

BASIC CHARACTERISTICS OF A MONTESSORI PROGRAM

Growth in the *Child*

- Independent
- Self-directed
- Responsible Group Member
- Self-disciplined
- Self-accepting
- Joyful in Learning
- *A Unique Individual*

Program Emphasis

- Auto-education
- Intrinsic Motivation
- Process, Not Product Emphasis (as the *child* matures, this emphasis becomes less profound)
- Cooperation, not Competition
- Fostering Autonomy in the *Child*
- Fostering Competencies Based upon Success
- Spontaneous Activity
- Peer Teaching
- Sensory-Motor Preparation for Intellectual Development
- Natural Social Development
- Biological Basis for Support of Developmental Needs
- Responsible Freedom

(From the American Montessori Society)

Discipline

"The liberty of the *child* should have as its limit the collective interest, as its form, what we universally consider good breeding. We must, therefore, check in the *child* whatever offends or annoys others, or whatever tends toward rough or ill-bred acts."

Maria Montessori

PHILOSOPHY

“The Guiding Stars”

The Faculty of **Carmel Montessori Academy and Children's House** recognizes and supports with deep respect the responsibility of Parents as the prime educators of their CHILDREN: "the idea that education must begin at birth is a consistent theme" in all of Montessori's works (*The Child in the Family*). The CMA community is keenly aware of its responsibility to the CHILD and his/her Family who have entrusted this Montessori community with a part of his/her education.

The Faculty of Carmel Montessori Academy strives to serve the needs of the CHILD and his/her Family in the spirit of Maria Montessori, as this Montessori community interprets her philosophy and pedagogy, validated through membership in:

The American Montessori Society

We encourage Families to visit our website at www.carmelmontessoriacademy.com for further information.

Montessori is a system of education which encompasses both a philosophy of the child's growth and a rationale for guiding such growth. It is based on the child's developmental needs for freedom within limits and a carefully prepared environment which guarantees exposure to materials and experiences through which to develop intelligence as well as physical and psychological abilities. It is designed to take full advantage of the self-motivation and unique abilities of children to develop their own capabilities. The child needs adults to expose him to the possibilities of his life, but the child himself must direct his response to those possibilities.

-- Paula Polk Lillard, Montessorian and author

The Faculty of **Carmel Montessori Academy and Children's House** respects the CHILD as different from adults and as an individual who is different from all other CHILDREN; a person who possesses unusual sensitivity and mental powers for observation and learning; a person who has a deep love and need for purposeful work.

At CMA, we interpret the injunction “follow the child” in the philosophy and pedagogy of **Maria Montessori**, and according to the standards of:

The American Montessori Society

The Faculty of CMA “is dedicated to providing researched-based, virtue-focused, continually evolving environments within the philosophy and pedagogy of Maria Montessori as interpreted by qualified, competent CMA Faculty to facilitate the balanced development of the physical, personal, social, and academic growth of the CHILD and his/her unique Family towards his/her self-creation of a happy, competent, continually developing person who is a citizen of our world” (from the CMA mission statement).

THE GUIDING STARS...

Because *The Authentic American Montessori School* protocol represents the highest standard of excellence which an *authentic* Montessori school can offer Families for their CHILDREN, an outline of the two sections of that protocol most pertinent to Philosophy and Curriculum has been included below. *The Educational Nature* delineates in the most specific manner the type of philosophy/pedagogy and educational environment and teachers which an *authentic* American Montessori school offers; *The Nature of the Outcomes* sets the goals that an *authentic* American Montessori school has for its CHILDREN. These are the stars by which an authentic American Montessori school steers its course. They should be before us all – CHILDREN, Families, Directors/Directresses, administration, and the wider American Montessori community - in our service to CHILDREN on all the successive Planes of Development.

The Educational Nature

The Montessori Learning Environment

A Child-Centered Environment

A Responsive, Preparing, Adaptive Environment

Individually Construed Competence

Montessori's Learning Activity

First Hand Experience with Materials

Spontaneous Activity

Active Learning Methods

Self-Directed Activity (Auto Education)

Liberty within Limits

Intrinsic Motivation

The Montessori Learning Relationships

Mixed Age (Family) Grouping

Social Setting as a Community

Cooperation, Collaboration, *not* Competition

The Montessori Spirituality

Child as a Spiritual Being

What the Montessori Teacher Is

Authoritative

Observer

Resource/Consultant

Model

What the Montessori Teacher Does

Respectfully Engaged with Learner

Able to Facilitate "Match" Between Learner and Knowledge

Environmental Designer/Organizer/Preparer

The Nature of Outcomes

Independence

Confidence and Competence

Autonomy

Intrinsic Motivation

Ability to Handle External Authority

Social Responsibility

Academic Preparation

Spiritual Awareness

Citizens of the World

PHILOSOPHY - "The Child & His World"

Each curricular area below contains reflections on the application of *The Educational Nature of the School* and *The Nature of the Outcomes* in the environments offered at **Carmel Montessori Academy and Children's House**, through all levels from Toddler through Upper Erdkinder. Please refer to the most recent CMA Accreditation for more details about these concepts.

AREAS OF CURRICULUM

Practical Life

Spiritual Development

Because Practical Life experiences and the Spiritual Development of each CHILD are the curricular foundation of Montessori philosophy and pedagogy, the "cosmic view threads" which support the fabric of Montessori education, all of the "guiding stars" are referenced under these two areas of curriculum. In fact, the essence of both Practical Life and Spiritual Development can be found throughout the curriculum, throughout the day, throughout the year. For brevity's sake, yet in recognition of the necessity for "cosmic view," all other areas of curriculum description below contain a few such references.

Sensory Education

plus Sensitive Periods in the Montessori Method

Language

plus Materials & The Three-Period Lesson in the Montessori Method

Mathematics

plus Mixed Age (Family) Groupings in the Montessori Method

Science

plus Animal Care and Barn – A CMA Signature Program

Social Science

plus Community Education – A CMA Signature Program

Art

plus Family Programs - A Montessori Tradition

Music

plus Community Line – A daily CMA Signature event

Physical Education

plus Special Lessons – A CMA Signature Program

World Languages And Culture

plus Home Economics – A CMA Signature Program

PRACTICAL LIFE

The works of Practical Life “are tasks which not only require increasing skills but also a gradual development of character because of the patience necessary for their execution and the sense of responsibility for their successful accomplishment.”

Maria Montessori, The Discovery of the Child, p. 61-62.

“Men with hands and no head, and men with head and no hands are equally out of place in the modern community.”

Maria Montessori, From Childhood to Adolescence, p.99.

In the CHILD-centered environments of the Toddler and Preprimary classes, the Practical Life curriculum offers the CHILD the opportunity to develop **confidence and competence** in such preparatory activities as dish washing, floor scrubbing, and chair washing. Such activities enable the CHILD to develop his/her own interior discipline and order, building **autonomy** and **intrinsic motivation**, through the use of his/her hands. The Home Economics Program, centered on nutritious lunches and snacks, provides the CHILD with the real-life **social setting** to frequently and consistently utilize these skills in a **directed** environment. The CHILD’S tasks include care of self and the physical environment, menu selection, shopping, cooking, table setting and serving, complete clean-up, and also ecological care for both the indoor and the outdoor environments.

As the CHILD grows toward a more product-oriented stage of development through the Primary and Elementary classes, she/he builds upon the order and skills acquired earlier, using them in a program meticulously **designed, organized, and prepared** by a certified Montessori Director/Directress. Practical Life activities at this level include a thorough cleaning of his/her own environment, detailed menu selection, advanced consumer education (e.g. price comparison), more intricate food preparation, fabric/yarn projects, and other Practical Life activities, including typing, reception, barn supervision, and outdoor activity supervision. Through **first hand experience with the materials** of daily living, the CHILD develops **independence** and the **social responsibility** required for living within a community.

The extension of Practical Life into the Erdkinder classes is characterized by ever more refined and in-depth activities. **STUDENTS** act as mentors to younger CHILDREN, lead the CMA Student Council, and assist in Lower and Middle School preparation of environments. Because their **competence is individually construed** and **cooperation and collaboration** are emphasized, the **STUDENTS** can determine the areas of Practical Life that most meet their interests and needs under the direction of an **authoritative resource consultant** – the Montessori Director/Directress. The **STUDENTS** participate in advanced consumer education projects, work in animal husbandry and landscaping, construct composting areas, and volunteer in community-based civic projects, to name a few. Strengthened by his/her own **independence** and **autonomy** and his/her awareness of **social responsibility**, the **STUDENT’S** Practical Life experience culminates in the Professional Involvement Program in which the **STUDENT** takes part in the operating of a school-based business and finally in the economic community itself.

