## 10/24/08 Notes from Nirvair

Last week I met a remarkable man, Hal. Hal is a retired lawyer who worked for 50 years in patent law. It is amazing to think about all that he has witnessed on the cutting edge of invention over the last half century. He himself is a benefactor of invention. After four years of total blindness, Hal has regained his eyesight through stem cells and Montessori education. The stem cell technology provided the "hardware" for Hal's eyesight. He was told that in order for the new cells to begin to "see", he had to program his brain through multi-sensory experiences in an alpha state of mind (the meditative state). Hal began researching sensory learning at his local library. As he studied, it all started sounding really familiar. You see, Hal's late wife was a Montessori teacher. During their life together, he had helped set up her classroom, watched her make materials, learned the philosophy behind the method. Hal went to work recreating Montessori-style sensorial learning experiences for himself. He invented exercises to engage all five of the senses simultaneously-touch, taste, smell, sight, and sound. He learned to relax, deeply engage, and learn sensorially. Today with the help of a pair of thick glasses, Hal sees. Montessori education became the "software" that provided access to the wonderful technology he had been given.

I was so glad that Sharon, Hal's new wife, introduced me to Hal. We had such a great conversation about the values of hands-on learning, and the brilliant discoveries of Maria Montessori. In Montessori education the teacher does not play the traditional role of the teacher, the conveyor of knowledge. The child is not an empty vessel and the teacher is not a pitcher for pouring in knowledge to fill up the mind of the child. In Montessori education, the environment is prepared with lots of opportunities for the child to explore with all the senses. The teacher is a guide to the environment, putting children in touch with hands-on materials, books, and other people with which they can interact, deeply engage and learn. Through these interactions, the senses engage to take in information and learning happens within the child. By working with the specific sensorial materials, which the children sort, grade and identify by size, shape, color, texture, sound, taste, etc., the students learn to be good observers. They learn to notice and pay attention to the world around them, sensitive to nuances. When they are aware observers, they will always be able to learn from whatever environment they find themselves in. They will be life-long learners, life becomes an adventure of discovery, they become interested in and excited by each new opportunity for learning.

New brain research has already confirmed many of Montessori's discoveries. It now appears that cell research confirms what Montessori educators have known all along, that the best learning happens through deep engagement, with the senses, and that the effect is regenerative at the cellular level. Learning does not mean filling the brain with information. Learning is a holistic process, head, hand and heart, from the most visible demonstration of knowledge and ability, to the invisible workings of the tiniest cell.