



The Growing Brain In a Changing World

by Jane M. Healy, Ph.D.

Although I am not a Montessorian, I find that the more I read current research about the developmental trajectory of the growing brain, the more I become aware that Maria Montessori already realized a great deal of what we know now—and she did it without the benefit of scanners, f-MRIs, and complex technologies. How did she do it? She watched children, of course. And she watched them sensitively, intelligently, and with an eye to appreciating how each youngster's pattern of development was unfolding. A very impressive accomplishment and, unfortunately, not one often emulated in today's top-down educational systems!

I have been devoting a great deal of personal thought to the question of what is happening to children in this pressured, unpeaceful, and mechanistic world we inhabit. My research has focused particularly on the increasingly "mechanistic" aspect of this world of childhood, as youngsters are ever-earlier "plugged into" electronic equipment and toys in an effort to "prepare them for the future" (such nonsense!), make them smarter (likewise nonsense), and, frankly, stay out of the hair of caregivers who have little time, respect, or patience for the critical process of children's development. A colleague in New York recently referred to the parent practices as "product development," and this observation may not be too far off the mark!

Thus my thesis is very simple, and yet all-too-complex: If we allow our children to be raised and educated by machines, we should not be surprised if they grow up without humanity. And it seems to me that the potential for peace in our world springs directly from our own humanity, which is directly related to the ability of the human brain to find peace within itself.

This personal ability to be at peace, both inside and outside, does not develop automatically, but is engendered in the brain by life experiences beginning even before birth, and it is highly dependent on the cultural milieu and value systems which surround it. No argument should exist that we here in the United States live in a culture of violence, when the most popular video game last year, "Grand Theft Auto III," includes scenarios which are too gross to even describe to a polite audience. The fact that this game, and others, are labelled appropriate for adults, does not keep it from being the top-seller in the young teenage market as well.

Not only does research clearly support the fact that such virtual violence engenders violent behaviors and thoughts in many of the young, but it is certainly possible that at least some of the documented "need" to drug many youngsters with powerful anti-psychotic medications (for attention problems, for depression, for antisocial, etc., etc.) stems from rearing environments which are out-of-sync with children's basic needs for a secure, safe, nurturing, and appropriately challenging environment.

Some of you in the room are working with youngsters who are disadvantaged in far more obvious ways, struggling on the other end of the economic scale with, paradoxically, the same core issue, namely, a world that is all too ready to sell out children's developmental needs for more expedient gains. What kind of humanity can we expect of children growing up in a state of appalling and desperate need—especially when a recent statistic indicated that every child in the world could be put into school for what it costs in one year to keep Americans in cosmetics?

The Developmental Roots of Humanity

Where does humanity come from? Current research offers some clues. First of all, the potential for either a peaceful or violent mind appears to be partially genetic—just as a child's temperament comes with the package. Nonetheless, just as bad table manners may run in families, one's capacity for a humane and peace-loving disposition is also physically developed in the brain, particularly in the complex involving the pre-frontal areas of the cortex, by the environments in which children live and are schooled. This most essentially human part of the brain is referred to as "the executive system" and enables us to choose socially and personally constructive and appropriate behaviors. It enables forward planning, inhibition of impulse, socialization, inner thought, and reflection; in short, it is critical for individual self-regulation and, by extension, for cultural stability. Interestingly enough, it is very closely tied to lower systems in the so-called "emotional brain," and may depend on early emotional development for its full fruition.