



University
of Glasgow

Providing Feedback to Students ... about their revision methods

Eric Yao & Steve Draper, University of Glasgow

Physics & Astronomy + Psychology

Aim

Motivation

Method

Evaluation

Plan

Feedback about methods of learning

Aim

*Get the students to think about
how they are studying*

School - University

Connect subjects

Foster peer group

Space for discussion

Show support

Improve engagement ... pass rate

Feedback about methods of learning

We tell our students:

What to study

Techniques of solving questions

Motivation

We test them

but generally ...

we don't say much about how

(not subject specific)

"It's impossible to learn very much by simply sitting in a lecture, or even by simply doing problems that are assigned." - Feynman

Feedback about methods of learning

Using

pre-test

intervention

post-test

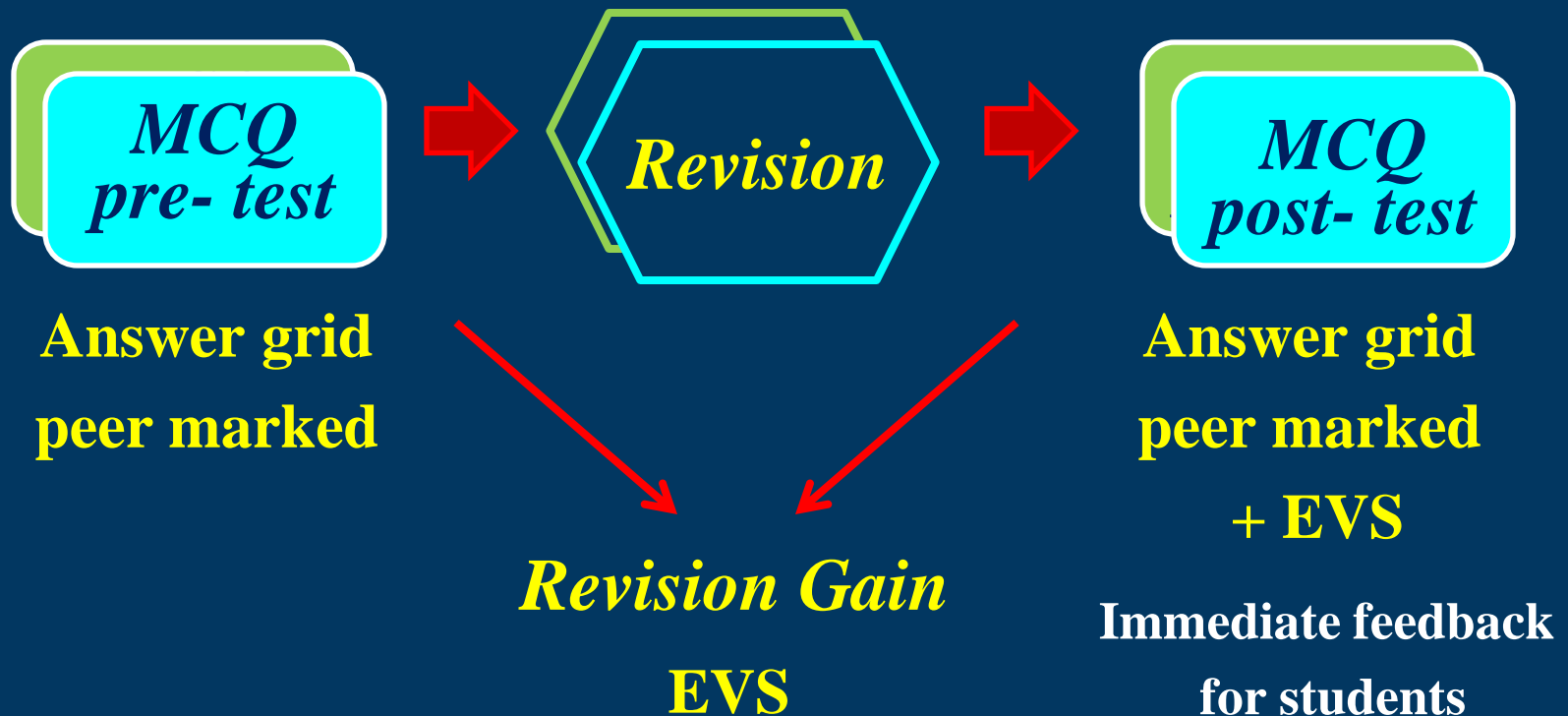
Method

... within a single session

*and comparing results of
2 different interventions*

Measuring revision “gain”

