The Institution of Structural Engineers

ANNUAL ACADEMICS' CONFERENCE 2016

Structures Teaching – Changing Demands

Martin Gillie, University of Manchester

Changes

Class size

Degree

Student origin

Technology – for education
- for engineering

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Changing the "How"

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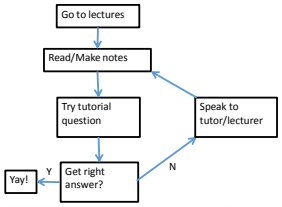
How I (and you) were Taught



Limitations

Personal contact with large classes?

One-size fits all

Timing

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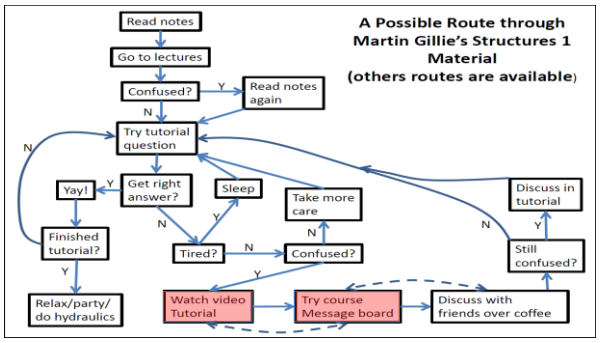
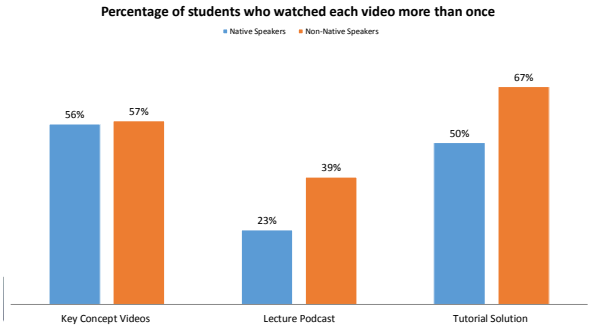
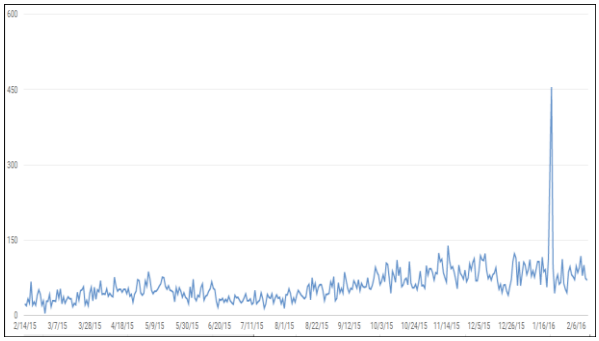


Date	Thread	Author	Status	Tags	Unread Posts	Total Posts
21/01/16 23:22	exam q2b	Anonymous	Published		2	2
21/01/16 16:00	Tutorial 7 question 2G	Anonymous	Published		0	2
21/01/16 15:52	Other past papers	Anonymous	Published		0	1
21/01/16 15:48	tutorial 5 queston 1	Anonymous	Published		0	3
21/01/16 15:16	Shear Force of a tringular load	Anonymous	Published		0	3
21/01/16 14:13	Bending moment for cantilever with a point load	Anonymous	Published		0	9
21/01/16 14:02	Parallel axis theorem question	Anonymous	Published		0	4
21/01/16 13:18	Question about Bending Moment Expression		Published		0	4
21/01/16 13:13	Tutorial 6 exercise 1 d		Published		0	2
21/01/16 00:49	Exam q 4		Published		0	2
20/01/16	Tutorial 7 - question 2(f)	Anonymous	Published		1	3

Video Resources

- Lecture podcasts – automatic
- Key concept videos <5 min
- Tutorial solutions





Changing the "What"

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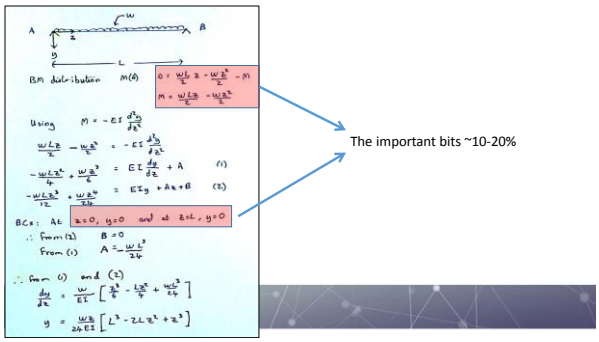
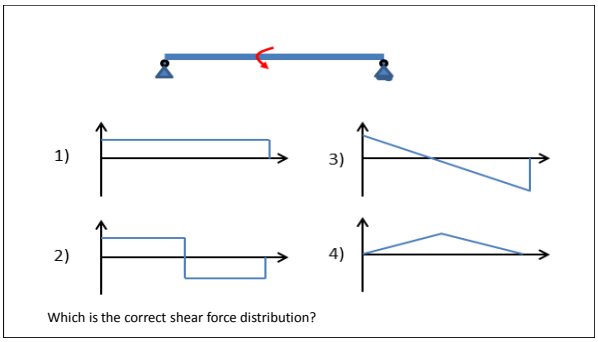


The important bits ~10-20%



Which is the correct shear force distribution?

The End

It works

- Excellent student satisfaction
- Efficient delivery
- External engagement

Lots more – happy to discuss!

M Gillie, R Dahli, F Saunders, A Gibson. *How Engineering Undergraduates use Rich-Media Resources* Proc 6th Int. Symp. of Engineering Education, Sheffield ,2016, Ed. P Kapranos. doi.org/10.15131/shef.data.3507380.v1

https://www.youtube.com/user/structengineering

https://www.youtube.com/watch?v=6KA5imCH5rQ