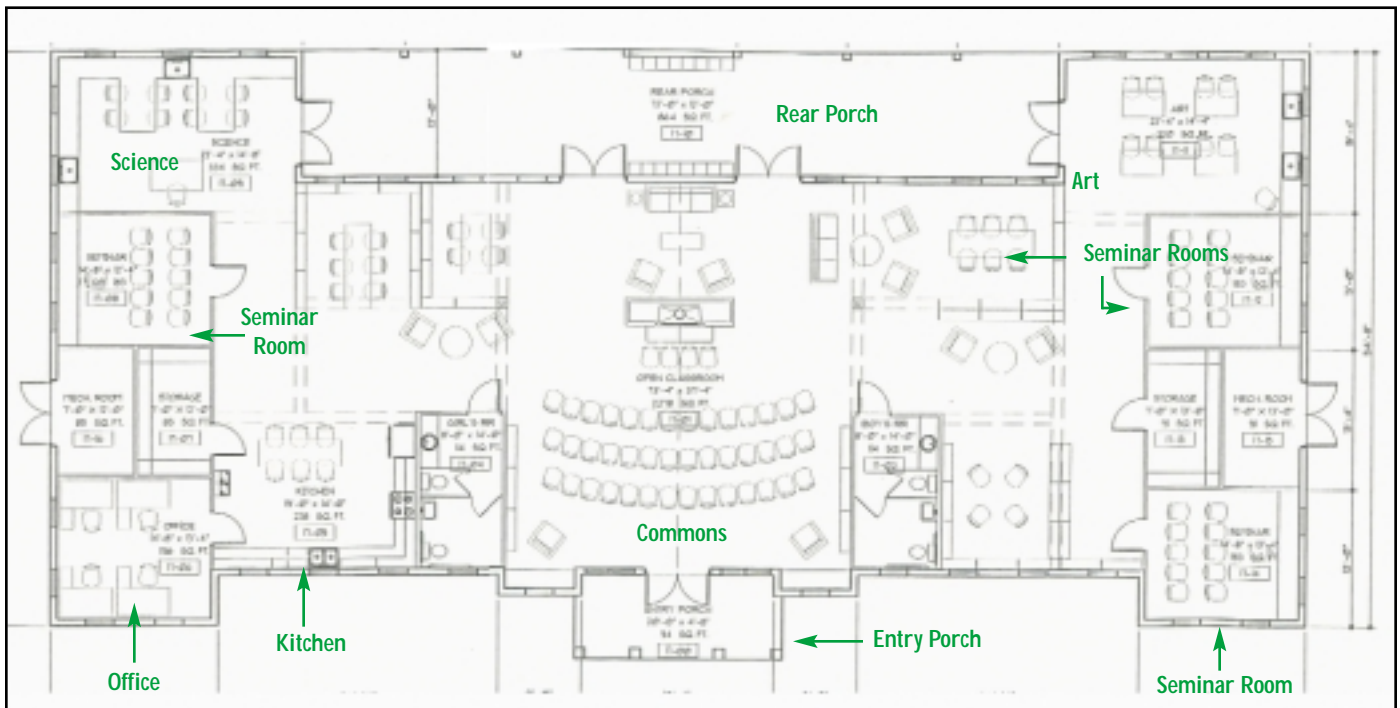
covery-based learning; individual and small-group learning projects; authentic and performance-based assessment; small advisory groups; community service, internships, and land-based studies. In addition, you should find the following specific program elements in a Montessori Secondary program:

- The curriculum is developmentally based and appropriate to meet the growing intellectual, social, emotional, and physical needs of adolescents.
- Students need ample opportunities for self-expression as they construct personal meaning about their studies and themselves.
- Students should solve meaningful problems and develop logical reasoning, research skills, and higher-order "formal" thinking skills rather than only memorize predigested concepts, theories, and information presented in lectures and textbooks. The curriculum should allow students to learn through experience and practical "hands-on" application.

- The curriculum should offer a broad view of the world, emphasizing ecological interdependency, the historical development and interconnectedness of ideas and events, and an international/multicultural perspective.
- The curriculum should be organized as an "integrated thematic approach" connecting separate disciplines of the curriculum into studies of the physical universe, the world of nature, and the human experience.
- Montessori Secondary programs do not emphasize academic competition among students. The program should evaluate students on a logical, objective basis. Students should not be graded on a curve but rather should be evaluated individually against clearly stated academic objectives through a wide variety of authentic assessment techniques, including portfolios, long-term projects, and self-evaluation.
- The faculty should use a variety of teaching styles and modify assignments and assessment strate-

(Below) The Adolescent Center at the Montessori School of Raleigh (North Carolina)





**New Gate School
Design for an Upper School House
45 Students — Grades 7 & 8, 9 & 10, or 11 & 12**

(Above) Working draft of the design for a Montessori Upper-School “House” developed for the New Gate School in Sarasota, Florida. New Gate’s master plan calls for the construction of several of these Houses as enrollment growth warrants. At the time this book went to press, these particular structures are scheduled for the next phase of construction.

gies to meet individual student’s learning styles and special interests.

