

EDITED Sobel Tribute transcription-Muriel Thatcher

Well it is an honor and a pleasure and it is worth the trip from North Carolina but I am a New Jersey girl and as we all know and as Kristie just said the world lost an extremely talented, bright and wonderful man. I was fortunate to be in his second year there at Montclair and met my best friend that day too - the first day- but I hope this remembrance will speak for hundreds and ultimately thousands of teachers and students who either had the honor of knowing or being affected by Dr. Max Sobel sometimes as an author, sometimes in person or at conferences. He did have a big following as we know. His book, *The Art of Teaching* was highly tuned with enthusiasm, knowledge and a deep understanding of teaching and learning mathematics. He also had the incredible ability to quickly commit to memory each person's name, and some wonderful facts about them, their family, their jobs and hobbies and he remembered those and if you were fortunate enough to run into him even years later that was a talent.

So, he modeled my teaching career and molded me into what I became and I was very fortunate and very blessed to enjoy many, many years and I am still tutoring and teaching with that same enthusiasm. So he was, I think, a true "math-e-magician." Now I use that word because the second year, when we were in college "Donald Duck in Mathmagic Land" came out and to me that was a wonderful cartoon some people may be a little slanted about it but it captured the wonders, the history and the mysteries, the challenges, the structure of math and to me that is what Max did. He captured it for all ages and he made it fun for all. When we describe his successes, it was because he managed to weave the history, the mystery, the stories, the humor, the tricks into his mathematically solid math lessons and students entered and left his classes with smiles on their faces and that is a rare teaching quality. We don't see too much of that. Max showed interest in students as a person. He got to know them as an individual. He made everyone feel special and co-authoring with Evan Maletsky, I called them

“the dynamic duo.” They always reflected current changes in thinking and challenges for students. I did bring one of their books to circulate to some of the tables if you have not seen them. Not the textbooks, but this an individual book and with Max kids discovered and understood math and they realized success as they made connections. So often people don’t do that and teachers realize it is possible to teach effectively and to enjoy it and hopefully presumably all of you do enjoy what you are doing and have fun and hopefully your students have fun because that should be the trademark and is it evident in your class that I asked a couple of students I worked with about their math teachers and I was not happy because they said well they show one or two examples and they hand out two or three pages with 25 to 40 problems and they sit at their desk. Well, David Johnson’s book *Every Minutes Counts*, he indicates that no teacher should be sitting at their desk. They should be walking around, talking to the kids, looking at how they are doing, giving them encouragement and so forth. The teachers look bored or show no enthusiasm. Well you can’t expect the kids to if you don’t. They often don’t seem to care if the kids succeed or if they struggle and they kind of give little attention to some of the students as individuals, they are just a block of people. They may not give partial credit. One of the boys I tutor has cerebral palsy and he has great trouble just manipulating to write let alone to take notes or have it be very legible. His track record with that teacher because he gives no partial credit doesn’t bother to look at all the work that is correct. There may be a sign that’s wrong, or one number but the answer isn’t right so the kid is batting about 30 out of 100 percent and his teacher won’t consider doing anything different. It’s sad that we don’t consider kids the way Max would have. So, we never know the far reaching of fact that one comment can have whether it is praise or criticism. The praise is what we want and that is what keeps kids going. I’m sure you as I do have a whole slew of kids that you could mention. I had Patty from a Catholic School and she persevered her heart out. Everything was wrong until March and she came in one morning, every morning she was there at 7:30 and had me look at her work and I looked at the paper and I said “Patty, you did all these”. [She shook

her head] It was a difference of a perfect square and it was a difference in her life. I got up and danced around the room with her, every single one of them was right, the first time all year and I had been coached her along giving her like a C- and she would go through and change everything correct it and that kid went on to get A+ the rest of the year and everything was perfect. It was just that confidence in turning the corner and that is the kind of thing that we hopefully will instill in lots of kids. Tony, the kid who sat there and was assigned to General Math and said "I ain't taking that. I'm taking Algebra." Sure enough somewhere in the middle of the year, I said "Let him stay if he wants to come to a higher level, more power to him" and he was the one who answered the abstract questions in Algebra and there is Billy who told me eleven years later that without the encouragement that I gave him to please go to PE and that it was a state law. He did need sneakers and had a dysfunctional family and a mother who was unfortunately an alcoholic and took eleven years before I found out that he was going to commit suicide and didn't. He said he graduated from high school and went into the military and learned to be, I think to be a welder, and have a wife, a family, a baby and a house and I thank you. Those are the kinds of things that so many people miss because they don't focus on the individual kid. There are many more and I am sure you have them too, but crediting Max for saying you have to pay attention to those kids, know your kids. That is the first thing. "Know your stuff, and stuff them artistically," Max said. But Max's magic brain teasers, stretching your thinking, challenging the imagination, coming up with creative solutions, different ones, multiple solutions to problems, I still have a whole stack of big index cards with his brain teasers but there were some magic ingredients needed to create those "ah ha" moments and Max Sobel was an expert in affecting that result and you all I hope experienced that. He had that twinkle or sparkle in his eye and he lifted his shoulder and kind of waited and it would make the kids contemplate, he wants me to say something, he wants me to think of something and what do I think is going to happen, and he had that sense of hesitation and waiting. He had a little wondering smile and a little suspense and he raised his shoulder and enthusiastically go