- student evaluation of revision methods

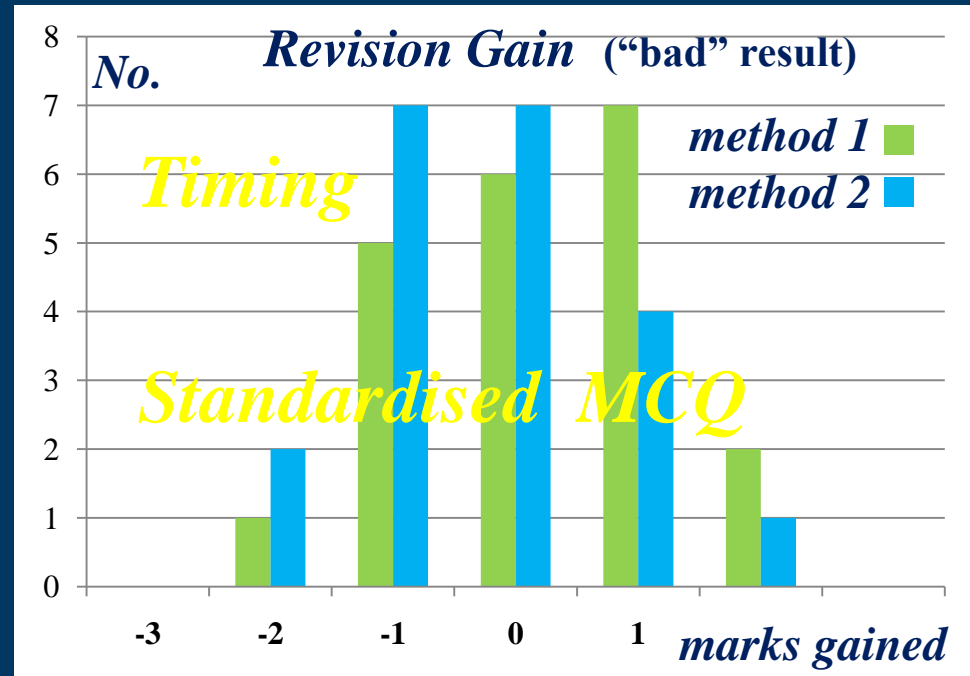


- *Students' own method*
- *Suggested revision method*

Feedback about methods of learning

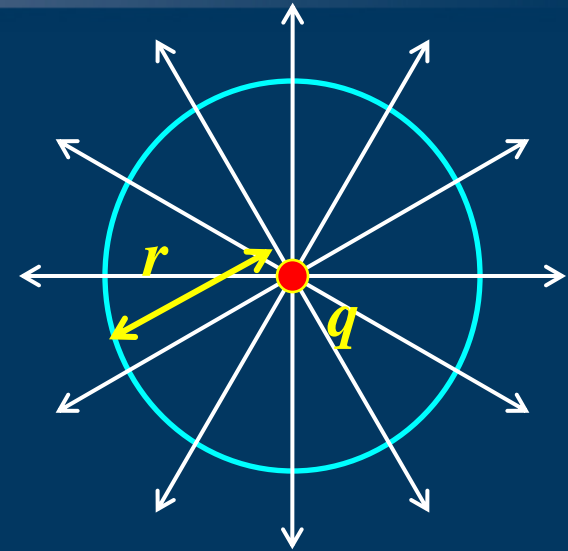
*Sometimes results don't go
the way you expect ...*

Evaluation



ES.1.5

Which of the following statements is true for the electric field \underline{E} and elements of the Gaussian surface dA (blue sphere) ?