- The faculty should serve as mentors and facilitate the process as their students learn how to observe, listen, read critically, gather information, and learn from hands-on experience.
- The faculty should consciously strive to help their students develop self-esteem, independence, responsibility, compassion, openness to new experiences and learning, patience and self-discipline, acceptance of others, and effective and satisfying social relationships.
- The school should be a community of young people and adults based on kindness, trust, and mutual respect. The school should support young adults learning the skills of living in the adult world within a safe environment.
- There should be many opportunities for student participation in the planning and operation of the life of the school community.
- Students should be introduced to social issues of the community in which they live, both through the curriculum and through field experiences, volunteer efforts, and internship projects. The school should consciously promote stu-

dents’ personal spiritual and ethical development and encourage service to the community.

- The school should consciously promote entrepreneurial spirit.

New Montessori Middle School programs typically begin with a small group of seventh graders. The enrollment gradually builds in size over the years as more families and their students elect to continue with the school through the upper level(s). This presents a tremendous challenge for many schools, because parents and students are normally reluctant to be part of what they perceive as a fragile new program.



Many factors contribute to this, all of which are tied to our culture's image of what a middle or senior high school should look like. For example, parents and students alike tend to expect a fairly large enrollment of several hundred to more than a thousand students in which students can choose among a wide range of friends and extra-curricular activities. And yet, school-reform efforts in these large institutions are heading in the direction of creating smaller learning communities called "houses" or "academies."

Although mixed-age groups within a classroom is an essential component of all Montessori programs,

there is no agreement as to the mix of ages in the middle school. Some schools combine grades seven through eight only.

Other schools define the middle school as grades six through eight or grades seven through nine. Schools that extend to grade twelve may offer three mixed-age levels: grades seven to eight; nine to ten; and eleven to twelve. Still other schools offer two levels: grades seven to nine and ten to twelve.

Ideally, each house will have its own suite of classrooms and meeting areas. Most programs are forced by budget or limited space to adapt themselves to existing facilities.

The facilities that The Montessori Foundation helped to design for the New Gate School in Sarasota, Florida are one example of what would be appropriate for an established "house" of perhaps forty-five to sixty students. This model is drawn from a blend of many upper-school facilities that the authors have visited over the years.

Each house is centered around a commons room of approximately 2,000 square feet. This space is designed for reading and quiet study. Each commons room also contains part of the library. At one end of the commons there might be a small stage used for debates, student

presentations, guest speakers, and performances.

Several smaller rooms are adjacent to the commons. Three are designated as seminar groups; each has a large conference table and seats up to ten participants. Another room is designed as a math lab. Students work alone or in small groups, and the room is equipped with a wide range of mathematical apparatus.

A fifth room serves as a science lab with a large attached greenhouse. The lab is equipped for the life and physical sciences, with corrosive-resistant work surfaces, sinks, Bunsen burners, aquaria, animal cages, and secure storage for chemicals and equipment. For safety, the labs will have an emergency

shower, eye wash, and a ventilated fume hood in which students can safely work with potentially noxious chemicals. A sixth room houses an art studio and craft workshop. Creative self-expression is particularly appealing to many adolescents. In addition to formal lessons, students should be able to engage in the arts as their interest, workload, and schedule allow.

The craft workshop provides tools for building model structures from wood, paper, and other materials. Older students often construct dioramas, models of ancient buildings, little machines, or re-creations of historical artifacts.

Finally, a small but complete kitchen is important, allowing students to

prepare their own meals. Many Montessori Middle School programs operate a small lunch business. Students purchase the ingredients, prepare the day's meal, serve and clean up, collect lunch fees, and keep the business books.

In the following description, Melody Mosby describes her Montessori Middle School program in Athens, Georgia, which combines many aspects of the *Erdkinder* model with recent middle school innovations.

(Below and opposite page) Students working and dining in the Commons Room in the Adolescent Center at the Montessori School of Raleigh (North Carolina).



In addition to its other functions, students and teachers normally eat lunch in the Commons Room.

Athens Montessori Middle School:

A Place for the Adolescent

by Melody Mosby

Imagine a place where young adolescents have an opportunity for practicing their future role in society, where meaningful work extends outside, where blue skies replace bulletin boards, where historic artifacts and experiential studies replace worksheets, and textbooks become resources. If you can imagine such a place, then you have imagined the learning environment at Athens Montessori Middle School.

