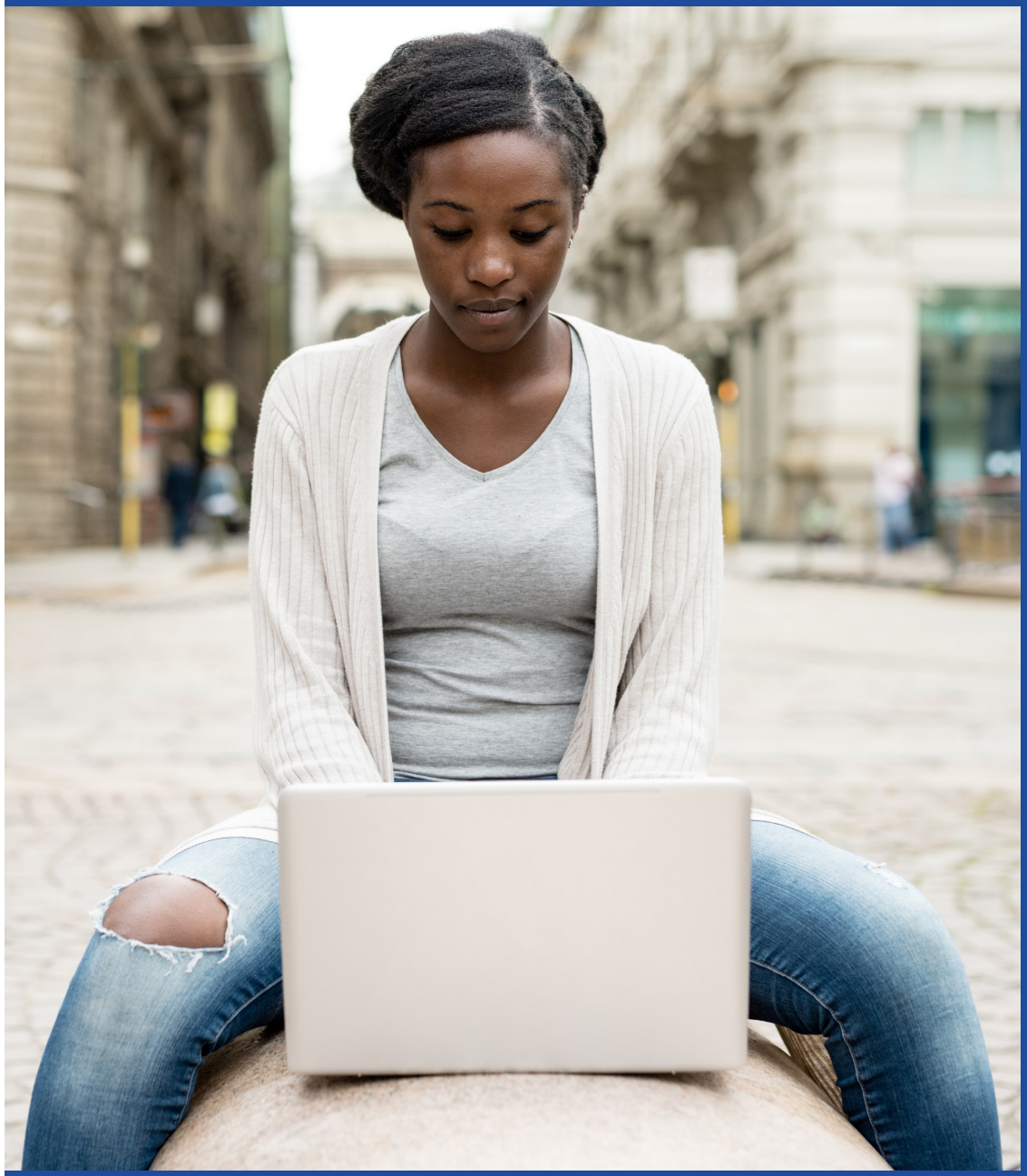


Is anyone out there? A guide to interactive activities in the online environment

Sue Pawley

The Open University

Why do we want students to interact?

