Liisi Pajula
University of Tartu, Estonia

Emanuele Bardone
University of Tartu, Estonia

Expanding Possible Futures
Using counterfactual possibilities to expand imagined futures

The realisation of the „grandest sociotechnical imaginary of our time" (Beck et al. 2021, 143) – sustainability – depends on the imagination and creation of a future radically different from the present. In order to achieve that, future first needs to be opened up: options now presented as unavoidable and their realisation "only a matter of time" need to be problematised and scrutinised. Next, imaginative work is vital to help create alternative visions of what's possible. In initial teacher training, counterfactual possibilities can provide prospective teachers with the tools to start examining what is considered a "given" about the future (of education) and possibly generate more radical desirable imaginaries of what is possible.

Futures literacy, imagination, counterfactual thinking

Topic: Exploring possible futures

WHAT is it about? WHO is it about?

The dominant imaginaries of the future are often presented as fixed and linear, only waiting to be realised (Death 2022). However, the changes advocated by scientists to move towards sustainability require a radically different way of doing things (Mukherji et al. 2023), thus pointing to the need to open up the future to alternatives. Sadly, many education systems still follow a paradigm rooted in industrialist, linear, and reductionist thinking (Courtney & Mann 2021; Sterling & Orr 2001), making them badly equipped to address the sustainability issues before us today. The belief that education can serve as an important driver towards giving rise to a more sustainable future from the unsustainable present is widespread among academics and policy-makers alike (Andersson 2017; Bianchi et al. 2022; Sterling & Orr 2001; Wiek & Redman 2022). Therefore, preparing *futures literate* teachers, who can imagine and work to fulfil alternative ways of learning and teaching, is an important step towards sustainability. Futures literacy includes situating teachers in their spatiotemporal context, building the capacity to view the future as a variety of alternatives open for creation and exploring how the present can give rise to desirable futures (Karlsen 2021). Or as Miller (2018) succinctly puts it, futures literacy is "the capability to 'use-the-future'" (2). Creating the shift to a more sustainable future also

requires imagining alternative futures radically different to the present – for example, to challenge capitalist realism as depicted by (Fisher 2009). Here, counterfactual possibilities, which are broadly construed as alternative representations to reality (Nyhout & Ganea 2019), might prove a useful tool to free the imagination and take first steps towards imagining desirable futures unshackled to the present (Van Hoeck et al. 2015).

Didactics

This learning scenario provides prospective teachers with the time and space to explore and imagine (alternative) futures. Such an approach makes use of active learning methods and allows for prospective teachers to construct their own understanding of the task. The learning scenario also focuses on group work and discussion, creating a non-hierarchical, collaborative learning environment vital for moving towards sustainability.

WHO is the target group? WHO are possible cooperation partners?

The learning scenario at hand is targeted to prospective teachers/teacher students of higher education institutions, or anyone interested in the possibility of exploring the future(s) of learning and teaching. The materials for the learning scenario can also be customised to explore the counterfactual possibilities of other fields.

WHY is this topic relevant to *CultureNature Literacy*? WHERE is it going?

Envisioning sustainable futures makes up an important set of competences in *GreenComp* (Bianchi, Pisiotis & Cabrera 2022), where "learners are advised to think of a wide range of possible future outcomes and envision alternative future scenarios for sustainability" (*ibid.,* 23). This forms an important aspect of furthering prospective teachers' Futures Literacy skills (CNL & Futures Literacy). The learning scenario at hand turns the focus to prospective teachers' capability of imagining and creating alternative, desirable futures. Counterfactual possibilities can serve to release students from visions of the future that are often presented as unavoidable, thus helping them to create imaginaries more radically different to the present. This, in turn, can serve as inspiration to widen the perceived possibilities for the future and to better analyse the *desirability* of the presented futures. Thus, the learning scenario helps learners to imagine different perspectives on the dynamic balance between culture and nature in the Anthropocene.

WHEN, in which period does this take place?

The learning scenario is designed to take place over a period of one or two 90-minute seminars in any university course (depending on how much of the proposed workshop is planned in contact lessons). While the focus is currently on imagining alternative futures for education, teaching, and learning, the content of the learning scenario can be adapted to address any field. (Teacher) Students need sufficient time to imagine and, in group, discuss the future(s) of education, learning, and teaching, so this learning scenario is better held in session.