through what he was looking for. But he would model it, fold it, build it, stretch it, crush it, analyze it, he used string, clips, straws, rubber bands, sand, beans, rocks, gum, wood, foil. You name it balloons, music, water, magnets and I was always known in my high school teaching year as “the bag lady” because I carted all those things around and I still do. The overhead projector he was a pro, the greatest tool for teachers but he was using those manipulatives before they were even known as manipulatives. Because of him I took time to teach that teachers don't have but have to make the time Pi as a ratio, not the formula, we measured circumference and diameter from everything from a straw to a huge tree that took two kids to put their arm around it and the rims of a truck tire. Figuring out things like that and three d soap bubble geometry or building a model for Pythagoras and 3-D models and one of my favorites is from nutrition labels from the fast foods and you scooped out those teaspoons of sugar or Crisco from a can, and you make a bulletin board and you just show how many teaspoons of sugar or how many teaspoons of fat are in those comparative foods, that will knock their socks off. Figure out the volume of a room, just don't multiply and count and so forth but we figured out ok if ping pong balls packaged in one-inch cubes sort of boxes, how many could we fit into this room. How many basketballs in one-foot cartons could we fit. Not that gets them thinking, and that is exactly what Max did, and so I always wanted to be the Max Sobel or Evan Malesky or wherever I was. I still try to do that. Read and tell stories of the great mathematicians from Rene Descartes, Archimedes, Aristotle and so many. I am a fan of books whether it is *Math Curse* or *Counting on Frank*, *How Big is a Million*, *The Greedy Triangle*... I mean there is an endless list. I must have 250 books for all ages including high school where you can do great springboard activities and get them going and have them write. But he did stretch the minds and poured knowledge into them, seemingly effortlessly, he was just a magician about that, it was very smooth. His little book *The Art of Teaching Math* was very challenging. I found that I was always embarrassed if I didn't do something that he expected me to do, that was just a killer. One time I didn't read the book that he assigned and he asked what does it mean to “ERR”, so I

wrote about the errors that we make and it wasn't that. It was about teacher and when they teaching and they say "Err, err, err..." I never wanted to disappoint that man, but when I was a student I did not realize the impact of the Math Department in Montclair until when I was teaching, I went to the University of California in Santa Barbara through an NSF Institute. When I was registering they said Montclair State, are you lucky? I said "yeah I am" because I had Max Sobel and Evan Maletsky. They said "that is one incredible college" and I was so shocked until I found out we do have that name and because of Max and Evan but also all the hats he wore and the colleagues in the Math Department, Meserve, Davis, and Mallory and preceding them but we were well known and they were all part of this little college that I never wanted to go to. I wanted to go away to college and I had to commute by two buses for an hour and a half in one day every day, one way. All my friends went away to college but you know what, it was the best thing that ever happened to me. Montclair just launched this incredible opportunity and careers for me and it started right off the bat with Max and Evan. It can't say it separately but they pursued me because I wanted to teach in Middle School because I did not want to teach geometry because I had a horrible geometry experience. I had straight A's in an honors geometry, all we did was read steps from proofs all day for every class that was it and my best friend said "oh I love geometry." Well I never told anybody the truth about why I wanted to teach Middle School, and they said to me you should teach High School and you can teach calculus. No that's already I really like that age, which I did. However, I finally landed my job and I did student teaching that was split. I mean I was really campaigning and planning this for four years. So I got a job in Scotch Plains and Fanwood and I was thrilled to teach and two days before school opened, the principal called me in and said "your professors have recommend that you be the one to teach Advanced Placement Geometry to our ninth graders". Well of course I fell in love with it because I found out what it really was and could be and I always enjoyed it when they did it but I did not think I wanted to teach that. So I am very indebted to Max for the most incredible inspiration, challenges, teaching techniques and strategies. He had an endless

assortment and the content matter that he transmitted so artfully. It was fun and satisfying and Montclair graduates were in high demand so, and in other majors too, but we thought Math was the best and special. So it is an honor to say you were a Sobel protege and endeavor to live up to his expectations so I offer thanks for the love and the guidance that only a phone call or a letter or conference meeting away, he would always respond and it was very special.