Athens Montessori Middle School* is a land-based model for young people, ages twelve to fifteen, who wish to continue their Montessori experience in a place where love of learning is nurtured, and the skills essential for optimal development of the adolescent are realized. The school is located in a residence on four acres of land featuring a wood lot, an active stream-bed, organic gardens, and an open field, where students enjoy life in the open air and take on the responsibilities and maintenance of the land.

This natural setting provides a quiet, serene environment for the adolescent to balance the extremes of emotions characterizing the age. Besides the calm surroundings, the work on the land provides, as Dr. Montessori suggested, "an introduction to nature and to civilization" (Montessori, *From Childhood to Adolescence*, pg. 69)



Students at Athens Montessori Middle School are not confined to a desk; rather, their role is very active, placing them in purposeful work and study that captivates the mind and body of the young adolescent. The activities that arise from the diverse geographical features on our four-acre property provide students with unlimited valuable lessons in a range of topics from botany to chemistry, geology, anthropology, anatomy, physiology, geometry, physics, and beyond. Academic studies are tied to projects and offer a balance of both manual and intellectual application.

The streambed is rich in micro-organisms and macro-organisms that provide a wealth of information about the life cycle. If the rains push debris and sediment into the stream, it has to be cleared. Paths through the woodlands have to be maintained in order to prevent further erosion. When it is time to plant, the soil re-

quires preparation, and a soil test is taken to determine what nutrients are needed. The garden requires tilling, mulching, weeding, and certainly water in times of drought. Our nature reserve is filled with a variety of native species and some that are endangered. With field guides in hand, and experts to help with plant identification, we have begun the process of documenting, mapping, and labeling the numerous species thriving in our reserve. After a recent visit to the Museum of Natural History at the nearby university, our interest in endangered species was heightened. Now, we are working with a wildlife specialist to track and survey the various species of animal life that inhabit our property.

In this way of working with our academic studies, the topics of biology, zoology, soil chemistry, stream



ecology, botany, and geology become relevant, and a wider understanding of the subject matter is apparent. We are not learning for learning's sake; we are truly receiving a preparation for life.

Besides the intellectual pursuits this work on the land offers, many social experiences arise, giving the adolescent further opportunity for nurturing the social interest of the age. Decisions have to be made about the division of labor: Who is going to do what, and how much?

Adolescence is a very social age when important lessons in responsibility and acceptance are learned. Working closely with peers on a project is a real lesson in character building and social consciousness. You find out very quickly on whom you can count, and who is going to give the best effort possible. Athens Montessori Middle School is not a boarding school, nor is it an environmental camp, but students do collaborate and cooperate

with each other on the daily maintenance of the school and, if asked, they will express a deep sense of stewardship for their land-based environment. Adolescents need a sense of place. Just as the children's house was significant to the growth of the young child, a special place that creates a sense of ownership is critical to the optimal growth of the adolescent. Our adolescents work in community with each other every day, immersed in the operations of running a school program. Routines are important, and we have them, but we also remain flexible and open ended.

To begin the day, students prepare by setting up the environment, both inside and on the land. Inside, the furnishings are arranged, fresh towels are laid out, fruit is washed and placed in a ceramic bowl, flowers are arranged in glass vases, the technical equipment is turned on, attendance is taken, academic work is checked and filed, the store is opened for business, and everyone prepares themselves for a productive day. On the land, readings from the

weather station are taken and recorded, the seed flats in the greenhouse are watered, the garden is tended, flowers are cut for the vases, and any necessary work to prepare our land for the day is done at this time.

Our plan of work and study is not restricted by a fixed curriculum but an evolving plan, which includes adolescent input and interest. This year, the study of our state's history and geography has been taken on the road. Students divided themselves into groups for this study and chose a particular geographical area. After researching the features unique to that area, students made plans and arrangements for a regional tour. Our studies have taken us to small towns, a granite outcropping, a rural sod farm, a coastal city, and the Appalachian trail.

Because our Georgia winters are not extreme and the weather conditions are some of the best our southern skies can offer, we enjoy our meals together in the

open air year round. In fact, the weather allows for a long growing season that enables us to produce a bounty of food, which we can sell at the farmer's market on Saturday mornings. With the profits, we are able to purchase more seed and supplies to keep the garden going.

Dr. Montessori emphasized the importance of economic enterprise for the enhancement of the adolescent's self-worth. At age twelve to fifteen, most adolescents are unable to hold a job and earn a wage, yet the adolescent has reached a level of capability that can enable them to undertake many vocations in the labor force. In fact, adolescents were the primary labor force less than a century ago in the farming community and in industry. By taking part in a business enterprise that compensates adolescents for their efforts, they can feel a sense of self-worth and realize the value of work.

