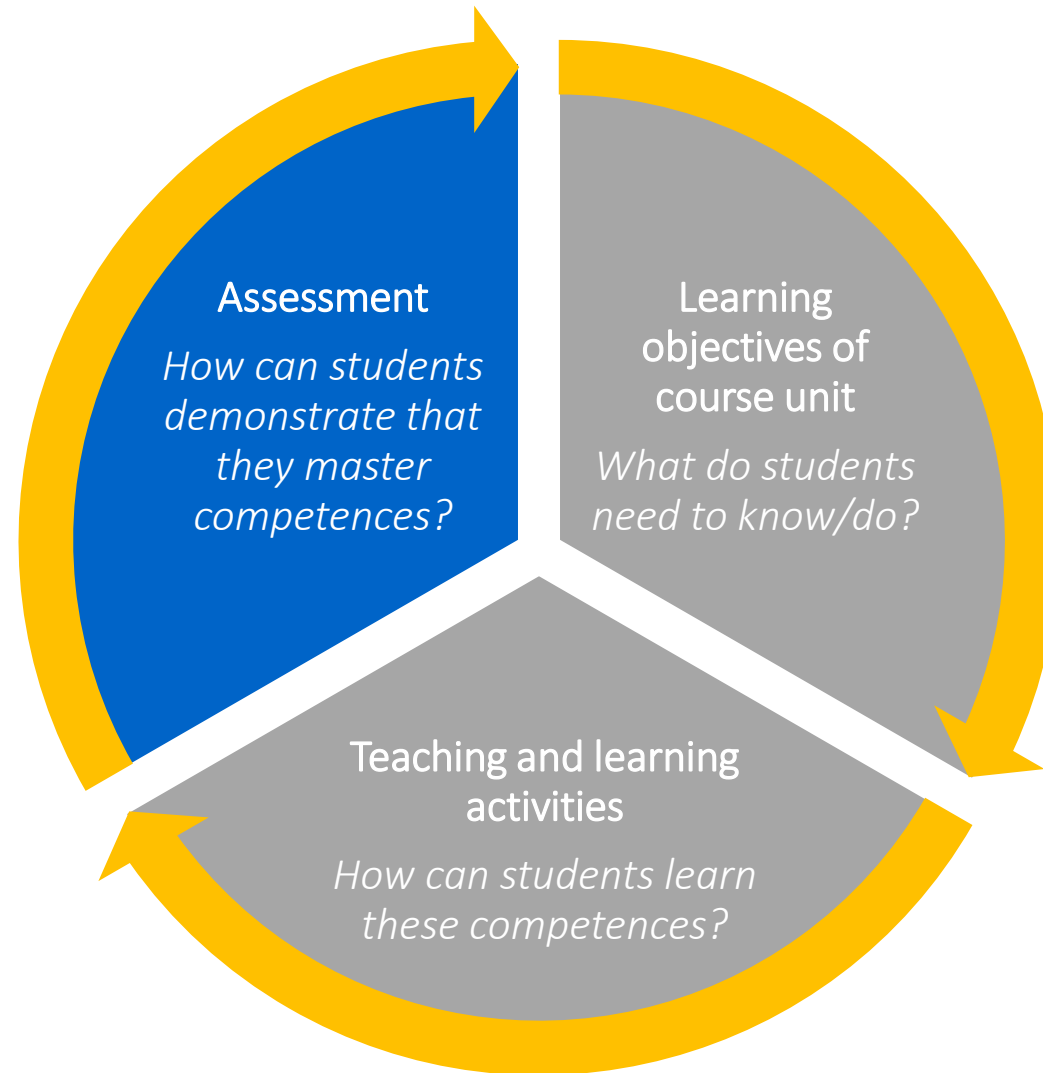Assessment for Learning
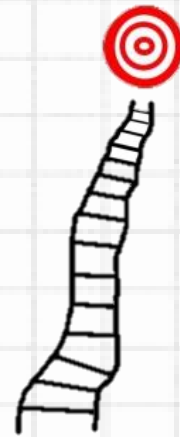
CONSTRUCTIVE ALIGNMENT

(Biggs, 1996)

Menu of this day

1. Assessment of learning & assessment for learning
2. Jigsaw - assessment strategies

Lunch break

3. Feedback

Learning objectives

After this session, you will be able to:

- Describe the transition from assessment OF learning towards assessment FOR learning.
- Describe the basics of peer assessment/self assessment/ portfolio/rubrics.
  - Illustrate how these assessment formats can be used in your own teaching practice.

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How do you determine the final grade of your students?

Assignment 1: 10 x (18/20)= 180/200
Assignment 2: 10 x (19/20)= 190/200
Test 1: 30 x (15/20)= 450/600
Test 2: 30 x (17/20)= 510/600
Participation: 20 x (18/20)= 360/400

Total Score:
1690/2000 = 84.5%

How

ASSESSMENT OF / FOR LEARNING

Assessment of Learning (~ summative)	Assessment for/as Learning (~ formative)
= a culmination of a learning process, leads to a grade for the students and determines whether students pass your course unit and, in other words, achieved the learning objectives you had in mind.	= used as an engine for learning. Provide ongoing feedback to staff (change of teaching approach) and students (strengths and weaknesses).
= valid, reliable and transparent	= "assess while you teach, teach while you assess" (Feden & Vogel, 2003, p.281)
Examples:	Examples:

ASSESSMENT CONDITIONS

Validity

= assess exactly those competencies you intended to achieve in your course unit (~ constructive alignment)

How?

- Start from your course unit's course competencies (to formulate exam questions or assignments)

- Choose an appropriate form of assessment ~~(A multiple-choice exam to assess whether students are able to swim a distance within a certain period of time)~~

- Assessment matrix (see next slide)

- …

Example Assessment Matrix 'Accounting' (Prof. P. Everaert)

Final competences of the course unit

1 Describe the general accepted accounting principles
2 Apply the basic principles of double bookkeeping.
3 Calculate the profit/loss of a company at period end.
4 Prepare the monthly and annual closing operations of a company

Mastery levels (*Taxonomy Bloom)

Remember
Understand
Apply
Analyze
Evaluate
Create

Examination format

WRIT	Written exam
ORAL	Oral exam
MC	Multiple Choice Exam
OPEN	Open Book Exam

Other evaluation formats

PE	Peer Evaluation
ESSAY	Essay
REP	Report
PORT	Portfolio
PART	Participation
BEH	Behaviour on workfloor
SIM	Simulation
SKIL	Skills test

Template Ufora

Final competence	Mastery level	% examen	Type of question	# questions	Chapter	EXAM %	Other evaluation formats Report %	Participation %	%	%	%
EC1:Describe the general accepted accounting principles	Remember	10%	MCQ	5 x 1pt	H1-H9						
	Understand	10%	MCQ	5 x 1pt	H1-3						
EC2:Apply the basic principles of double bookkeeping.	Remember	10%	MCQ		H2						
	Apply	20%	CASE		H4						
EC3:Calculate the profit/loss of a company at period end.	Apply	10%	OPEN								
EC4:Prepare the monthly and annual closing operations of a company	Apply				H1-H9 H2-H4		40%				
Totaal		60%					40%	0%	0%	0%	0%
		EXAM					Other evaluation formats				Total 100%

ASSESSMENT CONDITIONS

Reliability

= Results of the assessments must be accurate, objective and free from measurement errors and coincidences

= Mark = correct representation of how well a student masters his/her learning material

= Assessments provide the same marks over and over again (~ another assessor)

How?

