The View from the Dark Side

Deidre Tronson
Centre for Plant and Food Sciences, UWS

Nominated Speaker for the Loyal Opposition on the topic “Are First-Year Pracs relevant in the 21st Century”

Think of one memorable experience from your own first-year (or High School) practical classes.

I have one example from each of my pracs:

- CHEMISTRY
- PHYSICS
- ZOOLOGY

So, were those things really useful to my career as a chemist, biochemist and science educator?

NO

Nor to my horticultural pursuits.

Were your prac experiences extremely useful to your future career?

FIRST OPPOSITION POINT

PRACS NOT USEFUL FOR STUDENTS’ CAREER OBJECTIVES
Now let’s consider our students.

What proportion of your first-year class will continue in your speciality?

ONLY A VERY SMALL PROPORTION

IF our students have similar first-year prac experiences ....

IF those who proceed to second year share some of our passion and commitment......

THEN WE SHOULD leave all prac UNTIL SECOND YEAR and above WHEN

The best, most motivated, most enthusiastic students will benefit by learning relevant skills acquiring useful knowledge

SECOND OPPOSITION POINT PRAC CLASSES ARE MORE EFFECTIVE IF LEFT UNTIL SECOND YEAR ++.

HOWEVER
Many honourable speakers for the Positive Side have presented some reasons that first-year students need to become acquainted with practical skills.

O.K.
Let's do something positive about this.

LET'S USE COMPUTER SIMULATIONS to enhance:
- comprehension
- skills
- metacognition.

Tyre-changing as an analogy for all pracs: from: http://www.ehow.com/how_1863_change-flat-tire.html

Mouse-clicking as a simulation of squeezing a pasteur pipette (also similar sites illustrating burettes etc): from: http://www.biotechnologyonline.gov.au/popups/int_gameprobe.cfm

Selected micrographs or diagrams are superior to student-prepared slides From:http://www.cellsalive.com/

... and finally (but MOST importantly), PHYSICS FINALLY WORKS: From: http://www.chilternweb.co.uk/physics/emag ion.html
THIRD OPPOSITION POINT

COMPUTER SIMULATIONS ARE BETTER THAN REAL-LIFE PRACS.

HA! HA!

FINAL OPPOSITION POINT

THINK OF ALL THE $$$$MONEY$$$$ THIS WOULD SAVE.