

GCSE Strategies

Sally Barton (sally.barton@nottingham.ac.uk)
From Regent College, Leciester 6th form college last year
Now at Nottingham University.

Also with Nanamic
National Association for Numeracy and Mathematics in Colleges

GCSE Strategies

Foundation or Higher?
Modular or Linear?
One success will be C grade passes
But what are your other aims?
students to progress to A level maths?
students wishing to study sciences?
preparation for work?

GCSE Strategies

At Regent the majority of students on the "foundation" course but 50/220 students on the higher, those who:
failed Higher / C grade wanting A level maths / students wanting to study Sciences.

We used the modular papers and ALL students sat the Data module at Higher.

GCSE Use of Maths

Some students not ready for standard resit (from experience they fail).

This year we joined the pilot and used this approach with our grade E resits and teachers have been impressed with the level of engagement in the classroom so although the qualification has been killed Regent will keep the approach,

GCSE Engagement

Resources from/based on
[Thinking through Mathematics](#) Download all the resources here.

[Clip](#) Introductory clip explaining the ideas.

[Or download Malcolm Swan's ILIM strategies](#)

Resources from the FSMQs – see handouts

GCSE Strategies

Malcom Swan's material promotes discussion. Another way to encourage active learning is to use Jigsaws. I have included a handout on the Tarsia software.
With resit students – use what they do already know – eg area formulae
Can also use to extend the known into unknown.... Red jigsaw.....

GCSE Use of Maths

FSMQ Data Handling

This section is assessed by a terminal exam but Regent decided that students will learn the skills needed through a portfolio of tasks which will not be formally assessed.

This approach can, I believe, also be used to cover the relevant areas of GCSE.

GCSE Use of Maths

The Teaching

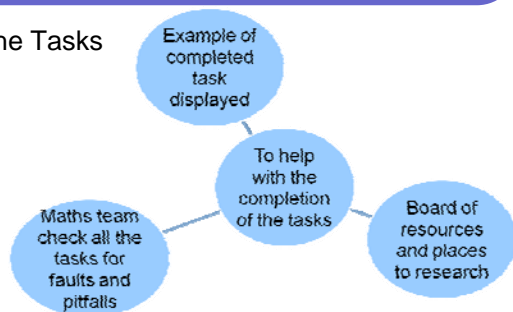
Afl through marking of tasks with feedback and marking of the monthly tests

Teacher management of the learning environment

Student research and revision for tasks and tests using text books, Mymaths and the teacher as resources.

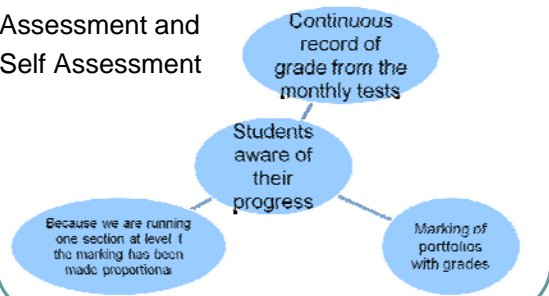
GCSE Use of Maths

The Tasks



GCSE Use of Maths

Assessment and Self Assessment



GCSE Use of Maths

FSMQ Data Handling

Example of data release sheet

How would you use these in your classroom?

Regent and George Moneaux have other resources to share : contact me if you would like to be put in touch

Improving Learning in Maths (ILIM)

Do you want to learn more about using active learning approaches?

NANAMIC can offer training to groups anywhere in the country. This can be for individual organisations or groups of organisations. The training is suitable for all teachers of maths as well as support staff who assist but who may not have a maths background.

The day will include exploring beliefs about teaching and learning:
+ the research underpinning ILIM
+ approaches, activities and learner responses to ILIM.
+ responding to learners differing abilities and learning styles.
Be a venue and get free training places

NANAMIC
Continuing Professional Development Standard
National Centre
for Excellence in the Teaching of Mathematics
www.nanamic.org.uk