Toward the Ultimate Goal of Peace: How a Montessori Education at the High School Level Supports Moral Development through Study and Community Life

by Elizabeth A. Henke

This paper is the synthesis of Elizabeth Henke's four years of work from 2009-2013: three years at the high school and one year at the University for Peace. She summarizes, "A Montessori high school education should reveal to the adolescent a pathway to peace that is built on positive human relations and should provide opportunities for contributions to the community that result in experiences of valorization. The organizing principles of the universe and society are revealed in the core of each discipline, and a moral framework emerges before the adolescent when disciplines are explored with the help of experts." This is the first Montessori document that attempts to directly derive moral essentials from teacher interviews about formal high school disciplines that develop peaceful communication and action and bring an understanding of peace theory to students at the Montessori High School at University Circle, in Cleveland, OH.

In 1937, while the West was recovering from World War I, and World War II was looming on the horizon, Maria Montessori countered the prevailing trend of military and political solutions to war by proposing that "peace must become a science, something positive,

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analysed in all its factors, each carefully studied and provided for" (Montessori, *Dr. Montessori's Message* 53). She posited, "peace is a practical principle of human civilization and social organization that is based on the very nature of man" (*Education and Peace* 33). Montessori believed peace to be the innate outcome of the natural development of the human personality. "Our hope for peace in the future lies not in the formal knowledge the adult can pass on to the child, but in the normal development of the new man" (*From Childhood to Adolescence* 58). Thus, if peace were to become a science, the science of peace would need to be a systematic study of human development based on universal principles of humanity.

The science of peace, derived from a systematic, scientific study of man, revolves around two interlinked goals: "the development of human values—and then as a consequence, the 'organization of the revalued individuals' into a society conscious of its aims" (Montessori, *Dr. Montessori on Peace* 3). They are built upon the unconscious and conscious sensitivities for the formation of inner



Maria Montessori was nominated for the Nobel Peace Prize in 1949, 1950, and 1951.

and outer peace throughout the developmental continuum. It is our task, as Montessori educators for peace, to become conscious of these sensitivities and to provide the prepared environment equipped with key content, skills, and experiences that correspond with the developmental needs of the students. Based on the academic disciplines and social life coinciding with the adolescent abilities and developmental needs, adolescence is the time when students become more conscious of their moral development and move a greater part of their activity into society. It is a testing ground for these emerging morally conscious individuals to start understanding and practicing the (re)organization of society.

During the 2012-2013 academic year, I focused my research and observation on how the approach to the academic disciplines and exploration of organization of society in Montessori high school education leads to a higher consciousness of morality in adolescents. After this immersion and concentrated study at the Montessori High School at University Circle (MHS), I have come to believe the older adolescent, in search of a role to play in society, seeks to understand the universe and his place within it at a deep level. This process is aided by interactions with adult experts and is propelled by the adolescent's inner mental, physical, emotional, and spiritual needs to participate in the building of peace internally and outside in the real world—both locally and globally.

The developmental needs of the adolescent, particularly as they relate to the academic disciplines, revolve around deeply understanding the times in which they live and discovering how they are capable of positive action within the world. Adolescents are constantly asking the internal questions, "Who am I in relation to human society? Where do I fit into this society? and How can I serve others within society?" (Davis). These questions are explored through the shifting lenses of the academic disciplines and the development of social life with the help of teacher-experts.

As students move to high school, there is a shift in the classroom away from having the Montessori teacher as a generalist speak to all courses of study, towards experts available for profound research in each discipline (course of study). These specialists make deep study possible as they illuminate the core of the discipline. The core

of the discipline is its ultimate purpose; it is that which serves as a tool to understand the universe and humanity's place within time and space. This approach also uncovers ethical questions built into the human relationship with the disciplines, making conscious the moral framework to guide our actions. The core of the disciplines, as accessed through key content and experiences, builds upon the adolescent developmental needs to understand the universe and themselves (humanity) as a direct preparation for peace.

In order to discover the core of each discipline, its ultimate purpose, and how it relates to the natural development of the personality, I asked each department at MHS what their discipline was *for*. It emerged that all disciplines examine the same story of events: the past, present, and future of the universe and humanity's place within it. Each discipline develops constructive perspectives to interpret these events and to grapple with the question of how humanity can optimize the positive development of human culture to collaborate in order to create a culture of peace.

As our approach to the academic disciplines illuminate a moral framework for coexisting with (and contributing to) the planet, natural development of the individual progresses toward the same aim. One step along that path is valorization. "The plan [of studies and work] aims above all at the 'valorization of the personality' in the present social conditions" (Education and Peace 71). "Valorization comes gradually to the adolescent as she realizes she is useful and capable of effort. This is accomplished only by the work of the mind, hands, and heart. It happens when adolescents have appropriate responsibilities and expectations: when they are able to experience the joy that comes from successfully meeting challenges, and the character building that is the result for their restitution when they have made poor decisions" (Donahoe 1). "Socialization is even more intense in the third plane, presumably to guide the adolescent in practice and conscious learning about the human social organization and—hopefully—social harmony that is necessary for humanity to function productively, to make progress" (Ewert-Krocker 2).

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that result in experiences of valorization. The organizing principles of the universe and society are revealed in the core of each discipline, and a moral framework emerges before the adolescent when disciplines are explored with the help of experts.

