Sustainable Cities



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Introduction:

This lesson plan aims provide awareness about sustainable cities and foster discussion about sustainable practices that can be carried out in students' homes, towns and cities.

Objectives or Learning Outcomes

Students will be able to:

- conduct research about sustainable and unsustainable cities across the world.
- present their findings using audivisual tools.
- act as embassadors for Sustainable Development in their city.
- learn from examples around the globe and promote good practices within their community.

Time required:

- Session 1 (90 min): Introduction and research
- Session 2 (90 min): Presenting the app and starting the game
- Session 3 (90 min): Developing sustainable ideas within the game

Resources required:

• Laptops, projector, Minecraft (game), two youtube videos, Microsoft Forms, Mentimeter account and mobile phones.







Activity

Classroom session



- The teacher introduces the topic by showing a video of an unsustainable city.
- Students have to describe what they see and guess the main issue that is presented.
- The teacher asks students to compare the city in the video to the city/town they live in.
- Using Mentimeter, the teacher asks students to complete the following sentence: An ideal city should be/have
- The teacher shows a <u>video</u> with examples of sustainable cities and asks students to reflect upon the previous activity and their answers. Then, students conduct a short online research trying to identify sustainable practices in cities.

Classroom session



- The teacher asks students for the key elements they have collected and they build an infographic on Canva or Genially.
- The teacher asks students if they would like to draw a sustainable city with all the elements they gathered and where they could do it in a fun way. It is very likely that students will quickly get to the idea of Minecraft, as it is a very popular game among them.
- Teacher presents the game and explains how it works.
- Students start building their sustainable city on Minecraft in small groups.

Classroom session



- Students build their sustainable city and present it to the class and explain the sustainability practices in their city.
- Students vote for what they consider most sustainable through Mentimeter.
- The winner(s) will have the chance to present their project in a school event.

Evaluation and Assessment

The evaluation of the activity is done through Microsoft Forms. Students answer a simple and anonymous questionnaire to show their interest on the activity and the learning they have done.

Suggestions of variation or further reading of the lesson plan

Students can choose another game they know. They can conduct interviews in the community they live in to know what is are the existing issues and present their results publicly and on social media.

References

Sustainable and unsustainable cities:

https://youtu.be/tNqSIzGKLiU

https://youtu.be/JlyPkvN4Kpw

UN Sustainable cities:

https://www.unenvironment.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/sustainable-cities

UNDP SDG 11:

https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-11-sustainable-cities-and-communities.html

https://www.un.org/sustainabledevelopment/cities/

Eco-Schools SDGs publication:

https://static1.squarespace.com/static/552bcd30e4b02ed06b97c76d/

t/5beea4806d2a73433f390809/1542366371761/Eco-Schools+SDGs+Publication+-+FINAL +version.pdf

This lesson plan was selected from the <u>2020 Eco-Schools competition</u> in which teachers were invited to develop and submit lesson plans that promote action oriented pedagogy about specific Sustainable Development Goals (SDGs).