- Formulate the questions and assignments clearly and unambiguous (cf. four-eyes principle)

- Design many questions and tasks to cover a large part of the content/competencies (≠ lucky shot)

- Answer key, clear assessment criteria or rubrics

- Mark without looking at the student's name. Mark per question and not per exam paper and change the order of the exam papers

Source: https://onderwijstips.ugent.be/en/tips/evalueren-hoe-doe-je-dat-kwaliteitsvol/
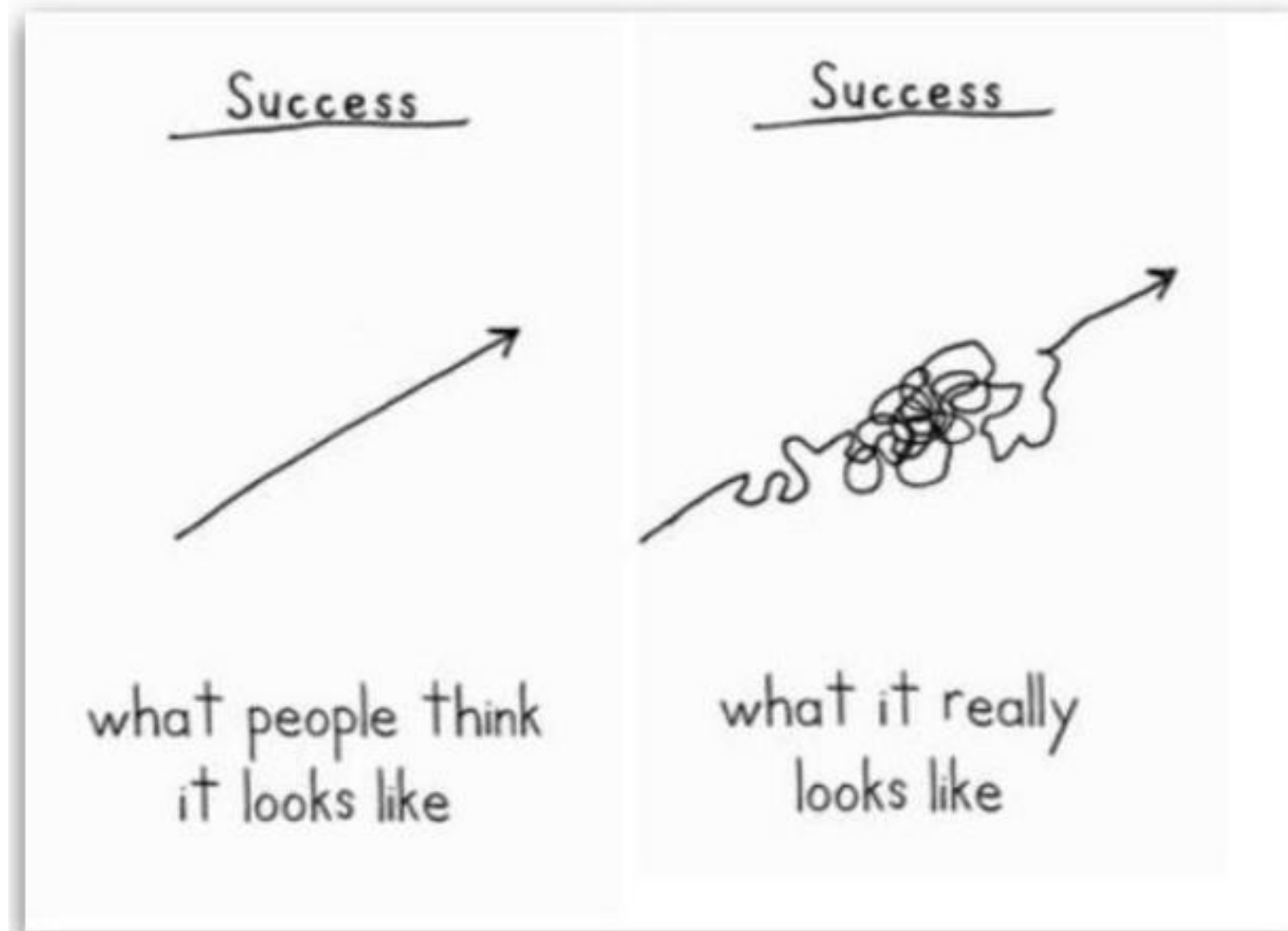
ASSESSMENT CONDITIONS

Transparency

= About the format, the moment, the rules and substantive expectations of assessments

How?

- Offer example questions, exercises during the lectures/seminars that reflect the level and specific exam requirements

- Information related to forms of assessment, calculation of marks, etc. in ECTS sheet of course unit

- ...

Source: https://onderwijstips.ugent.be/en/tips/evalueren-hoe-doe-je-dat-kwaliteitsvol/

ASSESSMENT OF/ FOR LEARNING

Success — what people think it looks like

Success — what it really looks like

ASSESSMENT OF / FOR LEARNING

Assessment of Learning (~ summative)	Assessment for/as Learning (~ formative)
= a culmination of a learning process, leads to a grade for the students and determines whether students pass your course unit and, in other words, achieved the learning objectives you had in mind.	= used as an engine for learning. Provide ongoing feedback to staff (change of teaching approach) and students (strengths and weaknesses).
= valid, reliable and transparent	= "assess while you teach, teach while you assess" (Feden & Vogel, 2003, p.281)
Examples:	Examples:

HOW TO FINISH A LESSON
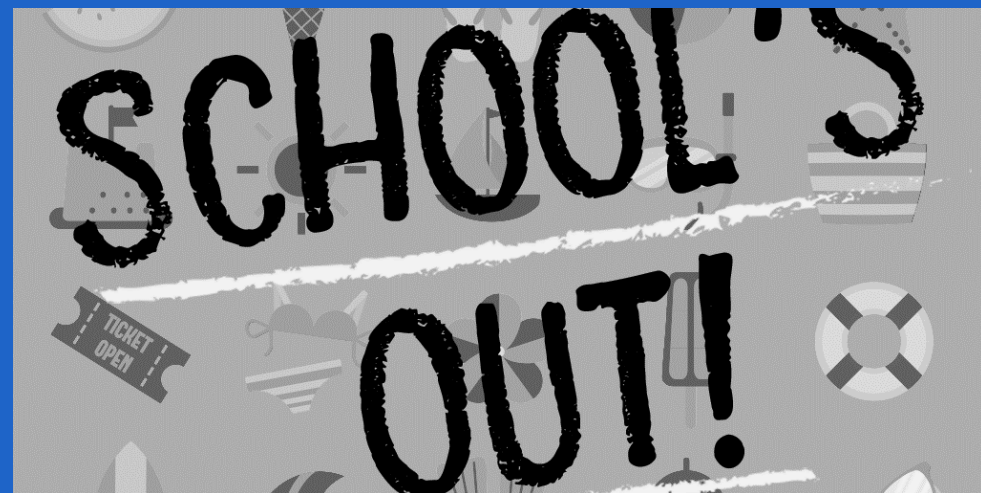
Stimulate students to deal more actively with subject matters
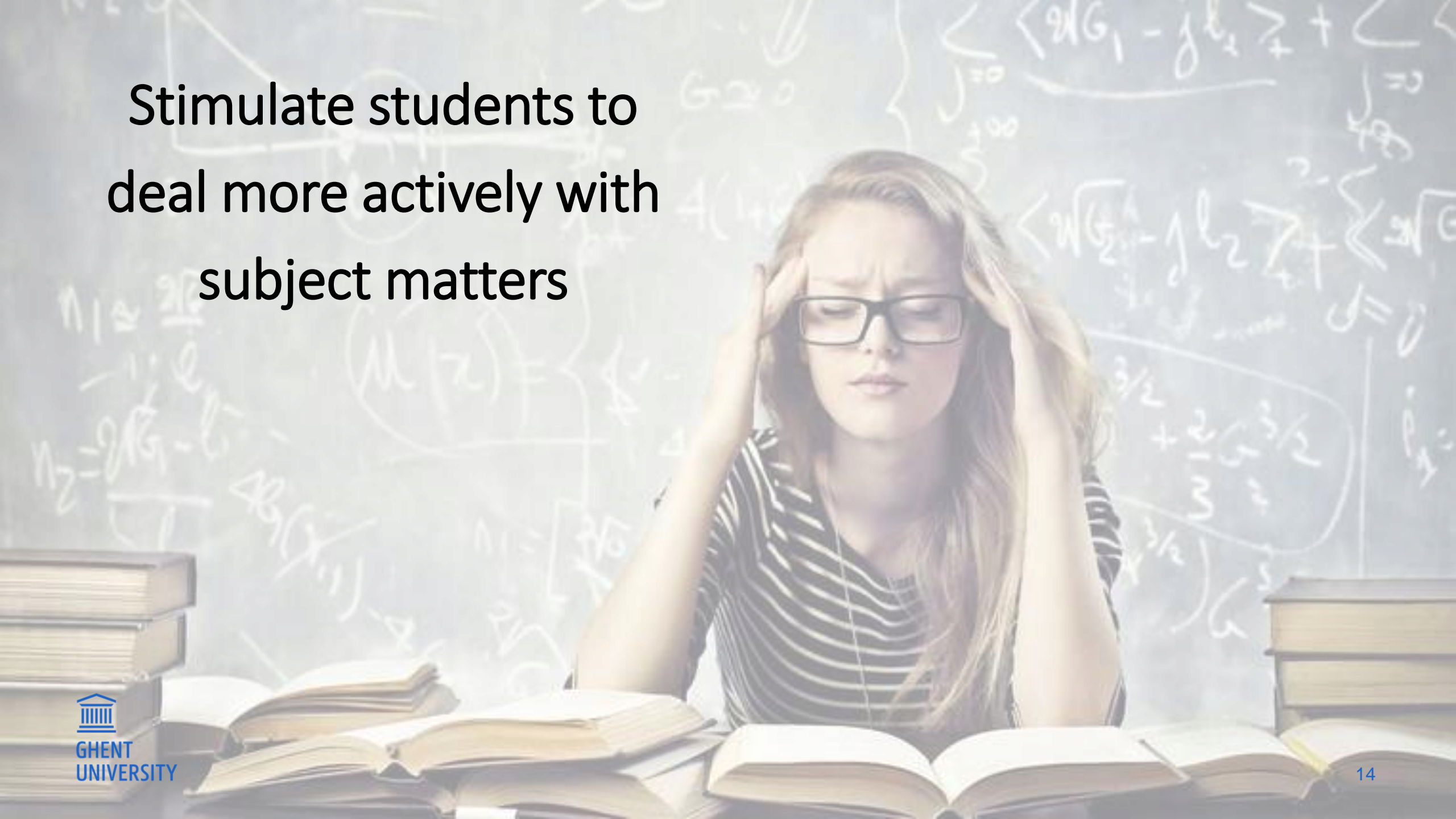
What is it?

The students receive a quiz prepared by the teacher about the course content they have learned. Different types of questions can occur in this quiz: multiple choice questions, right or wrong questions, open questions, etc. The quiz can be performed in various ways: physically and digitally.

- When a physical variant is chosen, color cards can be used for multiple choice questions. Each color then represents a certain answer option. These can also be used for right or wrong questions. For open questions, students can write their answer on a sheet and hold it up. You can also use erase boards (small whiteboards) on which the students write their answers.

- There are also a large number of digital tools: Kahoot, Socrative, Mentimeter are only a few examples. With these online tools, students can enter their answers through their smartphone or laptop. The good thing about this is that the online tool also keeps track of the score and gives the student feedback about the answer they have given.

QUIZ

What is it?

Each student receives the assignment to come up with one test question about what has been discussed in the lesson. It is up to the teacher to determine what kind of question it should be. For example, a question in which knowledge must be reproduced or a problem that requires a solution. In addition, it is up to the student to determine whether (s)he chooses an open question or a multiple choice question. When all students have prepared a question, the teacher can choose to randomly select a few questions and submit them to the class and/or to use the questions for the exam.

What is it?

At the end of the lesson, all students receive a sheet with the following questions: Write down **three** things you have learned this lesson, **two** things that you found interesting and **one** thing you (still) have a question about. In this way, the students evaluate the lesson for themselves. Let the students submit this sheet. In this way, the teacher gets a good overview of the things that the students have learned during the lesson, what they found interesting and where they still have questions about. It can also be very valuable to let the students keep these sheets for themselves. Give these sheets back to the students at the beginning of the next lesson so that they can see what they had learned last lesson and where they had questions about. If students collect this sheets on one place (for example in a portfolio), they can keep an eye on their own study progress.

3 things you learned	2 things you found interesting	1 thing you have a question about

QUICK WIN

What is it?

The students receive a two-circle venn diagram. At the start of the lesson, the teacher writes the subject of the lesson on the board. The student writes in the left oval the things (s)he already knows about this subject. After that, the learning content is offered to the students. At the end of the lesson the student picks up the sheet again. In the right oval (s)he writes down what (s)he has learned. Finally, the student writes in the middle oval (the two overlapping circles) what the relationship is between what (s)he has written in the left oval and (s)he has written in the right oval. What is the overlap?

