

Student Participation in Large-group Settings

Dr. Peter Fossey
Academic Development Centre
p.j.fossey@warwick.ac.uk

Opening question:

What kind of teaching do you anticipate doing this calendar year?

What challenges do you expect to face?



CANCEL THE FORWARD-PLANNING CONFERENCE.
JONES FORGOT TO BOOK THE HOTEL

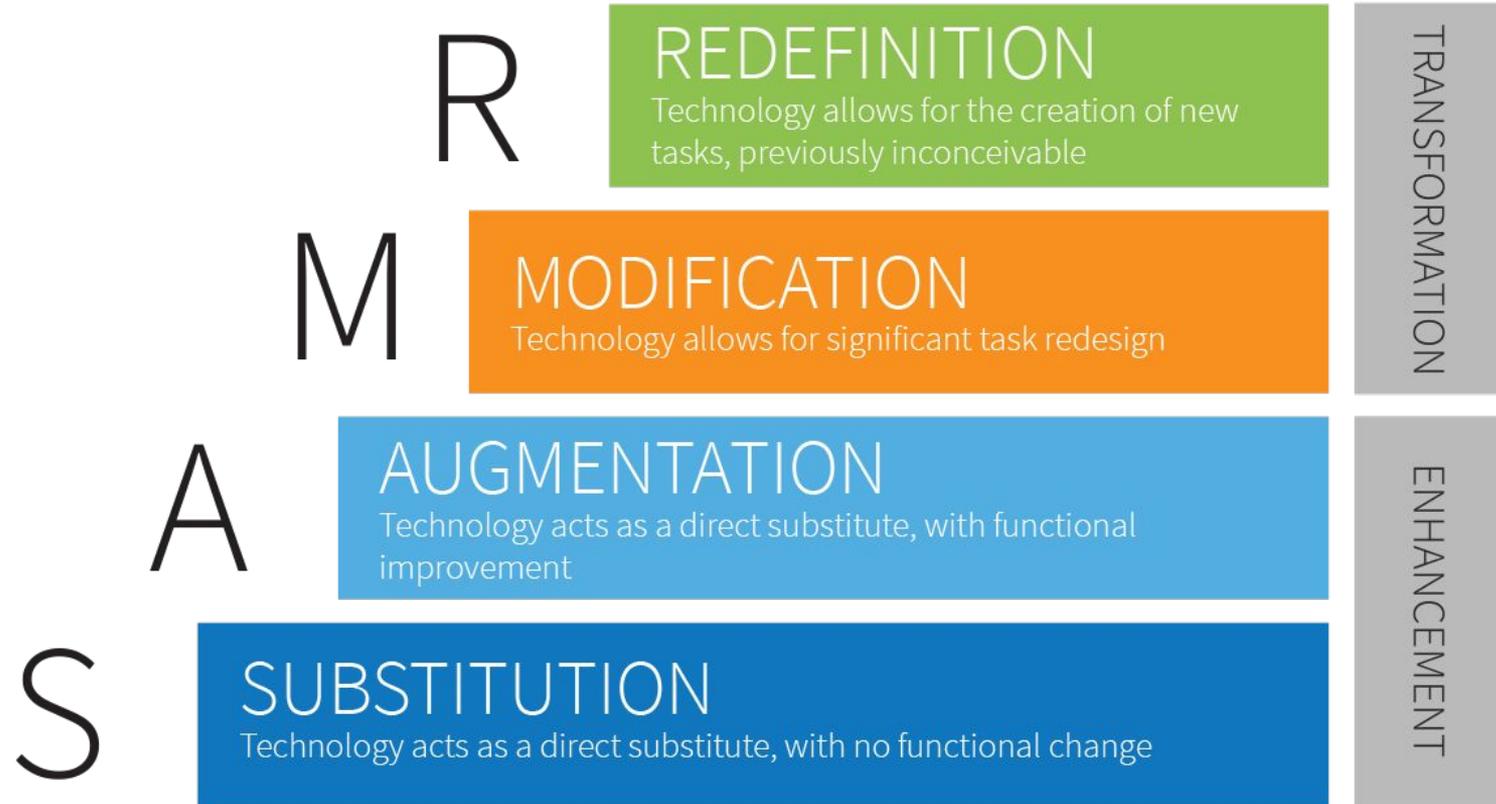
TEL support:

