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Examining the openness of the future

From the un-certain to the even less so

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, "the" 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. The first step towards this decolonisation of the future is recognising its unknowability and openness. Hence, this learning scenario guides students to examine what they do and do not (or cannot) know about the future.

Futures literacy, uncertainty, imagination

Topic: Discovering the uncertainty of the future

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. As such, there is a strong need to pivot education towards emphasising the agency and possibility for the next generation to create their own futures (Bianchi et al. 2022). To do that, students need to first be empowered to recognise the future as uncertain and subject to creation.







Didactics

This learning scenario provides students the possibility to map and explore their own imagined futures. Such an approach makes use of active learning methods and allows for learners to construct their own understanding of the task.

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

The aim and scope of the learning scenario is to give students the space to explore the unknowability of the future, thus providing the first step towards empowering them to create their own desirable futures.

The learning scenario at hand is targeted to students of higher education institutions or higher level high-school students with the capacity to draw inferences from existing data.

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 et al., 2022), where the need for students to acknowledge "that it is impossible to know what will happen" (*ibid.*, 23) is also highlighted. This forms the basis for furthering students' Futures Literacy skills (<u>CNL & Futures Literacy</u>). While recognising the future as uncertain is the aim of this learning scenario, this further builds to the wider goal of imagining and creating alternative, desirable futures to which imaginative work helped by literary and fictional materials is paramount.

WHEN, in which period does this take place?

The learning scenario is designed to take place over a period of either one or two 90-minute seminars in any university/high-school course. The students need sufficient time to explore their personal futures and draw inferences from the data to (hopefully) recognise the unknowability of the future. Thus, step 1 can be completed either in class (during a 90-minute seminar) or by students individually at home.

HOW to proceed?

Step 1: Provide students with the table presented below (see table 1). Instruct them to think about and write down what they do or do not know about their personal and professional futures. This step can be done during a contact lesson or by the students at home.

Step 2: Divide students into groups of 3 or 4 to share what they have written down. Direct students to look for any commonalities or similarities in what they have written down. What do they realise about the future? Have students draw inferences from the data they have provided about the future. Guide them towards recognising the future as substantially







unknown. Also, provide a safe space for students to recognise and work through their (potential) anxieties about the uncertain future.

Step 3: Have students share their discoveries in the bigger group. Direct their attention to commonalities, guide them towards recognising the future as uncertain and open to creation.

During the process, it is also important to align the content and form of the learning scenario: the learning scenario is created in a vague enough manner to provide space for a co-creation of the future by the teacher(s) and students. As such, it is important for the teacher(s) to avoid limiting the scope of possible futures the learning scenario might give rise to and embrace uncertainty. At the same time, the anxieties that might arise from facing uncertainty can be challenging for the learners to deal with, so providing a supporting environment to work through their emotions is paramount. Additional materials that may help students make sense of their emotions could be provided.

WHAT is being worked with?

Study material created by authors:

		Tomor- row/in the next week	In 3 months	Next year	In 5 years	In 10 years or more
What you know about	Yourself Your profes- sional life Your personal life Your social life					
What you don't know about	Yourself Professional life Personal life Social life					
What you hope for about	Yourself Professional life Personal life Social life					
	Yourself					







What you are afraid of	Professional life			
	Personal life			
	Social life			

Table 1. Guiding learners to consider the openness of future

WHERE does the learning scenario take place?

Step 1 of the learning scenario can be completed by the students either at home or in class. Step 2 requires a small group discussion and as such should be conducted by the students either face-to-face or online. It might be preferable for the students to choose the location according to their own needs. Step 3 requires a big group discussion, but this can also be held either online or face-to-face. As students are also asked to share their hopes and fears with the bigger group in this stage, the location should permit and encourage such sharing.

Literature

Beck, S., Jasanoff, S., Stirling, A., & Polzin, C. (2021). The governance of sociotechnical transformations to sustainability. Current Opinion in Environmental Sustainability, 49, 143-152. DOI: 10.1016/j.cosust.2021.04.010

Bianchi, G., Pisiotis, U. & Cabrera Giraldez, M. (2022). GreenComp - The European sustainability competence framework. Edited by Margherita Bacigalupo & Yves Punie. Publications Office of the European. DOI: 10.2760/13286

Courtney, S. J., & Mann, B. (2021). Thinking with 'lexical' features to reconceptualize the 'grammar' of schooling: Shifting the focus from school to society. Journal of Educational Change, 22(3), 401–421. DOI: 10.1007/s10833-020-09400-4

Death, C. (2022). Climate fiction, climate theory: Decolonising imaginations of global futures. Millennium, 50(2), 430-455.

Mukherji, A., Thorne, P., Cheung, W. W. L., Connors, S. L., Garschagen, M., Geden, O., Hayward, B., Simpson, N. P., Totin, E., Blok, K., Eriksen, S., Fischer, E., Garner, G., Guivarch, C., Haasnoot, M., Hermans, T., Ley, D., Lewis, J., Nicholls, Z., ... Yassaa, N. (2023). Synthesis Report of the IPCC Sixth Assessment Report (AR6).

Sterling, S., & Orr, D. (2001). Sustainable education: Re-visioning learning and change (Vol. 6). Green Books for the Schumacher Society Totnes.

Quality criteria | SDGs

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







Inclusion: Recognising the uncertainty of the future permits and encourages including alternative viewpoints and visions of desirable futures into the prevalent discourse.

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 best characterised as "next generations" or simply people interested in creating desirable futures.

SDG: SDG4, 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 metagoal to help in realisation of the more concrete SDGs.

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