"Good" Science Teaching

I feel that the most important thing I can teach my students is that science is an ever-changing body of knowledge which can be revised by any human (even themselves) through the scientific method. My image represents all of these things.

First of all, the Science News represents the ever changing aspect of science. I feel that part of the excitement of science is in that changing aspect: that science is not memorizing facts, but understanding ideas. I feel I would be remiss in any scientific class if I did not use a current periodical in the classroom.

Secondly, science is a body of knowledge represented by the textbook. Despite its ever changing nature, there is a certain part of science which is common knowledge and standard theories. This is the part of science which students do need to know and memorize. It is the foundation upon which the changing world of science is based. It is the giants on whose shoulders Newton stood that he saw further than most. Any scientific classroom would be remiss in omitting the established body of knowledge.

Third is revision, represented by the scientific experiment. Not only are established laws subject to revision through professional science experiments, but students' understanding is subject to revision when presented with contradicting evidence. The readings talked about this in some depth.

Finally, we have the human being who is there thinking about new theories, establishing new ideas, and running experiments. Science is a human endeavor with it's own history and that too must be established in a scientific classroom through biographies and experiments which allow the students to realize that they two can establish new scientific theories.

This is my idea of a good science teacher and it is what I attempt to personify.