



SUSTAINABILITY EDUCATION

Teaching & learning in the face of wicked socio-ecological problems

INTERNATIONAL THEMATIC NETWORK MEETING 27-29 NOVEMBER 2019 | COPENHAGEN, DENMARK 'CO-CREATING BETTER SUSTAINABILITY EDUCATION AT THE UNIVERSITY'

The central theme of this international SEDwise meeting is “Co-creating better sustainability education at the university”. The meeting consists of interactive workshops focusing on the following topics: How can we design tools and activities that facilitate better sustainability education? How could our complementary research expertise be translated into (online) courses, podcasts, didactic materials, etc.? How to design these in such a way that it fosters co-creation in collaboration with practitioners – instead of putting ourselves in the position of expert instructors? What are the best ways to disseminate such tools and activities? How can we collaborate on developing the much-needed empirical knowledge base on teaching and learning in the face of wicked socio-ecological problems? Which opportunities are offered by on-going research projects? How to do this in the spirit of SEDwise as discussed during earlier meetings (i.e. with ESE research as a critical friend, moving beyond consultancy and knowledge transmission towards co-creating teaching and learning practices as a learning network)?

PARTICIPANTS

Thomas Block (Ghent University, Belgium) – Ellen Vandenplas (Ghent University, Belgium) – Jeppe Læssøe (Aarhus University, Denmark) – Nanna Jordt Jørgensen (Copenhagen University College, Denmark) – Leif Östman (Uppsala University, Sweden) – Maarten Deleye (Uppsala University, Sweden) – Pernilla Andersson (Stockholm University, Sweden) – Ingrid Schudel (Rhodes University, South-Africa) – Johan Öhman (Örebro University, Sweden) – Johanna Lönngren (Umeå University, Sweden) – Jonas Andreasen Lysgaard (Aarhus University, Denmark, *host*) – Katrien Van Poeck (Ghent University, Department of Political Sciences, *chair*).

WEDNESDAY 27TH NOVEMBER 2019

Visit Copenhagen University: Integrating sustainability in the university

We started this network meeting with a visit to the University of Copenhagen, where we had a talk with Kristian Lautu, associate dean of education for the Faculty of Law and member of the steering board for the [Sustainability Science Centre](#) (SSC).



Kristian talked about the sustainability strategy of Copenhagen University which focuses on greening the campus, education and research. The Sustainability Science Centre is built on a [system-based research](#) approach and the researchers involved investigate urban systems, energy and transport systems, governance and

social systems, food systems, the Earth system and the Arctic systems. The centre organises diverse [activities](#) such as [lecture series](#), [MOOCs](#) and [interdisciplinary student workshops](#). They also made a [mapping of sustainability-related courses](#) according to the Sustainable Development Goals (SDGs).

Kristian's presentation was followed by a discussion during which we addressed several interesting questions and topics. For instance:

- ***What do the SDGs have to offer in view of integrating sustainability in the university?***

For Kristian, a first major advantage of working with the SDGs is authenticity. Working with the SDGs means framing the world through authentic problems and engaging the students in trying to solve challenges, threats to humanity. In the Law programme, for instance, this involves developing legal solutions. Working with these authentic problems exposes the students to the messiness of the world. This brings us to a second advantage: inter-disciplinarity. When addressing sustainability issues, it becomes apparent that this cannot be done adequately from a mono-disciplinary perspective: The world is not disciplined. Furthermore, the SDGs provide us with a sort of infrastructure to make courses interlink, to find new connections, etc. It also makes it possible to highlight potential levers and drivers. These can be found at four different dimensions: Behaviour, governance, technology and economy. So, SSC has consciously chosen not to focus on the single SDGs but on the hindrances and potential drivers of change.

- ***What are the barriers that have been encountered through the attempts to integrate sustainability in the university?***

It looks like the opportunities involved in working with sustainability issues can all the same function as barriers. Working across institutions or faculties, for instance, is not easy as it involves dealing with different funding, different languages, different methodologies, etc. The question what constitutes a relevant research question, for example, does not have a self-evident answer. Another barrier is the many competing agendas. We have to address sustainability but also, for instance, issues like digitalisation. This sometimes results in a sort of fatigue to address 'yet another topic'.

