



Carousel brainstorm

What is it?

Carousel Brainstorming is a cooperative learning activity that can be used to discover and discuss background knowledge prior to studying a new topic. This technique allows for small group discussion, followed by whole-class reflection.

Example

Before beginning a lesson on the civil rights era, you might post the names of some key people and events from this time in history to draw out students' background knowledge.

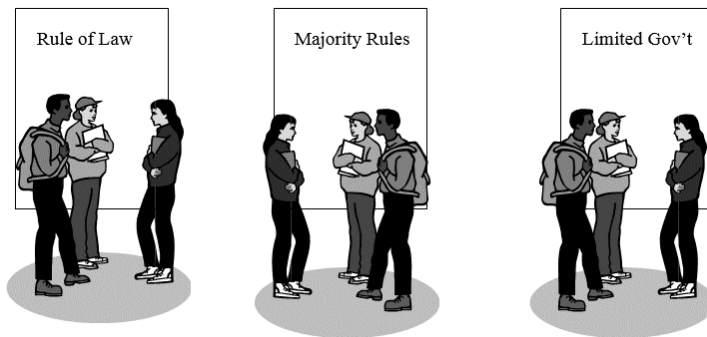
How does it work?

Small groups of students rotate around the classroom, stopping at various "stations" for a designated period of time (usually 1-2 minutes). At each station, students activate their prior knowledge of a topic or concept and share their ideas with their small group. Each group posts their ideas at each station for all groups to read.

Technology Spin: Take away the chart paper and go digital!

Google doc or Google presentation: To get students moving, have each student open a specific slide or be in charge of one question on their own computers and have each student rotate through the computers in their teams.

**Video?
Scan me!**



Metaplan

Background and purpose

This technique was developed in Germany in the 1970s by two brothers, Wolfgang and Eberhard Schnelle. Metaplan is a method for collecting and processing ideas and opinions when a group of people are working together.

The pillars of the Metaplan approach:

- ❖ Actively involving all participants and their opinions.
- ❖ Visualization of topics plays an important role in structuring the meeting and keeping the speed up: use of oval, cloud-shaped, rectangular cards of various colors; paper in A2 format; display boards, etc.
- ❖ Moderators (facilitators) administer the groups and ensure that good communication, cooperation and high levels of understanding are achieved.

Step-by-step guide

1. **Introduction.** Set the scene, give the rationale, describe the objective.
2. **Create individual input.** One leading sentence concerning the issue at stake should be proposed. The sentence should end with “...” in order to invite the participants to continue the sentence with their own ideas (e.g., If I want to judge the quality of an eco school the first things I look at are...). The participants work individually and can write as many ideas as they like (min. 5, max. 8 to keep it manageable). Only one idea should be on each card.
3. **Group the ideas together.** The participants are invited to form groups with 6-8 people. The groups pin their cards on prepared boards and name a coordinator/group speaker. The participants should organize their ideas into relevant topic headings. During this process no comments or criticism should be made on the proposed ideas but group members are allowed to ask questions to clarify understanding of the ideas.
4. **Discuss the ideas presented.** The group should now discuss what has been written. The group can also prioritize certain ideas and proposals in order to define a common vision or an action plan. For example, each participant can allocate 10 votes (using a coloured mark, or a cross with a colour pen), with no more than 3 votes being given by each participant to the same idea.
5. **Share the results.** Short presentations are given by each group enabling the plenary group to understand the total picture, followed by plenary discussion.



Technological spin

If there is still time after doing your exercise, you can explore these technological tools. No panic, we will discover these tools further during this week.

- <https://stormboard.com/>
- <https://padlet.com>
- <https://en.linoit.com/>
- ...

Sources:

- <http://www.hostingtransformation.eu/methode/metaplan/>
- <https://horae.nl/wat-is-metaplan/>

Concept maps

What is it?

A concept map is a visual organization and representation of knowledge. It shows concepts and ideas and the relationships among them. You create a concept map by writing key words (sometimes enclosed in shapes such as circles, boxes, triangles, etc.) and then drawing arrows between the ideas that are related.

Then you add a short explanation by the arrow to explain how the concepts are related.

