



A Summer with PSSC

by Tom Greenslade

My teaching assistantship at Rutgers ran only during the school year, which meant that I faced unemployment during the summer of 1960. Fortunately, I learned from Peter Lindenfeld, my graduate supervisor, that Rutgers had been given National Science Foundation money to run a summer workshop for high school physics teachers.

The Physical Science Study Committee physics course was in its second or third year, and Dick Weidner and Duke Sells of the Rutgers physics department had written a successful proposal to spread the PSSC gospel. I became the teaching assistant for the program.

PSSC was a completely new way to teach physics based on a series of laboratory experiments done with rather minimal equipment (no sealing wax and string, but lots of straight pins and clothespins). The development had been done at MIT, and I was sent there for a week to hear Jerrold Zacharias and Francis Friedman (who died at an early age not too long afterward) talk about their creation. The laboratory apparatus was a bit hard to get used to since it looked so impermanent. On the other hand, it was a good example of minimalist design and did its job well.

We were taken on tours of the film studio in Newton, converted from old manufacturing spaces, where the PSSC films were made. These were half-hour black and white sound films which showed real physicists at work in real surroundings. Some people found them altogether too realistic, and a few years later a competing physics program was developed at Harvard which was more humanistically oriented.

I have borrowed ideas heavily from the PSSC course over the years, particularly from its innovative treatment of oscillations and waves, and optics.