- ***How to address the educational challenges involved in sustainable development teaching?***

As yet, Copenhagen University does not offer specific sustainability teaching courses. A couple years ago, however, courses were organised about 'flipped classroom' and that is also very suited for sustainability teaching.

- ***Is integrating sustainability in the university a matter of bottom-up initiatives or rather top-down steering?***

In Copenhagen University, it is mainly a bottom-up process. There will be little or no steering from the university top. One could see it as an 'alliance of the willing'. The Sustainability Science Centre, for

instance, aims to provide infrastructure and sees itself as a facilitator, a spider in the web rather than a centre that conducts its own research. It has a steering committee with representatives of each faculty as well as the Green Campus and limited, mainly administrative [staff](#).

- ***Is the climate movement affecting how sustainability is integrated in the university?***

In Denmark, the student movement on climate change has created huge momentum. It is a small-scale revolution developing at a fast pace and bringing about a multitude of student initiatives, additional funding, etc. We should use this process as a living lab and learn from it.

- ***Are there any frontrunners when it comes to integrating sustainability in the curriculum of education programmes?***

A lot happens of course in programmes that are since long more focused on sustainability issues, such as food security, forestry, etc. There are now also some specific sustainability-focused master programmes. An example of a programme where sustainability became strongly integrated, is the political science programme.

Introduction into the central theme of this SEDwise meeting



After this interesting visit, Katrien Van Poeck gave a [presentation](#) about the central theme of this SEDwise meeting: *'Co-creating better sustainability education at the university'*. As there are some new participants that did not attend the earlier meetings, she started with a **brief historical overview**. The International Thematic Network SEDwise was established in 2016 with the aim to foster fruitful interactions between theory and practice regarding teaching and learning in the face of wicked sustainability issues. By bringing together UGent teachers who are strongly engaged in integrating sustainability in their education activities with a selected group of international sustainability education researchers, Ghent University serves as a 'living lab' for innovative experiments with sustainability education in varied curricula and courses. More information regarding past activities as well as the reports of earlier international meetings can be found on the [SEDwise website](#).

So, when we address the topic of **'co-creating better sustainability education at the university'** during this meeting, we do so **'in a SEDwise spirit'**, i.e. as 'critical friends' that engage in 'living labs'. The choice of the topic for this meeting, has been made in line with this spirit and also in response to some comments and observations made during earlier meetings:

- **'There is a need for in-service training** for university educators on teaching about wicked sustainability issues to which SEDwise could contribute. The available and developed insights, expertise, experiences... can also be shared with practitioners outside UGent.'

- ‘Often, researchers and educators in different settings (places, disciplines...) spend a lot of time and energy on **reinventing the wheel**. This network can be a fruitful vehicle to avoid that and to learn from each other, inspire each other’s practices, share experiences and expertise, etc.’
- ‘To make the interaction of research and education really interesting, we have to **move beyond a knowledge transmission approach**. It is an illusion that “best practices” can be transferred/copied to other contexts. Let’s jointly engage in both sustainability education theory and practice, and try to learn collectively from that.’



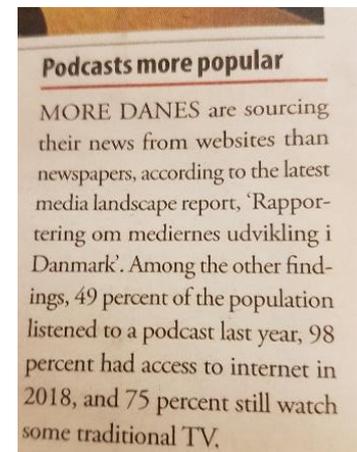
During earlier meetings, we raised a lot of ideas, plans and dreams. Some of them have been put into practice in the meantime whereas others are still challenges to be tackled in the future. For example, we found it important to obtain additional **resources for empirical research on sustainability in higher education** in order to fully exploit SEDwise’s potential as a living lab. Our efforts to develop joint research applications and collaborations have now resulted in several projects that make this possible: Maarten Deleye’s doctoral research on ‘Mapping the role of the university in relation to sustainability issues’, a project on ‘[Climate change in higher education](#)’ consisting of a survey and 15 case studies funded by the Flemish government, a Formas-funded project on ‘[Open schooling for sustainable cities and communities](#)’ which entails 2 case studies in university education and Katrien Van Poeck’s Marie Skłodowska-Curie Fellowship on ‘University education as a driver for sustainability transitions’ which also involves 3 case studies. We also wanted to develop in-service training, start up a learning network for educators, collaborate on creating courses for (university) teachers, develop a good website, etc. A **learning network** for UGent teachers on ‘sustainability in your course’ has been established and already reached about 80 participants. We organised **workshops and trainings** for (university) teachers, for instance on [engineering education](#), [business and economics education](#), [ethical and political challenges involved in sustainability teaching](#), etc., not only within Ghent university but also internationally (e.g. in [Ecuador](#) and [Mongolia](#)). Building on the experiences with and lessons learned from these mainly ad hoc initiatives, **the challenge remaining is to find a more systematic way to collaborate on outreach and dissemination.**

