

Methods of Activation for Large Groups in Applied University Teaching

13th of June 2022

Prof. Dr. Jörg Wendorff.
Ravensburg-Weingarten University

Content

- Differences between methods for larger and smaller group
- General tips for teaching in larger groups
- Methods for large Groups
- Discussion

Differences between methods for larger and smaller group

- **In this room:** Please discuss the differences with your neighbor!
- **Online:** Please think about the differences on your own!
Please write it down here in english language
 - <https://flinga.fi/s/F4XXJH6>

2 min.

We then will discuss the differences!



The big difference

Activating methods suitable for large groups generally differ from those for smaller groups in that they are less time-consuming to conduct and usually do not involve presenting all group work results.

General tips for teaching in larger groups

- Be in contact: Front of your body should face the audience.
- Maintain regular eye contact with everyone by using the »M-gaze«
- Because some people are sitting further away, your gestures should be more pronounced, but not hectic at the same time.
- To speak loud enough, speak to the people in the back of the room.

General tips for teaching in larger groups



Give clear work assignments

- Communicate the exact time of completion + the specific time when the task should be completed.
- For complex tasks, write down the work instruction for all to see, e.g. on a PowerPoint slide.

Methods for large Groups

- 1) Show similarities
- 2) Solution by raising a hand
- 3) Number-Estimation Question
- 4) Call-out Question
- 5) Headstand method
- 6) Buzz Group
- 7) Determine order
- 8) Solution in the row of seats
- 9) One-Minute-Paper

Three slides: a) Description b) Live c) Digital solution

1) Show similarities - Description

To get an initial overview of the group composition.

- To whom the asked aspect applies signal this by raising their hand.
- Sample questions:
 - *Who is a student of a technical subject? Who is a student of economics ... Social sciences... Computer science?*
 - *Who has already attended a session on this topic? Who has already gained practical experience in this field? Who already knows the theory ...?*

The students are easily activated by raising their hands and, as a positive side effect, recognize possible commonalities with others.

Show similarities - Live

What is your area of expertise?

To whom the asked aspect applies signal please this by raising the hand.

- Computer science
- Engineering & technology
- Science & Mathematics
- Art, Music, Design & Fashion
- Health & Medicine
- Social sciences
- Other subject

Who has taken part in further training for university teaching?

Who has already visited germany?

Show similarities – Digital solution

- Use Polling tool (e.g. Tweedback, PINGO, PollEv), some videoconference-systems integrate polling capabilities.
- Show the results live on your screen.
- You can also use hand raising for yes/no questions if the students activate their camera.

Please respond at [PollEv.com/jwendorff295](https://pollev.com/jwendorff295)

2) Solution by raising a hand - Live

Please raise your hand if the answer is correct!

When was the first Bavarian state university founded in Ingolstadt?

- a) 1455
- b) 1472
- c) 1572
- d) 1955
- e) 2005

Solution by raising a hand - live

When was the first Bavarian state university founded?

- a) 1455
- b) 1472 (first Bavarian state university)**
- c) 1572
- d) 1955
- e) 2005

Solution by raising a hand – Digital solution



Use a polling tool as in the previously presented method of “Show similarities”. In this method, questions should be asked that relate to the students' understanding of a particular issue.

When was the German-Jordanian University founded?

- a) 1995
- b) 2000
- c) 2005
- d) 2010

Solution by raising a hand – Digital solution



c) 2005

GJU was founded on April 25, 2005 by royal decree, in accordance with a memorandum of understanding between the Ministry of Higher Education and Scientific Research of the Hashemite Kingdom of Jordan and the Federal Ministry of Education and Research of the Federal Republic of Germany.

Solution by raising a hand - Description



- Set a task and present a range of possible solutions, only one of which is correct.
- Participants are asked to indicate which answer they think is correct by raising their hand.
- Then explain the correct solution.
- Alternatively, students can indicate their answer by lifting up their writing block.

3) Number-Estimation Question – Live and online

What do you think the African elephant's resting heart rate is?

- **Here in the room:** Please write it down at a sheet of paper!
Please show your result to me!
- **Online:** Please write it down in the chat!

Number-Estimation Question - Description



- Consider a number-estimation question.
- Your participants writing down their answer in large print on a sheet of paper.
- When prompted, everyone holds up their solutions.
- Get an overview of the values noted and summarize the range of results.
- In addition, you can ask if someone would like to briefly justify their estimate.

Number-Estimation Question – Digital solution



You ask the students to write their answer in the chat. Use the waterfall method, i.e. the students only send their answers at the same time as your signal.

Alternatively, have students write down the estimates anonymously on an Etherpad. Read out some of the estimates before revealing the official solution.

Additional information for you

The heart of all mammals beats about 2.5-3.5 billion times in a lifetime. The larger the animal, the lower the pulse and the longer its life.

- The African elephant has a resting heart rate of 25 to 30 bpm, it lives about 60 to 70 years
- The house mouse has a resting heart rate of around 600 bpm and lives around 2 to 3 years.

Humans would therefore have a natural life expectancy of around 19 to 38 years (with a resting heart rate of 50 to 100 bpm). Thanks to medical progress the average life expectancy in Germany e.g. is 81 years.

4) Call-out Question - Description

A very easy method to collect input from participants.

- Write down a question on the board or a flipchart.
- After a short period of reflection, students should call out their answers to you, without raising the arm.
- Write down all the ideas on the medium - exactly as they were formulated.
- Do not evaluate or comment on the ideas and do not allow discussions during the collection phase.

The goal of this method is to quickly gather ideas.

Call-out Question - Live

- Please tell me interesting countries that are worth visiting!
- First think about it for one minute!
- Then call out your answers to me!

