UCD TEACHING & LEARNING / RESOURCES



TECHNIQUES FOR ENCOURAGING ACTIVE (AND MORE INTERESTING!) LEARNING

Overview:

This document offers a snapshot of a range of techniques and methods that enable and promote 'active' participation in teaching and learning. A brief description of each is provided, followed by some pertinent suggestions.

Audience:

Faculty, Tutors, Demonstrators and those that support learning.

To engage learners actively in small group sessions one can use a range of techniques and methods that help productive interaction to promote learning. This means moving towards student-centred methods where the focus is on learning, rather than teaching. A repertoire of such methods can be used to produce a balanced session where different kinds of activities are used to make learning more active and more effective.

Provided below is a selection of common flexible methods one may use in both large and small-group teaching. Basic guidelines are provided to demonstrate how each may work in a given situation, and a prompt/query to self as to how and where one may implement this, like all such methods they are open to adaption and interpretation to suit your individual needs.¹

Silent Reflection

This is where you give students a few minutes to think about a problem or issue. Ask them to write down their thoughts or ideas on a notepad. Keep the task specific. For example, ask them to write down the three most important, or positive, or expensive etc. aspects of an issue. It is often useful to ask them to write on post-its and then post them on, say, a notice board or the wall. Alternatively, ask them to share their ideas with their neighbour before moving into a discussion phase.

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When could this approach be effectively used?

Large groups; before group is active/talkative; quieter groups; end of class summary/review; to get feedback from everyone...

¹ The following have been adapted from Brown, S. 'The Art of Teaching in Small Groups', The New Academic Vol. 6, no. 1 (Spring 1997).

Rounds

Go around everyone in the group and ask them to respond. Try not to make the round too daunting by giving students guidance on what is expected of them. **Keep it short!** For example, try and avoid questions like "I want everyone to give their name and then identify one aspect of the course that they know nothing about but are looking forward to learning about". In big rounds, students can be quite nervous, so make it clear that it's OK to pass and if people at the beginning have made your point, that concurrence is sufficient.

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When could this approach be effectively used?

Fairly small groups (20 or so); icebreakers; part of the winding-up of a session; to explore large/expansive topics...

Three Minutes Each Way

Ask students in pairs to speak for three minutes on a given topic.

Be strict with timekeeping. Your students might find this quite difficult at first, but it is an excellent way of getting students to articulate their ideas and also means that the quieter students are given opportunities to speak and be heard. The art of listening without interrupting (other than with brief prompts to get the speaker back on target if they wander off the topic) is one that many students will need to foster. This pair-work can then feed into other activities.

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When could this approach be effectively used?

To develop relationships/ice-breakers; encourage peer learning and interaction; first step to increased participation and larger discussion...

Buzz Groups

Give pairs, threes, fours or fives small, timed tasks which involve them talking to each other, creating a hubbub of noise as they work. Their outcomes can then be shared with the whole group through feedback, on a flip chart sheet poster, on an overhead projector transparency or otherwise as appropriate.

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When could this approach be effectively used?

Discuss more difficult or controversial issues; peer learning; get different perspectives on issues...

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Teaching With Primary Sources

- Hypotheticals, ask the learner 'What If' the source did not exist, it was written a year later / earlier?
- Reading Rounds, invite learners to read a text, the next learner comments and/or interprets.
- Caption Gap, present a source with its caption edited out, invite new captions.
- CCC, using groups of three, invite students to discuss the Context, Content and Consequence of the source materials.

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Every discipline base has cause for access to primary resources..?

Review what you might utilise and discuss its potential impact on the learner

Brainstorms

Start with a question like "How can we..?" or "What do we know about ...?" and encourage the group to call out ideas as fast as you can write them up (perhaps use two scribes on separate boards if the brainstorming flows well). Make it clear that this is supposed to be an exploratory process, so set ground rules that:

- A large quantity of ideas is desirable, so everyone should be encouraged to contribute at whatever level they feel comfortable.
- Quick snappy responses are more valuable at this stage than long, complex, drawn-out sentences.
- Ideas should be noted without comment, either positive or negative no one should say
 "That wouldn't work because..." or "That's the best idea we've heard yet" while the
 brainstorming is in progress as this might make people feel foolish about their
 contributions.
- Participants should 'piggyback' on each other's ideas if they set off a train of thought, 'logic circuits' should be disengaged, allowing for a freewheeling approach.
- The ideas thus generated can then be used as a basis for either a further problem-solving task or a tutor exposition.

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When could this approach be effectively used?

Create an open, secure environment; stimulating creative free-thinking; problem-solving; and generating diverse ideas.

Syndicates

This is the term used to describe activities undertaken by groups of students working to a brief under their own direction. They can be asked to undertake internet or literature searches, debate an issue, explore a piece of text, prepare an argument, design an artefact or many other tasks. To achieve productively, they will need an explicit brief, appropriate resources and clear outcomes.