**Tutorial:
Scan me!**



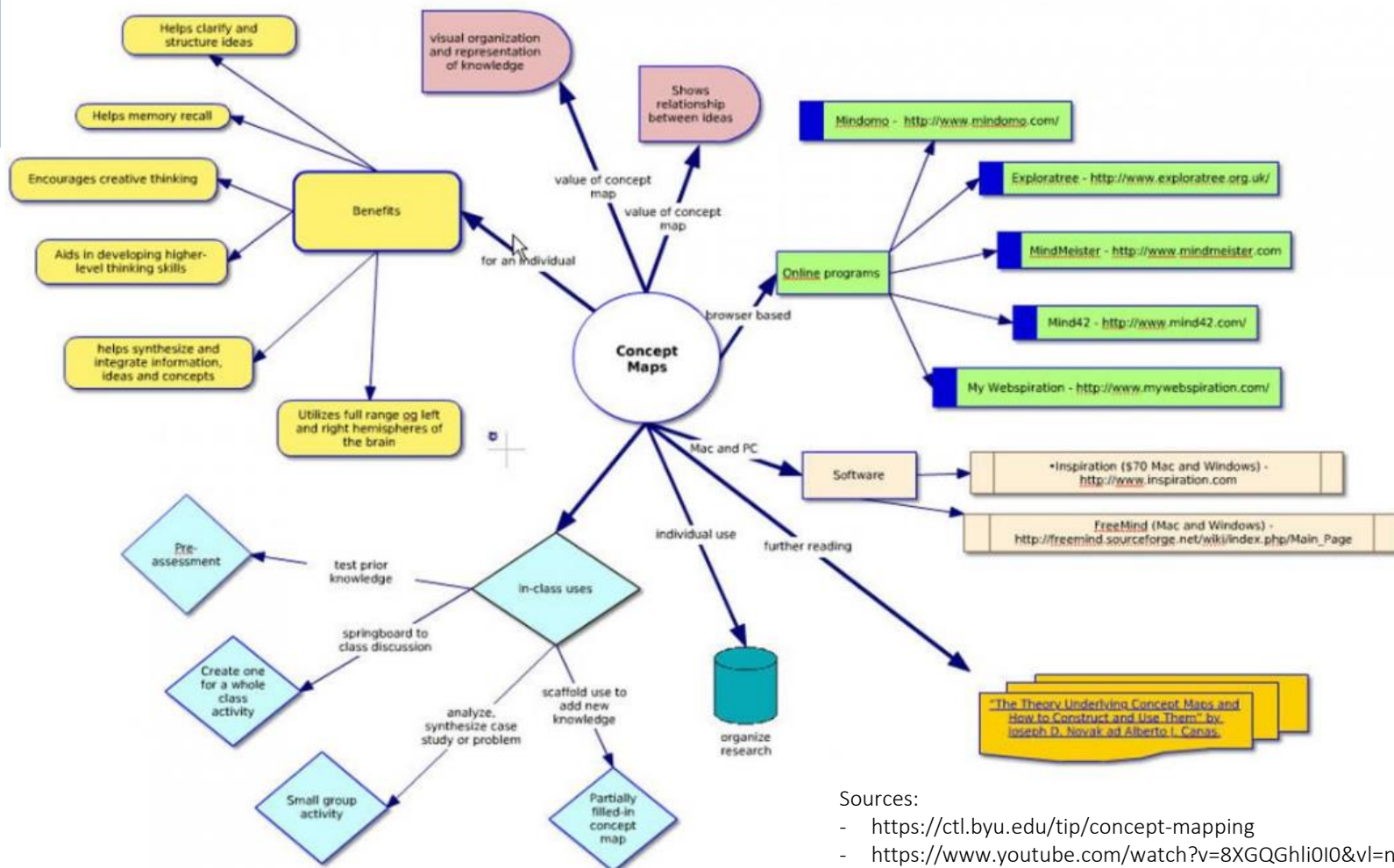
Technological spin

Coggle.it is an online tool for creating and sharing mindmaps and flow charts. It works online in your browser: there's nothing to download or install.



How does it work?

Since students might not know how to create a concept map, it is beneficial to model the process in class. Once students understand the process, concept maps can be used to activate students' prior knowledge. Prior to discussing a topic, ask students to create a concept map individually or in group. Then, as you discuss the information, they can add to or modify their map to reflect their understanding about the topic (more information, see concept map below).



Sources:
 - <https://ctl.byu.edu/tip/concept-mapping>
 - <https://www.youtube.com/watch?v=8XGQGHli0I0&v=nl>



Focused freewriting

What is it?


Focused freewriting is writing about a particular subject or question which has been posed. It simply means putting pen to paper and writing whatever comes into your head. It is a useful tool for generating ideas and discovering attitudes. The key is to keep writing, even when you feel stuck or at a loss for words. The goal isn't so much learning to write (e.g., spelling, grammar), but coming to learn, understand, remember and figure out what you don't yet know. The duration of a focused freewriting activity varies from three to fifteen minutes.

