Activating teaching and learning methods

Activating teaching and learning methods

In this booklet you will find an overview of some activating teaching and learning methods. You will find a general explanation of each method on the first page. On the second page, you get information about which learning objectives and lesson phases the method can be used for, as well as the context to consider. Additionally, you get some concrete tips for your teaching practice.

At the end of this booklet you will find an overview of general ECHO teaching tips on activation, as well as an overview of some online tools that you can use to facilitate active learning.

Good luck!

Questions/remarks or inspiring examples to share?
Contact echo@uantwerpen.be

Buzz session

During a buzz session (also called 'buzz group' or 'zoom group'), students carry out a short group assignment in small groups. When the 'humming' of the student groups gradually decreases, this is an indication that most students have completed the assignment and the debriefing can start. During this debriefing, some students can explain their solution to the assignment. At the end of this debriefing, summarise the answers, complete the answers if necessary and correct any wrong answers.

Buzz session

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TIPS

- Don't make the buzz groups too large (ideally 2 – 4 students per group).
- When the students are working in buzz groups, you can visit some (or all) of the groups and listen or even join the discussion.
- To stimulate active learning and participation, you can ask your students to come up with three key words with regard to the learning content covered in the lecture.

Case

Students analyse a case, individually and/or in groups, and work out a solution to it. A case study is a detailed description of a realistic situation or real problem that students may face in the work field. Afterwards, a class discussion takes place about the possible solutions of all groups/students.

Case

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TIPS

- Provide sufficient time to develop a good case study.
- The case should be up-to-date and sufficiently open and engaging to encourage students to search for creative solutions.
- The case can be presented in text form and/or with audio-visual material. If necessary, someone from the work field can be invited to present a real life case.

Catchbox

The catchbox is a soft wireless microphone that you can throw at students during your lessons, allowing more spontaneous questions, reactions and discussions to be shared.

Catchbox

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TIPS

- You can ask the student who catches the catchbox to pass it on to a fellow student (e.g. 1 row back or 2 places to the left).
- There are catchboxes available at UAntwerp. Please contact the New Media office via nmd-cst@uantwerpen.be (Stadscampus) or nmd-cde@uantwerpen.be (Campus Drie Eiken).

Debate

When organizing a debate, students get a statement.
One group of students will defend this statement (for)
and the other will dispute the statement (against).
The students do this on the basis of arguments to justify
their own point of view and counterarguments to refute
the point of view of the other group.

Debate

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TIPS

- Determine in advance (possibly in consultation with the students) which topic will be debated.
- Appoint a discussion leader/moderator or assume this role yourself.
- Draw up discussion rules together with the students, who must ensure that the atmosphere and quality of the debate is preserved.
- Also pay attention to the more quiet students and give them the opportunity to participate actively.
- Provide a good room setup (e.g. U-shape) so the students can see each other.

Exit ticket

A short assignment at the end of the lesson that gives students and the teacher insight into what the students have (not) learned and/or would have liked to learn. Some possibilities:

• Check to what extent the lesson objectives have been achieved.

• Ask a question about the content of the lesson.

• Have students summarize the key points.

Exit ticket

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TIPS

- You can also use an 'entrance ticket' so you give students a short assignment to start the lesson.
- Collect the answers from your students via an online tool (e.g. ExitTicket.nl or Ziplet)
- Process the answers you get from your students (e.g. use answers in the next lesson, offer extra learning materials, create a FAQ forum on Blackboard, etc.)
- Use the input you get from your students as a way to improve your lessons.

Flipped classroom

Where students in a more traditional lesson structure are offered the learning content during the lesson by the teacher and they have to process this learning content independently after the lesson, this lesson structure is reversed in the flipped classroom.

Prior to the lesson, the students process the learning content independently, so that the lessons can be used for further processing the learning content through exercises and assignments under the supervision of the teacher.