SPIRITUAL DEVELOPMENT

“The origins of the development, both in the species and in the individual, lie within.”

Maria Montessori, The Montessori Method, p. 105.

“Moral Education is the source of that spiritual equilibrium on which everything else depends and which may be compared to the physical equilibrium or sense of balance without which it is impossible to stand upright or to move into any other position.”

Maria Montessori, From Childhood to Adolescence, p. 116.

The development of a CHILD’S interior being is an essential aspect of the Montessori Method. **Spiritual development** is the other side of the fabric of "cosmic threads" which tie all disciplines into a meaningful whole. They center the CHILD, giving him/her a place to personally and intellectually locate individual concepts and skills in a cosmic view. The CHILD is a **spiritual being; spiritual development**, however, does not necessarily mean religious development, although it can and does to individual CHILDREN and their Families. **Spiritual development** in the Montessori environment begins in the Toddler and Preprimary classes with natural and

logical consequences, the development of self-discipline using the principles of *respectful engagement*, *liberty within limits*, and adult *models* of striving for interior strength of character. The dawning of **spiritual awareness** in the young CHILD is a function of not only the structures of the classroom, but also the *spontaneous activities* of the CHILD in a *responsive, preparing, adaptive environment*, and the social, *mixed-age* discussion groups of daily classroom experience.

As the CHILD matures through the Primary and Elementary classes, World Religion Studies in the Social Science Curriculum, Current Events Line, Socratic moral discussion groups, ecumenical experiences, and philosophic/psychological exploration provide the CHILD with the peripheral experiences to mold his/her own personality, soul, being. At Parent option, the CHILD may also participate in Scripture class, based primarily upon five major world religions, and Rite classes (of the faith of the Family). The Montessori Director/Directress **observes** the CHILD in these many settings, shares his/her observations with the CHILD and his/her Family, and plans with them this delicate *match between the learner and the knowledge and wisdom* to be ultimately acquired through *auto-education*. Again, the CHILD has the opportunity through *first hand experience with materials and ideas* and *active learning methods* to develop **independence, confidence, autonomy, and social responsibility** in a nurturing, *responsive, preparing, adaptive environment*.

Spiritual development for the *Erdkinder* STUDENT is facilitated by the Director/Directress and the Family, but also broadened through the **independence, confidence and competence** about his/her own **spiritual awareness**, his/her **autonomous** decisions regarding both personal and **academic preparation** of self, and, as a **citizen of the world**, the **social responsibilities** inherent in the **ability to handle external authority** rising from well-developed **intrinsic motivation**. Morals and Ethics classes (including evening sessions which Parents attend once a month for the three-year cycle) and Development of a Personal Philosophy are integral at the Erdkinder level.

The environments are so designed to direct the CHILD toward positive modes of behavior. The CHILD is free to experiment personally, socially, and academically within his/her environment, respecting the needs of him/herself, others, and the materials that serve him/her. "The child has the right (freedom) to do what is right." The CHILD who infringes upon these rights may be redirected, separated from the situation, or, more ideally, the environment itself will offer logical consequences. The CHILD who spills water mops it up. As the CHILD grows, the needs for increased responsibility parallels the needs for increased commitment. In the Elementary class, the CHILD sets his/her own goals and completes his/her work before she/he leaves the environment. In Erdkinder, the STUDENT is able to choose to complete assignments with ample time in class or she/he may take his/her work home; the assignments, however, must be completed. The CHILD grows, then, personally, socially, and academically. The goal of the *Spiritual Development* curriculum is to prepare the philosophical and psychological environment in order that the CHILD may learn to meet his/her personal, emotional, and social needs within his/her Montessori community and ultimately in the society and world in which she/he lives.

SENSORIAL EDUCATION

"The training and sharpening of the senses has the obvious advantage of enlarging the field of perception and of offering an ever more solid foundation for intellectual growth. The intellect builds up its store of practical ideas through contact with, and exploration of, its environment."

Maria Montessori, The Discovery of the Child, p. 99.

Sensorial education, whose goal is so aptly stated in the above quotation, begins in the Toddler and Preprimary Classes. Not only does *first hand experience with materials* like the Pink Tower, Brown Stair, Baric Tablets, and Binomial Cube serve the CHILD to be more aware of environmental possibilities, but it also provides an excellent syntactic base for later **academic preparation** in mathematics and science. Field excursions for the young CHILD offer a generous opportunity for "sensing" new environments – from smelling the apple pies on the sills of an Amish home, to listening to the oboe in Prokofiev's "Peter and the Wolf" at a performance of the Chicago Symphony Orchestra, to fingering the dress of the wicked witch at the Yellow Brick Road Museum. Both the CHILD'S physical and *spiritual* being is enriched by his/her sensory experiences.

In the Primary and Elementary classes, obvious *sensorial* refinements (e.g. fabric discrimination) combine with sensorial/intellectual presentations of the basic skills in language, mathematics, social science, science, art and

music. The CHILD develops **confidence** in his/her own senses and **competence** in using the knowledge thus gained for further exploration through the **active learning methods** systemic to interpretative reading, concretization of mathematics using bead chains or racks and tubes, creation of time lines, science experimentation, a field trip to the Art Institute, playing a recorder or a violin, and running up a sand dune at the bottom of Lake Michigan.

Within the **social setting as community, sensorial education** on the Erdkinder level ranges from the sheer pleasure of baking pumpkin pies for the annual Thanksgiving Family Feast, to painting scenery for a school play, to strumming a guitar for songs at daily Community Line, to saddling a horse for the young CHILD she/he is mentoring, to paddling a canoe across a lake. **Cooperative, collaborative relationships** with young CHILDREN, peers, and adults allow the **adolescent** to not only develop his/her physical senses, but also his/her psychological, **spiritual awareness**, and social senses which are essential to the goals of **social responsibility** and **world citizenship**.

SENSITIVE PERIODS in the Montessori Method

“Nature has placed an extraordinary sensitivity in a child... There is no going back: what a child’s mind assimilates during the sensitive period remains as a permanent acquisition for his whole life, and it can never be acquired at another stage.”

Maria Montessori, The Discovery of the Child, p. 171.

Within the construct of Sensorial Education, a word on the concept of Sensitive Periods and the Montessori Method may be most appropriate. Perhaps one of the greatest gifts of Maria Montessori was her ability to draw research, ideas, and practices from many scientists, psychologists, and educators and weave them into a philosophic and pragmatic method. The Dutch scientist, Hugo de Vries, discovered these sensitive periods in animals. Through Montessori’s insistence on **child-centered environments, spontaneous activity, intrinsic motivation, mixed age (family) groupings, the child as a spiritual being**, and, perhaps most importantly the **observation of the Director/Directress**, the concept of human sensitive periods, periods in which the CHILD demonstrates such extraordinary sensitivity to absorb special skills and concepts, unfolded. Or was it her strong belief in Sensitive Periods that led her to insist upon these facets of her pedagogy? No one of Maria Montessori’s own books describes this phenomenon with more acuity than *The Secret of Childhood*.

On the First Plane of Development, the life of the **Toddler** and **Preprimary** CHILD abounds with examples. The young CHILD has a great affinity for the absorption of knowledge through his/her senses; color tablets, sound cylinders, preparation of snack, fabric comparisons, and seasoned jars are most alluring during this period in an environment in which s/he is able to **self-direct** his/her own education in a **spontaneous** manner in a **well-prepared, adaptive environment**. The CHILD reveals the facile acquisition of verbal language the world over beginning even before the CHILD is two; materials and exercises in the Toddler and Preprimary classes (e.g. the three-period lessons, matching materials in vocabulary, one-to-one correspondence) reinforce this interest. The absorption of the written symbols of language follows so rapidly; the CHILD’S own written symbols, sandpaper letters, word building, reading, creative writing grow out of many sensitive language periods for many different skills and concepts. What is more, the acquisition of these skills and concepts during the CHILD’S Sensitive Period for language provides him/her with a strong, natural foundation for more advanced language learning.