HOW to proceed?

Step 1: Divide (teacher) students into groups of 3 or 4 and ask them to discuss and write down the main pillars/characteristics of the education system as they perceive it. Some possible questions for them to consider: Where does learning take place? What is the role of the teacher? What are students expected to learn? How is learning organised? How are students assessed? How is teachers' work assessed? What is the purpose of education?

Step 2: Hand the groups either one, a few, or a selection of the counterfactual possibilities (examples presented below); alternatively they can come up with their own examples. Based on the situation presented in the counterfactuals, have groups imagine how these would change or shift the education system.

Step 3: Have students work together to articulate possible scenarios based on the counterfactual they have chosen. Encourage them to use digital or physical materials to create a more fully rounded vision of their imaginary.

Step 4: The groups present their imaginaries to the class. Direct the discussion towards evaluating the imaginaries as to their desirability:

Is what has been presented an improvement over the present? In what sense? Is it a likely scenario? What should happen to move towards that future? How could the group or individuals attempt to influence the trajectory?

Is what has been presented worse than the present? In what sense? Is it a likely scenario? What should be done to avoid such a future? How could the group or individuals attempt to influence the trajectory?

WHAT is being worked with?

Study material created by authors. The following is a list of example counterfactuals that can be used in this learning scenario, but alternative "triggers" can also be used.

What if…

- … teachers were randomly assigned what to teach at the beginning of the school year?
- … schools did not have classrooms?
- … teachers could decide what to teach?
- … students were not grouped according to their age?
- … students could also be teachers?
- … students could decide what to learn?
- … education was purely experiential and didn't involve traditional classrooms or textbooks?
- … standardised testing was completely abolished?
- … the concept of grades and academic ranking didn't exist?
- … education was entirely decentralised?
- … education became a profit-driven industry?
- … certain subjects or topics were censored or banned from the curriculum?

… success in learning was not measured by academic results but how a person relates to social and natural environment?

… schools only focused on providing students with basic survival skills in nature?

… all educational activities were conducted fully online?

… all digital devices were abolished?

WHERE does the learning scenario take place?

This learning scenario requires group collaboration and discussion and is designed to happen in one session, so a collaborative space is required. It can be held either online or in-person.

Literature

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Quality criteria | SDGs

Sustainability: Learning to see the future as uncertain and probabilistic forms the basis for imagining and creating sustainable futures.

Inclusion: Recognising the uncertainty and possible alternatives of/for the future permits and encourages including alternative viewpoints and visions of desirable futures into the prevalent discourse. Focusing on adding alternative viewpoints of desirability in the creation of possible futures encourages a policy of inclusion.

Digitality: It is possible to conduct the learning scenario fully online, thus providing the option of including different and distant voices to the conversation.

Target group correspondence: The target group for the learning scenario is first and foremost prospective teachers who are encouraged to explore alternative visions of the future. The workshop can be customised to appeal to any field.

SDG: SDG 4, but as all of the SDGs require imagining and creating a future different from the present, the competence addressed by the learning scenario is best characterised as a meta-goal to help in realisation of the more concrete SDGs.

Authors

Liisi Pajula, MA
Liisi Pajula is a junior researcher and PhD student at the University of Tartu, focusing on sustainability education. Previous work and life experience in private language tutoring, entrepreneurship and in the legal field.

Contact: liisi.pajula@ut.ee

Emanuele Bardone, PhD
Emanuele Bardone is Programme Head for Educational Technology, associate professor and senior researcher. At the University of Tartu since 2015. Research topics include uncertainty, sociotechnical imaginaries, and the future.

Contact: Emanuele.bardone@ut.ee

Citation suggestion:

Pajula, Liisi; Bardone, Emanuele (2024): Expanding Possible Futures. Using counterfactual possibilities to expand imagined futures. In: *CultureNature Literacy für den Unterricht. Next-Practice-Beispiele für Schule und Hochschule*. https://cnl.ph-noe.ac.at/projektvorhaben/lernszenarien