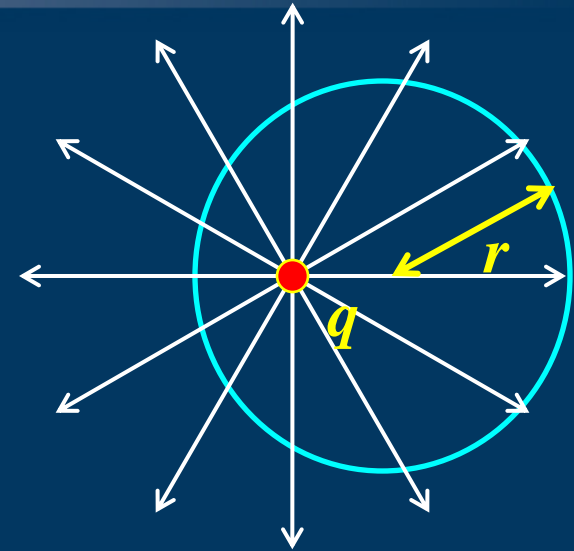


1. \underline{E} and dA are parallel, $|\underline{E}|$ is constant
2. \underline{E} and dA are perpendicular, $|\underline{E}|$ is constant
3. \underline{E} and dA are parallel, $|\underline{E}|$ varies
4. \underline{E} and dA are perpendicular, $|\underline{E}|$ varies
5. None of the above are true

Physics is hard but if you spend time working on it, EVERY student will achieve the goals of this course at the end.

ES.2.5

Which of the following statements is true for the electric field \underline{E} and elements of the Gaussian surface dA (blue sphere) ?



1. \underline{E} and dA are parallel, $|\underline{E}|$ is constant
2. \underline{E} and dA are perpendicular, $|\underline{E}|$ is constant
3. \underline{E} and dA are parallel, $|\underline{E}|$ varies
4. \underline{E} and dA are perpendicular, $|\underline{E}|$ varies
5. None of the above are true

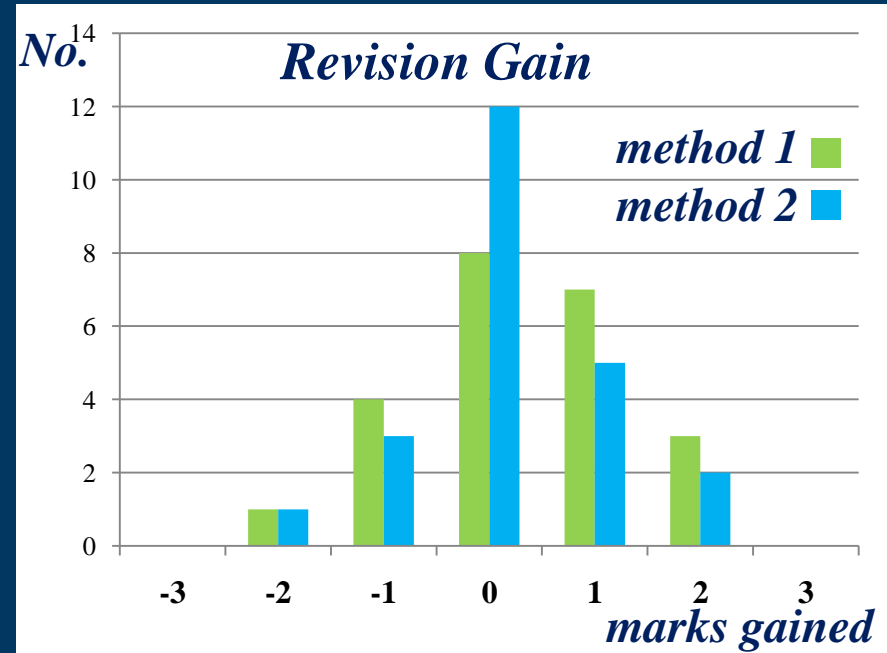
Physics is hard but if you spend time working on it, EVERY student will achieve the goals of this course at the end.

Sample results

What the students say:

This is very helpful. It makes me think about what I am doing.

Even if the data doesn't show it, I think it is a good idea [to use this method].



and ... pass rate improved!

Feedback about methods of learning

*Pre-session introducing
different revision methods*

Longer sessions (more time)

Roll out to bigger classes?

Responding to student requests

...

Plan

Thank you