QUICK WIN
★★★
QUICK WIN
★★★
QUICK WIN
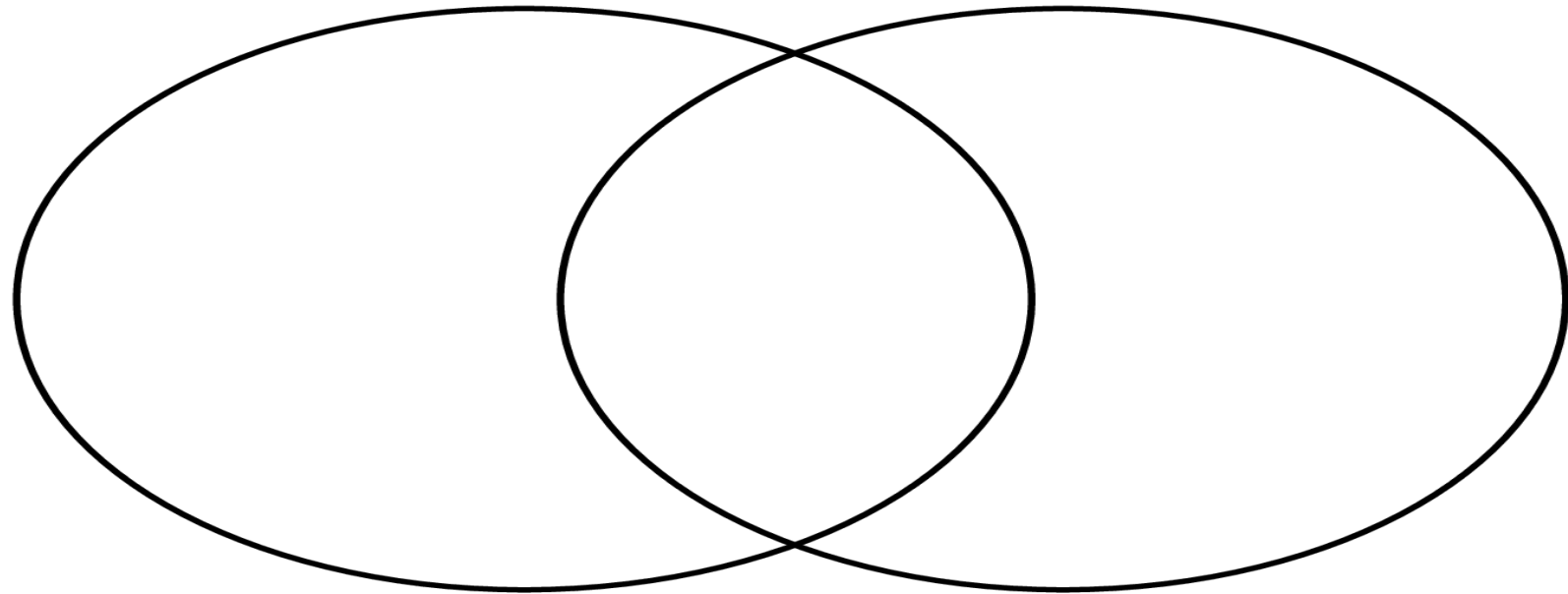
What is it?

The students receive a sheet and draw the outline of their hand. In each finger, they need to write the following:

❖ Thumb: what students liked about this lesson;

❖ Index finger: what students are going to do with the information they have learned;

❖ Middle finger: what students didn't like about the lesson;

❖ Ring finger: what students will remember most of the lesson

❖ Little finger: what students would like to learn more about the lesson topic.

When the students have filled in their handprint, they give it to the teacher. In this way, the teacher will have a clear picture of the way students experienced the lesson.

Source: https://activeerjeles.nl/werkvormen/high-five-2

What is it?

Give each student an A3 sheet of paper. All students are instructed to draw a road map of the past lesson(s). First, they write their starting point. **With what feeling have they started this lesson(s)?** Then, the students draw a (bumpy) line to the end of the paper which leads to the end of the lesson(s). At this point, they write **with what feeling they finish the lesson(s).** On the line, the students mark different learning moments by placing crosses on the line. At these crosses they **write briefly what the learning moment(s) meant for them and why this was a learning moment.** They can make a small drawing here to clarify it. It is desirable to place the crosses at the right place in time between the starting moment and the end point. As soon as the student has finished, (s)he has drawn a road map for himself/herself on which he has made his journey clear from the beginning to the end point.

Source: https://activeerjeles.nl/werkvormen/routekaart
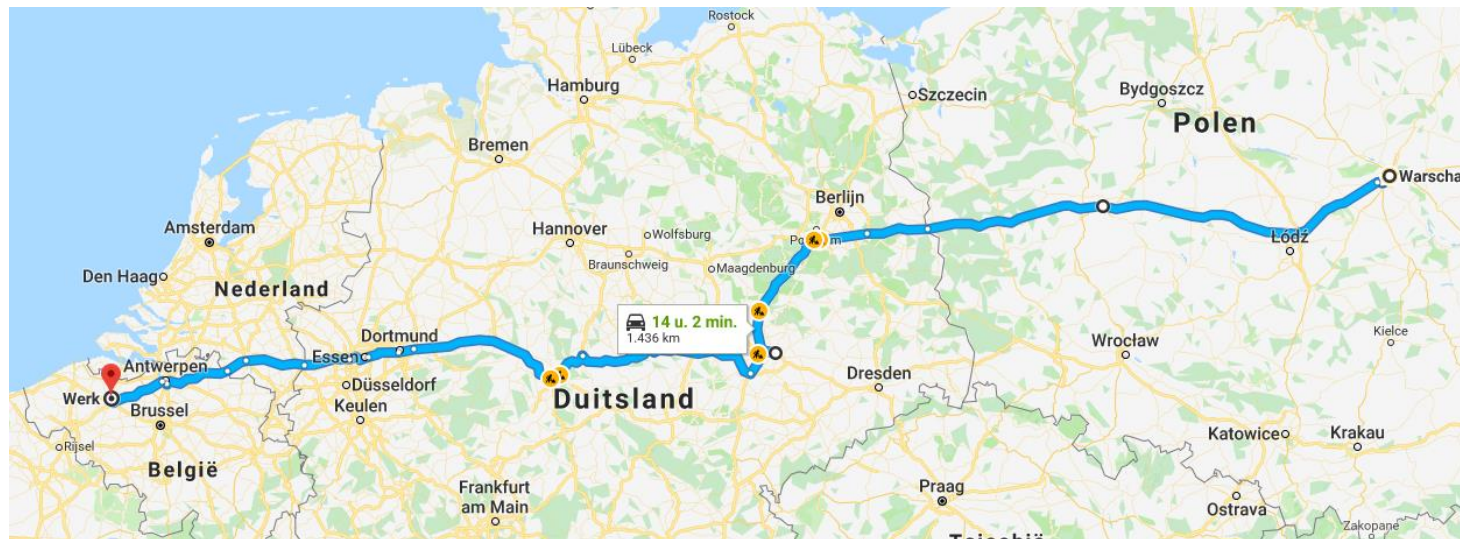
What is it?

All students are sitting in the classroom. The teacher has prepared a large number of questions about the content of the lesson. The teacher asks the first question. The first student who raises his/her hand, may answer the question. When the student has answered the question correctly, (s)he may leave the classroom. This is repeated until all students have answered a question correctly. When a student has answered a question incorrectly, (s)he may not leave the room and must skip a turn. The teacher could organize this activity for 5 minutes. If there are still students who did not answer a question correctly when the activity is finished, they can leave the class, but you could opt to give these students a brief assignment which they have to hand in before the next lesson.

