## Leading Children Back to the Future In the Waldorf Classroom

Each morning when I open the door and step into my first grade room, I immediately feel at home. I am so fond of my classroom - the plants by the windows, the children's watercolor paintings brightening the walls, the wooden desks and chairs all ordered and arranged to face the blackboard. I like to think that this classroom is lovelier than the one I entered as a child, but the truth is that there is something about my room that at first glance is similar to the classrooms of the past. Many of today's young teachers would say that my classroom is old fashioned. It is noticeably lacking the modern accourrements. There are no computers, no white boards, no markers, no active board, no laptops, nor cd and dvd players, not even an intercom speaker. My classroom is a low-tech environment - one seemingly behind the times. Perhaps I should be worried that I am a *dinosaur*; some relic from another educational era when teachers stood at the front of the room and when books and paper, chalk and erasers (and teachers) were essential ingredients in a school experience. And yet, when I read what is being written today about education, brain development, and the dramatic world changes that await our children I am absolutely convinced that my Waldorf classroom is leading my students back to the future.

Two years ago, Thomas Friedman, New York Times reporter and author of *The World is Flat*, spoke to a group of students at a highly respected prep school. The students wanted to know what they should do to prepare themselves for tomorrow's workplace.

Friedman's answer was striking. He told these students that their education had primarily

developed the left-side of their brains and that if they wanted to be prepared for the future they needed to develop the right side of their brains as well. He told them to *think art*, to *think green*, to *think connectedness*.

As it turns out, Friedman's ideas were influenced by what he was seeing in our rapidly changing global economy where American jobs are continually being out-sourced to countries like India, China, and the Philippines and by what he had read in a book by Daniel Pink, called *A Whole New Mind*.

In this book, *A Whole New Mind*, Daniel Pink makes it clear that our standard approach to education utilizes only the left side of the brain. This is the education that we are currently promoting with No Child Left Behind and what Pink states so clearly is that it will not prepare our children for the future. If we educate children only in a cognitive and testable way, we are going to make them economically obsolete. Because if young people are schooled in a traditional manner, using only the left sides of their brains, someone in a developing country is going to do what they are trained to do more cheaply. "According to Forrester Research at least 3.3 million white collar jobs and 136 billion dollars in wages will shift from the U.S. to low-cost countries like India, China, and Russia by 2015." (Pink, A Whole New Mind, p.39.) In addition, if we educate children in this conventional way, using only the left side of their brains, the computer is going to do what they are trained to do more quickly. If we truly wish to prepare our students for the future Pink proposes that we must help them develop new capacities in *art*, *storytelling*, *play*, *empathy*, *finding meaning*, and *symphonic thinking*.

What I find reassuring is that these are the very capacities that are being developed in children at a Waldorf School. Art and storytelling are essential parts of the Waldorf experience right from the start of school. When children are taught their letters in grade one, they are introduced to the sounds and shapes of these letters through a story. A fairy tale about an enchanted snake could be told in a lively, expressive manner. In that telling the students will hear the sound of the snake hissing as it slithers and slides through the softly, stirring grass. On the blackboard they will see a large, colored chalk picture of this sinuous serpent shaped exactly like the letter "S" which they will draw beautifully in the books they create. They will run the letter "S", paint it, even shape it in modeling wax, all in an effort to provide a multi-sensory experience. But most importantly they will be developing their whole mind.

In Jane Healy's book, *Endangered Minds*, the author underscores the value of this approach to teaching letters. "All thinking, even language processing, calls upon both hemispheres at the same time...Since the hemispheres carry on a continual and rapid communication over the bridge of fibers (corpus callosum) that connects them, their ability to interact is probably the ultimate key to higher level reasoning of all kinds." Healy goes on to say that communication between the left and right hemispheres of the brain occurs when language instruction includes picture letters. "People who learn to read both a letter-type and a picture-type script, as in Japan, tend to process language more equally between the two sides of the brain than do people who read only letter-type scripts." (Healy, 1990, p.125 & p.212)

But it is not just in the Waldorf elementary school that children are heading back to the future. The Waldorf preschool provides a similar mix of tradition and innovation that is truly in tune with our times. Americans are an intuitive people and there are certain understandings that we innately embrace. One of these is that youthfulness is a desirable trait. It is true that sometimes we go about obtaining this desirable trait in puzzling ways, spending millions of dollars on cosmetic surgery and on drugs like Cialis and Viagra. And yet, even when our response is misguided and shortsighted, we clearly sense that when older individuals retain a lively, adventurous spirit, it is a sign of health. In the book Geeks and Geezers: How Eras, Values, and Defining Moments Shape Leaders, by Warren Bennis and Robert Thomas, published by the Harvard Business School, it is noted that this quality, which the authors call *neoteny* (the ability of a species to maintain youthfulness in old age) is often a characteristic of our creative leaders. For instance, the architect Frank Gehry is close to eighty years old and yet he says that some of his best ideas come to him on the ice when he skates. What we see is that his playful, youthful nature is an important part of what makes him so creative.