The adolescents at Athens Montessori Middle School provide a pizza lunch service each week for our school. The students, with teacher guidance, are responsible for recording orders, serving the lunch, and accounting for income and expenses. The profit from the business is used to finance supplies, special projects, and our end-of-the-year road trip. There is a great deal of satisfaction gained from this enterprise, as well as life skills practiced.

Additionally, students intern for one week during the year in a local business. This intern week is a highlight for the adolescent. The self-confidence, enthusiasm, and experience they gain from this endeavor is immeasurable. Our parents are very supportive of this real-life experience and recognize the valuable lessons learned.

During the intern week, one of our students worked in a retirement home and made some strong connections with

the residents. Since then, she has created an inter-generational community service project for interested students who want to spend one day a week with the retirement community.

The power of the adolescent for their growth and self-knowledge is phenomenal. They are very capable of compassion, empathy, and acts of a heroic nature. When they are placed in an environment that meets their needs, the noble characteristics belonging to this age emerge. As program director and teacher in our land-based

model at Athens Montessori Middle School, I am in very close contact with the adolescents. I have observed in them the highest level of personal growth and academic achievement.

This learning environment, where our student enrollment is small, where there is personal, individualized learning, and where community and social interaction with peers and teachers is possible provides a positive, empowering climate for learning and a true place for the adolescent.

A typical day looks like this:

8:15 A.M. - 8:30 A.M.	Start of the school day Prepare environment and self Community Meeting
8:30 - 10:15 A.M.	Small-group lessons (Math and Language Arts) Personal work, which includes land management
10:15 - 10:30 A.M.	Mid-morning snack break
10:30 - 11:45 A.M.	Thematic lessons (cultural studies, science, history) More open-work period Spanish studies. Community work is done during this time, for example: accounting for lunch service, planning field trips, etc.)
11:45 - 12:00 NOON	Prepare for lunch; inspiration is read
12:00 NOON - 12:30 P.M.	Lunch (we provide a lunch service on Friday – one of our business enterprises)
12:30 - 1:00 P.M.	Personal reflection (music is played) Creative expression
1:00 - 1:45 P.M.	Occupational studies (wood lot, stream-bed, garden, nature reserve, maintenance on weather station or grounds.) (This time is extended on most days.)
1:45 - 2:00 P.M.	Clean environment and prepare for dismissal
2:00 - 3:00 P.M.	Outdoor education
3:00 - 3:15 P.M.	Gather together at log circle for saying goodbye

Secondary Montessori Teachers

Certified and experienced Secondary Montessori teachers are quite rare at this time. Schools contemplating a new program should plan on sponsoring one or more teachers through Secondary Montessori teacher training. The obvious alternative is to open the program with a staff that is not trained at the secondary level. Although this is not something that we would recommend, new secondary programs may see it as their most realistic option.

Today there are only a few programs preparing Montessori Secondary teacher educators. Dr. Betsy Coe offers a MACTE-accredited, AMS-Certified Secondary Montessori teacher education program at the Houston Montessori Center in Houston, Texas; Melody Mosby is inaugurating a new program in Athens, Georgia, to train middle school teachers; and more are under development. Also, for some years, the North American Montessori Teachers' Association (NAMTA) has offered a highly regarded summer workshop in Secondary Montessori education.

Secondary Montessori teachers should not be thought of as specialists in one area of the curriculum. Instead of teaching science, math, or history in isolation, they integrate aspects of these courses of study into thematic units. In small programs, one teacher will teach all of the major subjects, much as elementary teachers do. Two to four teachers may form a team in larger programs.

The teaching team will be much more than just teachers of specific subject matter; they are also mentors, counselors, and guides through the learning process. A program may supplement the skills of the full-time core teachers by bringing in part-time specialists for such areas as, for example, physical education, foreign languages, drama, music, and the arts.

The teacher's personality and ability to relate to adolescents is perhaps the most important element in predicting potential success. At no stage of education is it more important that the teacher become the students' mentor, confidante, and trusted friend.

In traditional secondary schools, teachers tend to see helping students absorb the curriculum as their fundamental goal. In a Montessori program, academic studies are balanced with emotional, social, and moral growth. The Secondary Montessori educator must recognize the crucial role played by this process of social and emotional growth.

Group process and lessons in everyday living skills are not supplemental activities to enrich the real curriculum; they are in many ways the most important element of the curriculum. The Montessori Secondary teacher should have a thorough understanding of:

- ▲ Montessori's concept of *The Erdkinder*;
- ▲ Montessori Early Childhood and Elementary philosophy and curriculum;
- ▲ Adolescent psychology and development;
- ▲ Today's most promising and innovative secondary curriculum elements and teaching methods;
- ▲ Individual and group counseling techniques;
- ▲ Field studies, including running a small business, community-service programs, land-based studies, and internships;
- ▲ The practical issues of organizing, structuring, and administering alternative secondary school programs; and

- ▲ Contemporary high school and college admission requirements.