QUICK WIN

What is it?

Muddiest Point is a quick monitoring technique in which students are asked to take a few minutes to write down the **most difficult or confusing part of a lesson, lecture, or reading**. It is simple to create and facilitate.

Why would you use it?

- You can quickly check for understanding. This assessment gives you a picture of misconceptions and confusion that still exists in the students' mind.

- Students can increase their understanding of their own learning. This assessment provides students with a metacognitive opportunity to think about their own learning. This is especially helpful with new information and complicated procedures.

What was your muddiest point today?

_____
_____
_____
_____
_____

ONE-MINUTE PAPER

What is it?

The one-minute paper is a classroom assessment technique in which a teacher asks a question to the students at the end of the lesson. The students need to formulate a short (written) answer to one of the following questions in few minutes :

- What is the most important insight/idea/ ... that you take home from today's lesson?
- What question do you still have?
- What was the most difficult issue of today's lesson (see muddiest point)?
- What was the most surprising element of today's lesson?
- Make a summary of ...
- Give an example of...
- Explain in your own words ...
- Write down the 3 most important keywords of the lesson.

How to respond?
- A buzz group/Think-Pair-Share in which students exchange their ideas
- Use the answers in the beginning of next lesson
- React in a discussion fora or in a short video (LMS)
- Use the answers to improve your lessons
- ...

What is it?

As a teacher you can announce that during the lesson a period of time will be provided in which students can compare each other's notes on specific topics. By doing so, students know that it is important to make good notes. During this moment, students actively reflect on the course content and thanks to their peers they go home with better notes. A variation is to ask students to summarize the lesson and to compare this summary at the start of the next lesson.

Seeker

Stimulate your students to take notes. Check the video: taking notes via laptop versus on paper.

https://www.youtube.com/watch?v=puOPSZ_EwII

HOW TO FINISH A LESSON: EXERCISE (🕐 ± 15 MIN.)

- Choose individually one strategy on how to finish a lesson (see Ufora).

- Implement this strategy on the content of this course (yesterday's + today's session)

- Pickerwheel decides which two teachers get the honour to present their work!

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QUESTION & ANSWER

ASSESSMENT OF + FOR LEARNING

QUICK WIN
QUICK WIN
QUICK WIN

EXERCISE: QUESTION AND ANSWER (± 15 MIN.)

1. Read the text of the website of AWL
2. Imagine that you are a lecturer in the faculty Veterinary Medicine – Companion Animals and that you want to discuss this text with your students
3. Prepare 3 questions that you want to discuss and write them down (e.g., backside text)
4. Share your questions with a neighbour and select 3 out of the 6 most 'interesting' questions

TAXONOMY OF BLOOM

New ideas

Create

Related to values, norms, choices

Evaluate

Investigating relations, comparing

Analyze

Using information in another context

Apply

Explaining ideas or concepts

Understand

Reproduce

Remember
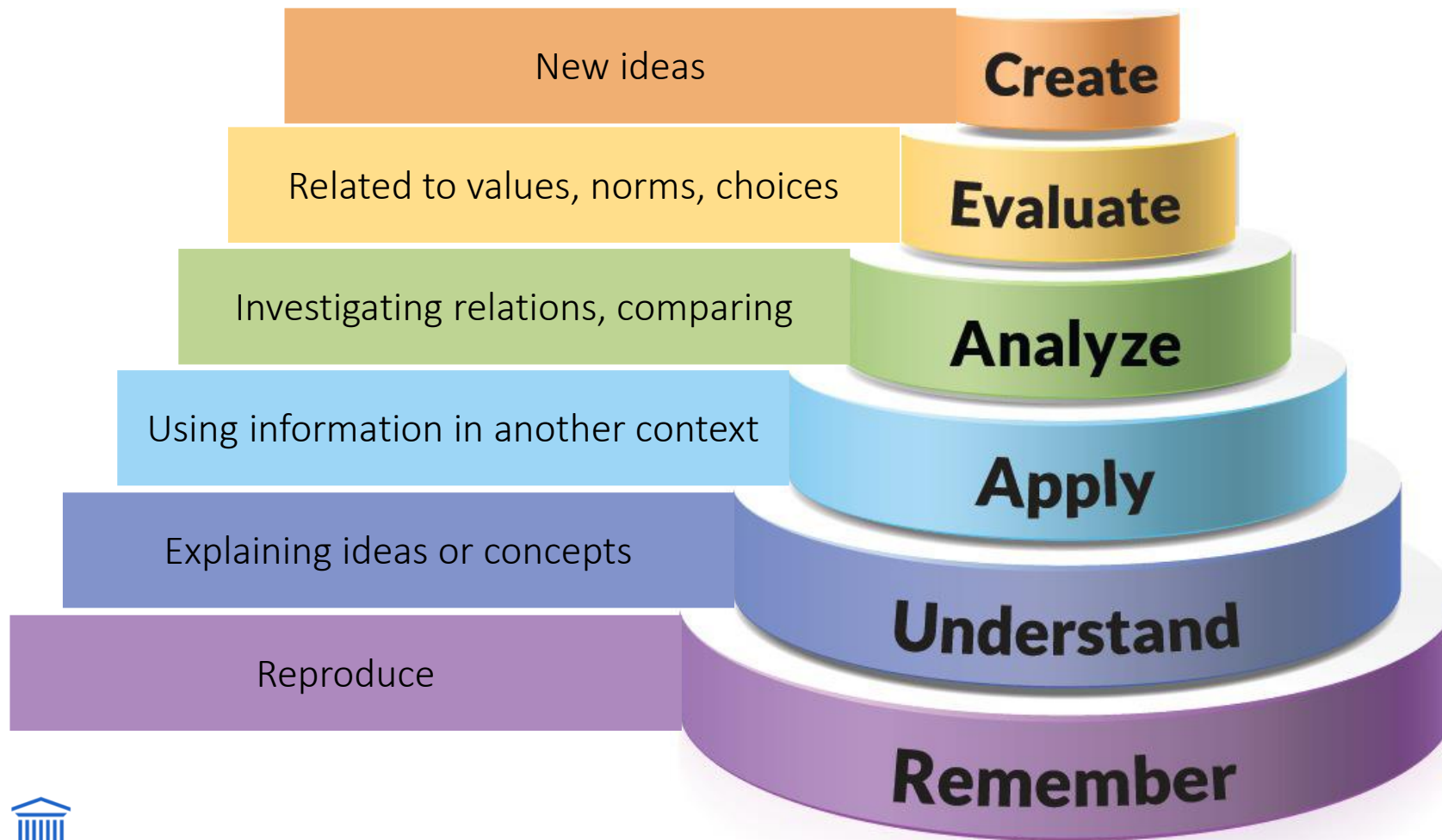
On which level of Bloom's taxonomy were your questions situated?