THE ARTS

Self-expression is a key experience for the development of the personality, and the arts are a perfect academic discipline to understand the self and to feel one's value in relation to society. Fluency in the arts is dependent on skill development and creating a space for expression. The natural artistic process requires students to learn the basic skills of drawing, music theory, movement, and composition and to practice them as a direct exploration of their artistic voice. As students practice the foundational skills, they are active participants in the process of self-construction. They apply themselves over time, make mistakes and grow from them, and demonstrate their skills and self-awareness in their final creative works.

Each act of creation is done alongside peers and is honestly critiqued. Through this process, students are affirmed that their work is part of a larger dialogue in their community and that they



Montessori High School at University Circle students performing at Arts on Magnolia. Courtesy of Jake Ols and Hugh Kydassi

are capable of knowing, communicating, and receiving feedback. Yet because the arts are so personal and require vulnerability, many students are shy to display their work or participate in critiques. When students are asked to publicly display their work, they often "receive a surprise moment of affirmation" (D. Waski, personal communication, May 24, 2013) from their peers.

Self-expression through the arts with a public "third period" is an excellent developmental tool to give students the experience of positive risk-taking in a very safe environment. "Risk-taking and rule-breaking is linked to developmental changes in the brain that serve to help teens become healthy, analytical adults. Thus, a certain amount of *positive* risk-taking is necessary for adolescents to fulfill their universal need for independence, developing a separate identity, and testing authority" (Donovan). Displaying one's art work, giving a musical concert, or performing in a dance recital or

Arts (visual art, dance, music, theater)		
Emerging Moral Qualities	Explanation	
Self-Knowledge	Within the framework of artistic guiding principles, students are free to combine and explore mediums and content in an authentic way. Particularly for adolescents, the arts are a direct way to explore identity.	
Clarity in Communication	Before students create a piece of art, they must first clarify what it is they have to say and determine the best medium in which to say it.	
Awe of the Present Moment	An infinite number of artistic works, starting with the same foundational materials/actors, when performed live or in the process of creation, will only be created that way once, never to be exactly repeated. The same materials are combined in surprising and endlessly creative ways, which will always inspire an unknown reaction in the viewer.	
Personal Dignity	Through creative expression, students develop their voice as an artist, which joins the universal chorus of artistic commentary and discovery. They receive the impression that they are worthy to contribute to artistic dialogue.	
Generosity of Spirit	Participating in the arts always requires the creator to give of himself/herself. It is inherently a transcendent experience because it is creative.	
Reflection	Incrementally, the artist steps back and questions what is needed, looking for balance and clarity, and seeking to understand motives behind expression.	

play are all excellent behaviors with minimal long-term risk and a high potential for public recognition based on personal work and challenge. For instance, over 50% of the student body participated in the annual community arts day, Arts on Magnolia, with twenty-three people directly associated with the play.

In the case of a play or other large pieces, students pull diverse elements together to create a coherent whole, practicing synergy (orchestra, multi-media art, characters in a play). In this way, their created music/art/theater together is greater than the sum of their parts. Large performances also offer a variety of opportunities for involvement, not necessarily on the stage. Two students, who never dreamed of being involved with the play, ended up designing and performing a musical prologue for the play. As soon as the theater director assured them that they were free to musically interpret the script as they found appropriate, they embraced the challenge and created something they were proud of and was valued by the community.

MATHEMATICS

The core of mathematics, its ultimate purpose, is a tool to understand the universe. The inherent order in mathematics reveals itself to the students as they unveil the universal principles governing math. For example, as students develop geometric proofs, they learn the foundation of inductive and deductive reasoning and how to order their thinking in a logical linear fashion. The order in math resonates with the human tendency for internal order and orientation, ultimately shaping the way we construct our thoughts and communications.

"[Mathematics] are the creation of Man. If they have come to be applied, it means that in the nature of Man the tendency towards mathematical conception exists" (Mario Montessori 19). Understanding the external order provides an orientation to create internal order. "If the security given by the sense

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of orientation is removed, it is not that one feels lost in a city, one feels lost in one's own mind" (Mario Montessori 16).

Math allows us to quantify abstract notions of time and space. Using mathematical metaphor, we can organize abstractions into something helpful to understanding and acting on our reality. "Abstraction is one of the natural tendencies of Man" and when combined with "a reasoning intelligence enable[s] him to make use of the abstractions he made" (Mario Montessori 17). The key here is that all of these tendencies to orient, abstract, and use the mathematical mind by their very nature, shape and inform society.

Math is a human created field of knowledge developed out of the observation of nature, in order to better understand the organization that we see as inherent in nature. Mathematicians constantly seek solutions to unanswered questions, humbling us to the mysteries of the universe while empowering us to search for the answers. "The universe is an imposing reality, and an answer to all questions. We shall walk together on this path of life, for all things are part of the universe, and are connected with each other to form one whole unity. This idea helps the mind of the child to become fixed, to stop wandering in an aimless quest for knowledge. He is satisfied, having found the universal centre of himself with all things" (*To Educate the Human Potential* 6).

Students are humbled to the greatness of humanity, when math is taught through a historical lens, seeing the building up of human progress and civilization. Students see themselves in communion with the "great thinkers" who discovered the mathematical principles, and a sense of awe and respect is developed for the field. The stronger our bonds are to the whole of humanity, from the past to the present, the more likely we are to respect others as intimately connected.