- [Teaching, Learning and Assessment Continuity](#)
- [APP TEL](#)
- [Technology Enhanced Active Learning Festival](#)
Monday 11th to Friday 15th May 2020.
- [Academic Technology webpage](#), incl. “Recipes for Excellent Teaching”

Plan

- (1) Think about what the student's experience of the session ought to be like, and how large-group settings present obstacles/challenges
- (2) Consider the lecture: what lectures are good for, and what they are not good for; and how we can plan lectures that promote active learning
- (3) Reflect on the factors that influence a student's willingness to participate in class activities
- (4) Discuss what we want to be able to do in our large-group teaching, and what kind of TEL support/tools we would need to achieve that

The SAMR model for technology integration



1. Active learning and lectures



What is “active learning”?

What is “active learning”?

“[Active] learning is characterized by active learning techniques that push students to be responsible participants in their own education”

(Machemer & Crawford 2007, p.10)

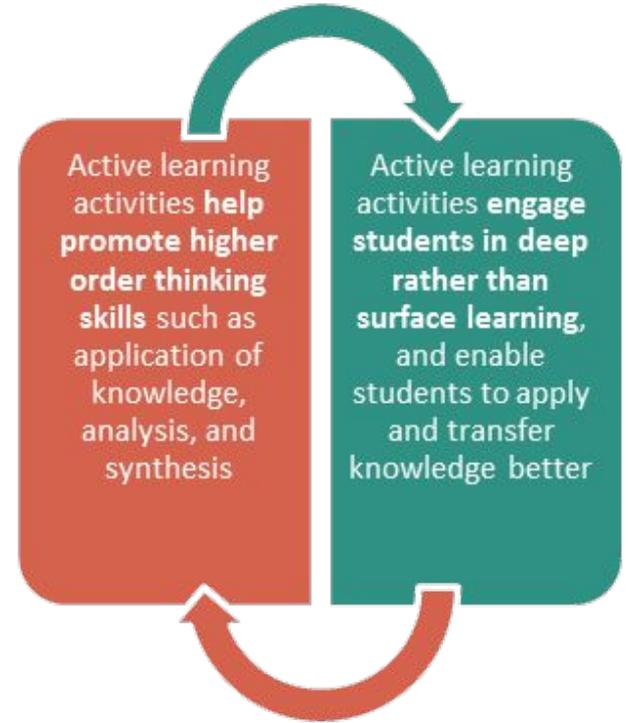
What is “active learning”?

“Without taking away from the important role played by the teacher, it is helpful to remember that what the student does is actually more important in determining what is learned than what the teacher does... [E]ffective teachers must know how to get students actively engaged in learning activities that are appropriate for the desired outcome(s).”

(Schuel 1986, p.429-430)

Why active learning?

- Improved student motivation/commitment (Armbruster, Patel, Johnson, & Weiss, 2009)
- Improved student satisfaction with learning (Cavanagh 2011)
- Conducive to “deep learning” strategies (de Caprariis et al, 2001)



Forms of activity

Use the Activity Handout to make notes

Engagement

What sort of activity does each of these terms describe?

Participation

How would you be able to tell if that activity were taking place?

Interaction

What challenges do those activities pose in large-group teaching?

What would ideal active learning
in your classroom look like?

