LESSON 9 FUTURES LITERACY

MAIN SUBJECTS
Literature
Visual arts
Theater
Natural Sciences

DURATION
Preparation: 10 min
Activity: 2h

AGE GROUP
15+ year-old students

TEACHING METHOD
Storytelling exercise
Creative activity

LEARNING OUTCOMES
Students revisit the concept of scenarios they have encountered in previous lessons. They imagine stories of possible futures. They can translate their stories into art, an exhibition, a novel, etc. It is a good opportunity to project themselves into a positive world under climate stress.

TARGETED SUSTAINABILITY COMPETENCE
Domain 3 – Envisioning sustainable futures
Competency – 3.1 Futures literacy

CONCEPTS COVERED
Scenario, societal choices, climate projections, urban heat island effect, adaptation, mitigation

PREPARATION 10 MIN

- Computer and projector equipment to show the **WORKSHEET 9.1.**
- Print out **WORKSHEET 9.2** for each group of students.
- Visual arts materials (pens, paints, pencils, or computer equipment of your choice).
- Refer to **WORKSHEET 8.1** filled during the previous lesson.

INTRODUCTION 30 MIN

As an introduction, ask the students what the temperature will be in 2100. After what they have learned, they will probably answer that there are different possible projections, depending on the scenario decided on by society (lesson 7). The current path is as follows: current climate change is leading to a rise in global temperatures over the next few decades.

Present **WORKSHEET 9.1**, a sketch by students illustrating life in a city in 2042. Ask students to identify some of adaptation or mitigation choices that have been made in this city to combat climate change. You can remind them of the multimedia animation they used in lesson 8.
Expected answers: *'we can see environmentally-friendly mobility (no cars), lots of trees, urban farms, etc'*.

Ask students for some clues that the inhabitants are experiencing a heatwave.
Expected answers: *'The inhabitants are sweating, their faces are red'*. The students should imagine the lives of these climate-stressed inhabitants.

PROCEDURE 1H20

PART 1: INSPIRING BY AN ARTISTIC PRODUCTION 40 MIN

1. Hand out **WORKSHEET 9.2** and ask the students to read the testimonies of three residents. They will match each testimony to the corresponding resident in **WORKSHEET 9.1**.

2. Ask the students to imagine a new character living in this city. They should describe a day in his/her life, how he/she interacts with his environment and other people. They can invent caracteristics of the character (such as age, name and so on). You can work on your students' artistic skills (drawing), literary skills or theatrical skills (character interpretation). Whatever your or your students' choice, you can use the following grid to assess their work.

BACKGROUND FOR TEACHERS

FUTURE STORYTELLING EXERCISE TO OVERCOME ECOANXIETY

Numerous international studies show that eco-anxiety is increasingly affecting young people, as early as nursery school. This affect is linked to the anticipated rapid and dramatic changes in one's environment and catastrophic consequences of extreme events, often associated with a fear of the future. Considering this affective dimension is crucial for successful school education. The authors recommend that, to deal with eco-anxiety, educators themselves should be aware of their own emotions about climate change[1]. It is also important to remind students that all emotions, positive, negative or even neutral (indifference, weariness,...) are legitimate and deserve to be expressed. Creative projects (artistic ones, work on future narratives) thus have a rightful place in climate change education[2].

1 Source: 2012, Ojala, M. et al.
2 Source: 2019, Jorgenson Simon N. et al.

	TAKING INTO CONSIDERATION THE CLIMATE CONSTRAINT	FUTURES LITERACY EXERCISE IS POSITIVE	QUALITY AND CONSTRUCTION OF THE STUDENTS' PRODUCTION
Very inadequate	The characters don't live in a world that has changed.	The story is depressing and sad!	Off-topic production.
Inadequate	A few indicators point to a warmer world.	The characters manage to adapt to climate change, but in their own way (e.g. air conditioning).	Unfinished work but some elements are acceptable.
Acceptable	Several indicators point to a warmer world.	The characters interact with each others and have ideas and energy to fight climate change.	Inventive, structured work.
Very good	A world under climate stress is very well integrate.	The inhabitants are united, imaginative and have modified their city to drastically limit the consequences of climate change.	Highly mastered production.

