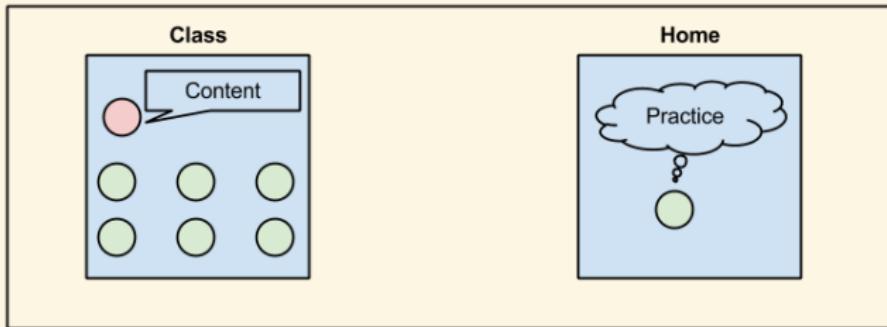


“I will not lecture you.”

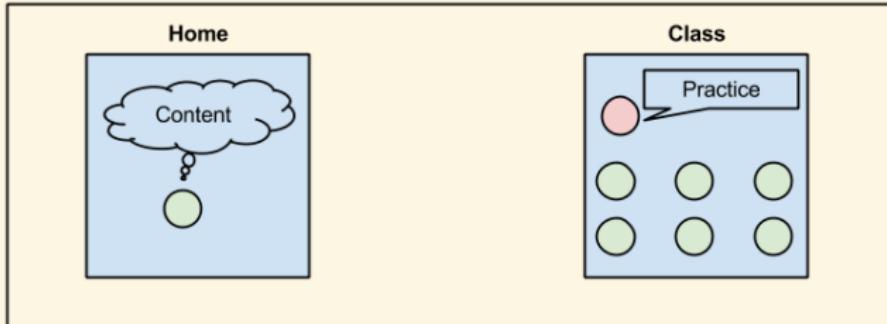
Vince
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Active learning increases student performance in science, engineering, and mathematics Freeman et al. 2014 (PNAS)

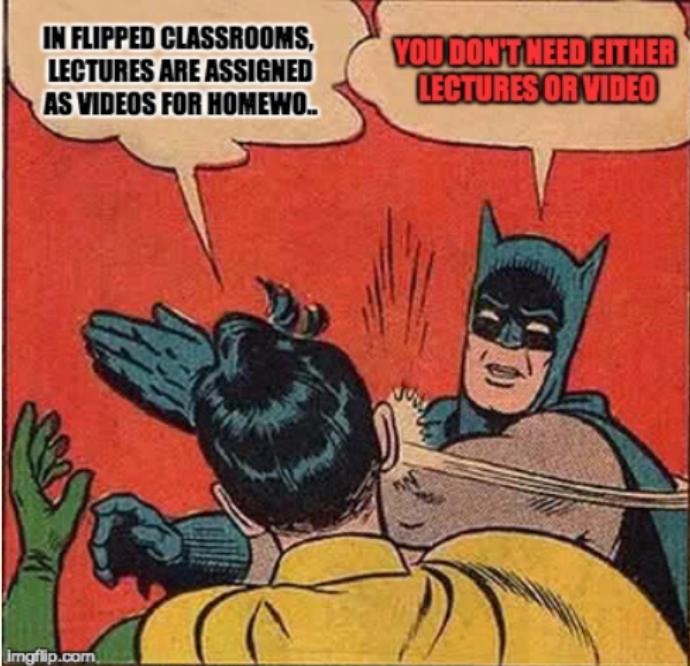
Classic Classroom



Flipped Classroom



Video



IN FLIPPED CLASSROOMS,
LECTURES ARE ASSIGNED
AS VIDEOS FOR HOMEWO..

YOU DON'T NEED EITHER
LECTURES OR VIDEO

Initial contact.