See Question Starters on Ufora (Tuesday morning – Types of Questions)

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TYPES OF QUESTIONS

Yes/No, True/False questions

WH/Open questions
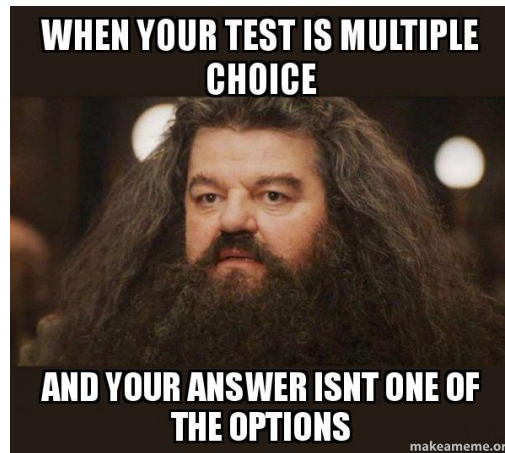
Multiple Choice questions

Matching questions

Fill-in-the-blank questions

Not easy, see the submodule on Ufora

15-minute break
Enjoy your cup of coffee or tea

JIGSAW – 3 STEPS

STEP 1: EXPERT IN ONE   →   STEP 2: EXPERT GROUPS   →   STEP 3: JIGSAW GROUPS

ASSESSMENT STRATEGY

- Peer assessement
- Self assessment
- Portfolio
- Rubrics

...
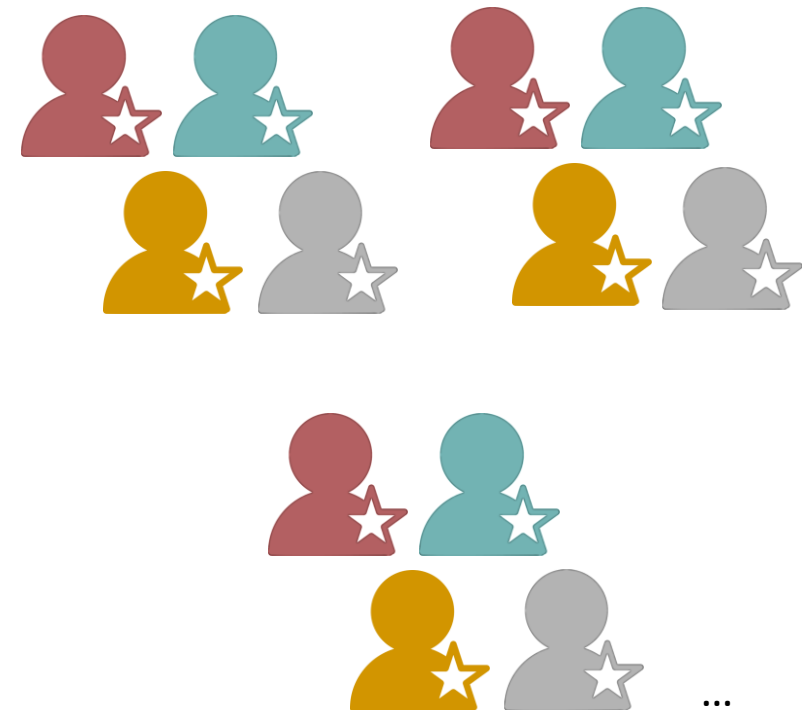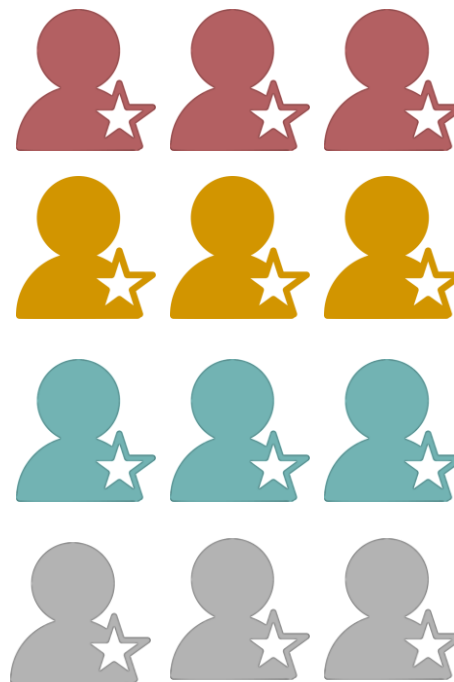
JIGSAW – STEP 1: BECOMING EXPERT IN ONE ASSESSMENT STRATEGY (🕐 ± 20 MIN.)

Wednesday morning: Assessment

Part 1: Assessment on different levels

Part 2: Becoming an expert in one assessment strategy

> Peer assessment

> Self assessment

> Portfolio

> Rubric

- Focus on 1 topic (only the one we assigned to you):
  - Peer assessment
  - Self assessment
  - Portfolio
  - Rubric
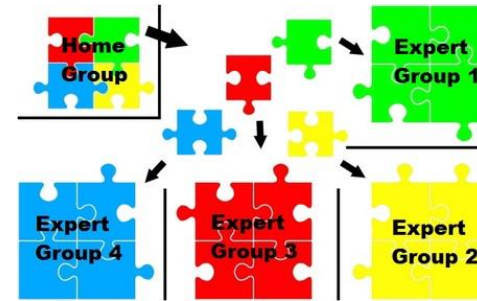
- Watch the instruction video related to your topic. Keep the following question in mind: *How would you explain this assessment format to your colleagues?*
  - Make notes on **scrap paper** or in **a Word document**
  - Guiding questions + Try to imagine how to implement the assessment strategy into your own teaching practice.

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JIGSAW – STEP 2: DISCUSSION WITH EXPERT-COLLEAGUES (🕐 ± 10 MIN.)

- Compare your notes (e.g., Discuss unclarities)
- Discuss how you would implement it in practice
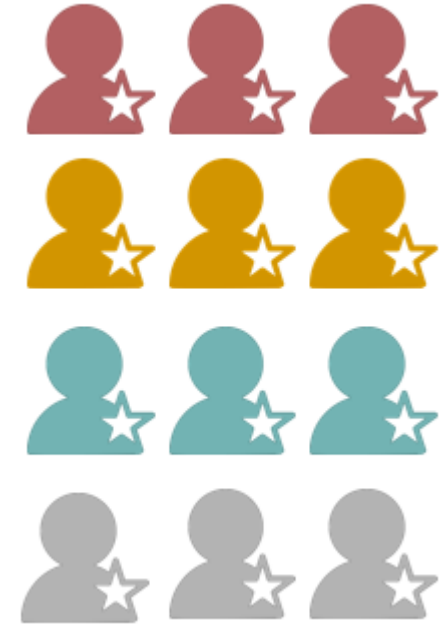
JIGSAW – STEP 3: MIXED GROUPS (⏱ ± 45 MIN.)

- Step 1: Tutor your findings to each other
- Step 2: Make 1 general concept/mindmap with the four different assessment strategies integrated (tool: Lucidchart)

CONCEPT MAP: LUCIDCHART

When you click on the link: three steps

1

Scroll down and you will find the link to your concept map.

2

3

Double-click on an arrow to add text

Characteristics like 'change colour', 'change the shape of an arrow', 'implement icons', etc.

