Folks,

I've been teaching IDL courses for a long time. When I started,
no one had a projector you could connect a computer to. You
just worked everything out on a black board or (sometimes)
a white board. Students had to put up with fuzzy thinking
and even poorer handwriting. Sometimes there were lots of
arrows drawn to show you how to insert code bits here and
there. Basically, it was chaos.

Now, of course, everything is done on the computer
and the instructor's code is projected onto a screen.
It's neater, the code is in a straight line, it is
easier for the class to see, many of the lectures
are canned, etc.

The strange thing is, I think people learned more
when the course content was a mess than they learn
today. Sometimes I'll lecture for three days and then
ask a class to write a short program without my help.
Fewer and fewer people, it seems to me, are up to the
challenge.

Now, I have confirmation of my theory that chaos
and confusion actually promotes learning!

Greg Wilson, over at Software Carpentry, has posted
a short summary of some work Eric Mazur, an expert on
physics education, has been doing.

   http://software-carpentry.org/2011/08/demos-reinforce-errors -and-
confusion-is-good/

Here are his main points:

  1. Giving people a demo of something actually results in
     them understanding it less well, because they fit what
     they?ve seen into their preconceptions (which are then
     reinforced). Guzdial interprets this to mean that CS
     educators need to do more live coding.

  2. Students like teachers who clarify things, but students
     who are confused are actually more likely to learn and
     understand.

3. Students? self-reported understanding of a topic has no
   relation to their actual understanding of it (which
   highlights once again the fact that self-assessment
   is useless).

Maybe the old ways ARE best! :-)

Cheers,

David

--
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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")