

Re: Curing Einstein's Disease (is Copyrighted)

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- *From:* Randy Poe <poespam-trap@xxxxxxxx>
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On Feb 1, 10:29 am, PD <TheDraperFam...@xxxxxxxx> wrote:

On Jan 31, 11:09 pm, NoEinstein <noeinst...@xxxxxxxxxxxxxx> wrote:

There is a ritual that physics professors go through: It's called "deriving equations". They string lines of this and that together; and faster than 'smart' students can write down, let alone question.

Not in my classes. The smart students just followed what I was doing by watching and questioning now and again, and then they went back to their dorm rooms or apartments and did it again for themselves. It was the not so smart students that were trying to write everything down so that they wouldn't have to work it out for themselves, and were so busy writing that they didn't have time to think of any questions, let alone asking them.

Wow. Could "NoEinstein" be any clearer in expressing where his resentment comes from. He couldn't follow a derivation, so he thinks it's black magic and pointless, and furthermore projects his failings onto the rest of the world, that NOBODY could follow a derivation.

The entire point of seeing derivations in a physics class/text, like proofs in a math class/text, is so that you don't just accept results on faith. You see where they came from, what the starting point was and the process to get to the result. I would hope that at least the B students follow it and are able to describe and reproduce it.

With one exception (organic chemistry), I don't remember any class I ever took where I was writing things down without time to think about them, or was expected to. Indeed, I learned pretty quickly that I could never learn a subject unless my notes were paraphrases rather than verbatim copies of what the professor was saying.

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Did NoEinstein never take a single course where students were pointing out errors (a dropped factor of 2, a mistaken change of sign) that the professor had made in a derivation? I would think that's the norm.

I had one admittedly quirky (but nevertheless, or perhaps because of it my favorite) professor who actually insisted students not write anything down. He expected you to follow what he was doing and be able to reproduce it without the note-taking. And if you asked him a question in the hall afterward, he'd slap the paper out of your hand if you tried to ask it by scribbling equations.

– Randy