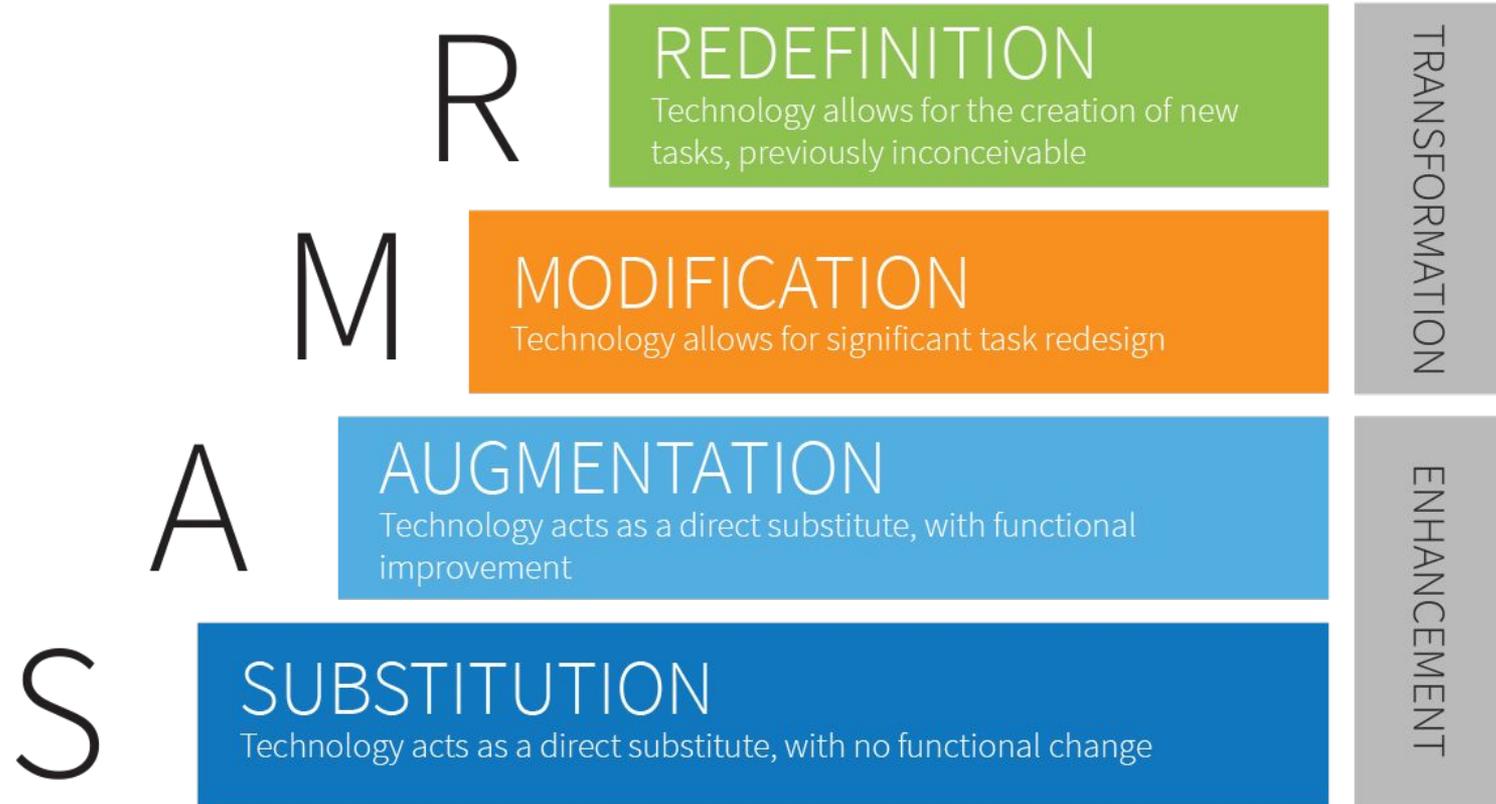
Why do we lecture?

Why do we lecture? Some thoughts:

- More control; more predictable content delivery
- Efficiently meets the requirement to provide contact hours for large numbers of students
- Develops the students' ability to learn by listening
- Allows you to “tell a story”; present a (relatively) complete treatment of an issue or a framework for understanding