The Second Plane of Development is perhaps the most stable, the most even of the three. For example, the CHILD in the Primary and Elementary classes develops the urge toward sociality. The desire to work with a partner or in small groups is very strong. Still using **active learning methods**, still with great **spontaneity**, but with the **authoritative** approach by the Director/Directress (necessary in a complex society) to explore **liberty within limits**, the CHILD experiments with his/her new-found feelings of **social privilege and responsibility**, more explicit **spiritual awareness, cooperative** vs. competitive associations, and the personal value of learning to appropriately **handle external authority**. The CHILD chooses the type of work setting she/he wishes (e.g. table, desk, rug) and the order in which she/he will do his/her work (e.g. grammar boxes, science experiment, food preparation). The CHILD participates in structured classes on the development of moral awareness and responsibility. The CHILD assists in the evaluation of his/her own ability to work productively in a small group. These activities, and so many more to which the CHILD on the Second Plane of Development is so sensitive, lay the foundation for the wider life community for which she/he will soon be preparing.

The *Erdkinder STUDENT* reveals one of his/her greatest “sensibilities” to the adults about him/her, for surely in the great agitation of mind and body of the adolescent, the undulations of uncertainty, tremendous responsibility, doubt, error, and achievement can only be attributed to the example she/he receives, and through his/her **autonomy** decides to incorporate into his/her own life. Perhaps the **modeling** role of Parent and/or Director/Directress is never so paramount for the CHILD who will soon become adult. In the development of **independence, confidence and competence, autonomy, social responsibility, spiritual awareness, and world citizenship**, as well as **academic preparation**, the adolescent observes, experiments with, rejects and accepts the example of the adults surrounding him/her. From the expectation of Parents and Directors/Directresses as reflected in the planning, implementation, and evaluation of his/her work (e.g. grading conferencing procedures), to the STUDENT freedom to make choice within acceptable limits (e.g. elective choice and creation), to participation in regional and national events, to giving presentations throughout the School, the CMA *Erdkinder student* grapples with the challenges of preparing for adulthood, for this is undoubtedly the sensitive period for becoming a **citizen of a community, a nation, a world**. The adults facilitating the CMA environments are not perfect; fortunately, Maria Montessori assures us that they do not have to be: “the good teacher does not have to be entirely free from faults and weakness... We must be taught and we must be willing to accept guidance if we wish to become effective teachers” (*The Secret of Childhood*, p. 149). By the time the CHILD is approaching the end of the Third Plane of Development she/he has a stronger grasp of the frailty of the human spirit, but also an awareness of the inestimable value of sincere intentions of the adults who have been facilitating his/her education.

Many more examples on each Plane of Development can be cited. Using Maria Montessori’s own observation methods, Directors/Directresses at CMA continue to facilitate the growth and development of the CHILD from age two through age eighteen through the utilization of currently known sensitive periods at all levels of development as well as their own **observations** of the sensitivity of the CHILD - windows of opportunity for the CHILD’S acquisition of concepts, skills, behaviors.

LANGUAGE

“...language is the expression of agreement among a group of men, and can be understood only by those who have agreed that special sounds shall represent special ideas... It is the instrument of thinking together.”

Maria Montessori, Education for a New World, p. 39.

The CHILD comes to the Montessori environments with a wide range of verbal language skills. The initial Toddler and Preprimary language activities are designed to broaden the CHILD’S real experiences (e.g. discussions around the lunch tables; rabbits in their hutches outside the classroom window; a field trip to the botanic gardens) as well as vicarious experiences (e.g. matching cards; classic children’s literature). The geometric insets are a preparatory writing, reading, art, and mathematics material, revealing the interdisciplinary nature of the Montessori curriculum. Sandpaper letters, three-letter phonics drawers, and configuration and context exercises are but a few of the sequential materials available for the CHILD to use again and again until she/he is **confident** of his/her understanding. Parallel materials for each concept serve the CHILD’S individual learning style and rate because the environments are **child-centered** and **competence is individually construed**. Writing is integral to the program, and, in fact, within Montessori philosophy and pedagogy, usually precedes reading.

Language materials are continuous from the Preprimary to Primary to Elementary and into the Erdkinder Program. Presentations in the Preprimary are usually verbal, while in Primary and Elementary, in addition to the intellectual/sensorial presentation, three-period materials themselves facilitate the progression toward **competence** and **autonomy** in their use and application. **Academic preparation** in language development relies heavily on the **responsive, preparing, adaptive environment**, including materials related to description (e.g. literary style), form (e.g. grammar, sentence types), etymology, and syntax (e.g. logical analysis) and is augmented by application in drama, creative writing, the CHILDREN’S newspaper, Montessorus Tracks, the Junior Great Books Program, and the Social Science Core Interdisciplinary Literature Curriculum as well as field experiences to the historic homes of authors, plays, and field writing experiences.

Language skills as well as literature concepts are refined at the Erdkinder level in both research and content classes. Basic skills in both language and mathematics are reviewed each year using the daily focus sheet format, allowing constant evaluation by the Montessori Director/Directress so that she/he will be able to **facilitate the**

match between learner and knowledge. A wide variety of writing assignments provide the STUDENT with the opportunity to “ephiphanize,” to discover his/her own **autonomous** writing strength, while at the same time appreciating and respecting not only classic authors but the work of peers as well. The written work of each STUDENT in all content areas is channeled through the language skills instructor to provide the **consultation** necessary to apply these skills in his/her daily work. Weekly readings and discussion groups in the Great Books Program and Social Science Core Interdisciplinary Literature Curriculum as well as the required (for graduation) World, English, and United States Literature courses allow the adolescent to intellectually experiment with ideas, concepts, and theories in the **social setting of a supportive community**. Field experiences to historic sites, museums, drama performances, interdisciplinary speakers, etc., contribute to the STUDENT’S **ability to respect and handle external authority**, both research authority and immediate, personal authority. Under the direction of the Montessori Director/Directress who **designs, organizes, and prepares** the physical, psychological, and social as well as the academic aspects of the wider adolescent environments, the STUDENT becomes more **independent**, more competent to **direct his/her own education** based upon his/her own interests, abilities, and the support of Family and the School.

MATERIALS & THE THREE-PERIOD LESSON in The Montessori Method

“The educative process is based on this: that the control of error lives in the material itself, and the child has concrete evidence of it.”

Maria Montessori, Dr. Montessori’s Own Handbook, p. 71.

“In every exercise... the teacher gives a lesson... in three ‘periods’:

Period 1. Naming.

Period 2. Recognition.

Period 3. The Pronunciation of the Word.”

Maria Montessori, Dr. Montessori’s Own Handbook, p. 126.

Within the construct of Language, a word on materials and Montessori’s three-period lesson may be most appropriate. In addition to the didactic Montessori materials in the environment from Neinhuis in Holland, Gonzaga in Italy, and Kaybee in England and India, the Directors/Directresses **design, organize, and prepare** the environment using many prototype materials on a continual basis to extend traditional Montessori materials, and add concepts consistent with recent educational research and United States cultural patterns. All materials in the classrooms are scientifically designed to be **CHILD-centered**, aesthetically pleasing, self-correcting (perhaps one of the strongest of Maria Montessori’s statements regarding materials lies in this “control of error”), positively repetitive, reinforcing, sequential, and to involve as many senses as appropriate, present but one concept at a time, and to lead from the concrete to the abstract. Materials are presented verbally in the three-period lesson on the Toddler and Preprimary levels. Essentially, the Three-Period Lesson is:

1st Period - "This is (a sphere); This is (an ovoid)."

2nd Period - "Show me (a sphere); Show me (an ovoid)."

3rd Period - "Which is this?" (pointing to the sphere) "Which is this?" (pointing to the ovoid)

In addition to the sensorial presentation and verbal three-period lessons, in the Primary and Elementary three-period materials for each concept/skill are available to the CHILD. Materials at this level parallel the three-period lesson:

1st Period Material - Definition

2nd Period Material - Description

3rd Period Material - Application

Because the CHILD is encouraged in his/her **spontaneous activity** and is in the process of internalizing the concept of **liberty within limits**, these materials assist the CHILD in the development of **intrinsic motivation** which leads to **confidence and competence** at his/her own developmental level.

Although at the Erdkinder level the three-period lesson and the three-period material may be used, the STUDENT is encouraged to manipulate *ideas* as well as materials to strengthen his/her **academic preparation**

and **independence**. And, as in the first two Planes of Development, field excursions at the adolescent level provide a wide variety of “materials” to observe, appreciate, and experiment with. The three-period lesson provides the foundation for both physical, concrete development and *spiritual*, reflective development.

