"The child is truly a miraculous being, and this should be felt deeply by the educator."
—Maria Montessori

BY DANE L. PETERS

When one thinks about influential philosophers of education, certain names tend to come to mind. There's Socrates, of course, the granddaddy of them all. But, in our modern era, the list no doubt contains heavy hitters like Piaget, Montessori, Dewey, Adler, and Steiner — not to mention all the current voices such as Howard Gardner, Ted Sizer, Deborah Meier, and others. But, of all of the modern-era educators, the one creating the most buzz these days is Maria Montessori, with her deceptively simple notion of keeping the child at the center of her philosophy and teaching methods.

Today, Dr. Montessori's is the single-most adopted educational philosophy in the world, with over 22,000 Montessori schools in 110 countries. In the U.S., the Montessori movement continues to show remarkable growth. The American Montessori Society (AMS) Executive Director Richard A. Ungerer notes that there are between 5,000 and 7,000 Montessori schools in the U.S. with the numbers increasing annually. The association itself has more than 11,000 members — a number that includes teachers, schools, and Montessori education centers. At its 2007 annual conference in New York City, AMS hosted over 5,500 worldwide educators who gathered to hear a plethora of sessions on Montessori education, as well as keynote speakers like Maya Angelou, Jonathan Kozol, and noted researcher Mihaly Csikszentmihalyi. While most of Dr. Montessori's work, methods, principles, and materials are directed at children from birth to age 12, they have even been used in the rehabilitation of dementia and Alzheimer's patients.



education and democracy

Not bad for a philosophy that began in a small, urban schoolhouse in Italy in 1907 — the Casa dei Bambini in Rome — by an educational maverick whose views have been seen as somewhat tangential to the rest of K–12 education and even spurned by other leading educational thinkers of her day.

But it is not happenstance that the Montessori approach to education, in both non-public and public schools, is now spreading rapidly in America. Like the industrialization and compartmentalization of education at the beginning of the 20th century that brought John Dewey and Maria Montessori to the public's attention, today's national approach to education through the No Child Left Behind Act (NCLB) — with its narrow notion of accountability through standardized testing — has left many Americans to question this one-size-fits-all rationale and look to a more individual, differentiated way of educating children. For many parents seeking alternatives to an NCLB philosophy, a Montessori approach that encourages the child to work at his or her own pace and make educational choices independent of adults seems just the antidote.

This choice is also supported by recent research. An 18-year longitudinal study of Montessori graduates, compared with a non-Montessori control group, found that Montessori education was a "key positive factor in the participants' academic, personal, and social development" and an important factor in their current identity.² Another longitudinal study by Association Montessori Internationale³ (AMI) came to a similar conclusion. In particular, this study found that attending a Montessori program

from the approximate ages of three to eleven "predicts significantly higher mathematics and science standardized test scores in high school." The North American Montessori Teachers Association's (NAMTA) Summer 2003 study4 — with Mihaly Csikszentmihalyi as a co-researcher — found that the Montessori students themselves reported a "significantly better quality of experience in their academic work" than did traditional students. They also reported a more positive community for learning. The most recent research comes from University of Virginia professor Angeline Lillard in her book, Montessori: The Science Behind the Genius, which outlines many of the ways that educational and developmental research support the validity of the Montessori approach. As Lillard puts it, "If schooling were evidence-based, I think all schools would look a lot more like Montessori schools." Ultimately,

she argues for the greater infusion of the Montessori model into public education as a way to improve the struggling system.

Maria Montessori died in 1952, but her philosophy of education seems to grow in stature every year — and looks as if it may be moving, finally, from the sidelines to the center of the debate over where education should be headed in this century.

The Italian Connection

Maria Montessori was born in 1870 in Italy. After earning her degree in natural sciences, she entered the University of Rome Medical School, where she graduated in 1896 as one of the country's first women physicians. Because of her pioneer status, Dr. Montessori became a leader of the women's movement, such as it was in late-1800 Italy. But her interest in education took center stage when, as a member



A SHORT LIST OF SUCCESSFUL PEOPLE WHO WERE EDUCATED IN A MONTESSORI ENVIRONMENT ALSO ADDS CREDENCE TO THE MONTESSORI APPROACH. THIS LIST INCLUDES **ERIC CORNELL**, NOBEL PRIZE WINNER; **CRAIG KIELBURGER**, THE YOUNGEST AND THREE-TIME NOBEL PEACE PRIZE NOMINEE; ACTORS **HELEN HUNT** AND **GEORGE CLOONEY**; VIOLINIST **JOSHUA BELL**; *GOOGLE* FOUNDER **SERGEY BRIN**; AND *AMAZON.COM* FOUNDER **JEFF BEZOS**.