A pre-lesson brain dump: Writing-to-learn activities can be used before a learning experience to get students to 'warm up' by thinking about what they know or think they know or feel about a new topic.

Examples of prompt to provoke focused freewriting:

- ❖ Write everything you know about cells.
- ❖ Had you been a peasant during the French Revolution, what do you feel your greatest fear would have been?
- ❖ What assumptions do you make about the author of the piece you have just read?
- ❖ ...





In a context
and/or
In the news

In a context

What is it?

To introduce the lesson, the teacher outlines a “real life” situation in which you need the knowledge/skills that are covered in the lesson.

Example



Context: Master of Science in Social Work and Social Welfare

Topic of the lesson: Applying for benefits

The teacher tells the story of a mother of two children whose husband wants a divorce. (S)he asks the question: What benefits could this woman apply for and what steps should she take to request these benefits? This assignment can be carried out in groups or in class. Many students will probably not have the knowledge yet of the various benefits and the steps that have to be taken, but they can write things down on the basis of prior knowledge.

In the news

What is it?

The teacher presents a newspaper article, news video or an advertisement that relates to the subject of this lesson. (S)he finds out whether the students have heard the message before and what they think about it. What questions does this message appeal to the students? After a short discussion of about five minutes, the teacher can start with the link to the theme of the lesson.

Example

Context: Bachelor in physics and astronomy



The screenshot shows the BBC News website interface. The main headline is "China's Moon mission sees first seeds sprout" with a sub-headline "China Moon mission". The article is dated "15 January 2019". Below the headline is a video player showing a close-up of green cotton sprouts growing through a white protective mesh cover. The video player has a "CLEP" logo in the bottom right corner. The article title "China Moon mission" is also visible in a small box above the video player.

Sources:

- <https://activeerjeles.nl/werkvormen/in-een-contect>
- <https://activeerjeles.nl/werkvormen/in-het-nieuws>



Initial Measurement

What is it?

The students find a test on their table when they enter the classroom. This test consists of questions related to new content for the students. The students are instructed to make the test without preparation. The test can contain one or two comprehension questions or a number of multiple choice questions. Do not make the test too difficult and assure the students that this test does not count. Give the students a few minutes to answer the questions. After that, the students can compare their answers in pairs. It is important that the students discuss why they have chosen the answer(s). After this consultation moment, the teacher shares the correct answers to the questions (e.g., an answer sheet, or in class to the plenary group). The students share which questions they had right or wrong. Give the students who had a good answer the chance to explain in class why (s)he chose this answer.





A picture is worth a
thousand words

What is it?

At the end of the previous lesson, the teacher gave the assignment to the students to find an image that fits the subject of the next lesson. This image may not contain text. It may be a drawing or a picture. Let the student bring their images to the class. At the beginning of the lesson, the teacher divides the class into groups of about 4 students. Every student receives the assignment to tell about his/her image for one minute and why (s)he has chosen this image in relation to the subject. After one minute it is time to switch to the next group member, until all group members have got their turn.

Example

Context: bachelor of engineering sciences
Next lesson: Bridge construction



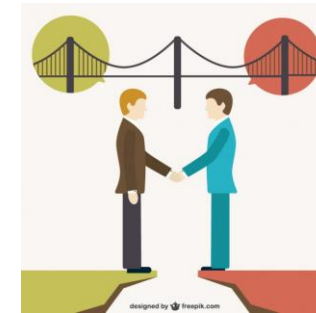
**Suspension bridge
Geierlay in Germany**

Student: I walked over this bridge last year and I constantly wondered how it was constructed.



Ponte Morandi in Italy

Student: How is it possible that this bridge collapsed in the summer of 2018?



Student: the theme reminds me of building bridges between people.

The background features a white central area surrounded by three large, overlapping geometric shapes: a teal triangle in the top-left, a yellow triangle in the bottom-left, and a pink triangle in the bottom-right.

Lie Beast

What is it?

During the introduction to a subject, the lecturer deals with some untruths in his/her story. It is up to the students to find out what the untruths are in the teacher's story. This format can also be applied in a text or video. Present something to the students as if it is truth and tell them later how much false statements there are. Let the students investigate which of the texts or videos are fake news.