Flipped classroom

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ℹ️ *Learning objectives such as 'remembering, understanding and applying' are mainly stimulated in the preparation phase (prior to the lesson). 'Analysing, synthesising and evaluating' can be pursued during the lesson.*

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TIPS

- Which preparation do you expect from your students? What technological tools will you possible offer to support this and how can they help?
- What will you do next during the lesson?
- And how do you make a clear link between the preparation and the lesson so that your students understand the usefulness of working in advance?
- Read the ECHO teaching tip about flipped classroom (2015)

Jigsaw

Form of group work, in which students are first divided into expert groups. Each expert group is assigned a different topic. After processing this topic, the students are divided into new mixed groups. Each mixed group consists of 1 student per original expert group. In these mixed groups, the students carry out an assignment in which they can use the knowledge from each expert group. Optionally, feedback will take place afterwards in plenary and/or in the original expert groups.

Jigsaw

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TIPS

- In a slightly larger student group, several expert groups can work on the same theme.
- In a less time-consuming variant of the jigsaw method, the first phase is replaced by an individual self-study phase. The students then immediately dive into mixed groups.
- Watch this YouTube video about the what and the how of the jigsaw method.

Muddiest point

For this activating method, students describe what they have not yet (sufficiently) understood/mastered and what support they need. This is possible at the end of a lesson, but also for a break after a certain part/chapter. When the information is collected, the teacher comes back to the most common muddiest points.

Muddiest point

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TIPS

- You can use a tool to collect the input from your students (e.g. Poll Everywhere, ExitTicket.nl or Ziplet).
- The collected muddiest points can be used as a feedback tool to optimize your lessons.

One minute paper

With this method, the lesson or part of it is concluded with a short assignment that students can work out very quickly. Some examples:

- Give an example of...
- What was the most surprising thing you took away from class today?
- Summarize...
- Explain in your own words ...
- Respond to the following statement ...
- What is the most important insight/idea/... that you will take away from today's lesson?
- What question(s) do you still have?

One minute paper

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TIPS

- Process the answers of your students in different ways (e.g. use answer in the next lesson, offer extra learning materials, create a FAQ forum, etc).
- Use student answers as a diagnosis to improve your lessons.
- Give students sufficient time to complete the assignment, this can be more than one minute depending on the difficulty of the assignment.
- You can use a tool to collect the input from your students (e.g. Poll Everywhere, ExitTicket.nl or Ziplet).

Parallel group work

In parallel group work, students work in small groups at the same time on the same assignment (e.g. conducting a lab experiment, setting up a field study, writing a paper, etc). After that, a class discussion takes place, in which some/all groups explain their results.

Parallel group work

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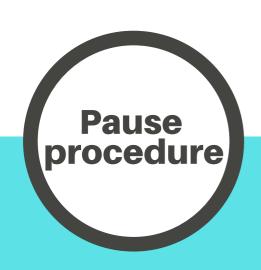**online**

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TIPS

- Opt for a well-considered group division (see ECHO Teaching tip mentioned below).
- Clearly indicate in advance what students can do in case of problems with the assignment and/or counterproductive group members.

Pause procedure

('Hink-stap-sprong' in Dutch)

When using the pause procedure technique, the class is briefly stopped every 15 to 20 minutes. During this break of 2 to 3 minutes, students are given the time to process the lesson content by, for example, organizing their notes or writing down some important matters from a practical. Students also have the opportunity to go over the learning content in small groups and to clarify it to each other if necessary.

Pause procedure

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TIPS

- Clearly indicate in advance that you will take sufficient breaks to process the learning content. This makes it easier for your students to keep their full attention on your explanations, without having to worry about their notes.

Peer instruction

For this teaching method, students initially try to answer a concept test individually (often in the form of a complex multiple-choice question). Then in small groups they discuss the reasoning for their own answers, try to convince their group members that they are right and then come to a joint definitive answer. To conclude, the teacher explains the correct answer and provides additional explanation for the incorrect answers.