Swipe the shape you want to the right box

Double-click to change the text

Process

Lunch Break

Start@13:15

FEEDBACK

Definitions

Feedback is information provided by an agent (e.g., teacher, peer, book, parent, or one's own experience) regarding aspects of one's performance or understanding

(Hattie, 2009, p.174)

EFFECT SIZE FEEDBACK

Feedback is one of the most powerful influences on learning and achievement.

Hattie & Timperley (2007): Summary of effect sizes from 12 meta-analyses assessing the influences of feedback (196 studies and 6,972 effect sizes).

Average effect size = .79

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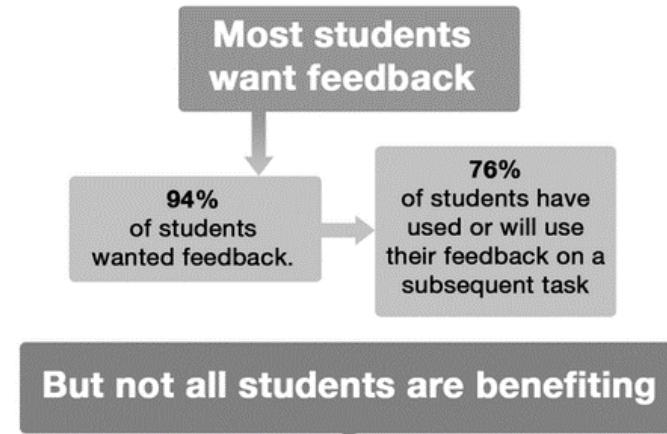# BUT ...

Universities are failing their students through poor feedback practices

November 27, 2017 7.09pm GMT

ENGAGE!

... WHAT'S IN IT FOR US?

FEEDBACK

feedback for learning.org

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Feedback for Learning project (Australia) surveyed 4,514 students and 406 staff accross two universities ...

Most students want feedback

94% of students wanted feedback.

76% of students have used or will use their feedback on a subsequent task

But not all students are benefiting

Of students surveyed...

37% of all students said **feedback is discouraging.**

Feedback is without opportunity:
• Only 13% of academic staff specifically design follow-up assessment tasks to allow students to act on the comments they receive.

Students who agree that **feedback is upsetting:**
• 15% of all students,
• 36% of students with below average English proficiency,
• 27% of students with a disability that impacts on their assessment,
• 26% of students who achieve an average pass grade, and
• 19% of international students.

67% of staff and 65% of students agree that **feedback is impersonal** and staff do not know their students well enough to offer personally meaningful feedback.

As undergraduate students progress through their degree they feel **feedback is less useful** as it is less detailed and they are less likely to use it.

ASSIGNMENT: 'HOW TO GIVE FEEDBACK?'

- Groups of 3-4 members (randomly assigned)
- Check the case (next slide) - a situation in the context of the course unit: Digital marketing
- Write in group a concrete script (What does the teacher say, how reacts the student) (Guideline: 5 min. conversation)
- 20 min. to think about/to write a script
- Time left? Try to role-play your script

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CASE

Context:

- Faculty of Economics and Business Administration
- Course unit: Digital marketing (2nd bachelor)

After the first examination period of the academic year (beginning of February), a teacher and student sit together after the student sent an email to the teacher because (s)he is disappointed about his/her final grade for the course unit Digital marketing. The final score of the student is 8/20 and (s)he wants more explanation related to the partial scores that determined the final grade. For this course unit, the students wrote an individual paper about using specific advertising tactics in order to address children, gave a group presentation about marketing strategies that companies can use, and made an exam with open-ended questions at the end of the course unit. Below are the scores that the student received for the several aspects:

Individual paper: 1/5

Group presentation: 3/5

Exam with open-ended questions: 4/10

ASSIGNMENT: 'HOW TO GIVE FEEDBACK?'

- Groups of 3-4 members (randomly assigned)
- Check the case (Word document) - a situation in the context of the course unit: Digital marketing
- Write in group a concrete script (What does the teacher say, how reacts the student) (Guideline: 5 min. conversation)
- 20 min. to think about/to write a script
- Time left? Try to role-play your script

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ASSIGNMENT: 'HOW TO GIVE FEEDBACK?'
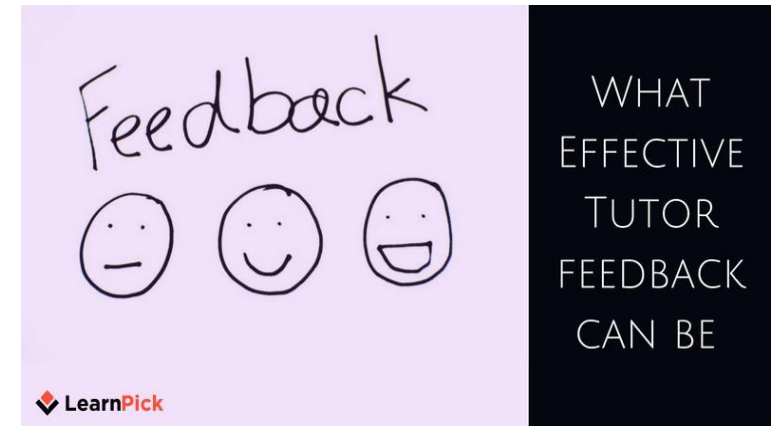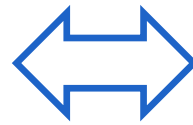
Giving feedback to a video of a previous cohort who had to roleplay a feedback situation by using a checklist (in portfolio map) AND the tool **VideoAnt**

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ASSIGNMENT: 'HOW TO GIVE FEEDBACK?'

1) Browse individually the checklist with tips & tricks (🕐 5 min.)

***

2) Watch the following video on which you will give feedback (🕐 5 min.):
https://youtu.be/MXo74EKdOaI

*Role-play video of a
previous cohort*

***

3) Watch the demo of VideoAnt (🕐 4 min.):
https://www.youtube.com/watch?v=1SOE2aQky2I&feature=emb_logo
(Watch carefully, you need this tool for the next exercise!)

ASSIGNMENT: 'HOW TO GIVE FEEDBACK?'
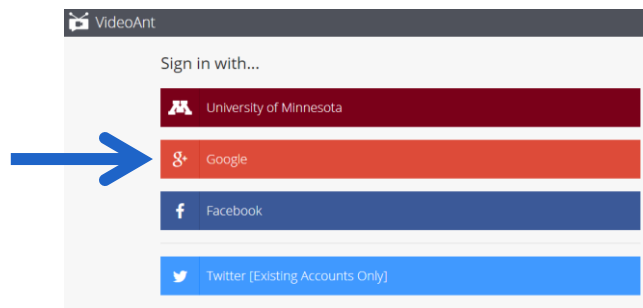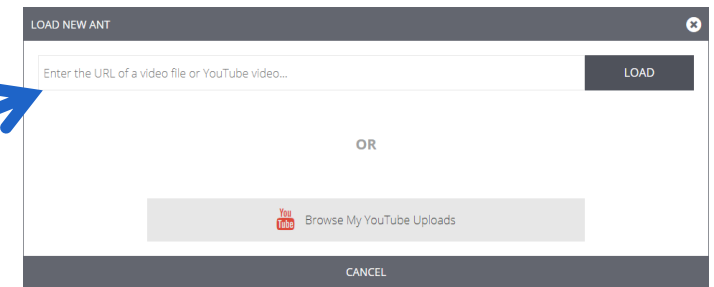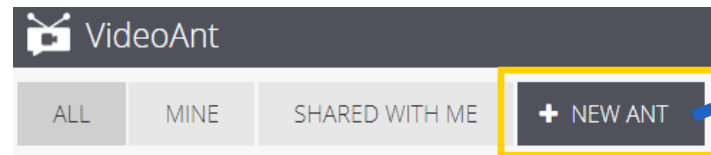
4) One group member surfs to https://ant.umn.edu/ (Chrome/Safari) and signs in via Google account

5) Click on '+ New Ant'

6) Enter the YouTube-URL: https://youtu.be/MXo74EKdOaI. Click on 'load' and start 'video anting' based on the checklist. *What are the positive aspects in the feedback conversation? What are opportunities for improvement?*

🕐 20-25 min.

