## ROBERT A. "BOB" KAHN

(GWHS 1964)

I'm happy to share a few tidbits that I remember about Irwin, and I can recommend a few other students from my GWHS class of 1964 who still live in Denver and who I'm sure would be happy to contribute memories as well.

Here are a few things off the top of my head:

- Academically, Irwin taught me geometry circa 1961-62
- The Math Department at GWHS during those years was unquestionably one of the best in the country. In addition to Irwin, it included Person Jeffries and Vaughn Aandahl, among others. Each of these math teachers had extracurricular teaching interests, which they were happy to share with students outside of school hours. For Irwin it was, of course, tennis. Person Jeffries was a great golfer and an avid bridge player (we sometimes used to play duplicate bridge during lunch hour). Vaughn Aandahl was an accomplished classical guitarist, and I took guitar lessons from him for awhile.
- To this day, I still buy and use engineering graph paper, which at GW we used to call "Hoffy paper." I wish I still had my "Hoffy" Geometry notebook, which every student in his class had to maintain. His unparalleled system of students correcting other student's homework each day, plus the Hoffy stamp of approval affixed on each assignment by student assistant graders (I was one of those assistant graders for awhile) was unique and effective.
- Irwin loved to barter. One summer, he gave me tennis lessons in exchange for me building shelving in his basement. That was a great bargain for me :-)
- When Irwin taught me tennis, it was all in geometric terms: Hold your racket perpendicular to the ground. When you swing, the arc of the racket head should intersect the plane of the ball at a tangent ...well, you get the idea.
- For those of us in whom Irwin had inspired a love of math, Irwin ran a GW Math Club at 7:30 am on Thursday mornings (I believe) . Topics varied, but we explored all kinds of math curiosities, puzzles, and interesting problems.
- At one of those Math Club meetings, Irwin brought his next door neighbor, Bob Albrecht, to speak to the club. Albrecht was a Systems Analyst for Control Data Corporation (at that time, the main rival to IBM). Albrecht asked all of us members of the Math Club to raise our hands if we wanted to learn how to program a computer—something unheard of in 1962-63. As you can imagine, every hand in the room shot up, and thus began the first high school computer education class in America.
- Albrecht wrote an article about this project in Datamation Magazine, July 1963. Here's a link to a PDF copy of that story. Following the article, you'll find some newspaper stories about several of us GW students participating in the Control Data Corp booth at a computer trade show. There's also a scanned program from a math

teacher's conference in Colorado Springs, where four of us GW students gave presentations on computer programs we had written to solve various kinds of math problems: http://www.rakahn.com/shared/medicine\_show\_1963.pdf

- Since I wasn't initially placed in the GW "accelerated math group," I hadn't taken trigonometry in my junior year, which was a prerequisite for taking calculus as a senior. So, Irwin arranged for me to be tutored in trig over the summer of my junior year, allowing me to skip into the senior calculus class if I scored 70% or more on a trig test. I passed the trig test, took calculus as a senior, and then entered Occidental College in Los Angeles as a math major the next fall. My decision to major in math was most certainly due to the influence of Irwin Hoffman, Vaughn Aandahl and Person Jeffries—but particularly Irwin.
- Occidental was a wonderful liberal arts college, but its strengths were in the areas of history, English/literature and fine arts—not math or science. So, in my junior year, I transferred to UC Berkeley—which at that time was "the place" to be. (I've lived here in the San Francisco Bay Area every since.)
- My math education at Occidental did not serve me well at Berkeley, and I ended up switching majors and graduating in Psychology, followed by a Masters and all but the dissertation for a PhD in educational psychology.
- While in graduate school at Berkeley from 1971-78, I developed and ran the Public Computer and Math Education Program at the Lawrence Hall of Science—a wellknown science museum and science education research facility on a hill overlooking the UC Berkeley campus and San Francisco Bay. You can read an article I wrote about the Lawrence Hall of Science Computer Education Project here: http://www.rakahn.com/shared/Kahn-LHS\_Public\_Computer\_Access.pdf
- After leaving Berkeley, I developed interactive computer exhibits for a cutting-edge San Francisco exhibition design company and I spent three years working for the Special Projects group in the Computer Division of game giant, Atari Corporation. There, in 1982-84, I was responsible for developing the computer curriculum for Atari Computer Camps—summer camps for kids merging traditional summer camp activities with computer programming. I also led curriculum development for a special family computer program at Club Med Punta Cana in the Dominican Republic. If you're interested, you'll find some videos, including my appearance on the Today Show, photos and PDF files about Atari's summer camps and Club Med projects here: http://www.rakahn.com/clients\_pages/Atari/index.html
- For most of the past 25 years, I've run my own consulting business as a technical writer and digital communications and media consultant. Basically, my entire career has been centered around educational and communications uses of computer technology both teaching people how to use computers/software/hardware and using computers to teach people about science and technology.
- The highlight of my career was serving as the public voice of the NASA/Stanford University Gravity Probe B (GP-B) program: a 50-year program, proposed by three Stanford professors in 1960 and funded by NASA to experimentally test Einstein's general theory of relativity by sending four ultra-precise gyroscopes into orbit aboard a satellite to measure the warping and twisting of spacetime around the Earth. I was

hired by Stanford to develop and coordinate the dissemination of all public information about this program from 2003, a year before the satellite finally launched, throughout the data collection, data analysis and the announcement of the final results in 2011. The design, organization and much of the content of the GP-B website stands as my legacy to that project: <a href="http://einstein.stanford.edu">http://einstein.stanford.edu</a>

I'm now semi-retired. I still do some consulting work for Stanford (e.g., the NASA Fermi Gamma-ray Telescope project) and for a couple Bay Area start-up companies.

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Bob has a talent for writing and a knack for explaining complex concepts.

He's been using computers since the days of punched cards, and he's forged a 30-year career in educational computing—managing a public computer education project, creating computerized museum exhibits, developing curriculum for summer computer camps, and more.

For the past 12 years, Bob has been doing freelance technical writing and digital storytelling.