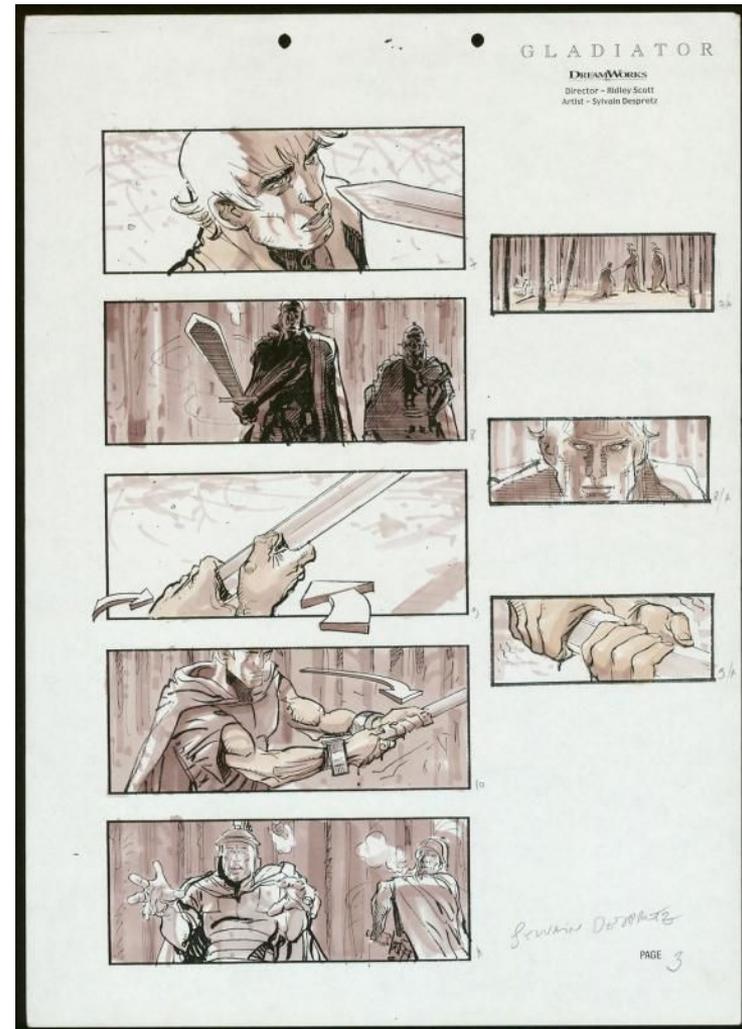


The SAMR model for technology integration

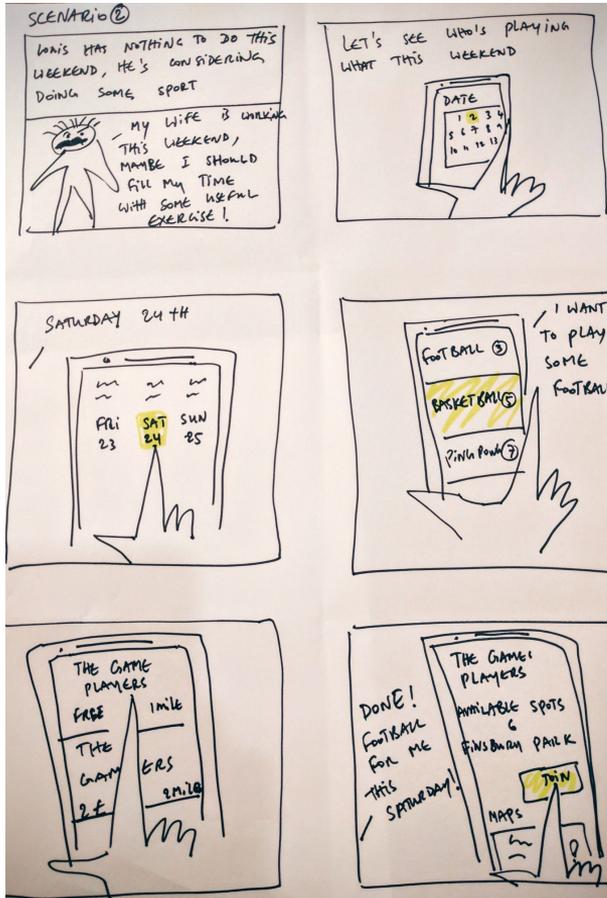


Storyboarding

- Sets out a process or story
- High degree of flexibility
- Efficient, multimedia communication combining text and images
- Highly accessible



Storyboarding



- Familiar tool for design of UX, products and services
- Encourages designer to think from the consumer's perspective
- Good for bringing to light potential areas of confusion, bottlenecks, disengagement points

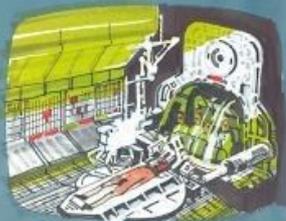
Can we use this in education? Maybe to design:

- Video/audio recordings
- Activities - e-learning or classroom
- Moodle pages or equiv.
- Whole modules

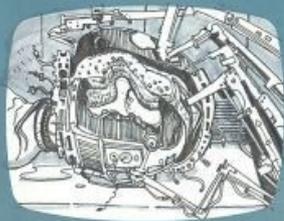


INT. INFIRMARY (CONTROL ROOM) ? ?