By grounding the study of math in case studies of historical mathematical figures, as done through the book *Fermat's Enigma*, students begin to ask the key orienting questions that transcend mathematics and go to the heart of humanity's purpose on Earth. These questions, which begin with the specifics of the book, are quickly turned introspective and students ask the same of themselves. What is a human's purpose on Earth? How does Fermat contribute to the

Mathematics		
Emerging Moral Qualities	Explanation	
Intellectual Courage	Students are prepared to approach math problems by applying the key lessons to find solutions. Because they understand the fundamental mathematical concepts they are applying, they are free to find the solution to a problem in whatever way makes the most sense to them. They forge their own pathways and then compare their mathematical journey to that of their peers. This allows students to arrive at the same conclusion but realize there are multiple ways to get there.	
Honesty	In math, students practice the ability to change one's mind if there is good evidence to the contrary, to change one's beliefs about their mathematical journey, and to revise their work toward a solution.	
Wise Restraint	Mathematics explored independently requires sticking to your convictions, if you firmly believe you are right.	

betterment of humanity? How do I? How much should one sacrifice for the betterment of humanity? Should we isolate ourselves for the greater good? Is it better to work collaboratively to find answers? What does it mean to dedicate one's life to something? Through the story of individual mathematicians and their work, students put a human face to math, and on the timeline of mathematics, the faces are diverse and non-European.

ENGLISH LANGUAGE ARTS

The English language arts examine societal issues as they are expressed in language and the media (current and historical, fiction and non-fiction) and expose students to a variety of perspectives while generating written work that focuses on constructing the personality through self-expression. Students also practice exploring the many dimensions and ways to read and interpret texts through written reflection. English language arts is a consistent place for the reflective process of writing, drafting, and editing a piece of written work. The quality of student work and insight is often recognized through the peer reviews of papers. Tina Booth, humanities teacher, has witnessed, particularly in the 9/10 class, that students begin to demonstrate valuing others as they begin to seek out the students who are a good writers or can give constructive feedback on peers' papers.

Language Arts		
Emerging Moral Qualities	Explanation	
Empathy	Exposure to multiple narrative perspectives (in non- fiction and fiction) develops empathy for motives of action and growth of character.	
Cultural Identity	Native language connects the individual with their cultural group offering the key to participation in one's own culture.	

In the early high school years, the students study the epistolary novel (novels written in the style of letters), such as Address Unknown, and stories written with one, two, and multiple voices. The students read the multi-voice stories first, before the two-voice, so they seek more perspectives than were given in the second story. Asking for more perspectives leads the students to the questions, How do you know what you know about someone? Where/who is the knowledge coming from, and how does their outlook change the information? This type of questioning encourages a pause before judging someone, showing that the truth has a variety of perspectives. When reading novels, the language arts teachers ask questions about character motivation to develop empathy. One exercise is to ask students to pick a minor character and develop a prologue. Developing perspective through multi-dimensional characters allows students to become comfortable with the gray areas of morality. "People are imperfect. Having multi-dimensional characters, which inspire varying degrees of sympathy or antipathy, shows the gray in human nature and that people are not moral all the time. This counteracts the student tendency to form one conclusion, and see only one reading of a text" (J. Reyers, personal communication, June 4, 2013).

FOREIGN LANGUAGE

Native language study is part of psychic development, as it helps students understand who they are and provides a key to participating in their own culture; foreign language helps students understand and participate in another culture. At MHS, foreign language is studied in a context that allows students to see language embedded in another culture, to explore another culture, and to put their own culture into perspective. In Spanish class the students have to pick a cultural aspect of a Spanish speaking country and compare and contrast it with

their own. By studying another culture, students begin to question what is unique to their own culture and expand the parameters of what they consider "normal," eschewing judgment for an openness to difference. This type of dialogue inspires discussion around questions like, If I assumed my culture was universal, what else have I assumed? Is this a fact? A universal fact? Or is it cultural?

While foreign cultural aspects appeal greatly to adolescents, students discover that learning a language outside of the sensitive period for language acquisition is very hard. They can appreciate the challenge because it *is* hard, but if the teacher shows they will work with the student and support them in the struggle, the students are willing to do the hard work. One way Leah supports the students at MHS is by teaching them how to study a foreign language. "You cannot pull an all-nighter to learn a language. It takes consistent work" (L. Baxendale, personal communication, May 23, 2013). She encourages students to study vocabulary and verbs bit by bit. This uphill battle forces the teachers toward creativity, enthusiasm, and creating memorable experiences to keep students engaged. Because of the emphasis on the process of learning, students are encouraged to "stop-by" and chat with the language teachers, in their open time.



Seminar at Montessori High School at University Circle

Foreign Language	
Emerging Moral Qualities	Explanation
Dedication, Fortitude	According to Diane Haughney, one of the Spanish teachers at MHS, "When learning a second language in high school, students are in a straight-jacket. They are ready for important conversations but struggle against their minds, which are no longer in the sensitive period for language acquisition. Because of this struggle, it requires extreme dedication, concentration, and practice to master a language in adolescence, which in turn leads to self-discipline" (D. Haughney, personal communication, May 23, 2013).
Human Appreciation, Wonderment	The struggle to learn a second language in high school leads to an appreciation of language acquisition. It opens mystery and awe for their own ability to learn language early in life and the process of self-construction. Studying a foreign language outside of the sensitive period also creates a unique bond between the teacher and student, as the teacher is providing assistance for something truly fundamental: communication. This provides several levels of personal and academic connection, which is vital to maintain the commitment to study a foreign language. The bond extends also to other classmates, as they struggle together.
Tolerance, Openness, Non-Judgment	By studying another culture, students begin to expand the parameters of what they consider "normal" and accept differences without attaching a value judgment.