A Typical Day

Secondary Montessori programs normally do not look very much like Elementary Montessori classrooms because of the very different personality of the adolescent. Adolescents prefer interactions with their friends.

In most programs, students and teachers gather every day in Town Meetings, where they learn how to work together, express their thoughts clearly and honestly, resolve disagreements, compromise, and reach consensus. There is a real sense of community.

The familiar Montessori materials are not noticeable. When they were ten, Montessori students may have enjoyed working with the Montessori materials, but at twelve they don't want to be reminded of the years when they were "just kids," and they may reject the Montessori materials as "babyish."

On the other hand, learning rarely involves passively sitting back and listening to a teacher talk. Students learn from participating in seminars, meeting with guest speakers, conducting research, performing historic reenactments, building models and dioramas, and organizing field trips and internships. These experiences engage learners in constructing a personal and meaningful education and invite students to get involved, ask questions, and think.

Teacher-initiated group lessons are usually brief — rarely lasting more than thirty minutes. Seminars and specialist classes are scheduled in such a way as to allow students large blocks of time to work without interruption. The schedule for group activities is flexible and allows the teachers to set aside the amount of time most appropriate for given activities.



(Above) A Town Meeting.

Many Secondary Montessori programs give students study guides to help them organize their work. A study guide describes the interdisciplinary theme and organizes learning experiences. Ideally, these guides are not prepared by the teachers alone. Teachers and students should work together to set goals and suggest a learning path that is defined in accordance with each student's individual learning style. Study guides typically identify three elements:

- Skills and knowledge that the students are expected to learn;
- Learning experiences in which students engage, such as attending seminars or lectures, books that need to be read, movies that must be viewed, field trips to be taken, presentations given, lab experiments completed, tests taken, etc.

- Essays, reports, and other assignments or projects students complete.

Many programs expect students to demonstrate a given level of mastery before they are allowed to move on to the next level. Unacceptable work or performance on tests of skills and knowledge must be resubmitted after additional lessons or coaching.

It is common for Secondary Montessori programs to allow students to select from among several optional learning strategies and assignments or to propose another option.

Using this approach, Secondary Montessori students continue to learn how to prioritize, pace themselves, and take responsibility for their work. These are skills that are critical to success in university and life.

The World is Their Classroom

Montessori Secondary programs will normally go out into the community to give their students a wide range of projects and experiences that would never be possible in a traditional schedule. Some schools go out as opportunities arise; others schedule one day a week for academic extensions, breaking off into small groups to visit museums, galleries, the theater, university libraries, the courts, government offices, and scientific laboratories.

Students also use "Extension Days" to work on special projects or to study issues in depth. They contact and visit government agencies, public interest groups, and relevant industries, pour through public records, and interview key public figures. Gradually, they assemble information and attempt to interpret the "big picture."

Example of a Middle School Assignment:

Study Guide: Presidential Politics, Cultural Revolutions, and the Korean War Cycle: Expectation Chiaravalle Montessori Middle School Program

Quotation: "He hath indeed better
bettered expectation." –
William Shakespeare (1564-
1616): *Much Ado about
Nothing*. Act 1, Sc. 1

Essential Questions:

1. What are personal characteristics?
2. What are the characteristics of a president?

Habits of Mind:

1. Evidence: How do I know this? What is the proof?
2. Persistence: What are some alternative ways of accomplishing goals?
3. Managing Impulsivity: Have I considered all options and consequences before acting?

Learning Goals:

1. Compare and contrast the presidential elections of 1948, 1960, and 2000.
2. Identify major decisions made by Presidents Truman and Bush.
3. Describe the purposes of the Chinese Cultural Revolution.
4. Define the goals of the United States during the Korean War.

Investigations:

1. Define "personality trait." What are some of yours?
2. Two signs sat on President Truman's desk in his White House office. One said, "The buck stops here." The other was a quote from Mark Twain, "Always do right. This will gratify some people and astonish the rest."
 - a. What difficult decisions do presidents make?

- b. Suppose these signs were on your desk. What decisions do you make each day? How does the buck stop with you? How do you know what is right? Is it hard to "always do right?"

3. Read the following sayings from President Truman. What does each mean? How does it fit your life?

- a. "If you can't stand the heat, stay out of the kitchen."
- b. "Children nowadays have too many gadgets to fool with and not enough chores."
- c. "I always tell students that it is what you learn after you know it all that counts."