Call-out Question – Digital solution

Please respond at PollEv.com/jwendorff295

Call-out Question – Digital solution

- Use a digital whiteboard on which you position the question centrally. You can allow students to post terms directly on the board. Alternatively, you can allow "calling out" via microphone or via chat.
- Then you can also write down the terms on a simple presentation slide.
- Another option is an Etherpad, where you post the question and all students can write down their terms anonymously under the question (there is a risk here that posts will also be deleted.)

5) Headstand method - Description

Use an inverse question for your questions.

- For example, if you want to compile "Criteria for good presentations" as the goal of the exercise, ask how to design a presentation so that it is confusing, uninteresting, and incomprehensible.
- Collect these criteria, for example, using a knowledge pool. Afterwards, ask the students to develop the opposite based on this compilation.

Headstand method – Live and online

What can you do so that the students learn as little as possible in your teaching?

- **Here in the room:** Please write it down at a sheet of paper!
- **Online:** Please write it down in the chat!

Then we consider what teaching should be like so that the students learn as much as possible.

Headstand method – Digital version

You use the “Call-out Question” method presented above.

Use a digital whiteboard on which you position the question centrally ...

6) Buzz Group - Description

- It has several variations and has a high acceptance among students.
- Ask a question not too complex or give a simple discussion assignment. The complementary action statement is: "As you sit, please form a group with the person (or two people) immediately next to you and discuss what I just ask for two minutes."
- After 2-5 minutes ask for silence. Ask for the results.
- In larger groups ask for a few exemplary results.

Buzz Group – Digital version

- Set up break-out rooms with a few students for about 3 minutes.
- Then ask some of the groups to report the answer they found to the question.

Buzz Group – Live

We have already done it!

Differences between methods for larger and smaller group



- **In this room:** Please discuss the differences with your neighbor!
- **Online:** Please think about the differences on your own!
Please write it down here in english language
 - <https://flinga.fi/s/F4XXJH6>

2 min.

We then will discuss the differences!



7) Determine order - Description

- Basic elements of a process are written unsorted on the board.
- Students are given the task of determining the correct order of the terms.
- If different suggestions come up, briefly discuss which one is probably correct with the whole group.
- The correct term is written down first or the card with the correct term is put up on the board.
- Then the group should name the second term and so on.

Determine order – Digital version

- Use a digital whiteboard on which you have set the terms as cards.
- Have students post their own cards with these terms and put them in order.
- Comment on the process.
- **Using a digital voting tool, the students should now decide which order they think is correct:**
Please respond at PollEv.com/jwendorff295

Determine order - Live

- What is the right order of the process of Group Dynamics?

Performing

Norming

Storming

Adjourning

Forming

Determine order - Live

- What is the right order of the process of Group Dynamics?

Forming

Performing

Norming

Storming

Adjourning

Determine order - Live

- What is the right order of the process of Group Dynamics?

Forming Norming
Performing

Storming

Adjourning

Determine order - Live

- What is the right order of the process of Group Dynamics?

Forming Norming Storming Performing

Adjourning

Determine order - Live

- What is the right order of the process of Group Dynamics?

Forming Norming Storming Performing Adjourning

Information

The forming–storming–norming–performing model of group development was first proposed by Bruce Tuckman in 1965, who said that these phases are all necessary in order for a team to grow, face up to challenges, tackle problems, find solutions, plan work, and deliver results.

8) Solution in the row of seats - Description

- Person sitting furthest to the left is handed a worksheet on which a task is noted that is to be solved using the content previously worked on in the session.
- After start signal, the sheet is passed from left to right in all rows.
- Everyone in the row who knows an answer writes it on the sheet.
- The person sitting on the far right of the row must check whether the task has been completely fulfilled.
- The fastest group presents its result and wins if the task has been completely solved.

Solution in the row of seats – Digital version



- Use breakout rooms.
- Each group receives a task as described above and gets its own etherpad to document its result.
- For example, once a group has found the number of terms to be achieved, the group leaves the breakout room.
- Give the other groups a little more time and then bring all the groups back into the main room where the "winning group" gets to present their result.

Solution in the row of seats - Life



Please write the names of eight of the methods presented here on the card. The card should arrive completely on the right side.

9) One-Minute-Paper - Description

Allows to collect written feedback in a time-efficient way.

- Ask the participants to write down on a sheet of paper handed out by you, on which up to three questions are noted or on a DIN-A5 or DIN-A6 sheet of paper of their own.
- What they particularly liked about the session and, in addition, what they would like to have changed in the next sessions. Point out that only one concise answer should be formulated at a time.

If time permits, present the most important results in summary form at the next session.

One-Minute-Paper - Description

Here are some suggestions for questions:

- What was the main point of the session for you today?
- What is the main question that remained unanswered for you today?
- What is the most important insight for you to take away from this session?
- Which argument did not convince you?

One-Minute-Paper – Digital version



- The same task can be used with the help of a learning platform via the feedback function.

One-Minute-Paper – Live and online

- **Here in the room:**

Please write on the **front of the card**: *What was very interesting here for you?*

And on the **backside of the card**: *What question do you still have?*

- **Online:** Please write it down in the chat:

+ Very interesting ! Possible Question

One-Minute-Paper – Live and online

- **Here in the room:**

Please write on the **front of the card**: *What was very interesting here for you?*

And on the **backside of the card**: *What question do you still have?*

- **Online:** Please write it down what was very interesting:
Please respond at PollEv.com/jwendorff295

Wendorff, J. (2021): Aktivierung von Großgruppen, in:
Waldherr, F./ Walter, C.: Didaktisch und praktisch - Methoden
und Medien für die Präsenz- und Onlinelehre. 3. überarbeitete
und erweiterte Auflage, Stuttgart: Schäffer- Poeschel. P. 81-90

