

Scientific Problem Solving

by Example, Exercise, and Reflection

The Zen of Problem Solving

"Your abilities are your handicaps; your faults are your gifts."

Too often, we trust our abilities too much and get fooled by a too quick result. But when we must struggle against a fault, we build something that has been well-tested and true.

"The answer is not the answer."

The answer is the journey and what it builds for the future.

"Assume what is required to be done as already done, what is sought as found, what you have to prove as true."

Quoted from [Polya](#). He meant to suggest working a problem backwards, but the quote can also refer to the success that belief in a solution and in oneself can bring.

"Fully understand your problem, and you will have your answer."

For example, Zhuang Zi relates [the story of a butcher](#) who never had to sharpen his knife because he took the time to study his subject prior to cutting.

"To understand, seek what you don't understand."

Question, question, question.