Hence, the main question to be addressed during this meeting is **how to collaborate on tools and activities to realise our shared ambitions** in this respect. Synergies can be found in relation to the above mentioned learning network, some deliverables in the Marie Skłodowska-Curie Fellowship (e.g. online database with quality assured university education practices, self-assessment manual for university teachers, international

conference) and an existing database for quality assured lesson plans '[Acedu](#)'. Throughout the meeting, we make a **podcast**, explore possibilities and develop ideas for collaborating on tools and activities aimed at co-creating better sustainability education with university teachers through **lesson design workshops** and **sharing lesson plans**.

We ended this first day of the meeting by discussing the podcast that would be made the day after. We decided to experiment with creating **a series of 3 podcasts on the topic 'Integrating sustainability in the university'**: 1) How to integrate sustainability at an institutional level and how to make sure that it moves beyond 'greening the campus' and also involves curriculum; 2) How to support university teachers to integrate sustainability in their courses and 3) Why integrating sustainability in the university. And the Danish newspaper that we found in the hotel later that day showed that focusing on making podcasts was a clever choice ☺

THURSDAY 28TH NOVEMBER 2019



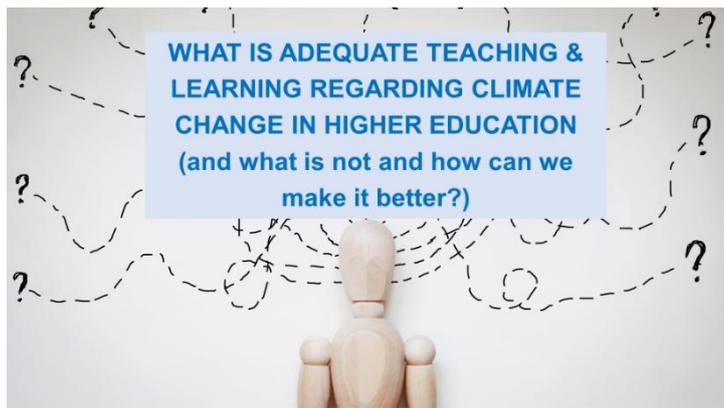
Workshop: Using case studies for co-creating better sustainability education

During this workshop, Ellen Vandenplas presented some **empirical examples from observations in the project 'Climate change in higher education'**. The aim is to explore possibilities to collaborate on empirical research as well as on research-based capacity building. Hence, two questions that are in focus throughout the workshop, are: 1) How can we collaborate on research (on climate change education)?, and 2) How can we collaborate on fostering the co-creation of better sustainability learning and teaching practices?

Ellen starts by explaining the aims and design of this research project. We did a **survey** with 121 university teachers that teach about climate change. The results thereof will be shared as soon as the Flemish government. Currently, we are conducting **15 case studies**. We collect data through interviews, analysis of documents, questionnaires for students and classroom observations. The research questions that guide the case studies are:

- 1. What are adequate teaching and learning practices on the issue of climate change?**
 - What do the students learn?
 - How is the issue of climate change addressed in the teaching content? How does this relate to the learning outcomes?
 - What is the influence of the pedagogical didactical approach of teachers on the learning outcomes?
 - How do teaching methods influence learning outcomes?
 - How does the curriculum affect the learning outcomes, teaching content, teaching methods and pedagogical didactical approach?
- 2. What are vital conditions for adequately addressing climate change in higher education?**
 - What are the advantages and disadvantages of diverse pedagogical didactical approaches?
 - What are adequate teaching methods, teaching content, teacher interventions and curriculum characteristics?

