PREDICTIONS

Approx. duration: 45-60 min
Groups of: 4-6
Competencies involved: S, L, W, R
Level: All

Required Material
·Whiteboard and marker or large piece of paper
·Laptop or smartphone)

This activity is fully based on a colleague's work, which was created as part of a research project (noùs) in philosophy and aimed at helping students develop better critical thinking skills through collective intelligence. [1] It has been demonstrated that "[..] active learning tools benefit students and improve their critical thinking and their motivation [...], so combining these concepts only seemed logical. [2] This task is based on making simple predictions, so it can be used to cover multiple topics. The premise must be a prediction that can be confirmed or denied (a question with a yes-or-no answer) for the activity to work.

The first step is to share a prediction with the students (e.g. *Will self-driving cars be available everywhere by 2040 ?*). Individually, students take a position and save it for later. Then, the teacher hosts a 5-10-minute brainstorming session with the class during which the students must share what information they think they need to make a more informed decision (e.g. to predict the implementation of self-driving cars, information such as pricing, safety, accessibility, history, social acceptability and legislation must be verified).

Activity Description

Next, each team is assigned a sub-topic to investigate (e.g. the aforementioned pieces of information). They must work as a team to find as much information as they can online, write it down on the whiteboard (or on a piece of paper) as well as the sources where they found it.

Once enough information has been collected, the second brainstorming session can be conducted for 5-10 minutes. This time, it involves sharing the information gathered by each team. Students can then be asked to walk around the classroom to view the other teams' research results.

Finally, students are asked to go back to their initial prediction, share it with their team, and collectively decide whether it still stands based on all of the information that is now available. The final recap can consist of a quick discussion about how the predictions have been impacted by the activity.

Preparation

TEACHER
·Topic selection
·Assessment and/or feedback tool preparation (optional)
·Activity instructions
·Team formation

STUDENTS
·Review of the evaluation criteria (if applicable)

Evaluation options

TEACHER
·Formative or summative assessment of the activity process using evaluation criteria that have previously been shared with the students

STUDENTS
·Formative or summative assessment of other students' work or self-evaluation, based on the teacher's criteria

Workflow

TEACHER
1. Gives the activity instructions.
2. Gives the students the prediction question.
3. Conducts the first brainstorming session.
4. Walks around the classroom to verify the students' progress.
5. Conducts the second brainstorming session.
6. Proceeds to a collective recap.
7. Completes the evaluation (if applicable).

STUDENTS
1. Answer the prediction question individually.
2. Take part in the first brainstorming session.
3. Work with their team to look up information.
4. Take part in the second brainstorming session.
5. Discuss their prediction with their team and adjust it.
6. Take part of the final collective recap.
7. Self-evaluate or evaluate a colleague (optional).

Tips

·Using whiteboards for this activity is ideal. Replace them with large Post-its if they are not available.

·Sticking to socially acceptable and non-controversial topics is best for this activity as it essentially aims to highlight the importance of factual information instead of opinion.

[1] Coutant, A. et al. (2025). Noûs – L'intelligence collective au service de la pensée critique pour contrer la désinformation. Faculté de communication. UQAM. https://communication.recherche.uqam.ca/projets/nous/ (and special thanks to Marie-Estelle Debs!)
[2] Rossi, I. V., de Lima, J. D., Sabatke, B., Nunes, M. A. F., Ramirez, G. E., & Ramirez, M. I. (2021). Active learning tools improve the learning outcomes, scientific attitude, and critical thinking in higher education: Experiences in an online course during the COVID-19 pandemic. Biochemistry and molecular biology education : a bimonthly publication of the International Union of Biochemistry and Molecular Biology, 49(6), 888–903. https://doi.org/10.1002/bmb.21574