FLIPPED LEARNING



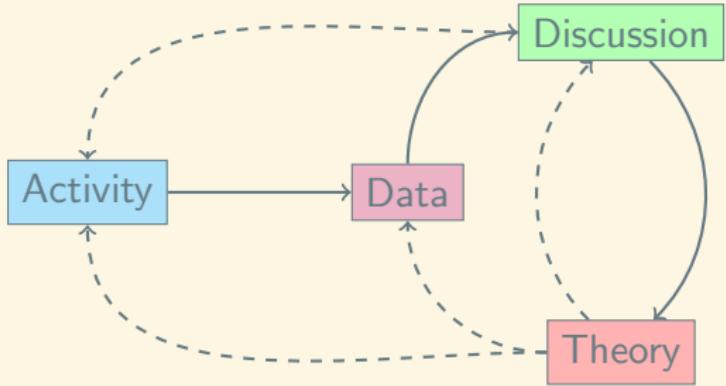
A Guide for Higher Education Faculty

ROBERT TALBERT

Foreword by JON BERGMANN

Example 1: Final year game theory class

Production: →
Reflection: - - →



Playing Games: A Case Study in Active Learning Applied to Game Theory Knight. 2015 (MSOR Connections)

Squad	1	2	3	8	9
Cake	1	2	3	3	4

Crew	5	5	0	11	12
Gauss	0	5	5	6	7

Squad	3	3	3	3	4
Crew	3	3	3	8	9

size	3	6	9	12	12
Gauss	3	6	9	12	17

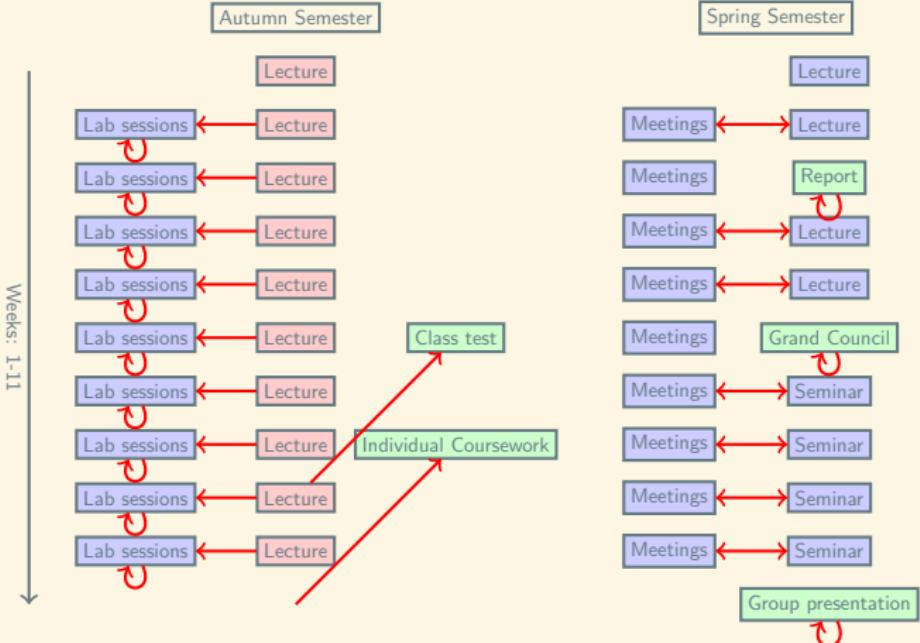
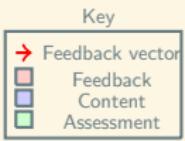
Squad	3	6	9	14	15
Gauss	3	6	9	9	10

Cake	1	2	3	8	8
Gauss	1	2	3	3	8

3,3	0,5
5,0	1,1

Squad	9	13	28
Cake	4	16	24
Crew	12	21	31
Gauss	7	24	34

Example 2: First year programming class



FAQ: Yes, great but [subject] is different.

FAQ: If I record my class will students no longer attend?

FAQ: If students don't [do some activity] before class what should I do?

FAQ: I have seen [a good talk] on flipped learning,
isn't that ironic?

FAQ: I tried the flipped classroom and students don't like it.

FAQ: How much more work is it?

Reaction.



(Dr Stephen Rutherford. BIOSCI.)

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