A student initiative called *Charla* (chat) was created to informally practice Spanish once a week after lunch. Several students come each week; some participate actively while others only listen.

SCIENCES

People are natural-born scientists and are drawn to understand the world around them. All sciences speak to humanity's place within the web of life, particularly to the questions Who am I? and Who am I in relation to the world? The sciences provide a universal language to understand and uncover the organization of the universe (e.g., gravity, root systems, geotropism, watershed principles). Through the sciences, students study these universal building blocks of the world, link elements, extrapolate data, build formulae, and draw together complex information sets to determine a conclusion, all developing their ability to reason and make sense of the world. Along with dis-

covering the organizing principles of the universe, the sciences also open up critical exploration of how human action and decisions affect the global whole. The sciences provide a way of understanding the world at both the micro and macro levels; students move from atoms to global ecological systems as the science teachers at MHS always link the details of science to the big picture.

Montessori High School at University Circle takes a case studies approach to studying science, which places the student inside the issue and outside in society (pedagogy of place¹). For example, this year the students read *Water Wars*, which discusses water issues (rights versus privilege, ecosystems) in the U.S. Great Lakes region—their backyard. By giving students a pressing global crisis to address in the context of science class along with access to outside experts and a venue for action, students come to really understand the problems



Students at Montessori High School at University Circle

¹Pedagogy of place is "the process of using the local community and environment as a starting point to teach...across the curriculum." Pedagogy of place "focuses learning within the local community of a student and provides learners with a path for becoming active citizens and stewards of the [local] environment" (Sobel).

Sciences	
Emerging Moral Qualities	Explanation
Perspective	The sciences provide a way of understanding the world at both the micro and macro levels; students move from the study of atoms to global ecological systems, from origins to sustainability. This ability to move back and forth between details and the big picture continually maintains a consciousness of perspective.
Curiosity	The sciences inspire awe at the mystery of the world and the infinite unanswered questions. Students take what they observe and create theoretical knowledge to explain their observations, then they must find ways to test it. This is a complex and necessary process of self-construction, exploring what they really believe and how it fits into the context of the universe.
Measured Responsibility, Prudence	Students see themselves as participants in the dynamic global ecosystem, with a realistic perspective of how their balance of choices affects the whole.
Interdependence	"If human unity—which is a fact in nature— is going at least to be organized, it will be done only by an education that will give appreciation of all that has been done by human co-operation, and readiness to shed prejudices in the interests of common work for the cosmic planWhen it is recognized that the world is already a living organism, its vital functions may be less impeded in their operation, and it may consciously enter on its heritage in the day towards which hitherto 'all creation has been groaning and travailing together." (Montessori, To Educate the Human Potential 50)

and see the need for concrete solutions. It also helps them realize they can make responsible choices on a daily basis. Current events issues are always deepened by solid academic understanding of the various sciences (physics, nuclear power, renewable energy, etc.), which allows students to ground their moral beliefs in sound science. Because they study these developments within the context of human history and firm scientific understanding, students see the leaps and bounds taken across generations. They also see the need for a new morality that can keep pace with the advance of technology to avoid the devastation and destruction caused when our moral framework lags behind our use of technology.

Current events studies, moral development, and hard sciences find their optimal match within the Environmental Science and Systems Class. Here students address current issues such as biological politics, water filtration, food distribution, etc. The culmination of their work, the third period, is a project on building sustainable cities. This project gives space for creativity and individuality, while based on two years' worth of research. Students see problems and feel empowered, based on the depth of their knowledge, to offer constructive solutions.

HISTORY

The study of history is naturally focused on societal issues (current and historical events) exposing students to a variety of perspectives. This is particularly true when looking at a historical event through multiple primary and secondary documents written by those from a range of strata in society. Through history class, students are exposed to the interplay of individual experience and the development of society throughout human history.

The task of the humanities is to lead the students to explore human behavior, from the origin of humanity to the present, and projecting into the future. The Montessori high school's approach to the study of history "testif[ies] to human solutions, to tensions between nature and super-nature, in different places, at different times. History, then, is not the study of the past for its own sake, but produces a wealth of resources for thinking through the challenges of the present and future, and suggestions for active problem solving"

(Feldman & Kahn 9). Students are able to see that there is no opposition between the individual and society. The younger high schoolers are often still focused primarily on themselves; thus, the humanities are a pathway to a continuous social experience (internal and external) through history, which is a development that happens more fully as students mature. One MHS senior wrote, "It is time to eliminate the divide between citizens and societies." This is done partially through extending

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the classroom into the real world and examining how individuals shape and respond to the structure of their society.

One of the tools used to examine the interactions of individuals, culture, and society are biographies and ethnographies. These types of text attempt to humanize great figures and show their human journey. Students are drawn in by the stories, particularly of moral leaders, as they are exploring their own ethical journey. For example, students research various "key personalities" in history and then build Facebook profiles for them where they debate and chat as their character, the *dramatis personae* of the technological age. The ethnographies raise questions of perspective and storytelling, particularly books like *Coming of Age in Samoa* that are classic text surrounded by major controversy. This approach draws attention to identity lines and the "othering" that can occur. The pervasive slip toward *othering*, us versus them, means that it is even more important to be aware of the invisible lines that we draw and for the humanities to focus on the positive forces throughout history.