Collaborative learning (Vygotsky; Biggs, 2003)

Consolidates learning

Assessing understanding

Active learning

Motivation

Builds confidence

Can be more fun

Builds relationships

Gives the tutor a rest

Deep/surface learning (Biggs, 2003)

The will to learn (McCune & Entwistle, 2011)

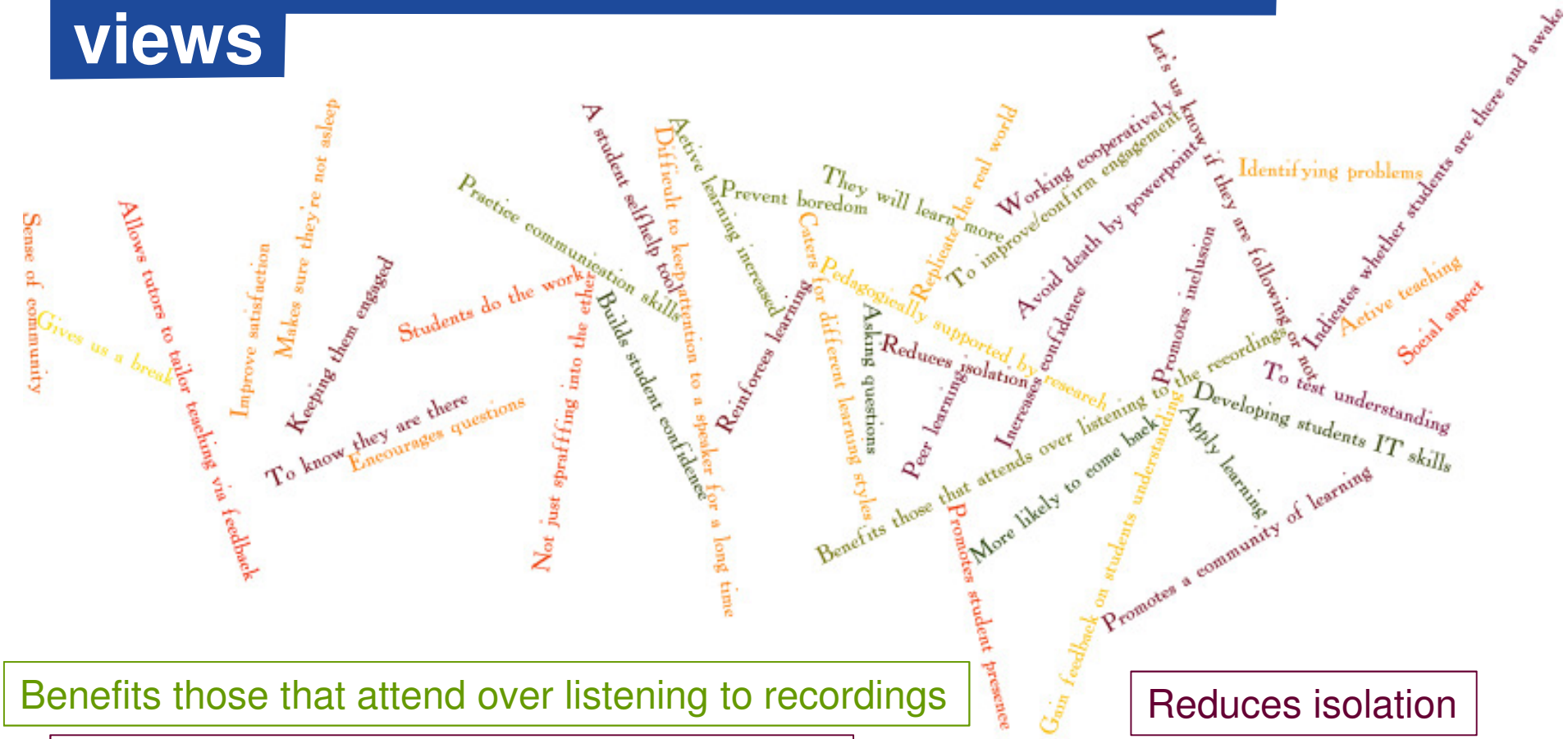
Communities of practice (Lave & Wenger, 1990)

Social-constructivist models (e.g. Bangert, 2004)