P. 36. INFIRMARY.
KANE PLACED INTO AUTODOC.



INT. INFIRMARY (AUTODOC). NOSTROMO



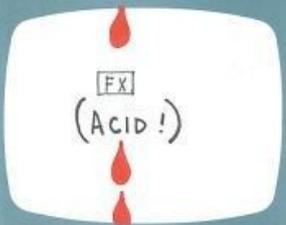
INT. INFIRMARY. NOSTROMO.

THE AUTODOC CUTS THE BELT,
FROM KANE'S HEAD, OPENING
IT LIKE AN ORANGE...
THE ALIEN RE-SEMBLES ITSELF
FROM STRONGLY ONTO KANE'S
FACE.



AUTODOC. READOUTS FX.

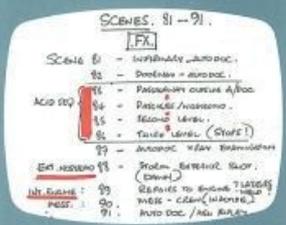
FX. READOUTS...
XRAY. READOUTS, ETC.:
SHINING CREATURE (ALIEN...)



1NT. AUTODOC - ACID.

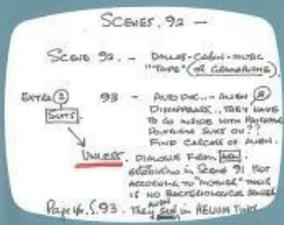
ACID SEQUENCE

BURNING THEM ① OPERATING PLATFORM
(CAUTION: SHOTS AND
SPLASHES). TO...
② DECA BELAN TO...
③ DECA BLAN
(SHOTS AND SPLASHES
NOSTROMO AND WE'LL
BE BACK.)



1NT. PASSAGE WAY ABOVE HULL.

AS ABOVE.

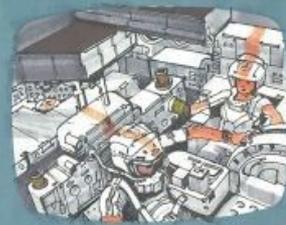


1NT. NOSTROMO. SCENES 92 - 94.

PAGE 48.

Scene 94.

DILLAS: LETS GET THE
TUBES OFF THE CLONE..



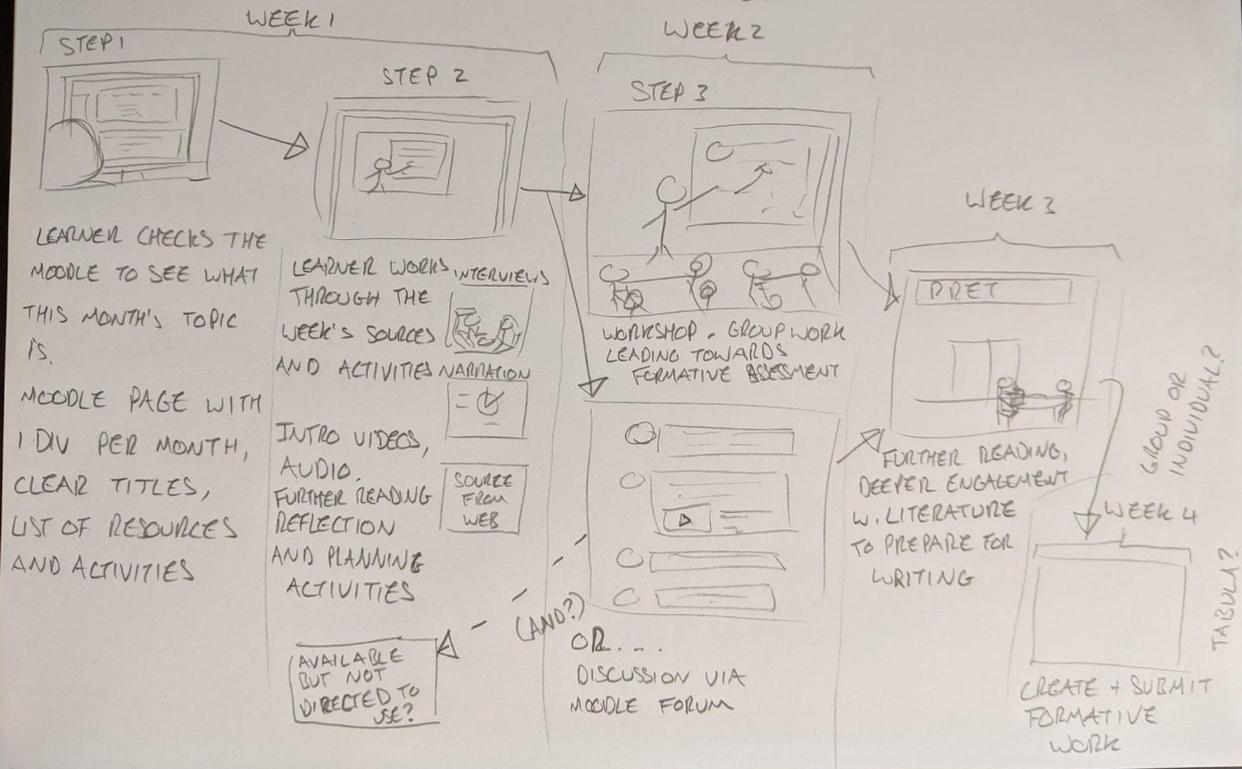
PAGE 49. SCENE 94.