MATHEMATICS

“The children possess all the instinctive knowledge necessary as a preparation for clear ideas on numeration. The idea of quantity was inherent in all the material for the education of the senses: longer, shorter, darker, lighter. The conception of identity and of difference formed part of the actual technique of the education of the senses, which began with the recognition of identical objects, and continued with the arrangement in gradation of similar objects... The child’s mind is not prepared for number ‘by certain preliminary ideas,’ given in haste by the teacher, but has been prepared for it by a process of formation, by a slow building up of itself.”

Maria Montessori, Dr. Montessori’s Own Handbook, p. 126.

Conceptually and practically, mathematics preparatory activities begin in sensorial education for the **Toddler** and **Preprimary CHILD**. Through *first hand experience with materials*, number concepts are presented through such materials as sandpaper numbers and spindle boxes, and through the Golden Bead Material, the basis of Montessori mathematics. Geometric shapes and solids not only provide a basis for future geometry but also a foundation for the fine and practical arts and, thus, **independence** and **autonomy**. The concrete facets of addition,

subtraction, multiplication, and division are presented in the Preprimary through *active learning methods* and *self-directed activity*.

The CHILD in the Primary and Elementary classes continues the static and dynamic aspects of these operations, again concretizing and verbalizing the sensorial concepts acquired at an earlier stage through spontaneous activity in the classical Montessori *family, or mixed aged, groupings*. Through repetition in *self-directed activity* with materials like the stamps and the beads, the CHILD begins to compute on a more abstract basis. The CHILD has a wide range of individual choices among practical applications for math skills, including problems such as computing our horse’s weight, and which of two food items is the best value. The computer is of tremendous value, not only to enable the CHILD to develop skill in using common programs, but also in the areas of mathematics, language, logic, and concept skill experiences in the cultural subjects. Through *active learning methods*, sequential mathematics materials continue through geometry, fractions, decimals, percentage, measurement, and into algebraic computation, advanced geometry, and trigonometry, from Elementary into Erdkinder, to provide firm **academic preparation** in this basic area of study.

Basic skills in both language and mathematics are reviewed each year using the daily focus sheet format, allowing constant evaluation by the Montessori Director/Directress in order that she/he will be able to *facilitate the match between learner and knowledge*. For many **Erdkinder STUDENTS** this review in Mathematics, as in Language, is primarily a reexamination of previously mastered skills and concepts. However, the Director/Directress, through *observation* and evaluation of both isolated mathematics work and/or its application in that specific course or other content area, may determine that a STUDENT has not completely conceptualized a mathematics concept. Using an *authoritative* approach, acting as a *resource and consultant*, the Montessori Director/Directress can facilitate the mastery of the specific skill, fortifying **confidence** while strengthening **competence**. Mathematics Developmental Concepts, Algebra, Geometry, Trigonometry, and further advanced mathematical courses are available to the **Erdkinder STUDENT**. All STUDENTS, throughout their six year Erdkinder experience, continue to study and refine both their Language and Mathematics skills and concepts to whatever level their abilities and interests allow in these two basic areas of **academic preparation**.

MIXED AGE (FAMILY) GROUPINGS in The Montessori Method

“What matters is to mix the ages. Our schools show that children of different ages help one another... People sometimes fear that if a child... gives lessons, this will hold him back in his own progress. But, in the first place, he does not teach all the time and his freedom is respected. Secondly, teaching helps him to understand what he knows even better than before. He has to analyze and rearrange his little store of knowledge before he can pass it on. So his sacrifice does not go unrewarded.”

Maria Montessori, The Absorbent Mind, pp. 226-277.

Within the construct of Mathematics, a word on Montessori’s insistence on *mixed age (family) groupings* may be most appropriate. *Mixed age (family) groupings* are essential in skill as well as content areas in all Montessori environments across all Three Planes of Development. Perhaps there is no better curricular area in which to illustrate this point than mathematics. The seeds of mathematics can be found in the Toddler and Preprimary classes in the sensorial didactic materials, as for example, the pink tower. Initially, the Director/Directress has *modeled* through a specific presentation the construction of this centimeter-graduated tower to a young CHILD. The joy in the face and hands of that CHILD during the *autonomous* construction of a tower taller than him/herself cannot but attract a fellow classmate to share the triumph *and* provide an opportunity to demonstrate the manual dexterity and balance necessary to such construction. And, of course, the builder becomes even more adept through his/her teaching. Now the Director/Directress observes both CHILDREN, only *respectfully engaging* if necessary; she/he takes note of the next *facilitation* which may be appropriate at another time for each of the CHILDREN. The Teens Board, perhaps by virtue of its repetitive attraction and beautiful, precise organization, often presents the opportunity for *child-teaching-child*, as do so many more of the Montessori didactic materials. The *Primary* and *Elementary CHILD* has entered a solidly stable, if outstandingly social, period of development. The occasions for older CHILDREN teaching younger CHILDREN extend not only to their own classmates but to the *Preprimary CHILDREN* as well. In addition to offering a presentation on the checkerboard (a didactic multiplication material) or the racks and tubes (a didactic division material) to a younger classmate, a CHILD on this Second Plane of Development is often found laying out the Golden Bead materials with a *Preprimary STUDENT*. And, at the same time, reinforcing his/her own concept of base-10, the “feel” of 100 as compared to 1000, the “space” of 6000 beads, but now on a more advanced level of sensorial-intellectual development. The Mentoring Program in Erdkinder in which the older CHILD shares his/her experience, physical abilities, knowledge, and wisdom with a younger CHILD may at first seem the epitome of the value of mixed-age groupings for the younger CHILD. However, *observation* has also strongly supported the benefit to the older STUDENT as well. At this tumultuous time in the growth and development of the adolescent the equanimity and deliberateness of the young CHILD can offer the 12- to 18-year-old a more cosmic, more objective view of reality than any adult can through lecture or classroom presentation. *Mixed-age (family) groupings* allow CHILDREN on all Three Planes of Development to grow in a *social setting that reflects the community nature* of adult life in *organized* environments designed specifically for their developmental level by an *authoritative resource model*, the Montessori Director/Directress.

SCIENCE

“... it is exact and scientific language which characterizes the trained observer... In fact, our little ones have the impression of continually ‘making discoveries’ in the world about them; and in this they find the greatest joy.

Now, the scientist who has developed special qualities of observation and who ‘possesses’ an order in which to classify external objects will be the man to make scientific discoveries...”

Maria Montessori, Dr. Montessori’s Own Handbook, p. 126.

Observation within the environment as well as in the community is basic to the Science Curriculum. Through use of the three-year cycle of curricular school themes in both science and social science, the CHILD, employing *active learning methods* and through *self-directed activity*, is free to choose the breadth and depth of his/her inquiry from wide and varied immersion environments. In the interdisciplinary mode so indicative of Montessori pedagogy, the *Toddler* and *Preprimary CHILD* begins with the very development of language itself to express

verbally and precisely his/her observations of the world. The young CHILD can avail him/herself of real and vicarious experiences and materials both in the classrooms and throughout the campus. The classroom offers matching cards on the parts of a rabbit or the blossom of a lily. On Line, songs about bones and muscles abound. The States of Matter (solid, liquid, and gas) bottles sit on a wooden tray beckoning to be examined by the *intrinsically motivated* CHILD through his/her *spontaneous activity*. Often small boxes of experiments with magnets or floating objects or wheels are shared in *mixed age groupings*. From “the hill” outside the classroom window in the fall, she/he can see the pumpkins round the outdoor stage or decide whether to join the square dancers in the little meadow; they are preparing for a family barn dance and some star gazing afterwards. In the winter, she/he can make innumerable trips up the snow-encrusted east side only to whisk down the south side “as far as I can go!” In the spring from atop “the hill” she/he can see from tree tops to recycling bins to the donkey in the pasture. Field trips to museums, forest preserves, observatories, fossil hunts augment the *prepared and preparing environments designed* by the Director/Directress. The sensorial experiences so necessary to scientific investigation immerse the young CHILD, providing growth in **autonomy and independence and confidence and competence**.

