



Supplement of

Seeds of transformative learning and its pedagogical implications on a conference-based university course in environmental and geosciences

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Supplement

S1 Course description (given to the students)

The Arctic is experiencing accelerated changes. The economic and sociopolitical relevance of the Arctic is expected to become more important soon as climate change makes natural resources and transport routes more accessible. While these changes will create economic opportunities, they also pose threats to fragile ecosystems and societies. The extent and the thickness of sea ice in the Arctic have decreased dramatically in the last decades, especially during the summer months. Sea ice melting facilitates natural resource exploration in the high north, which is estimated to host 13% of the world's undiscovered oil and 30% of undiscovered natural gas reserves. Moreover, the retreating and thinning of the ice opens new trade routes.

In this course students will participate in an international meeting, the Arctic Circle Assembly (<http://www.arcticcircle.org/>), that takes place annually in October in Harpa, Reykjavik. During the meeting students are required to attend at least three sessions on topics of their choice and will write a report after the meeting. In addition, students will attend two classes, one shortly before and one after the assembly.

Description of assessment: Evaluation will be based on written reports (three assignments) in which the students summarise and discuss one of the topics presented at one of the three sessions attended, reflect on their participation in the assembly and develop their networking skills. Students must send in their reports no later than four weeks after the Arctic Circle Assembly.

S2 Assignments

S2.1 Reflection on Arctic Circle (10% of final grade)

You will have to provide a short reflection on your participation in the Arctic Circle Assembly 2023. Please comment on one or several of the following questions:

- what have you learned by attending the Arctic Circle Assembly?
- had you attended this type of events before?
- what did you like best/worst of the event?
- did you find it challenging to interact with other assembly participants?
- did the assembly provide you a broader understanding of current issues in the Arctic?

S2.2 Networking exercise (20% of final grade)

Conferences are important, not only because of the transfer of knowledge, but also because of networking opportunities. One of your assignments during the Arctic Circle Assembly 2023 will be to mingle during the coffee breaks and to meet some new people. For this assignment, you will have to talk to at least two people (including if possible one speaker at

the conference). You will have to introduce yourself, and ask them the following questions (or something along these lines):

- 1) What is their name and where do they come from?
- 2) Did they give an oral presentation at the conference?
- 3) Is this their first time attending the Arctic Circle Assembly?
- 4) How does their work or daily life relate to the Arctic?

S2.3 Report of session (70% of final grade)

During the Arctic Circle Assembly you will have to attend three sessions (including one plenary session). You will have to choose one of the sessions as the topic to write a short report. You can choose if you want to focus your report on the specific topic discussed during the session, or some issue related to the session's topic that was brought up during the discussions in the session.

The report should be 1,500-2,000 words long (without the list of references). You will have to use relevant references where needed to support your statements. Please, include all references cited in the text in a list of references at the end of the document (this list of references does not count towards the word limit); if you have any questions about the use of references, please ask Isabel. You will have to include at least three relevant references related to the topic presented. Please try as much as possible to use sound scientific evidence to support your statements and try to use scientific articles as references.

Please organise the text in a clear, structured way, starting with a short introduction that presents the topic, then going more into details and finally coming up with some conclusions. Keep in mind that this is an academic text, so you should avoid subjective references or personal opinions (as opposed to the reflection exercise, in which we are specifically asking you for your opinion). The idea with this exercise is that you explore a bit more one of the topics presented in the sessions. You will have to read at least three other papers related to the topic (those you will cite in your reference list). This exercise will provide good practice for your reading and writing skills.

S3 Interview questions

S3.1 Interviews ad-hoc at the event (conducted by three different interviewers)

Warm-up

- What have you been doing, what are you planning to do/participate in?
- Did you find this event to be interesting? What in it? What is most interesting?

Knowledge & Expertise

The aim is to find out 1) what the student's perception of their expertise is and how it is related to the assembly, 2) if they potentially feel connected to the assembly that way and 3) if they are motivated to be part of the groups of experts that are present at the event, and 4) how do they personally relate to the Arctic area.

- What are you studying (in EnCHiL or in landscape restoration)?
- Do you have any plans after graduating?
- How familiar are you with the themes of this event? Are you studying these themes?
- What is your expertise? Is it represented in this event?
- Are the themes of the event part of your career plans?
- Are you from the Nordics/Arctic? What's your relation to the area?

Social interaction

Aim is to find out 1) who the student has interacted with 2) who they would like to interact with and 3) how "socially orientated" they are towards the assembly.

- Have you talked with people here?
- Are you going around alone or in groups? Are you looking to network with people?
- Who are you planning to talk to for your exercise? Why?

Learning

- Do you feel like you are learning here? What?

Belonging

Aim is to find out 1) do the students feel welcome and comfortable in the course or at the Assembly, 2) what are the groups that they associate themselves with (with using the information gained in the previous parts of the interview, 3) where the students potentially feel like belonging to.

- Did you feel welcome to the course? What created it?
- Did you feel welcome at the Assembly? What created it?
- What group do you belong to at this event?
- Do you feel like a part of the expert community here? Do you see yourself part of that in the future?
- Do you feel like a part of the student group here?
- Do you feel like a part of the.... whichever group has come up in the discussion.
- Do you feel like you belong here? What is 'here' and how do you feel to be a part of it?
- Do you feel like an outsider here? Why?

S3.2 Post-interviews (conducted by one interviewer)

What did you learn?

- Change in existing knowledge
- Various things such as skills, knowledge, about the world, about arctic...

Did something transform?

- Knowing differently now
 - o How did it change how you understand the themes or how you feel, think or behave?
- Relating to themes/concepts/people differently
 - o Perceiving your own role or responsibility differently?
 - o Sense of own expertise—Feeling more like an expert now?
- Intention to seek for transformation?

How do you see your sense of belonging to connect to the transformative learning/experience during the course?

- How did your sense of belonging change during the experience?
- A connection between your (transformative) learning and sense of belonging
- Did it enable or reversely-enable?