DILLAS: LETS GET THE
TUBES OFF THE CLONE.



PGA: CURRICULUM DESIGN

FOUR WEEK CYCLE, FROM INTRO TO FORMATIVE ASSESSMENT:



2. Improving student engagement

What factors govern a student's willingness to participate in class?

2. Improving student engagement

What factors govern a student's willingness to participate in class?

Staff-side factors:

- Clear opportunities
- Enough time
- Good Qs/tasks
- Encouragement (Ridge and Isiania 2020)

Shared factors:

- Timing/pace
- Norms of interaction (Fessinger 1995, p.28)
- Emotional climate
- Class size

Student-side factors:

- Self-efficacy (Mahyuddin et al 2006)
- Responsibility for own learning (Abdullah et al 2012)
- Motivation
- Confidence
- Preparedness

2. Improving student engagement

How do we support more students to make imaginative, interesting contributions to learning activities?

“Focusing on questions rather than answers can challenge students to develop an attitude of inquiry rather than an intention to simply produce an answer.”

(Dyche and Epstein 2011, p.666)

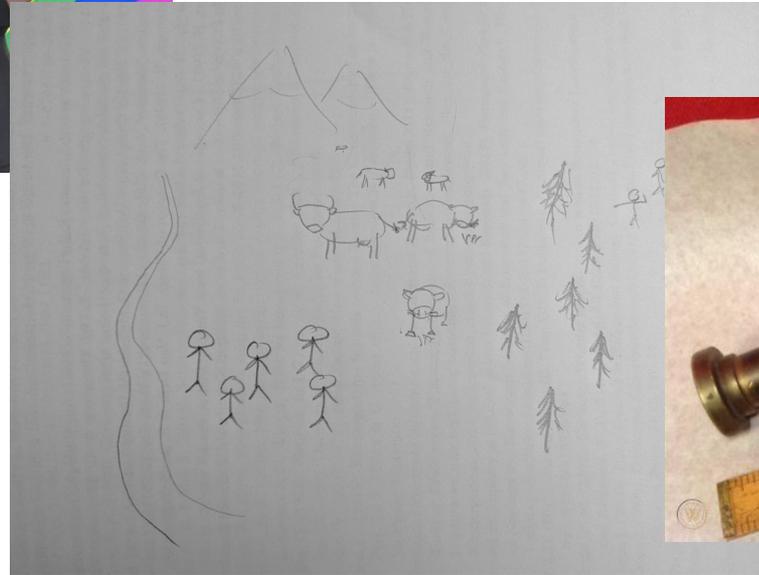


2. Improving student engagement

“Problem first” strategy:

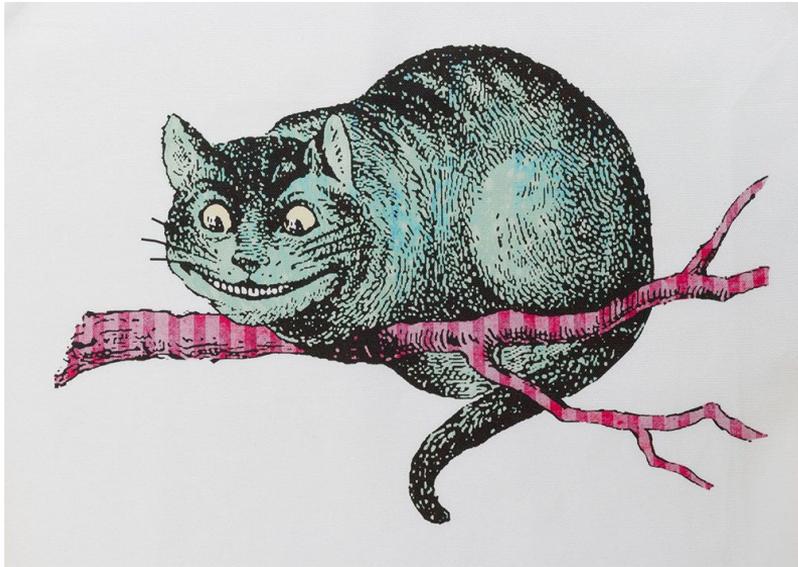
- Start with problems or questions, not solutions
- Consider possible solutions (could be historical, “common sense”, student suggestions, inspiration)
- Investigate the shortcomings that led to the solution being abandoned
- Explain the move to the next option

2. Improving student engagement



Promoting curiosity:

- Attention to novelty
- Positive response to uncertainty or ambiguity
- Persistent investigation in the face of failure



(see Day 1982, p.21)

Think-pair-share (a.k.a. breakout groups)

Pros:

- Helps to facilitate peer discussion
- Fairly easy to organise or plan for
- Possible to implement spontaneously in response to feedback

Cons:

- Does not by itself produce interaction at group level
- Requires some investment of class time
- Hard to tell what is actually going on in individual groups

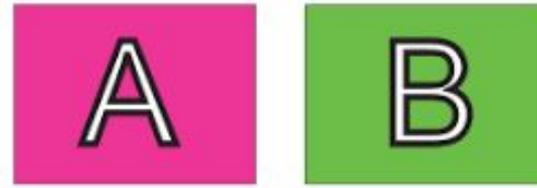
In-room Polling

Pros:

- Instant feedback for students
- Easy to plan (maybe)
- Quick to implement

Cons:

- Might require students to have/use devices
- Questions and perhaps answers are decided by the lecturer in advance (limited student agency, limited flexibility)



Digital Backchannels

Pros:

- Not time-limited
- Student determines the content
- Some programmes allow comment rating - more representative

Cons:

- Could become a source of distraction
- Requires students to have and use a laptop/smartphone

Examples inc. Audience Tools in Google Slides; Padlet; Mentimeter [and others](#)

Flipping the Classroom

“Two phase” model of learning: conceptual understanding + implementation

Relatively passive
Support less necessary
Outside the classroom

Relatively active
Support most needed
In class time



Works cited

- Abdullaha, M. Y. et al (2012) "Student's participation in classroom: What motivates them to speak up?" in *Procedia: Social and Behavioural Sciences*, vol.51, p.516-522.
- Armbruster, P. et al "Active Learning and Student-centered Pedagogy Improve Student Attitudes and Performance in Introductory Biology" in *CBE Life Sciences Education* vol.8, no.3. P.202-213
- Cavanagh, M. et al "Students' experiences of active engagement through cooperative learning activities in lectures" in *Active Learning in Higher Education* vol.12 no.1 p.23-33.
- Day, H.I. (1982) "Curiosity and the Interested Explorer" in *NSPI Journal*, May 1982, p.19-22.
- Epstein, R.M. and Dyche, L. (2011) "Curiosity and Medical Education" in *Medical Education* vol.45, p.663-668.
- Fassinger, P. A. (1996) "Professors' and Students' Perceptions of Why Students Participate in Class" in *Teaching Sociology* vol.24, no.1, p.25-33
- Janssen F.J.J.M et al (2014) "How to make guided discovery learning practical for student teachers" in *Instructional Science* vol.42, p.67-90
- Mahyuddin, R. et al (2006) "The Relationship Between Students' Self Efficacy and Their English Language Achievement" in *Jurnal Pendidik dan Pendidikan*, vol.21, p.61-71
- Ridge, K. and Islania, S. (2020) "Maximising Student Participation: Factors that Facilitate Dialogue" in *Enhancing Student-Centred Teaching in Higher Education*, Gravett et al (eds.) (
- Zion, M. and Sadeh, I. (2007) "Curiosity and Open Inquiry Learning" in *Educational Research* vol.41, no.4, p.162-168.