Or thinking time, e.g. Bowler & Raiker, 2011



Why do we want students to interact? – Open University staff views



Benefits those that attend over listening to recordings

Reduces isolation

Indicates whether they are there and awake

Improves satisfaction

Gain feedback on students understanding

Promotes a community of learners

Collection of activities

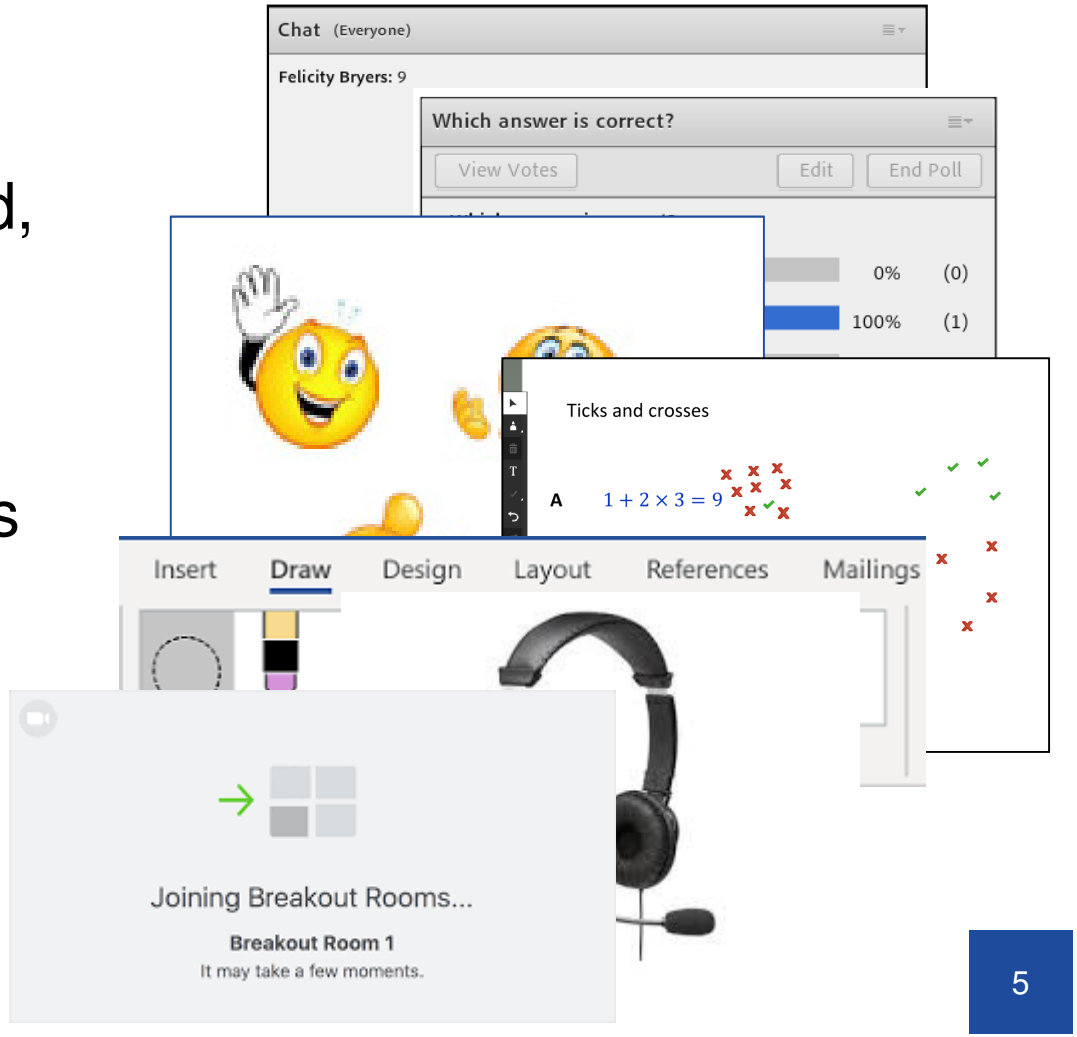
- We already had a bank of activities used in Maths and Stats
- Ran workshops at cross faculty staff development events

Session plan

- Why do we want students to interact?
- Examples of interactivity in mathematics
- Table discussions on student interactivity in adobe connect
- Plenary

Simple ideas for interactions – available on most platforms

- Chat/Comment boxes
- Simple student polling
- Emoticons – raise hand, agree/disagree, speak louder/softer, laughter, applause
- Drag and drop activities
- Writing on screen
- Talking
- Breakout rooms



Ideas from other faculties



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Activity: Progression in understanding a relevant topic

Learning outcomes: At the end of the session the students will be able to see how the general understanding of the group has improved ad identify areas for further study.