@ Ghent University

Under the credo 'Dare to think', Ghent University is challenging everyone to question conventional views and to dare to take a nuanced stand. It is because of 'daredevils' who sometimes defy dominant views and strong convictions, that the world progresses and we learned that the earth is not flat and that we aren't the centre of the universe.

Social experiment @Ghent University (Spring 2018)

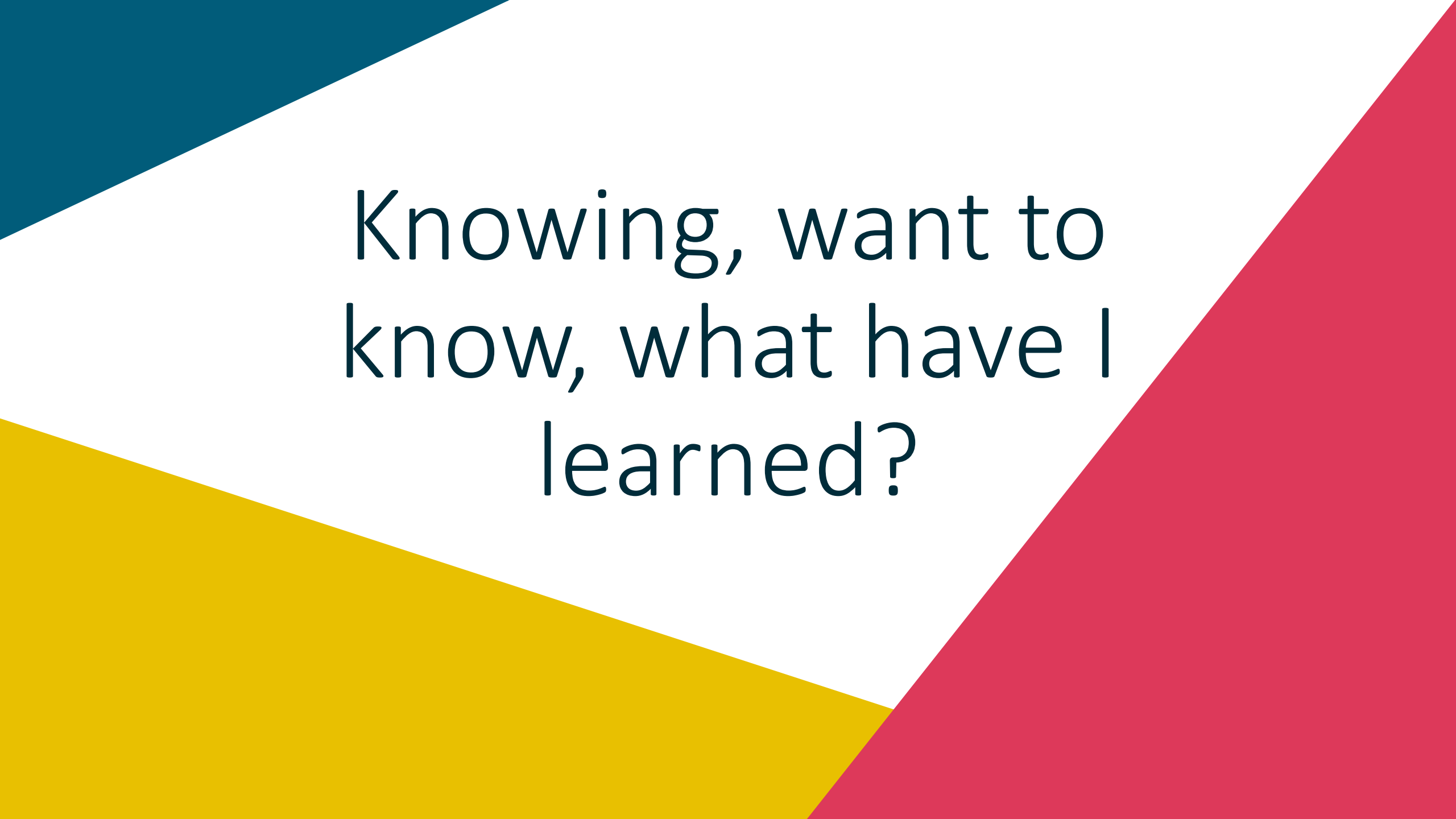
During their lessons, three professors introduced dubious, provocative or even totally wrong statements as 'Steve Jobs already had foreseen the image of 'smartphone zombies' in 1984, you effectively became zombies/slaves, addicted to your smartphone' (Prof. dr. Lieven De Marez – Media, technology, and innovation) or 'Darwin's theory of evolution does not make sense' (Prof. dr. Johan Braeckman - Philosophical anthropology). Do students dare to correct professors when they make controversial statements in class? Only a few students dared to openly contradict the professor in a crowded auditorium (see video, scan QR code). Students think that the professor will be right.