So, too, the *Primary and Elementary CHILD* shares and builds upon these sensorial, *first-hand experiences*. With his/her more advanced thinking processes, she/he is able to organize and categorize his/her experiences and studies into the more traditional, seven-faceted cosmic view of science: Botany, Zoology, Human Anatomy & Physiology, Astronomy, Earth Science, Physics, and Chemistry. His/her classroom environment is *organized, prepared, adaptive, and responsive* to his/her need for *spontaneous activity* with shelves of real and vicarious materials, yet designed in such an *authoritative* manner that she/he is *intrinsically motivated to direct his/her own activities* in responsibility to him/herself and as a **citizen of a wider world**. Within the school science themes base, the *Primary and Elementary CHILD interacts with materials*, performs experiments, plans projects with his/her *Director/Directress as resource*, participates in the annual Science Fair, and offers to his/her school community the fruits of the labor, whether an ecology plan or a suggestion for the school fruit baskets or an idea for a field excursion. The CHILD is able to explore the historical significance of scientific discovery through the Social Science Core Interdisciplinary study. Field trips are frequent in science. Often they are *designed and organized* around the school science theme; but neither the CHILD nor his/her Director/Directress are bound by this arbitrary curricular function. *Spontaneous* excursions to a forest preserve, a locally advertised college exhibit, a nursery, a specialty store, or an open prairie are not uncommon.

The *Erdkinder STUDENT* is encouraged to integrate his/her knowledge in the nine science courses required for graduation, which include Physical Science, Life Sciences, Botany, Zoology, Human Anatomy & Health Science, Astronomy, Earth Science, Physics and Chemistry. *Directors/Directresses facilitate* the creation of individualized albums for each course with each STUDENT, albums which contain an age-appropriate cosmic view of the subject matter, but go on to reflect the *student's first hand experience with materials and concepts, active learning, and auto education*. Through the vehicle of Erdkinder Albums (STUDENT-created texts) in Science as well as other content areas, the *student* acknowledges the overall outline of the content area and then demonstrates his/her knowledge and understanding through written work as well as material collections, photographs, and evaluations. So, although each STUDENT'S album in each course begins with the same cosmic view, the *child-centered nature* of his/her work is maintained and his/her **academic preparation and competences are individually construed**. Close communications with *parents*, parental participation in classes and evaluations (as noted elsewhere), mentoring in science areas for young CHILDREN, and extensive field experiences to places like planetariums, botanical gardens, museums, observatories, week-long camping to *experience first hand* biomes in Illinois and neighboring states, etc., all contribute to the *student's ability to respect and handle external authority*, both research authority and immediate, personal authority.

ANIMAL CARE AND BARN – A CMA Signature Program

“Children have an anxious concern for living beings, and the satisfaction of this instinct fills them with delight. It is therefore easy to interest them in taking care of plants and especially of animals.”

Maria Montessori, The Discovery of the Child, p. 71.

Since its establishment in the mid-1970's, CMA has offered the CHILD and his/her Family both indoor and outdoor *child-centered environments* which stimulate the CHILD'S physical, personal, social, and academic development through the care and maintenance of living things and animals. There is perhaps no more effective

way to facilitate the concept of *liberty within limits* than interaction with living things. The care of plants and animals in a **structured, responsive, adaptive environment** is the developmental foundation of **social responsibility** and **world citizenship** stewardship. Green and flowering plants, many from current continents under study, and examples of vertebrate and non-vertebrate animals can be found in the care of the CHILDREN in every classroom. The campus environment and the field excursions offer the CHILD many examples of domestic as well as wild flora. Mentors from Erdkinder frequently assist the young CHILDREN in their care of the inside as well as the outside Preprimary animals (rabbits). **Primary** and **Elementary** participate in all-school care responsibilities as well as caring for the animals in their own classrooms. Lessons in the cycle of life are presented to the CHILD through his/her natural experiences with plants and, especially, animals. The **spiritual**, deeply personal aspects of the development of the CHILD are facilitated by these interactions and lessons. Again, the importance of **mixed-age (family) groupings** within Montessori philosophy/pedagogy can be observed.

SOCIAL SCIENCE

“The history of civilization is a history of successful attempts to organize work and to obtain liberty.”

Maria Montessori, Dr. Montessori’s Own Handbook, p. 188.

“A child must acquire the customs prevailing in his environment. This is why he must have an opportunity to exercise himself in them. It is not enough that he see what others do. His movements are not those of a machine that only has to be regulated; they are rather those of a mechanism that has a definite task to fulfill. Motor activity, therefore, must have a goal and must be connected with mental activity. There is a close relationship between movement and the desire to learn.”

Maria Montessori, The Discovery of the Child, p. 305.

Awareness of the diversity of the world and the responsibilities of **world citizenship** are presented to the CHILD via an integrated approach of all concept areas, using the Social Science Core Interdisciplinary Curriculum as foundation. In the Toddler and Preprimary classes awareness often begins with a small globe or community helper dress/uniform. Stories and visits from essential members of community (e.g. firefighters) offer the young CHILD the concept of **social setting as a community**. Field trips include the mayor’s office, post offices, and Springfield, as the capital of Illinois. Jigsaw puzzle maps and land-water forms provide the young CHILD with the means to explore his/her world geographically. Historical concepts are presented in the Preprimary classes through story, art, music, and holiday celebration. Community Line offers the young CHILD experiences in a **mixed age (family) grouping of cooperation and collaboration** (e.g. performing together with a mentor) and **liberty within limits** (e.g. being listened to by others and listening to others).

Geographic concepts are integrated in two three-year sensorial history cycles in Primary and Elementary. Areas of historical study are: World, North America, South America, Europe, Africa, Asia, and Oceania, with an in-depth study of United States History. An interdisciplinary study, correlating the history, philosophy, religion, geography, scientific achievement, literature, art, and music of a given historical period, offers the CHILD an overview yet an individualized study, discussion, and materials, which, while giving each CHILD a broad knowledge of the times, allows him/her to choose those incidents and concepts most interesting to him/her within the cosmic view. The CHILD learns the value of Director/Directress as **resource/consultant** and learns to become a resource and consultant for other CHILDREN as well. Time Lines, used extensively to afford the CHILD a sense of history in a semi-concrete manner, give **first hand experience with materials**, as well as **independence** and strong **academic preparation**. Continental study on a structured, interdisciplinary basis is also an option for the CHILD. An extensive current events program (which correlates with the Spiritual Development Curriculum) places the CHILD in contact with his representatives in Congress as well as local officials and issues. The Elementary class culminates in a week-long trip to our nation’s capital, Washington, D.C. Participation in local community projects and an extensive Community Education Program offers the CHILD an opportunity for growth in **academic preparation, social responsibility, spiritual awareness**, and the obligations of **world citizenship**.

The uneven sequential development of STUDENTS at all levels, but especially in adolescence because of their emerging **autonomy**, necessitates a wider latitude of **liberty** and conversely a more refined concept of

individual and social limits. Choices in content, implementation of projects, and evaluation are many. *Erdkinder STUDENTS* participate in the study of World History and Geography, United States History and Geography, United States Government, and Illinois History and Government (required courses). Studies, experiences, recordings, and evaluation are often communal, emphasizing **social responsibility**, yet individualized to support the development of **autonomy, confidence and competence**, and **spiritual awareness** in each STUDENT. Travel around the state, country, and the world is integral to the interdisciplinary social science curriculum at the Erdkinder level. STUDENTS have traveled to Chicago, Springfield, Jamestown, Philadelphia, Washington D.C., New York, Yosemite National Park, the Ozarks, Key West Florida, Quebec, Canada, Ireland, England and France. The concepts of **independence**, the **ability to handle external authority, social responsibility, spiritual awareness, academic preparation, and world citizenship** are offered sensorially, concretely, and intellectually to the Erdkinder STUDENT in a *child-centered environment* which has evolved into their world.

COMMUNITY EDUCATION – A CMA Signature Program

“...the child needs wider boundaries for his... experiences...” (p. 9), “...it is necessary for us to provide him with culture and to enlarge his social experience...” (p. 17), “when the child goes out, it is the world itself that offers itself to him. Let us take the child out to show him real things...” (p. 34) “...the outing is a new key for the intensification of instruction ordinarily given in the school” (p. 35).