An important aspect of the project, is **capacity building** on climate education for teachers in higher education. Therefore, we will organise 3 **design workshops** with teachers involved in the case studies and develop an **inspiration guide** for teachers. The latter will be developed in collaboration with end users and is not considered to be a final product but rather a basis for further capacity building in the future, through co-creation and peer-to-peer learning.



During the discussion, we formulated the following possibilities, suggestions and important principles for collaborating on research-based capacity-building:

- It is important to make explicit what we mean by **'adequate' teaching and learning practices** and also to have a broad understanding of it. Education quality is often perceived in terms of effectiveness and efficiency, but it also entails aspects such as relevance, responsivity and reflexivity as elaborated in [this article](#).
- In dialogues with teachers, what we can offer from a research perspective is to **show the consequences of actions in educational practices**. This can stimulate teachers to see their own practice from another perspective, illuminate things that they had not considered before, foster reflection and help them to think for themselves whether the consequences of teaching practices are in line with their intentions.
- It is important to **ground our capacity building work in the teachers' intentions**. The starting point should always be to ask which purposes they are striving for. In that way, we can stimulate teachers to be analytical with respect to their own practice and collaborate on genuine co-creation. It is vital to engage the teachers in defining what is the problem they want to solve.
- Also **'bad practices'** are important and an important source for learning and capacity building. Particularly important, here, is to address the question why bad practices remain.
- It is important to pay attention to the interplay between **several dimensions of teaching and learning**: the interpersonal (e.g. interactions between students or between the teacher and the students), the intrapersonal (e.g. students' earlier acquired knowledge, skills, values...) and the institutional (e.g. traditions, discourses...).
- An important topic of attention is how to deal, in a respectful way, with the **vulnerability of teachers** that allow us into their classrooms. It seems important to provide separate feedback for each of the investigated cases. Can all feedback be made public? Or should we also create space and time for private feedback?
- The **transcripts of observations are useful** in two ways. **Analytically** they can be used for comparison across cases, e.g. different ways of organising classroom discussions, different pace or teaching activities (slow-fast), different ways of dealing with emotions. **Didactically** they can serve as a source of inspiration for teachers.
- **Design workshops can be a very valuable ingredient for empirical studies**. Again, this can be done in two ways: either by starting in the teachers' question or by presenting the consequences of certain education practices ourselves.
- The **learning network** can be a very valuable setting for interactive research. This is an intensive way of working with a limited number of people involved. Therefore it is important to **complement it with an**

inspiration guide in order to make the co-created insights and practices useable for a large number of teachers.

- It is interesting to collaborate with teachers on inspiration guides. See for instance this [example on Teaching for sustainable development on ethical global issues](#).



Podcast workshop

Christian Hansen, who works at the library of Aarhus University, was a very welcome guest during our meeting. He introduced us in the craft of making podcasts. After a [presentation](#) about **tips and tricks**, we divided ourselves in three groups and had a short **brainstorm** about possible content for three podcasts on the topic 'Integrating sustainability in the university'. Despite the very limited preparation time and some stress and stage fright, the **recording** of the podcasts went surprisingly well. The results are published on [Soundcloud](#):

- [#1](#) Integrating sustainability in higher education
- [#2](#) Supporting teachers in their work with sustainability
- [#3](#) Why integrate sustainability into higher education?

Invitational seminar on environmental education research

At the latest invitational seminar in Stellenbosch it has been decided that the next, 15th edition would take place in Ghent and that the SEDwise network offers an interesting setting to give shape to this event. During this session we discussed how to do this.

We started the discussion with **the question whether and, if so, in what form the invitational seminar can still be relevant in the field of environmental education research**. After all, the field has evolved considerably since the start of the invitational seminar. For instance, it does no longer consist of only a handful of researchers spread around the world and there are in the meantime also other networks that fulfil similar needs. Everyone tells about her/his own experiences with the event. Some have never been invited, and regret that. Those who did take part talked about it as a valuable experience that helped them in their research. We conclude that, indeed, the invitational seminar can still be very relevant and valuable but that some aspects need to be reconsidered in the light of the changes that our research field has undergone.