In higher-level history, there is a conscious choice to explore constructive topics in history. The school has chosen to focus on the interwar period and democratic states, particularly nationalist and independence movements in Africa, Europe, and Asia. Automatically, this broadens the scope of study, opening the students to the vast expanse of history instead of focusing on the Western world, like many traditional programs. Students explore historical case studies asking questions such as, How did democracy come about? What did it lead to? This study points to how vulnerable democracy can

Our vocation as teachers must be as keepers of the school's social and moral culture, illuminating community needs, supplying tools to answer them, providing means for student valorization, and exposing students to society through meaningful work and study. be; you can lose it if you don't engage. What a lesson for rising citizens! Along with studying movements for democracy, students are exposed to the variety of types of democracy around the world. Democracy looks drastically different when comparing the United States, Japan, and India. Studying democracy (and the frequent precursor to democracy, revolution) fits very well with the

developmental needs of the adolescent, particularly their desire to understand social structure and improve society. As the student sees revolutions and independence movements form, rise, and transform, they are exposed to profound examples of human ingenuity and conviction, which inspire awe and hope for the future.

In history class, the seminar is a multi-step process: annotating the text, developing interpretive questions, and writing a response, all before participating in the seminar. This process supports students as they respond to the material, determine their personal orientation and reaction concerning what they believe, all supported by textual evidence. Seminar is a place where students can test ideas and gain feedback from their peers and from the text. Both history teachers have seen incredible results of higher levels of engagement and discipline with this process. In seminar, students also begin to see each other as multi-dimensional. They value each other for their quality of thought and grace in participation, moving beyond the superficiality found in a typical lunchroom categorization.

I had the experience of being invited in as one of the outside experts into the 11/12 history class to offer a brief introduction to Maria Montessori's life and then to participate in three consecutive seminars on her book Education and Peace. This reading was undertaken while studying the interwar period in history and had formed a sort of capstone retrospective. I was struck by the level of dialogue and insight the students exhibited during these seminars. What I witnessed during the seminars on Education and Peace was that the students really picked up on its historical importance, since Montessori's conceptualization of peace was very countercultural. In response to Montessori's words about peace, an MHS junior wrote, "A global sense of community is necessary in order to acquire and sustain peace, and that is not possible when we remain unknowing and/or uncaring of the circumstances that other groups of people are personally faced with. Our greed and lack of sympathy ultimately separates us as a successful species.... We should all be opening ourselves up to the larger society to share everything we know and love with others.... It is my sense of having the abilities to affect the things around me that will allow me to help my generation change the world for the coming generations. We are forming conscience

and independent thought that will guide us for the rest of our lives." They appreciated her constructive definition of peace. They saw how reactive and destructive a negative definition of peace can be for the creation of peace.

History	
Emerging Moral Qualities	Explanation
Human Dignity	"These studies should consider that uplifting of the inner life of humanity towards tendencies that grow ever less in cruelty and violence and strive to form ever wider groups of associated individuals." (From Childhood to Adolescence 78). History helps adolescents to orient themselves in time and space. They explore the vocation of all human beings through stages of history, and begin to see where their unique talents can contribute.
Humility, Nobility	"This intelligence has become a collective intelligence and therefore colossal in its powerthe work of a man of genius is now the heritage of all. Discoveries are used by every nation. The conquest of a destructive power becomes the threat to all. Men are surprised by the astonishing fact of finding themselves tied by a common interest through the superhuman powers which can think with the genius of the whole of humanity and which place within their grasp these formidable forces." (Montessori, Education for a New World 1) Students see themselves as recipients of the incredible legacy of human progress through history.
Global Citizenship	The study of history links all individuals in the united struggle for the positive reconstruction of society. "We could not conceive of a man who had to develop himself perfectly before taking up his life in society. We know that in order to develop as an individual, he must have relation with other social beings. In other words we cannot conceive development of individuality in itself without considering the social side of that individuality." (Montessori, "Psychology" 1)
Норе	Peace "requires the influence of sacred and deep things to move the spirit, and the new children of civilized humanity must be given a profound emotion and enthusiasm for the holy cause of humanity" (Montessori, <i>To Educate the Human Potential</i> 51). By focusing on what uplifts humanity, students are filled with hope.

Through this discussion, the students saw that despite the potentialities for peace and the "single nation," we are far from reaching that goal. The students began to look inward and question their own role in the creation of peace. This was particularly poignant for the seniors who saw graduation on the horizon. One MHS senior wrote, "I believe my personal role in evoking change in the world is to take part in these types of experiences—to embrace new opportunities instead of shying away from them. This does not come naturally to many students, including myself. However, I believe that accepting challenges is an important way that adolescents can prepare to make a difference in the world, whether that be meeting with scientific experts, presenting historical research to a panel of esteemed judges, or traveling to Costa Rica to learn more about sustainability. Through opportunities such as these, MHS allows students to forge new paths and better understand their role as well as their power to make a difference."