Maria Montessori, From Childhood to Adolescence, pp. 34

"The Child - His World" is the beginning and end of the curriculum and can be most concretely observed in the *Community Education Program*. The CHILD spends six to eight hours per week in the community of which he is a part. To cite only a few examples, the *Community Education Program* expands the curriculum in many areas:

- Practical Life (e.g. grocery shopping, hardware shopping)
- Spiritual Development (e.g. visits to temples, "Wide-Sky," historic churches)
- Sensorial Education (e.g. Indiana Dunes, bakery)
- Language (e.g. Museum of Natural History, Illinois Railway Museum)
- Mathematics (e.g. Museum of Science and Industry)
- Science (e.g. Museum of Surgical Science, Arboretum)
- Social Science (e.g. Chicago Historical Museum, Office of the Mayor)
- Art (e.g. Art Institute, Museum of Contemporary Art)
- Music (e.g. Orchestra Hall)
- World Languages and Cultures (e.g. Polish Museum, Native American PowWow)
- Physical Education (e.g. sledding at Windmill Park, canoeing down the Fox River)

The CHILD observes, listens to lectures, participates in activities designed especially for him/her, and questions experts in their respective fields. Within the *Community Education Program* about one half of the experiences are **academic** in nature (e.g. museums, science field studies); one quarter are service to the community within **social responsibility**, (e.g. cleaning the prairie path); and the final quarter are social (e.g. Annual Bike Hike), that, is reinforcing **social setting as community**. Most notably within the academic area, the actual on-site experience is divided into three parts:

- an age-appropriate session/activity for CHILDREN on each of the Three Planes of Development (3-6, 6-12, 12-18), accenting **academic** concepts and goals
- a mentoring session in which older STUDENTS accompany and/or instruct their young CHILDREN in areas of importance, interest, and pleasure, accenting personal and **social responsibility**
- A third period in which time is allotted for individual and small group interests across age levels, accenting **independence and confidence and competence**.

The Community Education Program at CMA takes the CHILD out to his/her world in order that the CHILD may develop greater **spiritual awareness** of self, build strong **academic preparation**, and demonstrate essential **social responsibility** as a **citizen of the world**.

ART

“Musicians, singers, artists, athletes... heroes... all are born in the same way, but each carries within him the enigma of his own special development that motivates his unique activity in the world.”

Maria Montessori, The Child in the Family, p. 21

“Aesthetic and moral education are also closely connected with the training of the senses. By multiplying sense experiences and developing the ability to evaluate the smallest differences in various stimuli, one’s sensibilities are refined and one’s pleasures increased. Beauty is found in harmony, not in discord; and harmony implies affinities, but these require a refinement of the senses if they are to be perceived.”

Maria Montessori, The Discovery of the Child, p. 148.

The Fine and Practical Arts Curriculum is fully integrated into the Social Science Core Interdisciplinary study. On all Planes of Development the CHILD may avail him/herself of the two-fold function of the art specialist: art activity director and **resource/consultant** for the Head Montessori Director/Directress. In the Toddler and Preprimary classes the art teacher visits the classroom once a week for small group instruction and activity. Concepts such as color, hue, intensity, space, and rhythm may be highlighted through specific art activities and the use of various media, including pencil, pastels, watercolors, collage materials, clay, etc. The materials and methods are structured to meet the individual needs and interests of the CHILD, as part of the **community grouping**. The art specialist meets with the Head Montessori Director/Directress to (1) note her **observations** as she has worked with the small groups; (2) receive **consultation** for working with individual CHILDREN; (3) discuss the interdisciplinary curricular focus of the week with the Head Montessori Director/Directress; (4) assist in the **design, organization, and preparation** of daily art activities for the following week, incorporating geographic, holiday, and other content area concepts into the presentations to be offered to the CHILD.

Although the two functions of the art specialist in the Primary and Elementary classes are similar to her functions in the Lower School, the content and media become more sophisticated, more detailed *and* more integrated throughout content areas. Advanced concepts include: elements of art - line, color, shape, texture, space and form; and principles of art – unity, balance, contrast, rhythm, pattern, and movement. Groupings at this level are more flexible, more reflective of the CHILD’S interest and **individually construed competence**. Through **first hand experience with materials**, the CHILD, individually or in small groups, becomes facile with drawing, painting, collage, printing making, sculpture, pottery, crafts, and photography. The collaboration between the art specialist and the Head Montessori Director/Directress focuses on the historical period and/or scientific discovery which the class, a small group, or an individual CHILD is studying. Daily art activities for the CHILD can then be encouraged or suggested for the remainder of the week within the classroom, building **independence and confidence and competence** in this area. The wide variety of artistic expression in historical period or culture is studied and often imitated by the **Primary and Elementary CHILD**.

The STUDENT in the Erdkinder classes has a vast foundation upon which to express his/her artistic views, a wide perspective from which to draw inspiration, and many principles and techniques from which to create his/her own images for his/her own pleasure or in daily work. STUDENTS also incorporate these skills and techniques into the creation of curricular albums, often through the use of photographs. In addition the Erdkinder STUDENT takes a (required) Art History class whose primary focus is field work at institutes, galleries, and museums in Illinois and neighboring states. Electives in Art are offered frequently at this level and focus on such topics as Ancient Art, the Renaissance, Abstract Art, the Art of Native American Cultures or a specific in-depth course in photography or sculpture or print making. The development of **intrinsic motivation** and **autonomy** is supported. The Community Education Program provides a broad experiential background and draws the CHILD to further study and exploration in the arts from the Preprimary class through the Erdkinder classes in such activities as visits to the Art Institute, study of the fashions of historical periods in nearby museums, field excursions to nearby forest preserves for drawing, sketching, etc.

FAMILY PROGRAMS - A Montessori Tradition

“Those who are conversant with the chief problems of the school know that to-day much attention is given to a great principle, one that is ideal and almost beyond realization – the union of the family and the school in the matter of educational aims.”

Maria Montessori, The Montessori Method, p. 63.

So important is the Family in the education of the CHILD that Maria Montessori devotes an entire, treasured volume, *The Child in the Family*, to unfolding three principles of parenting: respecting “all reasonable forms of activity in which the child engages...” (p. 88); supporting “as much as possible the child’s desire for activity...” (p. 93); and the need to be “most watchful in our relationships with children because they are quite sensitive – more than we know – to external influences” (p. 96). Parents are the prime educators of their CHILDREN and within the Montessori tradition worldwide, programs which encourage parental appreciation of and participation in the work of the CHILD are highly valued. Some of the annual procedures, programs, and activities at CMA which support this union of the Family and the school include:

- Fall, Winter, Spring **Parent Conferences**
- Doorstep Conferences
- **Parent Meetings** (usually 3 per year)
- Family Studies of the Great Ideas of the Western World (weekly)
- CMA Holiday Celebrations & Bi-monthly Focus of five of the major religions of the world
- The monthly explorations of *The Nature of the Outcomes of an Authentic American Montessori School*
- Monthly **Erdkinder Morals & Ethics Meetings**

- First Day of School **Peace Rededication Ceremony**
- **Barn Dance & Pot Luck**
- **Harvest Festival & Halloween Celebration**
- **Family Reading Night** (a home activity)
- **Thanksgiving Opera & Feast**
- Any and all of our **December Global Light Celebrations**
- **Senior Caroling**
- **Annual Holiday Party**

- Any and all of our **Children-Helping-Children** fund raising activities
- **Snovernighter**

- **Valentine’s Day Celebration**
- **Mardi Gras Talent Show**

- **Children’s Presentation Night**

- **Math & Science Creativity Fair**

- **Fine Arts Open House**
- **All school plays** involving *all students*

- **Annual End-of-the-Year Events**
 - *Lesson Showcase*
 - *Annual Canoe Trip*
 - *Annual Trike/Bike Hike*
 - *International Children’s Day*
 - *Graduation Luncheon*, for *Preprimary, Elementary* and *Upper Erdkinder Graduates and Families*
 - *Graduation Day*
 - *Family Picnic*
 - *Graduation Pot Luck & Ceremony*

MUSIC

“... success here depends to a great extent upon having a child hear a good deal of music. His environment must be such that it can arouse in him a feeling for, and an understanding of, music.”

Maria Montessori, The Discovery of the Child, p. 286.

The Fine and Instrumental Music Curriculum, too, is fully integrated into the Social Science Core Interdisciplinary study. On all Planes of Development the CHILD may avail him/herself of the two-fold function of the music specialists: music activity director and **resource/consultant** for the Head Montessori Director/Directress. In the Toddler and Preprimary classes the music teacher visits the classroom, often on the Classroom Line (a Montessori group activity), once a week or more for presentation of music, songs, instrumental presentations, and related activities. Concepts such as melody and rhythm are explored. The materials (e.g. Montessori bells, rhythm band instruments) and methods are structured to meet the individual needs and interests of the CHILD, as part of the **community grouping**. The music teacher meets with the Head Montessori Director/Directress to (1) note **observations** she has made; (2) receive and offer **consultation** for working with the individual CHILD; (3) discuss the interdisciplinary curricular focus of the week with the Head Montessori Director/Directress; (4) assist in the **design, organization, and preparation** of daily music activities for the following week, incorporating geographic, holiday, and other content area concepts into the presentations to be offered to the CHILD, individually, in small groups, and on the Classroom Line.