4. Write your own saying and its meaning.

5. Define the following terms, persons, and events:

- a. Mao Zedong
- b. Jiang Jieshi
- c. the red army
- d. the nationalist army
- e. the "Great Leap Forward" plan of 1958
- f. communes
- g. the Red Guards
- h. the Cultural Revolution

6. What evidence did the *Chicago Tribune* use to proclaim on November 3, 1948: "DEWEY DEFEATS TRUMAN"

7. Define the circumstances that led to the creation of the *Washington Post* political cartoon caption: "REPORTS OF MY POLITICAL DEATH WERE GREATLY EXAGGERATED"

8. Compare the 1948 Democratic and Republican platforms. For whom would you vote and why?

**Study Guide: Presidential
Politics, Cultural Revolutions,
and the Korean War
Continued ...**

9. Examine polling predictions of the 1948 presidential election. What evidence were these predictions based upon?
10. Truman made numerous decisions including: dropping the atomic bomb; desegregating the Armed Forces; promoting Truman Doctrine; enforcing the Marshall Plan; recognizing Israel; and fighting in Korea. What are some of President Bush's decisions?
 - a. In carrying out these decisions, how did each president demonstrate persistence and resist acting impulsively?
11. React to the following political satire piece: *"2004 Presidential Election Cancelled."*
12. Research:
 - a. Who decided to divide Korea at the 38th parallel?
 - b. What was China's role during the Korean War?
 - c. How did Truman's views differ from MacArthur's? Was Truman's decision to fire his general a good one?
 - d. How did the Korean War end?
 - e. What is the relationship between North and South Korea today?
 - f. What is the relationship between the United States and these two countries today?

A culminating project:

Your final project involves speculation. Imagine President Roosevelt completed his fourth term. What effect would this have had on the ending of World War II, the election of 1948, China, and Korea? What evidence supports your hypotheses?



(Above) Students study marine biology in the Caribbean in this archive photo from the Barrie School in Silver Spring, Maryland.

Secondary Montessori programs also arrange for their students to participate in field work — a combination of land-based studies, community service, and internship experiences. At certain points of the year, students will engage in internships in the business, professional, or public-interest communities. Students develop their own resumes and are expected to find their own internship position. Montessori High School students have interned in government offices; worked for Greenpeace; studied at the zoo; and assisted in doctors' offices, architectural firms, veterinary clinics, radio stations, newspapers, hospitals, retail businesses; or volunteered in shelters for the homeless. Many internships develop into long-term relationships. One of the unique programs in a Montessori High School is the opportunity for a wide range of international study and travel. Montessori education is worldwide, and each program has sister schools across America and in Europe, Asia, Australia, and South America. There are invaluable opportunities for correspondence and student exchange experiences. Again, using Barrie as an example, students have engaged in travel/study programs in Israel, Canada, France, Spain, Italy, Greece, Mexico, Costa Rica, Russia, the Caribbean, Japan, and China. Montessori High Schools also sponsor camping, canoeing, and sailing expeditions.

Montessori High Schools

A number of independent and public schools now offer Montessori at the high school level. At this time, however, there is no agreement as to what defines a Montessori High School. The following insert about Clark Montessori Secondary School in Cincinnati, Ohio, offers one description.

A Montessori University

In keeping with her philosophical focus on designing learning environments to satisfy developmental needs, Montessori noted that university studies must help students become autonomous and



**Clark Montessori
Secondary School**
Cincinnati, Ohio

Clark Montessori Secondary School is located in Cincinnati, Ohio*

Author's Note: Our thanks to Program Director, Marta Donahoe, for her description of Clark Montessori Secondary School.

Clark Montessori Secondary School* is the first public Montessori High School in the nation. In 2003 Clark, which is located in Cincinnati, Ohio, graduated its fourth class with 98 percent of its students college bound and one National Merit Finalist. The Bill and Melinda Gates Foundation, in the publication *Small, Safe, Sane, Successful Schools*, recognized Clark Montessori as an exemplary secondary model. The small-school design provides opportunities for students to learn the skills and values involved in teamwork and group decision making, long-term project management, and service to the community. These skills in human development are imbedded within the challenging academic courses required of all students.