Several years ago the Smithsonian held a conference on the role of play in the lives of geniuses that underscored the formative influence of play in the lives of innovative individuals whose discoveries impacted our society in dramatic and positive ways. One of the unique capacities of scientists like Albert Einstein, Alexander Fleming, and Barbara McLintock was imagination. What was clear at the conference was that playfulness and imagination are characteristics of genius. The wooden sinks and stoves, the natural building materials, the dolls and the wooden toys that are still part of a

Waldorf preschool classroom allow young children the creative play experiences that will enhance their problem solving ability by fostering divergent and imaginative thinking.

This stands in sharp contrast to most contemporary schools where we are requiring children to do less imaginative assignments at tables with workbooks and pencil and paper.

In the Waldorf high school we are also working to lead students back to the future. Waldorf high schools are small schools, with a required curriculum that is diverse and integrated. Requiring students to take choral music, or to play an instrument, or to be on a sports team may seem restrictive to some, but it is definitely preparation for the future. In the The World is Flat, Thomas Friedman writes about the educational rebirth that occurred at Georgia Tech in the 1990's. The school's president, G. Wayne Clough, knew that the country needed more good scientists, engineers, and entrepreneurs. "Clough began rethinking Georgia Tech's approach by reflecting on his own experiences as a working engineer. Some of the best engineers he had collaborated with over the years had not been the best engineering students. 'They knew how to think creatively,' he said. 'They might not be the ones who could solve the calculus equation better than anyone else, but they were the ones who could define the problem that the calculus had to solve better than anyone else... They were often people with character and that something intangible.' The more time he spent on campus, the more Clough noticed that an 'awful lot of talented students were interested in creative outlets. These students were interesting people when you talked to them. I began to think [that it] would it be nice have more of these interesting people on campus... It helps make the student who is one-dimensional more multi-dimensional [by having him or her] bump shoulders with these other kinds of kids,' So beginning in the 1990's, Clough gradually altered the admissions policies at Georgia Tech, having his admissions people focus specifically on recruiting and admitting good engineering students who also played musical instruments, sang in a chorus, or played on a team. The idea was that people who have other interests tend to be able to communicate, tend to be more social... tend to be able to tie things together from different disciplines and fields." (Friedman, 2006, p. 310 -312.)

This ability to integrate knowledge and see connections in seemingly unrelated areas has been an emphasis in Waldorf Schools since their inception. It is the reason the curriculum is integrated, so that music is taught in conjunction with history, so that art is part of all science studies, and writing is used to enhance the teaching of mathematics.

Daniel Pink calls this *symphonic thinking*, thinking that asks us to recognize patterns and motifs, to synthesize information, to see the big picture, and to make connections in the surprising new ways. Frans Johannson, in a recent article in the *Urbanite*, calls this capacity *the Medici Effect*, referring to the Renaissance family that supported a remarkable burst of wide ranging creativity in the 15<sup>th</sup> century. It is this innovative thinking – the ability to connect the seemingly unconnected, to create new solutions - that is at the heart of the kind of problem solving that we need for the future. It is this ability that led the architect Mick Pearce to design an office complex in Harare, Zimbabwe without the need of air conditioning. To do this he incorporated his understanding of the way in which termites cool their mounds in the hot African sun into his architectural design. "Pearce's passion for understanding natural ecosystems allowed him to combine the fields of architecture and termite ecology and to bring this combination of concepts to

fruition. The office complex, called Eastgate, opened in 1996 and is the largest commercial/retail complex in Zimbabwe. It maintains a steady temperature of 73 to 76 degrees and uses less than ten percent of the energy consumed by other buildings its size. And it saved 3.5 million immediately because they did not have to install an air conditioning plant." (Johannson, Frans, "*The Urbanite Project*," The Urbanite, no. 33, March 2007, p. 56.)

Clearly in our era of global warming and the heightened need to reduce fossil fuel consumption, Pearce's creative problem solving is in demand. If we are truly preparing our children for tomorrow, we should be educating them as Thomas Friedman said, "to think art, to think green, to think connectedness." And this requires that they use both sides of their brain.

So when I enter my seemingly *old fashioned* classroom each morning these are the understandings that reassure me. When I teach my first graders their letters through art and storytelling, I do so with confidence that I am stimulating the kind of brain activity that will give rise to higher order, creative thinking. And in fourth grade when I will watch each of these same children begin to play violin, viola, or cello, I will rest assured that their ability to think creatively and to work collaboratively is being strengthened through music. And when these same students in grades six, seven, and eight, see the synthesis of art and science and the love of nature that lived in individuals like Leonardo da Vinci, Thomas Jefferson, and George Washington Carver, it will be with the hope that these same qualities will have been cultivated in them because they were educated to be

multi-dimensional individuals, accustomed to using their whole mind in surprisingly new and innovative ways.

## References

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