When I was still in high school, I found that things I read came alive to the extent that they contained factual information. It was easier to judge a decision—whether it was by a general in a battle, a legislature on a social policy, or a company on a new product—if the book or magazine contained data, charts and graphs. Despite this, when I applied to a liberal arts college I never imagined that I would end up as a statistician. Like all social science majors (psychology, sociology, political science, and economics) at my school, I took one course in statistics. When I went on to graduate school, it quickly became clear that statistical tools were essential for understanding, much less doing, research in the social sciences. After completing coursework for a Masters in International Relations, I decided to earn a Masters in Business Administration. I learned that many computer-based statistical programs were used in market forecasting, strategic planning, and operational control. The more statistics courses I took, the more I realized that statistical methods were not only flexible with applicability in almost every field, they were great fun in themselves! Thus, I took more statistics than any of my friends. However, because I had had only one pure mathematics course in college I had to put in extra effort compared with those who had better quantitative backgrounds.

When I began my career, first in government and then in the automotive industry, I was disappointed that the challenges of my jobs rarely included the need to use the statistical tools I had enjoyed so much in school. This changed drastically in the early ’80s when I was a financial analyst at an automotive company. I noticed a sign asking, “Are you interested in statistics?” I called the phone number provided, and found that many firms had discovered that statistical quality tools were essential not only for success, but in some cases for survival. My firm was trying to develop a ‘critical mass’ of people who understood statistical thinking to help improve the quality of our products. We were losing sales to imports which, at that time, had better quality. Today no manager in the auto industry is unaware of the need for the use of statistical tools.

I am now a statistician in a company that designs and manufactures parts for the auto industry. I particularly enjoy working on a Research and Development teams that determine the design of products years before they go into production. I have the opportunity to make presentations to our customer, explaining the meaning of data on the performance of the parts we produce. I work with manufacturing people personnel to improve vehicles that are being produced today.

In an effort to give something back to the profession which as given so much to me, I have become active in the American Statistical Association (ASA). When I was the Chairperson of the ASA Section on Quality and Productivity, it became clear that while advanced statistical tools are important, a first step which must be taken is to ask the basic question of ‘statistical thinking,’ “Do the data provide any evidence of a real change or does there appear to be only what statisticians call random (or chance) variation?” This question can frequently be answered with the simplest of statistical tools. Indeed, companies are training employees in statistical methods that could have been learned in high school. With this in mind, I provide workshops for local teachers on
the use of statistics in industry. In 1999 I was an organizer of a regional conference on “Statistical Education, Mathematics Standards, and the Meaning of Statistics.”

One thing that I have found surprising since graduating is the importance of continuing education. Many companies now insist that employees attend seminars and conferences to keep their skills up to date, particularly those of us in technical or managerial jobs. In my own case, it would have been impossible to make the shift from financial analyst to statistician if my employer had not developed a cooperative program with the statistics department of a local university. In addition, I have taken advantage of the fact that one university in the area offers courses in the evening that lead to a Ph.D. in a statistical discipline, Educational Evaluation and Research. I have been able to use what I have learned in my present job and to improve my workshops on the uses of statistics. When I complete my doctorate I hope to teach in a School of Education—probably on a part time basis while still working in industry--helping future teachers learn how to teach statistics in middle and high school. Perhaps some of their students will enter college with an eye towards a career in statistics.