



Project number:

2021-1-IE01-KA220-SCH-000027825

Designing an educational activity for your class: the CLiC – Poli templates & approach

Age: Grade 3-9 (9-15 years old)

Topics: Light pollution, Biodiversity, Urban species, Monitoring, Impact, Project-based learning, Inquiry-based methods, Interactive tools, Critical thinking, Environmental awareness, Collaborative problem-solving

Resources: Dr. Loukas Katikas (EA)

Authors: Dr. Seda Özdemir-Fritz, Jenny Brüggler, Dr. Lothar Kurtze
(FTP-Europlanet)

Engaging in a project-based activity to understand and monitor the impact of light pollution on urban species, utilizing inquiry-based methods and interactive tools.

Template Outline

- Title & Duration
- Target group(grade), Description & Learning objectives
- Ideas to support school & out of school activities
- Green Competences Linked
- Educational approach & Links to school curricula
- Equipment, materials & tools
- Tasks & Timeline

CliC – PoLiT Lesson Plan template

| | |
|--|--|
| Module title (i.e. Light Pollution & Energy Efficiency or Light Pollution & Biodiversity) | |
| Topic title (i.e. Monitoring impact on urban species) | |
| Lesson Plan title (i.e. Green parks hunters) | |
| 1- Duration | <i>i.e. 45 minutes or 2 school hours (45 + 45 minutes)</i> |
| 2- Short Description of the Lesson | <i>Students will learn about...</i> |
| 3- Learning Goals | <i>This activity will help students to: i, ii, iii, v,</i> |
| 4- Green Competences Linked | <i>Linkages to the <u>Green Comp. Framework</u></i> |
| 5- Target Group | <i>9 – 12 or 12 – 15 years old (3 – 9 grades)</i> |
| 6- Educational Approach | <i>i.e. Inquiry – based, Project – based, Experiential learning etc.</i> |
| 7- Link to School Curricula | <i>i.e. Science, Math, Environment, Geography</i> |
| 8- Facility/ Equipment & Tools/ Materials | <i>i.e. Classroom, internet access, printables, presentation</i> |
| Main Tasks | |

Module Title, Topic Title, Lesson Plan Title: Different topics per module covering all aspects of Light Pollution.

1-2-3) Simple to complex activities, experiments, inside and outside of school activities.

4-5) ** Competence-based activities related to the green & sustainability skills per age group.

6-7-8) Educational approaches to be used, STEAM activities, materials and equipment needed.

**GREEN COMP

GreenComp: The European sustainability competence framework by JRC





12 competences organised into the four areas below:

- 1- Embodying sustainability values, including the competences**
 - valuing sustainability
 - supporting fairness
 - promoting nature
- 2- Embracing complexity in sustainability, including the competences**
 - systems thinking
 - critical thinking
 - problem framing
- 3- Envisioning sustainable futures, including the competences**
 - futures literacy
 - adaptability
 - exploratory thinking
- 4- Acting for sustainability, including the competences**
 - political agency
 - collective action
 - individual initiative



MAIN TASKS

Educational approaches to be used, STEAM activities, materials and equipment needed

| Module title (i.e. Light Pollution & Energy Efficiency or Light Pollution & Biodiversity) | |
|---|---|
| Topic title (i.e. Monitoring impact on urban species) | |
| Main Tasks | |
| 10 minutes | <p>Task 1: Introduction to light pollution</p> <p> 1.1 Start the lesson with the following video</p> |
| 15 minutes | <p>Task 2: Understanding light pollution</p> <p> 2.1 Provide your students with sticky-notes and ask them to provide answers</p> |
| 10 minutes | <p>Task 3: Light pollution monitoring and mapping</p> <p> 3.1 Using online tools to identify light pollution from space</p> |
| 25 minutes | <p>Task 4: Discuss with the students</p> <p> 4.1 Create a poster presenting the light pollution levels in...</p> |

- ❖ Note to Educators: This report offers teachers a structured guide to designing engaging lessons on topics like Light Pollution. By integrating hands-on activities, green competences, and a variety of educational approaches, this framework aims to empower students across different grade levels to develop sustainability skills, fostering a deeper understanding and appreciation for environmental issues.