How the activity will be done	Determine the level of understanding at the beginning and the end of a tutorial
Pre-session setting up (pods, settings etc)	Setting up two polls in identical pods, with multiple choice options as applicable
During the session: what the students will be doing	Complete one poll at the start Discuss and study material Complete second identical poll at end
During the session: what I will be doing	Encouraging students to participate Emphasising anonymity
Post session	Bring up both polls for comparison
Potential Challenges	If understanding has decreased – uncover reason by questioning students

From History " why did the French revolution start", but also works for any mathematical concept.

Activity: Watching a video

Learning outcomes: Deeper Understanding

How the activity will be done	Screen share and show relevant module video
During the session: what the students will be doing	Watching video, making notes, discussing questions
During the session: what I will be doing	Stopping the video at suitable places and asking students to discuss what is happening
Potential Challenges	Problems with streaming video. Accessibility issues – will also make transcript available

From Languages, stops video to ask “what could the person say next”, but also works for any mathematical problem, “what should the next line of the solution be?”, “Where have I gone wrong?”

Activity: Planning an essay

Learning outcomes: The student should be able to recognise key concepts

How the activity will be done	The students will study an essay broken down into sections and learn to identify the key concepts within each section, they will then learn how to assemble the essay into the correct order based on the key concepts of each section
Pre-session setting up (pods, settings etc)	Prepare an essay, break it up into 6 sections and then jumble up the sections and label them a, b, c, etc. Prepare a short answer poll pod for each section. Prepare a poll where they can order the sections. Break group into 6 breakout rooms so they can look at a section each
During the session: what the students will be doing	Initially they can discuss in breakout groups what they think the key concepts in their designated section are. Then the groups can look at each other findings and suggest any alterations. Final poll, each student votes on the order of the sections to create a full essay.
During the session: what I will be doing	Observing each group – giving guidance where necesary

From an English Literature Lecturer, Can also work with a mathematical solution, to improve communication.

Activity: Programming Solutions

Learning outcomes: Algorithm of code for a problem - practice

How the activity will be done	Set a problem that can be solved in program code. Split into modular programming by asking different rooms to address different aspects of the problem. Back in main room promote individual students to presenter, application share program so they can code solution to their bit of the problem
Pre-session setting up (pods, settings etc)	Set up break out rooms. Prepare statement of problem.
During the session: what the students will be doing	Discussing and preparing code in their breakout rooms
During the session: what I will be doing	Explaining problem. Processing the application share
Post session	Email or forum post the complete final program
Potential Challenges	A student with presenter status can do things that might disrupt the session.

From Computing – Can also work for Mathematical proofs, or Calculations with several parts

Ideas from Maths and Stats Lecturers

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Activity: Critique of a mathematical solution

Learning outcomes:

How the activity will be done	Critique a potential solution prepared on PowerPoint which contains errors eg Legendre symbol calculation
Pre-session setting up (pods, settings etc)	Slide with solution of say ten lines Add theorem references
During the session: what the students will be doing	Adding ellipses round errors, adding explanation-move pre-existing boxes with theorem numbers
During the session: what I will be doing	Giving drawing permission to just a few students at a time to prevent screen freeze. Checking they are happy to participate
Potential Challenges	If no one is willing to try to identify mistakes

Activity: To use appropriate terminology when interpreting hypothesis

Learning outcomes:

How the activity will be done	Give Polling options: Accepted Rejected Proved supported not supported
Pre-session setting up (pods, settings etc)	Set up voting options
During the session: what the students will be doing	Voting for each statement null Hypothesis is.... Hypothesis is ...
During the session: what I will be doing	Use the same poll over and over again with different statistical results
Advantage over how I've been doing this before	Advantage is students don't see what option other students have chosen so it should be easier to see who has misconceptions

Ideas to take away/ Important things I've learnt

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Ideas to take away/ Important things I've learnt

- Always make sure there is a benefit to attending (rather than listening to a recording)
- Avoid death by PowerPoint
- Give yourself a rest
- Don't try to cover as much material as you would do in a face-to-face lecture
- Try to get some running feedback that replaces eye contact
- Aim to add at least one activity that helps to build community and gets students discussing the topic
- Share ideas across faculties

THANK YOU



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