Peer instruction

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TIPS

- Give students sufficient time to think individually first, so that each student has been able to formulate an answer.
- Respond to common misconceptions among students.
- Usually more students get the answer right after sharing insights in groups. When formulating the question, it is therefore important that the understanding of the learning content is tested and not pure factual knowledge.
- Pay attention to whether the different answer options are acceptable or possible, so that students can discuss.
- Collect the answers of all groups via an online tool (e.g. Poll Everywhere).

Poll

A poll is an activating method in which students answer a question or give an opinion on a statement. The result can be taken into account when making decisions or for the further progress of your (online) lesson, but should above all be seen as an indication of what the students master or think at a certain point in the learning process.

POLL

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TEACHING AND
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TIPS

- You can use a poll to start your lesson, to start a discussion or to end your lesson, or even several times because it's not a time-consuming method.
- There are mutiple online tools to use for a poll. This makes it easy to integrate a poll when teaching online.
- KISS: Keep It Short and Simple. Give students a clear question or statement and provide clear instructions when using an online tool.

Pro and con grid

When using a pro and con grid, students should prepare a list of arguments for and arguments against to a problem, dilemma, or decision. The teacher then compares the answers from the students with their own answers and supplements if necessary. Finally, some students briefly explain their list.

Pro and con grid

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TIPS

- Collect all the answers via an online tool (e.g. Padlet).
- A pro and con grid can be a great starting point of a debate (see above).

Quick think

For this method, you give students a few minutes to individually come up with an answer to a specific question or problem. When the individual thinking time has ended, you designate a few students to explain their answer in plenary. Summarize all answers and complete if necessary.

Quick think

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TIPS

- Give students enough time to come up with an answer.

Socratic method

('Onderwijsleergesprek' in Dutch)
For this method, you conduct a structured conversation with students, in which they clarify part of the learning content or a particular issue in dialogue form.

To this end, you ask the students questions and distil the necessary insights and/or new questions from the answers. By asking targeted questions and using appropriate questioning techniques, you bring the students themsleves to new ideas, insights of relationships in the learning content.

Socratic method

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TIPS

- After asking a question, give students enough time to think.
- Get several students to speak (activate everyone).
- Ask students for the reasoning behind the given answer and explain why that answer may not be correct. When students do not know the answer to a question, ask a supplementary question that helps students get on the right track.

Think-Pair-Share

During this teaching method, students first think individually about a question or problem (Think). Then the students compare their findings in pairs and complement each other (Pair). In the third step, the ideas of some/all groups are plenary shared (Share).

Think-Pair-Share

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TIPS

- Give students enough time to think individualy first, so that certainly each student has been able to formulate an answer on their own.
- There are a few variations on this method. You can vary the group size by forming groups of three (Think-Triangle-Share) or four students (Think-Square-Share). You can also ask students to write down their individual answer first befor putting their findings together (Think-Write-Pair-Share).

Wiki

A wiki is an online collaboration tool in the form of a web page to which all those with access rights (your students) can add content.

It is a simple and structured way for students to build content together, remotely and at different times. This content can include text, photos, hyperlinks, etc.

WIKI

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TIPS

- You can include multiple wikis within your Blackboard courses.
- Within one wiki, you can create several pages.
- Via "track back" history, you can track each student's individual contribution and go back to previous versions.

Online tools

- [Blackboard Collaborate](#)
- [ExitTicket.nl](#)
- [Kahoot!](#)
- [Mentimeter](#)
- [Miro](#)
- [Mural](#)
- [Padlet](#)
- [PollEverywhere](#)
- [Socrative](#)
- [Ziplet](#)

When using tools, always keep in mind to work **goal-oriented**, not tool-oriented.

Teaching tips

This thematic ECHO-webpage contains all teaching tips on activating students. You will find a more detailed explanation of some teaching and learning methods, as well as tips on culture of activation and safe classroom climate.

You can subscribe on the mailinglist to get a monthly update of the lastest ECHO Teaching Tip.

**Tell me and I forget,
teach me and I remember,
involve me and I learn.**

Benjamin Franklin