Aim and focus

- We find it important to adhere to the tradition of a seminar that was quite different from, for example, a conference where people present papers with research results. From the early days, the invitational seminars were rather **a space to raise questions you are struggling with, something you are puzzled about and not yet have explored fully**. The purpose has never been to present finished research results or to receive feedback/supervision on preliminary findings but rather to **enable discussions about issues of general relevance, preferably on the edge of – or even a bit outside – the existing frontiers of the research field**. In that sense, the seminar indeed offers an added value and fulfils a purpose that none of the existing conferences/networks has in focus. Perhaps as a kind of think tank within the field.
- This implies a certain **openness** for participants to come up with problems, struggles and ideas. However, we might also need some kind of **structure**, be it one that allows for open spaces. We aim for a fruitful combination of facilitated input and open (small group) discussions.
- We find it important to foster a **sustained attention for the educational dimension of environmental education research**. Exploring and crossing the borders with related fields is valuable, but our focus must be on challenges, tensions, prospects... for educational research in relation to environmental and sustainability issues.

Audience

- There is a consensus among the participants that **the invitational aspect of the seminar has become problematic** in the context of the contemporary research field. It installs a dynamic of inclusion and exclusion without clear criteria, which is by many people experienced as unfair. Furthermore, as the field has grown so strongly, inviting only researchers that we already know entails a big risk of missing out inspiring, innovative, thought provoking... contributions of potential participants that the organisers do not (yet) know.
- Considering this, we decide to open-up the invitational seminar by **inviting widely within the field**. Existing networks, mailing lists, etc. can be used for that as well as 'snowball-invitation'. Everyone who is interested, must be able to send in a proposal to participate in the seminar.
- On the other hand, we want to keep the group limited to **30-40 participants**. This is vital in view of the above described aim and focus and in order to safeguard the informal, safe and generous atmosphere that has characterised the invitational seminars so far. Therefore, the organisational committee will make a **selection based on the submitted proposals**. This still involves inclusion and exclusion, but after giving everyone the chance to apply and based on clear criteria, such as the extent to which the proposal is in line with the seminar's aims and focus.
- Many of us have appreciated the **dialogue between junior, mid-career and senior researchers** during earlier invitational seminars. This is something we want to preserve and that will also be taken into account in the selection of proposals.
- Besides these participants, we also want to invite **two 'external' guests** who come from outside the field of environmental education research but who can inspire, challenge and provoke our thinking. Names raised are Bruno Latour. Donna Haraway and Eugene Thacker.

Output

- Given the specific aim of the seminar, it does not really make sense to focus on developing (joint) publications. After all, what is central in the event are those **questions, struggles, ideas... that are somewhere in front of us and that we cannot yet write about.**
- On the other hand, it can also be valuable to **document** these questions, struggles and ideas as well as the evolving insights that emerge during the seminar. Perhaps **podcasts** could be a proper way to do that? Another possibility could be a **book** with, for instance, one page essays that the participants submitted when applying for the seminar.
- Should we consider to come up with a **common output in terms of an agenda or challenges for future environmental education research?** The answer to this questions remained a bit open during our discussion.

Practical organisation

- **Timing** is an issue. The initial plan (autumn 2019) has proven to be infeasible. After a long discussion, we came to the conclusion that planning the event in the week before or after ECER actually causes more problems than it solves. For some people, it may be easier to travel if they can combine two events. Many others, however, do not have the opportunity to be away for a longer period of time, both due to family and professional reasons. Considering that the SEDwise funding is only guaranteed until the end of 2020, the seminar should take place next autumn. **November 2020** seems to be the best option.
- In order to increase the opportunities for people to participate, we will:
 - explore possibilities to acquire additional funding so that we can keep the registration cost low;
 - explore possibilities for (partially) reimbursing travel costs for participants from low GDP countries;
 - make ‘acceptance letters’ like they do with mainstream conferences so that participants can use these in order to receive travel funding within their institutions.
- The **venue** of the seminar is important in view of the open, informal, focused... atmosphere we want to create. Although Ghent is a beautiful city, we also see the value of taking the participants out of the city centre and gather them in a more ‘remote’ place.

Organisation committee

- We will install an organisation committee consisting of **SEDwise members** and representing the **variety** of the envisioned participants (e.g. PhD students, mid-career and senior researchers, gender balanced).
- This committee will prepare and distribute the **invitation/call** (incl. **selection criteria**) and make the **selection** of participants.

