## The Teacher's Job is to Design Learning Experiences; Not Primarily to Impart Information

Frederick P. Brooks, Jr. Kenan Professor of Computer Science University of North Carolina at Chapel Hill brooks@c.s.unc.edu

## **Abstract**

The primary job of the teacher is to make learning happen; that is a design task. Most of us learned most of what we know by what we did, not by what we heard or read. A corollary is that the careful designing of exercises, assignments, projects, even quizzes, makes more difference than the construction of lectures. A second corollary is that project courses that go deeply into narrow aspects of a subject seem to stick longer and deeper than approaches aiming at comprehensive coverage. How to strike a balance? I've taught a first software engineering laboratory course 22 times, and an advanced computer architecture course about ten times. Here are some techniques that work for me.

## **Categories and Subject Descriptors**

K.3.2 [Computers and Education]: Computer and Information Science Education – *Computer science education* 

## **General Terms**

Experimentation