The **Primary** and **Elementary CHILD** at CMA has a wide and diverse opportunity to experience many facets of music, as well as study it from a more academic perspective. In these classes the two functions of the music specialist are similar to her functions in the Lower School, but the content and media become more sophisticated, more detailed *and* more integrated throughout content areas. Advanced concepts include harmony, theory, form, and timbre. Groupings at this level are more flexible, more reflective of the CHILD'S interest and **individually construed competence**. Small groups frequently form to practice their instruments and vocal arrangements; **spontaneous activity, independence, and social responsibility** are thus encouraged. Special Lessons (arranged privately with instructor) in piano, violin, cello, guitar, etc. are common. Class as well as all-school concerts are frequent and interdisciplinary in nature, especially at daily Community Line. Often the work of the CHILD forms around the School Historical Theme as well as **multi-age group experience**. Several times each year, concerts by the Chicago Symphony Orchestra at Orchestra Hall as well as concerts by other local musicians, interdisciplinary composer study, and individualized music work provide each CHILD with a wide experiential background in the area of music.

The STUDENT in the Erdkinder classes has a vast foundation upon which to base his/her musical views, a wide perspective from which to

draw inspiration, and many principles and techniques from which to create his/her own musical expressions for his/her own pleasure or in daily work. The STUDENTS may incorporate these skills and techniques into the creation of curricular albums, often through the use of CDs and photographs. In addition, the **Erdkinder STUDENT** takes a (required) Music History class whose primary focus is the appreciation of music in the life of mankind through the ages. Field work at concert halls and other musical venues in Illinois and neighboring states is frequent. Electives in Music are offered frequently at this level and are often “created” by the STUDENT and his/her Parents. The Community Education Program provides a broad experiential background and draws the CHILD to further study and exploration in music, from the Preprimary class through the Erdkinder classes, in such activities as visits to the Orchestra Hall, study of the instruments of the recent and more distant past in nearby museums, field excursions to STUDENT and professional performances, etc.

COMMUNITY LINE – A daily CMA Signature event

“All the older ones become heroes and teachers, and the tinies are their admirers. These look to the former for inspiration.”

Maria Montessori, The Absorbent Mind, p. 224.

“Goodness must come out of reciprocal helpfulness, from the unity derived from spiritual cohesion. This society created by cohesion, which children have revealed to us, is at the root of all social organizations.”

Maria Montessori, The Absorbent Mind, p. 239.

Each day the entire CMA community – *Preprimary, Primary, Elementary, and Erdkinder CHILDREN*, Faculty, and any Parents or visitors present – meet together for *CMA Community Line*. The philosophical basis for this gathering is clearly embodied in the word “community.” CHILDREN join the assembly from their classrooms or the kitchen or from the outdoor campus; they come in large and small groups or individually from music practice or silent reading. Often they sit with other classmates; frequently the small CHILD will find his/her mentor. The buzz of social intimacy fills the room. Then silence falls, the individual refocuses to become part of the group, and Community Line begins.

- The Pledge of Allegiance
 - with some CHILDREN, not of United States citizenship, standing respectfully by, silently or verbally offering their own allegiance
- Announcements
- Sensorial-Intellectual Presentation
 - usually based round the Science or Social Science Core
 - often with a music or art theme
- Usually... *Student* presentations
 - Poetry Readings
 - A Fiction or Non-Fiction Selection
 - An “Opinion” Presentation of community interest
 - Leading of a song on a guitar or keyboard or thumb harp
- Often...
 - Celebration of a Holiday or Holyday
 - A Guest Presenter
 - Other Issues of Importance

Community Line ends with *Silence*, one of Maria Montessori’s most important reflective exercises. And then CHILDREN are dismissed to table for lunch.

PHYSICAL EDUCATION

“The care and management of the environment itself afford the principal means of motor education...”

Maria Montessori, Dr. Montessori’s Own Handbook, p. 50.

As clearly elucidated by Maria Montessori herself, the foundation of Physical Education within a Montessori environment is Practical Life. In addition, physical education exercises permeate the entire *responsive, preparing, adaptive environment* from the hall balance beam, to the physical education stations around the fifth-of-a-mile track encircling the back of the two acre campus, to the exercise of the animals to develop *independence* and *social responsibility*. The CHILD participates in organized and *spontaneous* physical activity each day in a *mixed age (family) community* both inside and outside in all kinds of weather. The *Toddler* and *Preprimary CHILD* can not only choose the areas of both the *child-centered indoor and outdoor environments* as they move with their Directors/Directresses among environments, but their mentors from the Erdkinder and Upper Elementary classes spend time with them nearly every day after lunch in organized, sequential physical development activities which supports *cooperation and collaboration* among STUDENTS. *Primary* and *Elementary STUDENTS* study the basis for physical activity in their Human Anatomy and Physiology classes with *first hand experience with materials* and join in physical activities both indoor (e.g. yoga classes) and outdoor (e.g. recycling) on a daily basis. In addition to materials for physical development in the classroom and on campus, *Erdkinder STUDENTS* have a strenuous Practical Life program which includes setting up for daily programs, campus work such as garden preparation and recycling, and off-campus work such as cleaning of the prairie path, etc. to facilitate the development of *autonomy* and *social*

responsibility. All STUDENTS participate in a vast number of physical experiences in all the environments plus field excursions.(e.g. Practical Life activities of every class, wall climbing, sledding down the hill, animal care, hiking, canoeing, biking). While *facilitating the match between the learner and knowledge* and action, the Montessori Director/Directress *designs, organizes, and prepares the physical indoor, outdoor, and field excursion environments* to meet the *individual* and group needs of the CHILDREN at CMA.

SPECIAL LESSONS – A CMA Signature Program

“Physical exercise, such as long hikes, also forms a part of the activities... The children become accustomed to the greater challenges of a more serious and a harder form of life.”

Maria Montessori, From Childhood to Adolescence, p. 18.

“For this purpose there would be all kinds of artistic occupations... Some must be for the individual and some would require cooperation of a group. They would involve artistic and linguist ability and imagination, including... Music... Language... Art...”

Maria Montessori, The “Erdkinder” and The Functions of the University, p. 6.

The Special Lessons Program at CMA offers an opportunity for the CHILD and his/her Family to choose from two different strands of activities (on a special fee basis): Physical Education (Life Sports Program) and Fine Arts. Curricular and “authentic” notations made above address these facets of curriculum. The purpose of the Special Lessons Program is to provide the CHILD and his/her Family with additional physical and fine arts options which, by the nature of their necessary content or implementation, may not be able to be available in the on-campus structure or environments. CMA makes every effort to follow the counsel of Maria Montessori: “There must also be... visiting teachers, men and women who come to give lessons. They should have the proper qualifications for teaching... but this does not mean that they should be free to use their own methods, for they must agree to adopt special methods and cooperate...” with the underlying philosophy and pedagogy of the School (Maria Montessori, *The “Erdkinder” and The Functions of the University*, p. 120). Not all lessons are offered every session or every year. The interests of the CHILD and his/her Family determine the offerings and content. The Special Lessons Program may include, but may not be limited to:

Physical Education Strand (Life Sports)

- Archery
- Bowling
- Climbing and Repelling
- Horseback Riding
- Skating (Ice and Roller)
- Skiing
- Swimming
- Tennis
- Tumbling

Fine Arts Strand

- Ballet
- Creative Images
- Basic Drama
- Cooking
- Jazz Dancing
- Piano
- Sewing
- String Instruments
- Tap Dancing
- Woodworking

WORLD LANGUAGE AND CULTURE

“...all children are endowed with this capacity to ‘absorb’ culture. If this be true...let us provide the children with [many] elements of culture.”

Maria Montessori, The Absorbent Mind, p. 19.

“One of the most important aspects of our method has been to make the training of the muscles enter into the very life of the children so that it is intimately connected with their daily activities. Education in movement is thus fully incorporated into the education of the child’s personality.”

Maria Montessori, The Discovery of the Child, p. 79.

