Twenty years ago I had an experience which I have shared with every class I taught ever since. At that time I was teaching seventh or eighth grade middle school math. We were looking at the famous Fibonacci sequence where every term is the sum of the preceding two terms such as 1,1,2,3,5,8.... Outside of class I was curious about getting a formula to compute any term, the nth term, without having to know the two preceding terms. I was stuck, so I asked my friend Lance, a real rocket scientist working for Lockheed in Sunnyvale, to help me.

Lance said that it was an interesting problem, and he quickly set up a preliminary equation which he started expanding from there. On he worked, filling one page, then another, and finally a third, all in ball point pen and with no cross outs or erasures. After about 15 minutes or so, he showed me an equation he derived to compute any term in the Fibonacci sequence. It was rather complex, having radicals and powers, but when we tested it on a simple term, it worked.

I was clearly impressed, and I ventured to say, "You must be pretty literate in math to be able to do that so easily." As long as I live, I will never forget what happened next.

Lance looked at me, shocked, like I had slapped him in the face. After a brief pause to recollect himself, he said in a slow and serious tone, "During my life I must have read a thousand books on mathematics because I enjoy it. Each of those books represents another world of math out there, and I have hardly scratched the surface."

Emboldened, I continued: "Are there times when you have difficulty understanding how to solve various problems you encounter?"

"All the time," he said. "I often consult my professors at Stanford, and many times, it takes me weeks, if not months to solve them, if I do at all."

I pressed on: "Do you ever feel like you just don't get things, do you get discouraged, and sometimes think you're not very smart?" And so for the past twenty years I have been sharing this story with my students. At the end I would always engage the group thus:

"Raise your hand if you feel like you don't get things sometimes." I 'd quickly raise mine first. The kids, clearly encouraged by my candor, like Lance's before me, would raise their hands also.

And then, "How many of you sometimes feel that you're just stupid, and don't even want to try?" I first raised my hand, and they quickly followed.

I'd conclude, "If the smartest person I know says "yes" to both of these questions, we can see that being "smart" *does not* mean knowing all the answers. It *does not* mean that learning comes easily. Being smart *does not* mean that there are not frustrations, self doubts, and feeling inadequate or 'stupid'."

"Furthermore," now on a roll, I would add, "the wise person is one who accepts that he or she doesn't know everything, and that there will often be difficulties or struggles along the way, for every one of us at some time or another. The wise person is patient with him/herself, is humble, and keeps trying in the face of all difficulties.

"And, finally, maybe we should redefine 'smartness' to mean "not knowing the right answers all of the time, but having the willingness to ask the right questions, and to patiently plod on and persevere to get the correct answers."

And so, unknowingly and by intuition, I agreed with "America's top learning expert," Mel Levine, M.D., and I help set the stage for learning, by talking about the process of learning itself, and helped "demystify" some of the stumbling blocks all learners encounter, no matter how old, how educated, or how "smart" they are.

My only regret is that I did not know about or read Dr. Levine's books, *The Myth of Laziness* or *A Mind at a Time*, 12 years earlier. I am now retired from full time classroom teaching, but this summer I was fortunate to have read about Dr.Levine and taken the Schools Attuned training program to help teachers help students look at their individual learning strengths and weaknesses, and demystify their fears and anxieties. I am using this knowledge in my tutoring individual students, and I hope to be further trained to facilitate this week long program to other educators who are still in the classroom. --Joe Barile, July 2007

<sup>&</sup>quot;Yes, I do," he admitted, " but I don't beat myself up about it. Some things are just difficult, to anyone. And whining about it is not going to get the problem solved."