FRIDAY 29TH NOVEMBER 2019

Workshop: Designing and sharing lesson plans for university education about sustainability issues

Through concrete examples coming from the **university-wide elective course ‘Sustainability Thinking’** at Ghent University we explored possibilities for collaboration on designing and sharing lesson plans. In this workshop, we aimed to try out and further develop **possibilities for enabling the co-creation of better sustainability education at the university** by bringing together teachers and researchers.

In preparation of this SEDwise meeting, all the participants received the **student assignments ('protocols')** that are used in this course:

1. Discourse analysis
2. Development of explorative scenarios
3. Student-led education
4. Experiential learning and reflecting on breaking routines
5. Analysis with the Multi-Level Perspective (MLP)
6. Strategic Niche Management (SNM)



Thomas Block, lecturer-in-charge of the course, starts the workshop by [presenting](#) the **context of the course**. In 2014, we developed the new university-wide elective course at Ghent University 'Sustainability Thinking' (3 credits). In this course, we confront students with different perspectives on a sustainability issue and encourage them to explore the complexity, ambiguity and controversies this brings about - yet without falling into undue anything-goes-relativism. Students will experience that, in general, experts from the exact sciences use a framing that differs from that of social scientists, and that while the knowledge of academics, policy-makers, business leaders and representatives of NGOs is complementary, it often diverges. Some are predominantly concerned with ecological limits, while others prioritise poverty and social exclusion. Sometimes, global perspectives prevail over local ones; other times, it is the other way round, etc. This course aims to familiarise students with the multi- and transdisciplinary character of topical sustainability problems and with multi-perspectivism, and as such, to lay bare the politics of these issues. The course starts with several introductory lessons that focus on (1) the basic concepts concerning sustainability, (2) a short historical outline and the most important perspectives on sustainability (e.g. Brundtland report, UN/Rio conferences, ecological modernization, limits to growth, factor four, ecological economics, environmental justice, degrowth, etc.), (3) the difference between multi-, inter- and transdisciplinary (incl. Mode 1 vs. Mode 2 Science), and (4) transition thinking and how the connection can be made with the ambition of realising sustainable development: What are transitions? How can structural, technological and cultural changes be understood? Can sustainability transition be influenced? Which perspectives and methods are proposed for that? To show how a sustainability topic can be approached in an inter- and multidisciplinary way (in which knowledge from different scientific disciplines is used), as well as a transdisciplinary way (in which not only academic knowledge, but also knowledge from e.g. policy, business and the NGO world is valued) the students

have to accomplish a written group assessment. The course is taken by 100 to 120 students and for this written assessment, they work in small groups of 6 to 8 students (so 12 to 15 groups in total). Using different research techniques and methods, they scrutinise a sustainable issue. Over the course of two or three interactive seminars, the tutors will explain each technique, e.g. discourse analysis, development of explorative scenarios, applying the multi-level perspective, 'student-led education', etc. A customised approach is foreseen as each group will use only one technique or method. After the seminars, all groups have to accomplish the group work independently and write a group paper (max. 6000 words). All groups focus on the same sustainability issue or topic, e.g. sustainable consumption, sustainable urban mobility, circular economy, the commons, etc. The issue/topic changes every year. It is possible that one or more (issue) experts (e.g. from a university, a company, an NGO, etc.) will be invited to contribute with a guest lecture. The final results of all groups are presented and discussed at an open/public conference. We have translated every research technique and method in a clear protocol that should help the students carry out the group work adequately. Of course, more detailed information and guidance is provided during the seminars. In this workshop, we discussed the specific assignments that were used in the academic year 2017-2018 (annual theme 'Sustainable mobility') and the academic year 2018-2019 (annual theme 'Circular economy').

During the discussion that followed, we addressed some **questions** that Thomas raised:

