How to do something today

Producing materials for maths lectures is often a difficult task, certainly more difficult than many other subjects. But in the case of teaching writing getting started is easy: let the students generate the material. Get some old exam scripts and look through them for good mistakes. I'm not sure I can define rigorously what a 'good' mistake is but I'm sure you'll know one when you see it. All you have to do is photocopy these examples, hand them out to students during a lecture and ask them to find the errors.

Usually the students look through for arithmetical errors and give up when they don't find them. To counter this stop the students after about ten minutes and ask what they have so far. If they have nothing or are obsessed with arithmetical problems, then show them how to tackle one of the examples. Then set them back on task.

The exercise can take about 20 to 30 minutes. Some say that losing that time in a course is not possible as there is too much material to get through. I would counter by saying that this short exercise, when done correctly, gives more benefit to more students than they would get from the lost material.

On the DVD I've included an example of a handout I give to my 2nd year complex analysis class (complex-analysis-find-error.pdf). Please feel free to use that until you make your own. In future I may put other examples on my website, www.kevinhouston.net.

To generate your own further examples just photocopy any marking you have to do and use it later. Don't forget to anonymize the material - students don't like to be embarrassed in front of their peers.

Also on the DVD is a ready-to-go exercise in writing mathematics on maxima and minima. See wm-exercise.pdf for instructions and handout.

Please get in touch if you have any comments, suggestions or good mistakes!

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