

The Climate Case



1. The foundation

We are in the midst of a **climate crisis**. This is indicated by high atmospheric carbon dioxide levels, temperature increases and rising sea levels.

The climate crisis is a global issue that requires **global collaboration**. However, facts such as (1) natural resources being subtractable but non-excludable, (2) emitters of greenhouse gases often not paying the true cost in the short run and (3) actors 'free-riding' on others' climate efforts, show that global partnership around climate issues is associated with significant collaboration dilemmas.¹



Since the future state of our planet depends on actions taken today, the climate issue engages many young people. However, in high school **education** students mainly learn about what the climate crisis is, not what is being done to solve it and by whom. In other words, students learn more about *knowing* than *doing*.

The foundation of the Climate Case was formed in the intersection of the **climate crisis**, **global collaboration** and **education**.

2. The solution

We have created the Climate Case – a fun, interactive and educational climate role-playing game aimed at Swedish high school students. The students participate in national and international negotiations, representing different actors and countries. By encouraging participants to take others' perspectives and try to understand the dynamics between actors, countries and climate policies, the game enhances students' system thinking abilities².

Each step of the game has its specific aim in accordance with the foundation described above.

- 1. National negotiations**, in which students represent political parties, industries and NGOs, address the question of who is responsible for solving the climate crisis.
- 2. International negotiations** show the importance of, and the complexity with, global collaboration.
- 3. Using the En-ROADS simulator**,³ developed by Climate Interactive, MIT Sloan and Ventana Systems, the students see the effect of their negotiated climate agreement on global warming, thereby encouraging them to reflect on actions needed to reach long-term temperature goals.

The Climate Case is distributed to teachers as a package consisting of 25 role cards, teacher instructions and presentation material. No preparation is needed; it is ready to use.

3. The process

3.1. Ideation

Based on knowledge previously gained in Economics and the Global Challenges courses at SSE, we identified a common interest to understand collaboration around climate change. Following that, we targeted three SDGs: education, climate action and global partnership.

3.3. Data research

In order to develop a game highlighting complex topics, we needed to understand the dynamics of international climate negotiations. Hence, we conducted research about climate conferences, the climate crisis and countries' views on climate policies.

3.5. More stakeholder contact

Continuous contact with stakeholders has been an important source of knowledge. Teachers, students, Skolverket and a graphic designer have helped us to gain new perspectives.

3.7. Pilot project

To test what we had been working on in practice, we conducted a pilot study. We arranged a virtual climate role play over Zoom with 24 second-year high school students from Jensen gymnasium Södra.

3.9. Distribution

Using a direct distribution approach, we contacted high school teachers to ask for their interest. The distribution has started and is an ongoing activity.

3.2. Stakeholder contact

Early on, we contacted teachers and principals at high schools and understood that there was a demand for this type of game. These contacts have enabled us to make sure that the game is developed for the schools, not just to them.

3.4. Deciding the outline

Based on stakeholder contact and research, we decided on the core principles we would keep in mind – to make the game fun, interactive and educational. These core principles have guided our decisions regarding the outline of the game.

3.6. Creating the material

We sorted the information we had gathered into 25 role cards. The game material was then created and designed, continuously keeping the core principles in mind.

3.8. Evaluation and version II

Based on feedback and learnings from the pilot project, we revised some parts of the game and wrote the teacher instructions. At this point, the current version of the game was completed.



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4. The results

Achieved impact

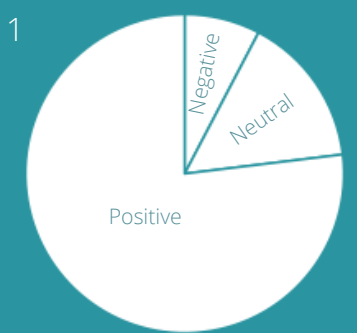
- We conducted a virtual climate role play with 24 students from Jensen gymnasium Södra. The survey sent out afterwards showed that 80% of the participants had a positive experience (figure 1).
- After the pilot study, some revisions were made. The final version, consisting of 25 role cards and teachers instructions, has been developed.
- The game has been distributed to interested teachers. So far, the game has the potential to reach over 1600 students the upcoming academic year.

1600 ↑

Expected impact

- As we continue to contact teachers, we have the potential to reach even more students in the near future.
- We have a meeting scheduled with an external organization that could be interested in carrying our project forward.

Figure 1



5. SDGs



Integrating sustainability and the focus on *doing* into high school education.



Creating a game focusing on climate topics such as energy sources, transports and population growth. Also addressing possible financing solutions to developing countries.



Highlighting the importance of, and the complexity with, global collaboration.

6. Lessons



TO LISTEN

... in a dual sense: in the process since we have gained new insights from each other and from stakeholders, as well as in the game as listing is a critical part of effective collaboration and coordination of perspectives.

TO ADJUST

Zooming out, these unprecedented times due to covid-19 have made us realize the importance of adjustment and continuous improvement. In the face of uncertainties, one must monitor, adapt and improve rather than have a fixed mindset.⁴

TO SIMPLIFY THE COMPLEX

Climate negotiations and collaboration are complex phenomena. However, provided the format of the game, these concepts need to be delivered in a condensed form. The process of simplifying the complex has taught us how to research and synthesize huge amounts of information; a relevant skill in today's information society.

7. References

- [1]: Goolsbee, Austan, Levitt, Steven D. & Syverson, Chad (2016). *Microeconomics*. Second edition. New York: Macmillan education.
- [2]: Kegan, Robert (1994). *In over our heads: the mental demands of modern life*. Cambridge, Mass: Harvard University Press
- [3]: Climate Interactive. *En-ROADS*. <http://en-roads.climateinteractive.org> (2020-05-07)
- [4]: Dweck, Carol S. (2006). *Mindset: the new psychology of success*. First edition. New York: Random House
- These are the references used for the poster itself. As the project relies on much research, the complete reference list is included in the game's teacher instructions. Contact us if you want to know more.



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