- **Do you have any suggestions on the techniques and protocols used?**
 - It would be interesting to create a larger course (more ECTS credits) and let the students work with more than 1 protocol.
 - The course now seems to be interdisciplinary within social sciences. Natural science perspectives seem to be a bit missing. In order to avoid that students stay within the comfort zone of their own disciplinary background, an idea could be to make all of them choose 2 methods: one with a social science/humanities approach and one with a natural science approach. Collaboration with invited lecturers from other disciplines may be necessary then.
 - Letting students conduct a discourse analysis seems to be very demanding. Thanks to the protocols and the intensive guidance (e.g. individual feedback moments for each group), however, they usually manage to deliver good work.
 - The topics seem to be very local. It would be good to also integrate a global perspective.
 - It could be interesting to work together with students and combine the inquiry processes/methods with letting them find their own literature on the topic.
- **Do you know other interesting techniques and protocols?**
 - It might be interesting to combine the current techniques also with Life Cycle Analysis (LCA), Cradle-to-Cradle, system analysis, etc.
 - The [work](#) of Louise Sund and Karen Pashby could also be useful to translate into a protocol.
 - Cultural analyses of consumer cultures regarding concrete products.
- **How to strengthen the integration of the perspectives and techniques of which each student will experience only one?**
 - At a meta-level, it would be interesting to focus on the students' experiences with working with the different techniques.
 - Instead of only asking the students to reflect on their own standpoints (e.g. the discourse or future scenario they prefer), it could be interesting to ask them also what would be the most relevant, desirable... from a sustainability perspective.

- **How to share protocols and lesson plans with other teachers (booklets, website)? What info is needed for other university teachers in order to enable them to get inspired by it, adapt it to their own teaching context and share their experiences with others?** (e.g. also adding the Powerpoints of the first workshop (one hour introduction of technique), the evaluation formats,...)
 - Although all the techniques are well explained, it remains difficult to understand without the face-to-face clarifications and answers to our questions that we got today. We should think about ways to make this possible when we share the lesson plans, e.g. with a discussion forum, FAQ, video introduction, podcast... In that sense, a website is much better/dynamic than a booklet.
 - Context information is very important: the university context, the people behind the course, the aims, the way the education system works, etc.
 - Another option may be to *decontextualize*, to make it more general: What is the idea behind this protocol, what can you do with it? Then, in a next step, different examples on how it can be concretised in varied ways can be presented.
 - Sharing such lesson plans can be interesting for several target audiences that each have their own needs, e.g. university management, education coordinators, other teachers. From a user perspective, we will need different ‘entrances’.
 - Organising design workshops to bring people together (in person) to discuss such lesson plans will definitely have added value and can be complementary to sharing it on, for example, an online platform. Participants can be asked to use the ideas, implement it into their own context and then share their experiences, learn from each other and make the results public for others to be inspired by it.
 - It would be good to send these protocols to different university teachers (e.g. colleagues within our own universities) and invite them to be our test audience. Is this information helpful for them? Do they lack information or guidance? Which questions remain unanswered? Etc.

The comment was made that the results of the student assignments would be very **valuable data for environmental and sustainability education research**. It would be good to be prepared for that, e.g. by getting informed consent to use them for research purposes. In addition, it would be interesting to do interviews or distribute a questionnaire with students immediately after the course and, for instance, 5 years later.

Prospects for the future

As usually, we end the meeting with an evaluation and discussion of prospects for the future of the SEDwise network.

The participants evaluated this meeting very positively. Particularly appreciated were:

- the good discussions, space for dialogue and informal contacts
- the combination of education practice and research – this meeting was very much in line with the SEDwise philosophy of co-creation, living labs and critical friends
- the opportunities to learn from each other’s struggles and from concrete examples
- the open and generous atmosphere
- the privilege to be part of such a network while doing PhD research
- the precious time to work together
- sharing the workload
- finding synergies and inspiration

- the good balance between concrete topics and more abstract discussions
- working closely, intensively with the materials we discussed
- the intergenerational dialogue

Plans and intentions for the future:

- trying to secure the SEDwise funding and, hence, time and resources for implementing all our ambitions (we agree on it that we need it now probably even more than when we started)
- making efforts to invite teachers from other universities that also teach about sustainability (e.g. CEMUS, colleagues in our own universities)
- exploring and disseminating even more examples
- securing a good balance between continuity and new input – e.g. establishing a core group and ad hoc working groups
- making more efforts to spread materials, expertise, etc. – apply together for ‘infrastructure’ funding
- developing the SEDwise webpage
- meeting in small, task oriented groups for instance for design workshops
- continuing to collaborate on applications for empirical research projects: there is very little didactic research on sustainability in higher education and this network has so much to offer in this respect
- perhaps exploring the idea of an international research school, common course
- returning to the Urban Academy that we discussed in Uppsala in 2017 and that now became a reality in Ghent (Michiel Dehaene is still interested in the SEDwise activities)
- collaborating on organising the 15th invitational seminar on environmental education research