In keeping with Montessori philosophy, "Clark places a priority on developing students' emotional competencies, building a caring community in which students feel respected, cared about, and bonded to classmates. Adolescents need to feel responsible for learning and their social life. They want to be with peers, but they need support and clear expectations from adults. They need to enhance their personal self-esteem, communication skills, sense of community, and ability to engage in meaningful learning experiences." (Mckenzie, G. K. [2003]. "A High School Model:

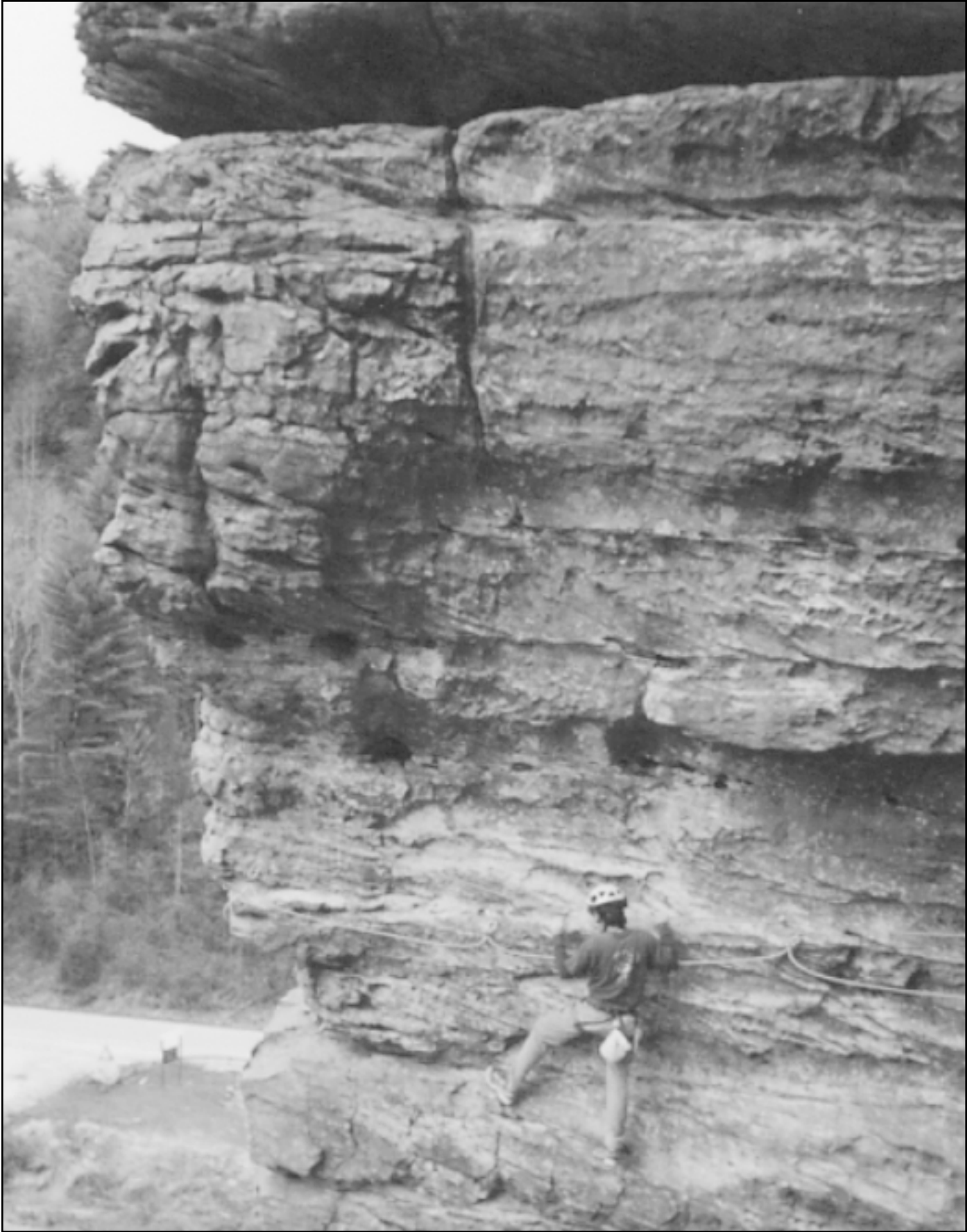
Inside Cincinnati's Clark Montessori School." *Public School Montessorian*/Spring 2003.)

These developmental needs are met with a number of planned experiences including community meetings, peer counseling responsibilities, immersion weeks, community service, independent study, and job internships. Students are expected to participate in each of these experiences as well as maintain their studies in Clark's rigorous academic program. Clark Montessori Secondary School has earned "School Achievement," the school district's highest academic ranking.

During regular community meetings, students discuss issues and concerns. Peer counseling began at Clark in 2001, after students read Montessori's essay. Teachers, along with a group of



(Right) Work with the land incorporates some of the basic elements of Montessori's proposed *Erdkinder* approach.





junior students, now counsel and advise freshman; other teachers, along with a group of seniors, counsel sophomores. Advising begins with a fall camping trip and continues during the school year with twice-a-week meetings.