Sources:

- <https://activeerjeles.nl/werkvormen/liegbeest>
- <https://www.ugent.be/en/ghentuniv/principles/dare-to-thin>
- <https://www.vrt.be/vrtnws/nl/2018/03/20/-dat-de-studenten-van-de-ugent-zo-goed-als-niet-reageren-op-prov/k>



Scan me!



Knowing, want to
know, what have I
learned?

What is it?

This strategy consists of three phases:

- 1 The teacher write the subject that will be treated in the lesson on the board. The students receive a sheet with three different columns. To begin with, the students fill in the first column "Knowing". What do they already know about the subject? The students write at least three things here.
- 2 Then the students fill in the second column: "Want to know". What do the students want to know about this subject? As soon as the students have filled these two columns, the lesson will start.
- 3 At the end of the lesson the students take the paper again and write what they have learned this lesson. When they leave the classroom, the students hand in the papers to the teacher. In this way, the teacher gains a good insight of students' prior knowledge, their learning questions and what they have learned in the lesson.

<i>Knowing</i>	<i>Want to know</i>	<i>What have I learned?</i>

Word chain

What is it?

Let students stand in the classroom. The teacher appoints the theme of the lesson and mentions a word, concept or person related to this theme. Then, it is up to the first student to name a new term, word or person which starts with the last letter of the word mentioned by the teacher. This chain is continued until all students have had their turn. To make the chain run smoothly, a time limit can be set on the answers. For example, a student must name a term, word or person within 10 seconds. If it is not possible to do this within 10 seconds, then the student is finished and must sit down. The last remaining student is the winner.

Alternative Pim Pam Pet: When entering the classroom, the teacher gives a letter to each student. The student who enters first receives the letter A, the second student receives the letter B, etc. Difficult letters as X and Y can be skipped. When the Z is reached, the teacher starts again with the letter A. As soon as all students are seated, the teacher writes the subject of the lesson on the board. Now, each student need to mention a concept, word or person what/who is related to the lesson subject.

Example

Context: Bachelor of Bioscience Engineering

Course: Climatology

Concept mentioned by the teacher: Climate change

Word chain of students: Earth - Human – Nature – Environment – Tornado – Ozone – Extreme conditions – Sea levels – Sun – Nuclear – Rainfall – Lightning – Global warming – Gas – Storm – Metreologist – Temperature – Electric vehicles – ...

Pim pam pet: Atmosphere – Biodiversity – Contamination – Dioxide –

Ecology – Flood – Global warming – Heat – Industry - ...

Technology Spin: Word Clouds with the aid of Mentimeter

Word Clouds (also known as wordle, word collage or tag cloud) are visual representations of words that give greater prominence to words that appear more frequently. For Mentimeter Word Clouds, the words that are added most frequently by audience members using their smartphones. This type of visualization can help presenters to quickly collect data from their audience, highlight the most common answers and present the data in a way that everyone can understand.

See <https://www.mentimeter.com/features/word-cloud>



Interview

What is it?

The students need to imagine that they will be interviewed on television about the lesson topic. In group, the students need to write down 5 questions that can be asked on television. By doing so, the teacher gets insight into aspects students didn't know yet about the topic.

Example


Context: Bachelor of arts in History

Course: History of Belgium

Five questions:

1. On which date Belgium declared independence?
2. What is the oldest city in Belgium?
3. Which colonial activities did Belgium have?
4. What was Belgium's role in World War II?
5. What was/were the reason(s) for the 2007-2011 Belgian political crisis?





Who/What
am I?

What is it?

When entering the classroom, the teacher/assistent sticks a post-it on the back of each student. On these post-its, concepts, persons or terms are written that are related to the subject of the lesson. It is up to the students to guess what is on their card. They can do this by asking questions to their fellow students. To make it more difficult, students can be restricted to ask only one question per fellow student. Another restriction may be that students' questions can only be answered with yes or no. As soon as a student has guessed what is on his/her card, (s)he gets another card from the teacher.

Example

Context: Bachelor in Political Science

Course: Introduction to World Politics (Small group of students)

Post-it terms/persons/concepts could be: Herman Van Rompuy (first President of the European Council) – Donald Trump – Arab Spring – United Nations – Globalization – Kyoto Protocol – Schengen Area – ...