HOW IS VIDEOANT USED @GHENT UNIVERSITY
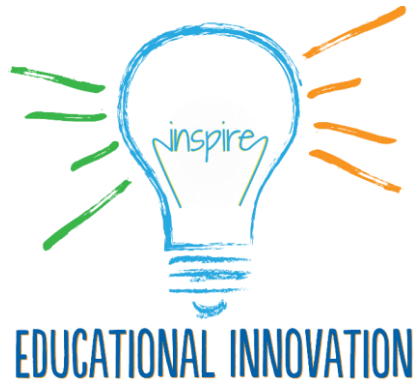
Authentic assessment of students' communication skills

Participating faculties:
– Psychology and Educational Sciences (therapy sessions)
– Medicine and Health Sciences (consultations with patients)
– Political and Social Sciences (interview skills)
– Pharmaceutical Sciences (conversation with pharmacy clients)
– Veterinary Medicine (conversation with owners of (domestic) animals)

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Authentic assessment of students' communication skills

Problem statement
- Learning communication skills → practice on a regular basis → e.g., (pharmacy practice) skills labs
- But:
  - Often unfeasible for a lecturer to follow practice sessions 'live' ~~→ feedback and formative assessment~~
  - Feedback and summative assessment based on written representation of behaviour in the form of scoresheets or reflection reports (≠ actual performances)
  - Limited number of practice sessions:
    - Lack of safe learning environment → reluctance to practice communication skills

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Authentic assessment of students' communication skills: video annotation as solution

The use of VideoAnt allows:
- To exercise regularly, supported by formative assessment
- To create authentic summative final assessments

Options for students:
- **Reflection**: annotating a video clip provided by the lecturer
- **Self-reflection**: students record their own video clip (e.g., during internships in authentic contexts or during exercises with simulation patients/clients/etc.)
- **Peer evaluation/peer feedback**: analysing each other's video fragments by adding annotations

inspire

EDUCATIONAL INNOVATION

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HOW IS VIDEOANT USED @GHENT UNIVERSITY
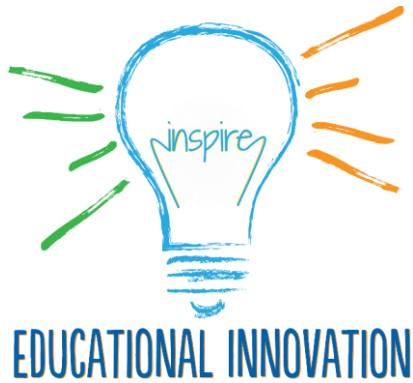
Practical example 1: Motivational conversation (Prof. dr. Stefaan Van Damme)

Context:

- Faculty of Psychology and Educational Sciences – Bachelor in Clinical Psychology
- Faculty of Medicine and Health Sciences – Master in Health Education and Health Promotion

In the courses "First line: Motivation and self-regulation in chronic health problems" (3rd Bachelor Clinical Psychology) and "Individual and group-oriented methods and techniques for influencing behaviour" (Master Health education and promotion), students learn to apply motivational conversation techniques. The students receive the **theory through lectures and online learning paths**. In addition, they are instructed to conduct **three short conversations with a volunteer** with the aim of mapping and motivating the volunteer to deal with unhealthy behaviour such as smoking, unhealthy eating, or moving too little. These conversations are planned in specified periods so that they match the increasing complexity of conversation skills that the student acquaints through the learning paths. The **conversations are filmed and loaded into the video annotation tool**. **Each student gives feedback to two fellow students** via this tool, and reflects on the own video and the feedback received. The **teaching team moderates**, and can (depending on the number of students) also give feedback on the work of the students. At the end of the semester the students write **a self-reflection report** about their experiences, their learning process and issues they need to pay attention to in the future. This reflection is read by the lecturer and included in the non-period bound evaluation.

inspire

EDUCATIONAL INNOVATION

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HOW IS VIDEOANT USED @GHENT UNIVERSITY

Practical example 2: Clinical conversation skills (Prof. dr. Lesley Verhofstadt)
Context: Faculty of Psychology and Educational Sciences – Bachelor in Educational Sciences (Orthopedagogics)

In the couse unit 'Clinical Psychological Skills and Diagnosis', the students learn conversation skills that they have to apply in a clinical psychological context. The students are given **two moments to practice** this. After the **first theory lesson and practicum**, the students have to do a **role play in a skills lab**. Here, every student takes the **role of the therapist for 10 minutes**. **Some students also take on the role of the client**. This situation is **filmed** and **uploaded to the video annotation tool**. The students are divided into **groups of two** and **give each other feedback via the tool**. Later in the semester, the process is repeated a second time. Again, every student takes on the role of the therapist, but the **client is played by a figurant** (these are PhD students attached to the department). After this conversation, the students must write **a self-reflection on their experiences**, **their strengths and work points**, which **feedback** they have taken to the second practice moment and where they will work in the future.

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Practical example 3: Qualitative interviewing (Prof. dr. Peter Stevens)
Context: Faculty of Political and Social Sciences – Bachelor in Sociology

In the couse unit 'Introduction to Qualitative Research', students receive an introduction to the basic principles and techniques of qualitative research as applied in the social sciences. Here, the students learn, among other things, **to conduct an interview**. The students themselves are looking for **a volunteer who wants to be interviewed**. This conversation is **filmed** and **uploaded to the video annotation tool**. The students are **divided into groups** and **provide feedback** within this group through this tool. As a result, they learn to give feedback on sociological work of fellow students in an empathic, critical and constructive way.

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Practical example 4: Medical consultation (Prof. dr. Annelies Decloedt)
Context: Faculty of Veterinary Medicine – Bachelor in Veterinary Medicine

In the couse unit 'Clinical and Communicative Skills I', students learn the process of how to perform a medical consultation in a less demanding context. **During the lessons, the theory is taught** and the students get the time to **apply the theory** in these lessons **through a role play**. In the last part of the lesson, the students spread about the space and perform this role-play, which they **film themselves with their smartphone**. This video is put in the **annotation tool to give feedback to each other after the lesson**. They learn to critically reflect on the communication between animal owner and veterinarian.

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