Energy Inventions

TIME

90 min.

break

Session

including

Art of learning



WARM-UP: INVENTOR TRICKS #3 AND #4: "YES, BUT" WHICH IS REALLY NO, AND "YES, BUT" WHICH BUILDS ON THE PREVIOUS SENTENCE.

This will happen:	Create inventor stories to practise interaction in the groups.
Materials needed:	
Preparations in advance:	
Preparations in the space:	
The space looks like this:	Open space.

GUIDANCE: Session 3

In their invention groups, the students should create an invention story, where they each say one sentence and take turns. After the first suggestion, all further sentences must start with 'Yes, but...' Yes should be excited YES! And what comes next should build on the idea from the previous sentence.

Demonstrate an example of a 'Yes but..." (which is actually a no):

Person 1: I think that screw there fits very nicely as an eye!

Person 2: YES! But now we'll take it off again, because I'm going to use that screw on the legs.

Ask: Why is this called this a yes, but it is really a no?

Each group creates new stories with "YES, but..." and this time it is a real YES! (and not a Yet but...(which is actually a no). Challenge students to find new places and new situations than those they have used in prevision sessions. Remind them to mime what happens.

Reflection: Did they notice a difference between a real yes and a yes (but) that is really no? In which situations can they use this approach? (both inside and outside school).

Session 4

Repeat as in Session 3, but demonstrate an example of a "Yes, but" (which builds on the previous sentence).

Person 1: I think we should make a tail for our robot dog.

Person 2: Yes, but then I think the tail should be made like a vacuum cleaner tube so it can vacuum with it. Person 3: Yes, but then the vacuum cleaner pipe has to be painted brown, so it looks like a real tail.

In the invention groups. Try saying "Yes, but" and making suggestions that build on the previous suggestion. Feel free to talk about inventions as a starting point.

Reflection: What is the difference between yes (a yes which is actually a no) and a proper yes (which is a yes)? What do they think the Inventor wanted them to understand from this exercise?

REFLECTION: "THE BOND BETWEEN US"

This will happen:	The class works in a circle throwing a roll/ball of gift ribbon so that everyone is involved, and they reflect on teamwork.
Materials needed:	A roll/ball of gift ribbon and a soft ball.
Preparations in advance:	Wrap the gift ribbon around a soft ball. The gift ribbon should come off easily and be easy to catch. Practise throwing the ball to ensure that the gift ribbon comes off easily.
Preparations in the space:	
The space looks like this:	Open space.

GUIDANCE:

Everyone sits (or stands) in a tight circle (if the class is large then divide them into two smaller groups with an adult in each). It is important that it is a circle, and that the distance across the circle is not too big. The tempo of the exercise should be calm.

- **1.** Everyone closes their eyes and is given a question to think about from today's session. When they are ready with their answer, they should open their eyes and look at the adult.
- **2.** The adult repeats the question, states their answer, holds the ribbon ball firmly, makes eye contact with another student and throws the ribbon ball to them.
- **3.** This student repeats the question, states their answer, holds the ribbon ball firmly, makes eye contact with another student, and throws the ribbon ball to them.
- 4. Then the process is repeated until everyone has had the ribbon ball.
- **5.** Reflection: While the web is still held by everyone, ask everyone to stand up (slowly, while still holding their part of the web). Ask everyone to hold the web tight. Then throw a school bag or three into the web.

Ask: Why are they able to hold the bags on the web? What happens if one of them lets go of the web? (Test this out). Do they still have a connection between them when they are not connected by the web? For example, when they're out at breaktime? As a class? What does it take to keep the connection between them?

Questions Session 3-4:

- Think about a challenge their invention group has faced. Share one thing they did to solve the problem.
- Think about their invention group: What has been their favourite part of the collaboration so far? What is their group the best at?

NOTES



PROPOSALS FOR MAIN ACTIVITIES

Continue constructing the invention model

Prepare and practise presentation for the class/large assembly: Explain the presentation rules: 1. Everyone in the group must be active and talk.

2. Remember to include the most important things about the invention:

- What is the name of the invention?
- What will it be used for?
- How does it work?
- What energy source does it use?

3. The presentation cannot last longer than 2 minutes.

Day 4: Start with the groups presenting their inventions to another group, and give each other feedback. The groups are then given time to work on the feedback.

Wallace and Gromit – Snoozatron/Tellyscope: https://www.youtube.com/watch?v=vGxRUgIFFME (1)

https://www.youtube.com/watch?v=Xc5eqwzEgUo (2)

Donald Duck and the Caravan: https://www.youtube.com/watch?v=RxPIY3a7dMU (3)

youtube.com (1)

youtube.com (2)

youtube.com (3)







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