

Highland Park High School 1950-53

My years at Highland Park High School restored my consciousness and are, unlike those of junior high, remembered well. They were certainly a success academically. I was the recognized leader in my mathematics classes, often called upon by teachers to clarify problems that arose in class. This occurred because frequently more than one approach exists to a mathematics problem, and although the teachers were very competent I was sometimes faster than they at seeing the connection between one idea and another and these teachers had no problem with recognizing that. I was therefore chosen to represent Highland Park in the Hockaday Mathematics Tournament, competing on May 10, 1952 in a one-day event against representatives of other Dallas high schools and of those in Denton, Ft. Worth and McKinney. I remember clearly that the problems were extremely hard for me, so that I thought for two uncertain days that I had not done well whereas in fact I had won. The decisive, hardest and final problem stays with me as if it were yesterday. A plane figure consists of three sides of a rectangle capped by a semicircle; the total perimeter is L ; find the lengths of the two sides of the rectangle for which the enclosed area is a maximum. Instead of despairing on a hard problem, I had reasoned from scratch to seek a way to solve it and had concluded that the length of the base of the rectangle must be twice its height, which in turn must equal $L/(4+\pi)$. It was a problem in calculus, which we did not study in 1952 in high school. I came very close to reasoning it out⁵. Speaking of this fifty years later at the banquet for Distinguished Alumni of Highland Park High School, my words to them were:

What I learned from this day applies to all of life. We face many hard problems for which there are no answers, or at least no easy answers. What we must do, all that we can do, is call upon all of our knowledge and training in the attempt to arrive at the best solution we can find. This is the credo that I carried through my career after discovering it during this math tournament.

Chemistry and Physics were two subjects of my final year. Physics was my favorite course. It was taught by the same Mr. Marshall that managed the University Park swimming pool in summers. His laconic style and Socratic questioning drew us all into attempted explanations. This suited my fundamental nature, the seeking of correct explanations. So I became the class leader by simply being true to my nature. I described Grandpa's milk-pail experiment to the class, and what I thought it meant. This reinforcing experience may be the main reason that I would later become a physics major in college. My near perfect grades in these math and science courses elevated me to rank third among my 92 classmates at graduation in January 1953. I was in passing elected an officer of the Highland Park chapter of the National Honor Society.



The author displaying a chemical reaction to classmates, 1952