of the University of Rome LaSapienza Medical School's Psychiatric Clinic, she developed ideas for educating children considered "mentally retarded" or otherwise uneducable. At the time, such children were thought of as a medical problem rather than an educational one. Guided by the early work of Jean-Marc-Gaspard Itard and Edouard Seguin, two 19th-century French pioneers in education of the mentally challenged, Montessori's ideas caught the attention of the Italian Minister of Education, who asked her to start a program for such children. She accepted, and caught everyone's attention when most of her "uneducable" students passed the state test in reading and math, some scoring above average. Curious how such principles would work with the mainstream population of children, Montessori then opened her first school — Casa dei Bambini (Children's House) — in 1907.

child development and one-time head of the Swiss Montessori Society.

After getting off to a great start in the U.S., however, the Montessori method of education would founder over the next four decades. Dr. Montessori blamed the failure of the American Montessori movement on America's insistence on trained teachers.6 World War II and her active involvement in peace initiatives did not help her cause in the war-active United States either. But, ironically, a great deal of the blame, if that's the right word, for the early failure of Montessori education in the U.S. can be attributed to the progressive education movement of the early 20th century. While the ideas of John Dewey and Maria Montessori would seem to be well matched for each other, Dewey's focus was on socialization and the development of the imagination in the early years, and Montessori was more focused on indisize-fits-all approach to public education, an "Americanized" version of Montessori's ideas re-emerged, and, as education professor Jacqueline Cossentino writes, "this time it stuck." Spearheaded by a group of leaders who sought to integrate Montessori into the educational mainstream, Americanized Montessori schools emphasized social development, including social justice, and appealed directly to a new generation of middle-class, college-educated suburban mothers seeking 'the best' for their preschool-age children."

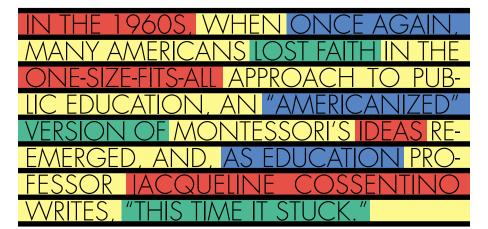
In particular, the 1960s revival emerged when Nancy McCormick Rambusch started the Whitby School in Greenwich, Connecticut. Eventually, McCormick would found the American Montessori Society (AMS), now the largest Montessori organization in the world, which set the course for the current growth in the movement.

Philosophy, Method, and Principles

I was educated in public schools and worked for 25 years in traditional independent schools before making my transition to Montessori education. I've long been aware of Maria Montessori's work and generally knew that Montessori schools were good places for elementary education, but it wasn't until I began working in a Montessori school that I truly understood the method. Now in my sixth year of heading an urban Montessori school, I have come to more fully appreciate the philosophy, the advantages it gives to children, and the phenomenal appreciation teachers have for the child's potential.

However you try to categorize the Montessori philosophy — structured, progressive, traditional, even permissive — the more you read about and observe the methods, the more you see that the power of the philosophy comes from its insistence on giving the child choices and a great deal of independence. This empowerment within a safe, structured environment places the ultimate responsibility (and motivation) for learning with the child.

What guides the school and the child are eight essential principles. As



Montessori's philosophy of education was greeted with great interest in the United States in the early 20th century, in response to the over-regimentation of U.S. public schools at the time. Montessori's 1912 book, The Montessori Method, became the second best-selling nonfiction book of that era. The first U.S. Montessori school opened in Tarrytown, New York, in 1913. By 1915, there were over 150 Montessori schools in the U.S. and many more worldwide.5 Back in Europe. Montessori's ideas would also influence the work of Jean Piaget, one of the 20th century's leading theorists in vidualized learning and intellectual development. It was the 1917 publication of William Kilpatrick's *The Montessori System Examined* that knocked Montessori schools in the U.S. for a four-decade loop. Although Kilpatrick, a professor of education at Teachers College, also believed in the idea of "teaching children not subjects," he was, as a disciple of John Dewey, deeply critical of Dr. Montessori's method — essentially arguing that it was based on outdated theories and focused too early on intellectual development.