CURRENT EVENTS AND ETHICAL THOUGHT

The adolescent environment is structured to provide strong moral training and practice for adapting to a variety of situations without compromising their values. Our task as educators is to elicit the most noble and moral qualities of the individual in order to improve society. We challenge the students by asking, "Are we here to be the best *in* the world or to be the best *for* the world?" (T. Vento, personal communication, June 4, 2013). In order for students to find the place where their gifts, passions, and skills meet the needs of the world, they must understand the society that they are about to enter and feel confident to change what they see as unjust. This courage and confidence comes from practicing these "utilized virtues or super-values" in work that requires action and intellect.

Montessori discussed moral education as a unique course of study focused on preparing students to enter into society and create the "new world." She believed, "a new morality, individual and social, must be our chief consideration in this new world. This morality must give us new ideas about good and evil, and the responsibility toward humanity that individuals incur when they assume powers so much greater than those with which they are naturally endowed" (From Childhood to Adolescence 78). At MHS, the focus study of moral

education takes the form of Current Events and Ethical Thought (CEET) class. This course is primarily concerned with understanding the context for what is going on in the world (current events), and the ethical frameworks through which we can analyze, interpret, and act upon these current events, using classical texts as support. CEET is built around an examination of ethics through rings of interaction with the aim of empowering students to live consciously according to their values. The course begins with personal ethics and moves outward through person-to-person interactions, the individual and society, nation to nation, and finally collective human interaction with the natural world.

In the first sphere (personal ethics), students examine the evolution of their personal ethics and the organization of society (in ethical and non-ethical ways), particularly through the lens of current events and one's own culture. Because students explore ethical principles through a variety of lenses, using case studies, current events, and exploring the theory behind universal ethical principles, they begin to determine "what is true for me, what is true in my culture, what is true for the world." CEET offers opportunities for reflection, as knowing your personal ethical framework and striving for inner peace requires a spiritual self-awareness, which can only be developed through deep introspection and reflection.

Moving into the next sphere of human-to-human relationships, the work is grounded in human rights, particularly universal human rights, drawing upon Montessori's fundamental human needs charts as a guide to protect what is universal for humanity. By examining human rights case studies and current events, students are connected to their time and place as well as across cultures, which allows them to see the reality of other's lives beyond their personal identity lenses.

The exploration of human rights is extended during the nation-to-nation sphere of interactions. Students chose a type of government (dictator, fascist, police state, representative democracy, direct democracy, etc.), read the "founding documents" of that country and explored the spectrum of civil, political, cultural, social, and economic rights. They then compared the founding documents with the U.S. Constitution and Bill of Rights. The students were amazed

to see how differently societies chose to organize themselves (in reality) and how similar the rhetoric is (in theory). Based on their understanding of rights, students then looked at the International Bill of Rights comprised of the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, and the International Covenant on Civil and Political Rights, along with reading the Earth Charter.

Having worked with the highest universal documents for human and environmental rights, the students were charged with the task of either developing a party platform for Montessori's concept of the Party of the Child or developing lesson plans to spread the word and work of the Earth Charter Initiative. When performing the Party of the Child work, an MHS sophomore said, "Building the Party of the Child is so important because it continues to be unrealized and that is why it is so relevant 50 years later!" An MHS freshman agreed, "In this work we are all encouraged to add our voice and create a consolidated document unifying our ideas." The students saw this work as a mission and mode of real action. An important outcome to the determination of personal ethics in context of universal values is the opportunity for practicing these values. The students are going to continue the work next year with the hopes

Current Events and Ethical Thought		
Emerging Moral Qualities	Explanation	
Conscious Living	In CEET, students discover their moral framework and practice how to live within it. An MHS sophomore wrote, "I think it is important that people know themselves because without knowing yourself how can you make choices in life ethically.	
Compassion	As students explore and then share their personal ethics, they consciously choose to share of themselves, trust their peers, become vulnerable, and receive their compassion. This is practiced again and again as students walk beside one another on the path to self-discovery.	
Justice	The discipline of ethics builds on adolescent's sensitive period for justice, addressing topics of justice from a personal ethic standpoint to international justice and the ethical considerations at each stage. This is the period when students truly start to discover who they are, what they believe, and why.	

of extending it to Montessori adolescent communities around the globe. This work gives the student an avenue to demand dignity through real action in the world.

SOCIAL COHESION

The ultimate purpose of education is, "to develop the 'spiritual life of man' and then 'to organize' mankind for peace. Peace has its positive side in the reconstruction of human society on a basis scientifically determined. The peaceful social harmony should have but one foundation, and this can only be man himself" (Montessori, *Dr. Montessori on Peace* 2). The direct preparation for social harmony is practiced within the intentional organization of the school community. In the stage of adolescence, the developmental need for social life and the adolescent drive to understand and act in society are direct preparation for peace.

Social organization is a natural progression from early childhood, to childhood, to adolescence, and to adulthood. There is change that comes with each stage of development, and becomes manifest at the beginning of each stage and at the end. The teacher has to be keenly aware of moral, social development that transition from stage to stage—going from egotistical to other awareness, going from self interest to unselfish cosmic task, going from self preservation to the awareness of the community and its welfare. Each transition needs teacher guidance to a higher social plane, both intellectual and practical. The real life of a class has to include the dimensions of what is happening socially and morally in the community to really support the optimal developmental culture that makes a Montessori adolescent school really Montessori. (D. Kahn, personal communication, September 21, 2013)

Our vocation as teachers must be as keepers of the school's social and moral culture, illuminating community needs, supplying tools to answer them, providing means for student valorization, and exposing students to society through meaningful work and study.