Students imagine their future on the theme of 'Holidays in 2042', a futures literacy activity. What will holidays in 2042 look like under climate constraints? Here, students imagine different aspects of their life in 2042. (Productions: OCE in partnership with DSAA, or graphic design at Jacques Prévert High School in Boulogne Billancourt).

PART 2: STORYTELLING EXERCISE IN A CITY IN 2100 40 MIN

1. Retrieve **WORKSHEET 8.1** and ask the students to realise a new narrative (preferably on a different medium from part one). This time, they imagine a future in 2100 for one city they studied the last lesson:

- ~ Students work in pairs and write their story.
- ~ They tell the story of a typical day in their city (how they get around, what they eat, where they work, their connection to nature).
- ~ In pairs, they check whether SDGs and/or synergies are effectively included in the story.

2. To make the most of your pupils' work, encourage them to share their stories outside the classroom: blog, school newspaper, open days, etc.

WRAP-UP 10 MIN

Ask students to present their productions and let the class discuss the relevance of the different measures. Some difficulties may appear when trying to classify these measures as some may be relevant for adaptation but not for mitigation (air conditioning for example). Adaptation will benefit us in the short term, while mitigation will be fundamental in the long term. Both must be considered together.

Conclude by telling the students that there are solutions to the problems of climate change. This lesson shows that they can be implemented at different levels (individual, family, school, city).

To illustrate other levels (country, region, world), you may watch 'The United Nations Climate Change Conferences' CLIM video, by Sofia Palazzo (Imperial College London, United Kingdom). She explains that at COPs, the various governments agree on effective measures to combat climate change. Many people, communities and organizations around the world are already implementing adaptation and mitigation measures.

WATCH THE VIDEO ↗

The world is changing, but humanity has the capacity and ongoing potential to make societal choices to adapt to it. Envisioning alternative futures by imagining and developing positive scenarios is one way of overcoming eco-anxiety and empowering students.

LIVING IN THE CITY OF 2042, UNDER CLIMATE STRESS (STUDENT ART PRODUCTION)

Artistic production (risography) and texts are made by students: Julia and Alice, Master DSAA, High School Jacques Prévert, Boulogne Billancourt, France. © OCE.

WORKSHEET 9.2

TESTIMONY OF 3 INHABITANTS OF THIS CITY (ARTISTIC PRODUCTIONS BY STUDENTS)

Linda

I have just left our apartment three minutes ago. I'm on my way on my bicycle to meet my friends Akim, Sarah and Lucy in the park. However, my mother has just sent a message: she needs me to help her in our greenhouse. The zucchinis are ripe and need to be harvested. I quickly drive my bike to the greenhouse – which only takes 15 minutes on the brand new bicycle path; there's no traffic light to stop me. This year, I quit my annual bike rental subscription since I bought a bike at the flea market. It is still working perfectly well, after I changed the chain and mended the flat tyres. Today, I'll bring Akim a second-hand game boy that I have found in the 'give-away' box at the gym.

Enrique

I'm heading towards the community laundromat of our building. I haven't used an individual washing machine since I moved in in 2035. It's simple: we pay a small fee to compensate for the ecological footprint caused by running the washing machine. We can book slots in order to avoid queueing. I like to meet and chat with various people at the laundromat. I have a special deal with my neighbour Imany: I take care of her laundry, and in exchange I get some of her excellent home-grown tomatoes. Since drinking water is become more and more scarce, the washing machines use rain water that is collected in big barrels. And to flush the toilet, we use greywater.

Imany

I have been picking tomatoes in our vertical garden that is adjacent to our apartment. I'll give some of the tasty yellow cherry tomatoes to my friend Enrique who is doing my laundry today. I want to make ketchup with the ripest of my freshly harvested oxheart tomatoes. My friend Linda will come and help me. In our vertical farm, every party has its own little garden where they can grow vegetables and fruit. I always cook with very fresh ingredients thanks to the short distance between our garden and our kitchen. Besides, it's really nice to meet and chat with the other residents of our building while gardening. Often, we give each other tips on how to get rid of lice, for example, or we exchange our harvest surplus. The other day, I traded radishes against strawberries.