But in the 1960s, when once again, many Americans lost faith in the one-

MONTESSORI: INDEPENDENCE IN A CHILD-CENTERED ENVIRONMENT

Here are some of the basic tenets of the philosophy and pedagogy that you will find in just about any Montessori school:

• MULTI-AGE GROUPINGS • Developmental stages are seen as three-year planes of development — preschool: ages three to six; lower elementary: ages six to nine; and upper elementary: ages nine to twelve. Children are grouped accordingly into these age groups and remain in the same level for three years before moving along to the next level.

• TEACHER AS FACILITATOR • A teacher's interaction with the child is meant to be limited, facilitating, and withdrawing so that the child can discover on his or her own with the knowledge that the teacher is standing by to help whenever needed. "What is the greatest sign of success for a teacher transformed?" Maria Montessori wrote, "It is to be able to say, 'The children are now working as if I did not exist.'"

• PREPARED ENVIRONMENT • Shelving, chairs, tables, sinks, and learning materials are carefully designed and strategically arranged to accommodate the child. Teachers spend countless hours preparing the environment daily so that the child can work unencumbered and as independently as possible. "To assist a child," Montessori wrote, "we must provide him with an environment, which will enable him to develop freely."

• FREEDOM TO MAKE CHOICES • Within the structure of the environment, it is essential for the child to have the freedom to make choices on his or her own. "The child's first instinct is to carry out his actions by himself, without anyone helping him," Montessori wrote, "and his first conscious bid for independence is made when he defends himself against those who try to do the action for him."

• SELF-CORRECTING MATERIALS • Montessori sensory-rich classrooms have materials that are designed to have the child succeed without adult monitoring.

OBSERVATIONS AND ASSESSMENTS

The teacher constantly observes the child in his and her environment, taking notes and recording progress along the way. These observations and notes help the teacher assess the child's progress, adjust future work of the child, and help parents understand first-hand how the child is progressing.

• GRACE AND COURTESY • "Their behavior as a group changed dramatically, from street urchins running wild to models of grace and courtesy," writes Tim Seldin, president of The Montessori Foundation. From the early years of working with street children, Dr. Montessori devoted her energies to helping children understand how to work with one another and the adults around them. This approach evolved into peace education that carried her name and principles through both World Wars and into today.

• AN ENVIRONMENT FREE OF COM-PETITION AND ABSENT OF EXTERNAL REWARDS • Underlying much of a Montessori education

REWARDS • Underlying much of a Montessori education is the goal of helping the child learn to work for the sake of learning, without external rewards. Therefore, typical Montessori schools operate without grades, competition, or prizes for achievement. In many ways, this goal connects with Abraham Maslow's "Hierarchy of Human Needs," which ranges from the very basic physiological needs (breathing, food, water) to the self-actualized needs (morality, creativity, problem solving, and lack of prejudice). Learning for the sake of knowledge and understanding is a key step on the path to self-actualization.

• UNINTERRUPTED WORK CYCLE • This is a period of time, usually in the morning, when children work unencumbered. After a typical morning opening circle, children are encouraged to work independently, collaborating with classmates as their work and exploration dictate.

• **PEACE EDUCATION** • Unlike other world leaders who advocated peace through political systems, civil disobedience, or a religious basis, much of Dr. Montessori's work focused on bringing about world peace through educating the child. She was nominated three times for the Nobel Peace Prize (1949–51) for her work in peace education. "Establishing lasting peace is the work of education;" Montessori wrote, "all politics can do is keep us out of war."

1 Montessori 101: Some Basic Information that Every Montessori Parent Should Know, Tim Seldin, President. The Montessori Foundation. described in Lillard's book, *Montessori:* the Science Behind the Genius, the philosophy goes like this:

movement and cognition are closely entwined, and movement can enhance thinking and learning;

2 learning and well-being are improved when people have a sense of control over their lives;

3 people learn better when they are interested in what they are learning;

4 tying extrinsic rewards to an activity negatively impacts motivation to engage in that activity when the reward is withdrawn:

5 collaborative arrangements can be very conducive to learning;

6 learning situated in meaningful contexts is often deeper and richer than learning in abstract contexts;

7 particular forms of adult interaction are associated with more optimal child outcomes: and

8 order in the environment is beneficial to children.