There are several ways to provide opportunities for valorization outside of academic classes. Within the school walls, a myriad of needs arise that are within the realm of student solutions, most evident in care of the environment. The needs of the community

must be exposed so the students can meet them. This extends beyond material needs to emotional needs as well. Students benefit from opportunities to practice being compassionate, thoughtful, and empathetic, particularly with adults they admire and respect. This is also true for student relationships. Through projects and meaningful work, we can provide an environment where students can be vulnerable about difficult things and the community is able to support them. When these opportunities for vulnerability and corresponding kindness are authentic and appropriately timed, they lead to strong social cohesion.

The stronger the social cohesion in a school, the easier it is for students to explore academic content (through books, places, or people). The three-period lesson is a pedagogical tool used in the prepared environment and provides optimal support for student valorization through authentic exploration, work, and synthesis. When students share their authentic work with their class, the school, or in public,



Montessori High School at University Circle students visiting Mexico

they are sharing a piece of themselves. This makes them extremely vulnerable—it is a risk, and because of their vulnerability, it gives their peers an opportunity to be kind, to appreciate their work, to see how it contributes to the whole community. I believe the third period is a key in, not only academic content mastery, but also social cohesion because it allows the students to see one another as multi-dimensional and be valued for their work. Valorization will only occur when students are valued for their work and contributions. This requires opportunities for them to explain, synthesize, and publicize their work. The third period is often where "real work" according to societal recognitions comes in.

Within the Montessori developmental framework, the individual's great work begins to emerge during adolescence as they interact with society. When supported by an active education carefully matched to developmental characteristics, the adolescent is able to perceive his or her highest vocation or calling, which is to make a noble contribution, both concrete and abstract, to the human world in peaceful coexistence with the natural world. Real work within society leads to an understanding of social organization (both positive and negatives aspects), preparing the adolescent with the tools to create a new social organization for peace.

Opportunities for valorization are equally important when working in society. As is witnessed in community events, like an arts festival, the students rise to the challenge when they know their work is for the benefit of the community. In fact, it is through authentic work in society that the adolescent can begin to explore their great work. Montessori explains great work "actuates man's value, allowing him to attain the maximum development of his energies, truly preparing him to bring about a different form of human society on a higher plane" (Education and Peace xiii). Contemporary philosopher and theologian Thomas Berry views the "great work" in terms of human history, "governed by those overarching movements that give shape and meaning to life by relating the human venture to the larger destinies of the universe" (3). The present generation's "great work," Berry says, is to "transition from a period of human devastation of the Earth to a period when humans would be present to the planet in a mutually beneficial manner" (3).

Both of these definitions of "great work" apply universally because they are based on man's nature in relation to social organization. Within the Montessori developmental framework, the individual's great work begins to emerge during adolescence as they interact with society. When supported by an active education carefully matched to developmental characteristics, the adolescent is able to perceive his or her "highest vocation" or calling, which is to make a noble contribution, both concrete and abstract, to the human world in peaceful coexistence with the natural world. Real work within society leads to an understanding of social organization (both positive and negative aspects), preparing the adolescent with the tools to create a new social organization for peace.

Through authentic interactions with society, augmented by reading Montessori's *Education and Peace*, students begin to formulate ideas on how to reconstruct society for peace. One MHS junior wrote, "Montessori advocates the idea of a single nation transferring the focus from nationalism to globalism and extinguishing the idea of national ownership of material things. All resources should be shared between countries; however, today we continue to see wars fought over border disputes and the ownership of land or materials." As this student expressed, Montessori envisioned a new way of interrelating, based upon the sharing of information and celebrating the progress of civilization.

If human unity—which is a fact in nature—is going at least to be organized, it will be done only by an education that will give appreciation of all that has been done by human co-operation, and readiness to shed prejudices in the interests of common work for the cosmic plan...When it is recognized that the world is already a living organism, its vital functions may be less impeded in their operation, and it may consciously enter on its heritage in the day towards which hitherto "all creation has been groaning and travailing together." (To Educate the Human Potential 50)

By taking a developmental approach to education, we believe we are preparing students to step away from the old paradigm of individualism and power toward the new paradigm of mutual benefit and cooperation. When reflecting upon her four years at MHS, one senior wrote, "Education is not just workforce preparation, but an institution that directly affects the way future generations interact with the world. In this sense, education has a responsibility to raise generations that will improve the world, a concept, which is especially poignant in the modern world where sustainability is increasingly becoming a problem. Montessori's vision saw education as an opportunity to raise peaceful generations of children who were psychologically sound and self-motivated...I personally will have a responsibility to not work solely for my own survival, but to use my life as an opportunity to improve the world for others." As the students of MHS reflect, they understand and accept the role of creating a new social organization based on contributing positively to humanity; they see it as their responsibility. It is our job to give them the tools and opportunities (the key content and experiences, locally and globally) to advance confidently toward their great work.

APPENDIX

THE MONTESSORI INSTITUTE FOR THE SCIENCE OF PEACE ADOLESCENT PROGRAMMING

The Montessori Institute for the Science of Peace (MISP) has designed several programs based on the idea of "great work," which emerges during adolescence and actuates one's value as a noble contribution is made to the world. The Authentic Abroad Experience in Costa Rica, the annual Adolescent Summit, and the local chapter student organization *PeaceX* are programs that provide unique opportunities for Montessori adolescents and have emerged from academic disciplines and the adolescent's need for social interaction.