Of all the facets of CMA curriculum, World Language and Culture has evolved the most over more than three decades of research and discovery. However, in many ways World Language and Culture has paralleled the English language curriculum. Although two major language/cultures, French and Spanish, have long been the focus of this facet of the curriculum, many languages (e.g. German, Japanese, Italian, Russian, Swahili, to name a few), and the worldwide cultures which embrace them have been included for the CHILD’S appreciation, study, and **academic preparation**. The young CHILD comes to the Montessori environments with strong cultural and language skills reflecting his/her own language and cultural heritage. The initial Toddler and Preprimary World Language and Culture activities are designed to have cosmic view and to broaden the CHILD’S real experiences (e.g. national heritage dress, songs and dance from around the world; field trips to a wide variety of cultural museums) as well as vicarious experiences (e.g. matching cards; classic songs and stories from around the world) through a **responsive, preparing, adaptive environment** and **first hand experience with materials**. World Language and Culture teachers assist in or visit the classroom many times during the week to (1) note their **observations** as they have worked with the CHILDREN; (2) receive and offer **consultation** for working with individual CHILDREN both academically as well as personally; (3) discuss the interdisciplinary curricular focus of the week with the Head Montessori Director/Directress and incorporate world language and cultures concepts therein; (4) assist in the **design, organization, and preparation** of daily language and culture activities for the following week, incorporating geographic, holiday, and other content area concepts into the presentations to be offered to the CHILD, individually, in small groups, and on the Classroom Line.

The World Language and Culture curriculum is continuous from the Preprimary to Primary to Elementary and into the Erdkinder Program; basic materials, however, and many related activities are expanded and a more in-depth study is presented to the **Primary** and **Elementary CHILD** to facilitate the progression toward **competence** and **autonomy** in their use and application. Sensorial experiences, both real and vicarious, continue into the Middle School classes. In addition, computer programs in many languages together with more advanced cultural perspectives are offered to the CHILD. The collaboration between the World Language and Culture teachers and the Head Montessori Director/Directress focuses on the geographical and/or historical period which the class, a small group, or an individual CHILD is studying. Daily activities for the CHILD can then be encouraged or suggested during the remainder of the week within the classroom, building **independence** and **confidence and competence** in this area. The celebration of annual cultural holidays in **mixed age (family) groupings** and Social Science Core Interdisciplinary activities provide the CHILD with **academic preparation** on a sensorial-intellectual basis for further studies, and also **spiritual awareness** and **social responsibility** at this most stable age. Field experiences include museums, community groups, and individuals with language and culture expertise. Additional materials in social science, art, and music as well as specific adjunct programs serve the CHILD’S individual learning style and speed because the environments are **child-centered** and **competence is individually construed**.

World Language and Culture skills (e.g. grammar, form) as well as literature concepts are refined at the Erdkinder level. It should be noted, however, that at the adolescent juncture many STUDENTS, with parental and Director/Directress **consultation**, opt for a **primarily language** (e.g. speaking, grammar, structure, writing) or a **primarily cultural** (e.g. geography, history) emphasis in their studies. The goal of the World Language and Culture curriculum at this point is to **facilitate the match between learner and knowledge**. Development is continuous throughout Erdkinder. Field experiences to historic sites, museums, drama performances, interdisciplinary speakers, etc. contribute to the STUDENT’S **ability to respect and handle external authority**, both research authority, culture “authority,” and immediate, personal authority. Under the direction of the Montessori Director/Directress who **designs, organizes, and prepares** the physical, psychological, and social as well as the academic aspects of the wider adolescent environments, the STUDENT becomes more **independent** and more competent to **direct his/her own education** based upon his/her own interests and abilities. Older **Elementary** and all **Erdkinder STUDENTS** are encouraged to participate in language immersion programs during the school year (often on weekends) or more extensively during the summer months in four, six, or eight week residential camp programs offered throughout the Midwest, which provide them the opportunity to further develop their **independence, confidence and competence**, and strong **academic**

preparation in their chosen study of language and culture, and the foundation for deeper **spiritual awareness** and **world citizenship**.

HOME ECONOMICS – A CMA Signature Program

“The furniture... consists, in addition to tables, of low cupboards accessible to all the children, who can themselves put in their place and take away the crockery, spoons, knives, and forks, table-cloth and napkins. The plates are always of china, and the tumblers and water bottles of glass.”

Maria Montessori, Dr. Montessori’s Own Handbook, p. 43.

“For him to progress rapidly, his practical and social lives must be intimately blended with his cultural environment.”

Maria Montessori, From Childhood to Adolescence, p. 26.

Perhaps no program or activity is more illustrative of Montessori philosophy and pedagogy and the **educational nature** and the **nature of the outcomes** at CMA than the Home Economics Program. If Practical Life and the Spiritual Development form the “cosmic view threads” which support the fabric of Montessori education, surely the programmatic cloak which most exemplifies the philosophy and pedagogy made from these threads is the Home Economics Program.

The Home Economics Program initially grew out of Social Science and World Language and Cultures. **Primary** and **Elementary CHILDREN**, under the guidance of their Directors/Directresses, began to assemble recipes, prepare snacks and offer them to fellow STUDENTS with the precise and deliberate motions so well described by Maria Montessori herself when queried about fine motor control and physical development in her schools. And then lunches began to appear from the countries and cultures, from not only the CHILDREN’S study but from Parents who shared their ethnicity with the entire school community through treats, snacks, and often lunches with deep cultural roots, a much-prized practice with a long history at CMA. The Sensorial curriculum was enhanced with every new taste and aroma. CHILDREN began researching new recipes, writing about their findings and gustatory experiences in their journals and in the NewSheet. Language skills were reinforced and expanded. At a fairly early date, these activities began to take on a life of their own and ultimately rose to the status of “program” by virtue of the involvement of the entire STUDENT body, and Faculty and Parents as well. **Preprimary CHILDREN** used their Mathematics skills to count plates and achieve a one-to-one correspondence with knives, spoons, forks, napkins, and glasses. In Primary and Elementary, CHILDREN requested that they be able to prepare lunches *daily*. **Erdkinder STUDENTS’** research began to take

on Science qualities, with forays into Human Anatomy and Physiology revealing physiological needs and current scientific research on diet and menus. A trip to the Art Institute, the story of Helen Keller, the history of foods in Time Line form, brought Art and more history, more literature into play.

Today at CMA, the Home Economics Program can often be experienced from the moment the front door of the school is opened in the morning. Early-arriving **Elementary** and **Erdkinder CHILDREN** frequently participate in preparing soup stock, cutting vegetables and fruits, preparing sauces before formal classes begin. **Primary** and **Elementary CHILDREN** still plan menus around the historical or cultural area of classroom studies and take turns cooking in the kitchen with the facilitation of the Home Economics director (often a Montessori Director/Directress). **Preprimary CHILDREN** wash fruit for dessert and the fruit baskets and arrange serving plates in the Practical Life area of their classroom. Shortly before Community Line each day, **Erdkinder STUDENTS** set up tables in the classrooms; **Elementary STUDENTS** prepare dishwashing stands; **Preprimary, Primary, and Elementary STUDENTS** put linen table cloths and napkins on the tables, set them with china plates and tumbler glassware and knives, spoons, and forks, and arrange seating around the tables. And, then, while a few CHILDREN remain in the kitchen for last minute preparations and serving, most STUDENTS go to Community Line. When STUDENTS are dismissed from Community Line, they go to their regular seating at tables, mentors sitting with their young charges; **Upper Erdkinder**, by virtue of their “upper” status, often have a separate table with their Director/Directress. If Erdkinder STUDENTS are off-campus, adjustments need be made. Music, played throughout the lunchtime, is usually selected from the historical/cultural period of study or the current holiday celebration. CHILDREN eat family-style, with all the courtesies and customs which pertain to community table. Conversations are varied, and often, at least initially, facilitated by an adult at table. The opportunities in Spiritual Development seem infinite and, in practice, are as varied as the CHILDREN and their interests. After everyone at the table is finished with his/her lunch, individual dishwashing, rinsing, and sanitizing begins, again facilitated by adults at tables and mentors, as well as the Home Economics director. “Jobs” (e.g. sweeping the floors, replacing tables and seating, returning

classrooms to original order) are completed. Mentors take their young CHILDREN to the coatroom to assist them, when necessary, in dressing for outdoor activities. The **Primary** and **Elementary CHILDREN** whose turn it is to work in the kitchen for the two-week period, return to the kitchen for final cleaning procedures.

The Home Economics Program at CMA exemplifies so many of the pragmatic aspects of ***The Educational Nature*** of this Montessori community:

- The Montessori Learning Environment
- Montessori's Learning Activity
- The Montessori Learning Relationships
- Montessori Spirituality
- What the Montessori Teacher Is
- What the Montessori Teacher Does

In no other single program at CMA may ***The Nature of the Outcomes*** be more easily demonstrated:

Independence

Confidence and Competence

Autonomy

Intrinsic Motivation

Ability to Handle External Authority

Social Responsibility

Academic Preparation

Spiritual Awareness

Citizens of the World