Intersession courses are held twice a year when the entire high school stops the routine of regular coursework and holds immersion courses for two weeks. Each course has both an academic and service component. For example, a trip to Appalachia involves hiking, camping, and biological and historical studies. In a civil-rights course, freshman and sophomores travel to locations in Alabama, Georgia, and Mississippi. Other courses take place at Clark School. As if the academic coursework were not compelling enough, students are coached during these immersion courses in leadership skills such as group development, decision making, and dealing with conflict.

Students are required to complete two hundred hours of community service during their four years of high school. Students also complete two job internships prior to graduation. The immersion weeks, community service, and internships give students opportunities for “real-world” learning experiences. This is “Practical Life” at the secondary level.

Students’ high school experiences culminate with a year-long senior project involving an in-depth study of their choice, long-range planning and implementation of the project, and a culminating exhibition. The senior project showcases the students’ individual skills acquired during their twelve to fifteen years in Montessori classrooms.

Twice a year the entire high school participates in immersion courses, which involve activities outside the classroom, such as hiking the Appalachian Trail (shown here) or rock climbing (shown opposite page).



learn how to adapt to rapidly changing global natural and social conditions. Montessori further believed that university students should know how to achieve moral equilibrium and become economically independent.

At this time there are no Montessori universities; developing a Montessori university experience is work still to be done. There are, however, a number of colleges and universities that offer undergraduate and graduate programs in Montessori teacher education. Students complete a rigorous course of study involving Montessori philosophy, curriculum, methods of instruction, classroom leadership, and classroom teaching under the supervision of an experienced Montessori teacher.

The Challenge Facing Montessori Secondary Education

Ironically, as interest in Secondary Montessori education in the United States has begun to expand, many of the most established Montessori schools find themselves facing what may prove to be the greatest challenge to Montessori education. Despite decades of well-prepared young men and women who have graduated and gone on to succeed at highly competitive high schools and colleges, more and more contemporary parents express fear that their own sons and daughters will not adequately be prepared by anything less than a traditional, highly structured, and competitive college-prep program.

The experience of one very old and venerable Montessori school stands as a prime example of this trend. The school was founded and led for more than sixty years by a family devoted to strong ideals and a clear educational philosophy. Under the founding family's leadership, the school enjoyed a worldwide reputation and was recognized as one of the first Montessori

Junior and Senior High schools in North America. However, when the founding family turned the school over to the care of a parent board of trustees, the board decided to replace the former head with a traditionally oriented and non-Montessori-trained head of school. With no one at the helm to articulate the school's core values and vision, there was no longer a strong force to address the concerns expressed by some leading families about the effectiveness of a Montessori education at the secondary level. As a result, despite many years of successful graduates, the school transformed its Montessori Junior and Senior High School into a more traditional college-preparatory program.

This decision was apparently based on the school's desire to maintain the confidence and support of parents who were primarily focused on college admission. Presumably with the goals of increasing upper school enrollment and fund raising, the school entered into an odd dichotomy in which it now describes itself as offering a Montessori program through grade five, with a rigorous college-preparatory program for grades six through twelve. Sadly, as the United States has become more obsessed with tests and *accountability*, some leading Montessori schools have followed a similar path to become less *Montessori* and more conventional in their public image.

The basic premise of this book is that the two approaches reflect completely different perspectives on education and human development: the conventional approach of the highly competitive school and the *Montessori Way*. We believe that while both perspectives have merit, they cannot exist in one school without leading to a confused institutional identity stemming from this sort of inconsistent and illogical educational philosophy.

Jamie Wheal, Head of the Upper School at the Telluride Mountain School

in Telluride, Colorado described the challenge to Montessori Secondary education this way:

"If Montessori is an effective and positive approach for young children, as has been well documented for ninety-six years, then why, at the crucial juncture of adolescence, would it suddenly become less effective?"

If independence, curiosity, values of self-direction, inquisitiveness and responsibility are important for a five year old, are they any less so for a sixteen year old? If 'following the child' can be an effective maxim for a decade of schooling, should we doubt that same child's lead when he becomes a teen?"

We do not even need to cite the drum-beaters of the crisis among American adolescents to make the case for Montessori high schools today. Dr. Montessori's approach always seemed to be more visionary than alarmist and focused on the potentials of the human experience more than its pitfalls. A quick survey of adolescent life today, however, with its intense emotional and social pressures, alienation and sometimes tragic violence, would suggest that, if nothing else, the need for meaningful education of young adults is as strong as ever.

In the past five to ten years, it seems that many Montessori communities have perceived that need and have taken steps toward meeting it. Drawing on the examples of Montessori High Schools developed from the 1930s around the world, as well as from Dr. Montessori's own essays, over the last twenty years Montessori schools from New England to British Columbia have begun to create exciting new visions of this final stage of Montessori education."

— Jamie Wheal, New Directions for Montessori Secondary Education