AUTHENTIC ABROAD EXPERIENCE IN COSTA RICA

In partnership with the Friends of the Children's Eternal Rainforest and the University for Peace (UPEACE), MISP has developed an authentic learning experience that incorporates tropical ecology, peace education, activism, scientific study, and travel abroad for Montessori adolescents. The Costa Rica experience was designed to build upon the uniquely adolescent ability to construct their own worldview as distinct from another's without judgment. This practice requires moving outside the comfort of their home community. "Most important in thinking about young people's participation



Montessori High School at University Circle students visit University for Peace, San Jose, Costa Rica

is the sequence of phases in perspective-taking, and the insight that the child is actively trying to construct the world of the other, while simultaneously constructing her own understanding of that world" (Hart 32).

The Costa Rica abroad program is designed to be a peak experience for adolescents. It strikes a delicate balance between exposure to the familiar and unfamiliar; security is found in universal principles between cultures while the unknown and differences of another culture draw on the adolescent's desire for positive risk taking and adventure. Removing students from their familiar routines and habits, including technology use and social norms, allows for a dedicated focus and a deep connection with the people and places. This connection is strengthened through seminar readings and discussions and a balance of guided reflection and quiet time to process the experience.

This program is unique as it explores peace and biodiversity through access to and real work with the United Nations mandated UPEACE and the Childrens Eternal Rainforest. The UPEACE mission is to contribute to the great universal task of educating for peace by engaging in teaching, research, post-graduate training and



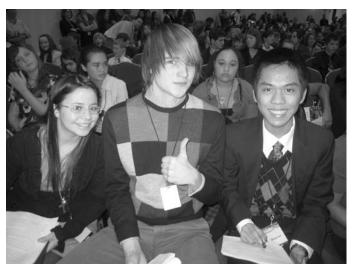
Montessori High School at University Circle students complete research with Dr. Jeff Norris, a member of the Friends of the Children's Eternal Rainforest team.

dissemination of knowledge fundamental to the full development of the human person and societies through the interdisciplinary study of all matters related to peace. MISP students receive lectures, participate in classes, and interview UPEACE staff, who are some of the top experts in their respective fields. MISP students work alongside the UPEACE students and faculty on sustainability issues on campus, participate in projects strengthening the relationship between UPEACE and its Costa Rican host community of El Rodéo, and assist with individual student projects that require eager workers.

The reciprocity between UPEACE and MISP sets the framework for students to move into the Children's Eternal Rainforest. Founded in 1987 by Swedish school children, the Children's Eternal Rainforest is 54,000 acres and represents the maximum expression of life on Earth in terms of biodiversity. It is a forest created by children for children and a forest that needs study and support. In this way, it provides an opportunity for Montessori schools to take a leading effort in original research and stewardship of a global treasure. The Children's Eternal Rainforest provides limitless potential for uncovering new knowledge, which not only offers endless possibilities for research but also perspective and appreciation for local (knowable) biodiversity back home. Integrating the Costa Rica experience into the disciplines preand post-trip is important because this work is most impactful when it builds upon the local study of biodiversity and gives relevance to the real work being done, locally and globally.

THE ADOLESCENT SUMMIT

Each year Montessori adolescents from around the world gather to discuss a theme based on a current global crisis. The global crisis topics naturally integrate with the disciplines as the themes are inherently social, environmental, and ethical in scope. Students prepare for the summit with a deep and wide study of the general topic and then focus on sub-topics to create further specialization. Through developing deep knowledge about a sub-topic, students become experts. These topics all have global implications with local applications, and place students at the heart of the problem and the heart of the solution. When it comes time to meet with experts in the field at the Adolescent Summit, the students ask informed and critical questions in order to design possible and innovative solutions. Students see the crisis in the context of human impact,



Montessori High School at University Circle students participate at the Montessori Model United Nations. New York

progression and digression, but also see their role in transforming the situation. "A strong indicator of peaceful pedagogy is that it stirs hopefulness, a faith that ordinary peoples can exercise patience, commitment and courage in transforming their realities" (Toh 13). Because the students specialize by sub-topic to develop a holistic solution, they need to work together and form a unity. Students collaborate to create a comprehensive manifesto on how to solve their given topic, which becomes their springboard for action once they return home. Once again, this experience requires local preparation and application upon returning home.

PEACEX

Montessori *PeaceX* is a local/global convergence of academic study, personal development, and social action focused on peace and sustainability for Montessori adolescents. Participants consolidate their vision of peace, forming a manifesto and roadmap of social action in their local community. They research, discuss, and act on issues of peace and sustainability in collaboration with their school community and in coordination with other Montessori *PeaceX* groups around the world. Montessori *PeaceX* outreach provides integration of knowledge and action addressing the most urgent

reform issues of our time. These student groups form the backbone of peace work being done in every participating school and local community as they channel the immense power of the Montessori adolescent network for peace.

Peace is the natural outcome of Montessori education. Our teaching as Montessori educators becomes clearer when we understand the ultimate purpose of the disciplines and the key skills, experiences, and content that prepare the students for their great work as individuals with heightened moral values who will reorganize society as a unity and bring peace.

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