Specialist accommodation is not always necessary; syndicates can work in groups spread out in a large room, or, where facilities permit, go and use other classrooms etc. If the task is substantial, the tutor may wish to move from group to group or may be available on a 'help desk' at a central location.

Outcomes may be in the form of assessed work from the group or produced at a plenary as described above.

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When could this approach be effectively used?

Developing ideas; assessment; developing interpersonal skills & generic / transferable skills...

Snowballing (Also Known As Pyramiding)

Start by giving students an individual task of a fairly simple nature such as listing features, noting questions, identifying problems, summarising the main points of their last lecture. Then ask them to work in pairs on a slightly more complex task, such as prioritising issues or suggesting strategies.

Thirdly, ask them to come together in larger groups, fours or sixes for example and undertake a task involving, perhaps, synthesis, assimilation, or evaluation. Ask them to draw up guidelines, perhaps, or produce an action plan or assess the impact of a particular course of action. They can then feed back to the whole group if required.

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When could this approach be effectively used?

Working on complex tasks; introducing new ideas; peer learning; and scaffolding for more effective learning...

Fishbowls

Ask for a small group of up to half a dozen or so volunteers to sit in the middle of a larger circle comprising the rest of the group. Give them a task to undertake that involves discussion, with the group around the outside acting as observers. Make the task you give the inner circle sufficiently simple in the first instance to give them the confidence to get started. This can be enhanced once students have had practice and become more confident. After a suitable interval, you can ask others from the outer circle to replace them.

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Some students will find it difficult to be the focus of all eyes and ears, so it may be necessary to avoid coercing anyone to take centre stage (although gentle prompting can be valuable).

A 'tag' version can also be used, with those in the outer circle who want to join in gently tapping on the shoulder of someone in the middle they want to replace and taking over their chair and chance of talking. Alternatively, it can be very effective to give the observers in the outer group a specific task to ensure active listening. For example, ask them to determine the three key issues or conclusions identified by the inner group. It is then possible to swap the groups round and ask the new inner group to evaluate the conclusions identified by the first group. Fishbowls can work well with quite large groups too.

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When could this approach be effectively used?

May be useful for managing dominating students (permission to be the centre of attention for a period of time); giving less vocal students the opportunity for undisturbed "air-time"; ways of getting feedback from buzz groups to class...

Teaching Abstract Concepts

- Utilise graphical representations (art, diagrams, even sculpture), invite learners to explore relationships via their own diagrams.
- Manifesto writing, invite learners to apply the theoretical to practice.
- Wall of Post-its, invite learners to respond 'emotionally' and 'intellectually' and discuss the divergence
- and its impact on the nature of the concept.

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When could these approaches be effectively used?

Discuss the impact that these 'creative' and 'personal' interpretations may have upon the learner

Crossovers

Often we want to mix students up in a systematic way so they work in small groups of different compositions. You can use crossovers with large groups of students, but the following example shows how this method would work with twenty-seven students.

Prepare as many pieces of paper as you have students, marking on them A1, A2, A3, B1, B2, B3 and so on (this combination is for creating triads). If you want to create groups of four students add A4, B4 etc. (You can do this as a header on hand-outs.)

When you are ready to have the students go into smaller groups, get them to group themselves with students who have the same letter as themselves: AAA, BBB, CCC and so on for one group exercise. For a second exercise, ask the students to work with people who have the same number as themselves: 111, 222, 333. A third exercise will have students in triads where none of

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the students can have a matching letter or number: e.g. A1, D2 F3. This will allow you to get students to crossover within groups, so they work with different people on each task in a structured way.

This technique also cuts down on the need to get a lot of feedback from the groups because each individual will act as a rapporteur on the outcomes of their previous task in the last configuration. As with snowballing or pyramids, you can make the task at each stage slightly more difficult and ask for a product from the final configuration if desired. Crossovers are useful in making sure everyone in the group is active and also help to mix students outside their normal friendship, ethnic or gender groups.

It takes a little forethought to get the numbers right for the cohort you are working with (for example, you can use initial configurations of four rather than three, so that in stage two they will work as fours rather than triads). If you have one person left over, you can just pair them with one other person and ask them to shadow that person wherever they go.

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When could this approach be effectively used?

To break up small, well-established groups from forming and reforming, other methods for mixing groups up: arrange themselves according to height/month of birth/county of birth/star sign...

Teaching With Numerical Data

- Bogus data, invite learners to identify and explain why certain data is not admissible.
- Predictions, provide partial data, invite learners to interpret and extrapolate real figures.
- Market Translation, invite learners to represent the 'meaning' of figures in another form.

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When could these approaches be effectively used?

Identify how this may impact student learning by use of real-world examples...

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