Although Dr. Montessori looked at planes of development through adulthood, most of her work centered on children through age 12. In one of her most comprehensive books, The Absorbent Mind (1946), she describes the time between birth and age six as an age when "children are sensorial explorers, studying every aspect of their environment, language, and culture."8 This still describes most Montessori schools todav, vet Montessori schools that work with children in the middle and high school years are increasing in number in both the private and public school sectors. In these schools aimed at older children, self-directing materials give way to increased thematic-based work. But the disciplinary links in life are still the key - giving a logical context to everything. Unlike a more traditional school that offers middle school students literature, geography, grammar



and composition, and history, a Montessori middle school is more likely to offer humanities that encompass all of the aforementioned disciplines.

Another characteristic of a Montessori education is its universal standard. Whether you visit a Montessori school in India, New York, Tibet, or rural Nebraska, you will experience a similar look and feel in the way a classroom is arranged, in the choice of materials used, and in how teachers interact with children. In order to assure such consistency and quality throughout Montessori schools, the evaluation process requires that head teachers be credentialed in the level that they teach. Early childhood teachers who teach children ages three to six require a specific credential for those ages. The same applies to teachers who teach children ages six to nine, nine to twelve, middle school, and secondary level. Credentialing typically requires teachers to take classes over two summers with an internship in between at a Montessori school under the supervision of a master teacher.

And all of this is guided by various Montessori organizations, the most

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education and democracy

prominent of which are the Association Montessori Internationale (AMI) and the American Montessori Society (AMS). AMI, based in Amsterdam, was established by Dr. Montessori in 1929 to maintain the integrity of her life's work. Perhaps not surprisingly, it is known for its strict interpretation of Dr. Montessori's work. AMS, based in New York City, is, as its name implies, focused on U.S. Montessori education. Recently, AMS established a library at the Thomas J. Dodd Center at the University of Connecticut as the repository for its archival materials — a step that clearly demonstrates the growing importance of Montessori education in the broad spectrum of American educational options. It is important to add that many non-public Montessori schools are also accredited by state and regional independent school associations and are members of the National Association of Independent Schools (NAIS).

A peculiarity of the Montessori name is that it is in the public domain, there-

fore the name "Montessori" can be used by any school. Also, there are Montessori schools throughout the U.S. and world that are proprietary, for-profit schools. One can only imagine what Maria would have thought of this concept.

Montessori Today and Tomorrow

The more familiar you are with the Montessori philosophy, the more you see its pervasiveness in modern education practices, even outside the Montessori world. In Jane Healy's book, Your Child's Growing Mind, for instance, you'll find numerous similarities between Healy's modern-day research and teaching and what Dr. Montessori established many years ago. Similarly, the work of Howard Gardner and Robert Sternberg echoes and builds upon Montessori's philosophy, with its focus on the needs of individual children and its sensitivity





to different learning styles and intelligences. You'll also understand why a Montessori approach that encourages the child to work at his or her own pace, making educational choices independent of adults, is attractive to today's parents seeking alternatives to the NCLB philosophy — and why Lillard and others argue that we pay more attention to the ideas of Maria Montessori as we search for solutions to our nation's public education woes.

A short list of successful people who were educated in a Montessori environment also adds credence to the Montessori approach. This list includes Eric Cornell, Nobel Prize winner; Craig Kielburger, the youngest and threetime Nobel Peace Prize nominee; actors Helen Hunt and George Clooney; violinist Joshua Bell; Google founder Sergey Brin; and Amazon.com founder Jeff Bezos. The publication With Graduates Like These. . . We Must Be Doing Something Right! features dozens of prominent Montessori graduates who are successful, accomplished, and fulfilling their goals.9

It's also worth noting that modernday Montessori schools tend to have a social conscience, too - including a concern for environmental sustainability and social justice — as they help prepare the child to navigate a maze of complex life challenges. Ultimately, though, what sustains this educational philosophy is its basic tenet of keeping the child at the center and a pervasive belief in the child's potential to learn on his or her own. This central tenet of the Montessori philosophy, conceived 100 years ago, has proven to be enduring. More importantly, it holds out the real possibility of positively shaping the world today and tomorrow through quality education. The more our nation's leaders push against these ideas - hoping for more control of educational outcomes — the happier I am to see that there are remarkable grassroots forces pushing back, some with roots that connect to that little schoolhouse in 1907 Rome.

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Notes

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- ²Christopher M. Glenn. "Longitudinal Aptitude Study (LAS): Eighteen-Year Follow-Up. Final Report." ERIC, 2003.
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- ⁵Marsha Enright. Foundations Study Guide: Montessori Education. Revised 2007, www.objectivistcenter.org/showcontent. aspx?ct=48@h=44.
- ⁶Enright, p. 46
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