LESSON PLAN

Greening Our City: Rethinking Urban Spaces

Age Level: 12-18
Duration: 8-10 hours of lessons
Role of teacher: Coaching, guiding, moderating
Role of student: Taking agency, acquiring knowledge and skills, collaborating, reflecting

Learning objectives:

- Understand the environmental, social, and health benefits of green public spaces.
- Identify challenges and barriers to greening urban areas.
- Develop critical thinking, collaborative problem-solving, and empathy skills.
- Produce a proposal based on evidence, research, and analysis.
- Present and refine a final solution after feedback.

Skills development:

- Critical thinking
- Exploratory investigation
- Empathy

Nb: Teachers can explore the Teacher Training on Skills HERE to select those most appropriate.

Material needed:

- Large paper/poster boards, markers, and post-its
- Laptops or tablets
- Access to local maps or online mapping tools
- Projector for videos/slides

Relevant YSC Knowledge Pills:

1. Greening Cities
2. Urban Farming Strengthens Resilience
3. Greening Urban Spaces' Impact on Health

Didactic objective of lessons:

Lessons	Phase	Didactic objective
Lesson 1	**Explore**	Engage students in the topic by exploring their prior knowledge and opinions, introducing key concepts through the Knowledge Pill on Greening Cities, and ensuring everyone reaches a shared foundational understanding of the subject**.**
Lesson 2-6	**Research, Analyse, and Ideate**	Guide students to identify what empirical evidence is needed, collect and analyse it, and use their findings to develop feasible, sustainable, and beneficial proposals for greening public spaces in their city.
Lesson 7-8	**Present, Feedback, Reflect**	Support students as they present their proposals, gather feedback from peers, experts or stakeholders, and reflect critically to refine and improve their final products.

Nb: timeline is flexible

Problem-Oriented Learning Situation on greening our city

Driving Question:
How can we transform public urban spaces into green areas that improve the quality of life in our city?

Scenario:
Many cities have limited green spaces, as most areas are occupied by roads, buildings, and parking spaces. To address this challenge, the local authority has launched a public call for innovative ideas to green urban spaces and make the city healthier and more sustainable. The goal is to improve air quality, reduce heat, improve stormwater management, and enhance the well-being of residents and visitors. Citizens are invited to submit proposals identifying priorities and creative solutions for transforming existing public areas into greener, more liveable spaces.

Task:
Students design an evidence-based proposal responding to their local authority's call for ideas to greening urban spaces in their city. Working in groups, they select one specific area and develop a clear, research-informed idea for how it could be transformed into a greener and more liveable public space while helping address the effects of climate change. The goal is to demonstrate that the proposal is feasible, sustainable, and beneficial for both the environment and the community.

LESSON OUTLINE

LESSON 1: Explore (1 lesson)

Introduction to Greening our City (1 lesson)

Objective: *Students build a shared understanding of green spaces, their benefits, and their current role in the city, while acquiring foundational knowledge needed for research.*

Opening Discussion

Teacher Action:

- Ask: "What is the role of green spaces in cities?"
- Record keywords emphasising benefits (air quality, biodiversity, mental health, community engagement).
- Help students connect examples to different groups of people and stakeholders.

Student Action:

- List examples of green spaces locally.
- Identify how different groups use these spaces and what is missing.

Why:

- Establishes a common baseline of understanding and engages students with the topic before they start research.

Short Presentation on Greening Public Spaces

Teacher Action:

- Show the video: Greening Paris Video
- Ask comprehension questions.
- Highlight challenges like urban heat islands, air pollution, mental health impacts and the role of parks, gardens, and tree-tunnels.
- Guide students towards examples of innovative green spaces, e.g., rooftop gardens and urban forests and farms

Student Action:

- Observe and take notes.
- Relate video examples to their city context.

Why:

- Provides factual background to frame the problem and introduces possible types of interventions.

Introduce the Learning Situation & Driving Question

Teacher Action:

- **Present the driving question:**
  "How can we transform public urban spaces into green areas that improve the quality of life in our city? "
- **Present the task:**
  Explain to students that they will prepare and submit a proposal outlining priorities and creative solutions for transforming existing public areas into greener, more liveable spaces.
  Emphasise that their work must follow an enquiry-based approach to ensure their proposals are grounded in solid, evidence-based reasoning:
  Explore → Research → Analyse → Ideate → Present → Reflect

Student Action:

- Read the Knowledge Pill on Greening Cities.

Why:

- Frames the challenge and ensures students have the basic knowledge needed and understand the task before starting research.

LESSONS 2 - 6: Research, Analyse, and Ideate

Objective: *In smaller groups (3-4 persons), students gather evidence, analyse it, and develop potential solutions based strictly on* ***research and analysis.***

Nb: Remind students that effective project management, including careful planning, clear role allocation, and setting realistic deadlines, is essential for completing their work efficiently.

Step 1: Research & Evidence Collection (Lesson 2 - 3)

Teacher Action:

- Guide the students to identify what type of evidence is needed to design an informed proposal for greening our city
- Explain the types of evidence needed:
  - **First-hand evidence:** surveys, interviews, or focus groups with residents, schools, or local stakeholders.
  - **Second-hand evidence:** Knowledge Pills, reliable reports, academic studies, newspaper articles, or statistics.
- Emphasise that **no solution ideation should begin before evidence is collected and analysed**.

Student Action:

- Determine what evidence is needed for the task.
- Collect first-hand evidence: stakeholder input, surveys, interviews.
- Collect second-hand evidence: YSC KPs, research studies, government or NGO reports, news articles.

Why:

- Gathering reliable evidence ensures that proposed solutions are grounded in facts and local context rather than assumptions.

Step 2: Analyse Evidence (Lesson 4 - 5)

Teacher Action:

- Guide students to make sense of collected data: identify patterns, needs, constraints, and priorities.
- Help students summarise findings in a clear format (charts, tables, diagrams).

Student Action:

- Analyse collected data to identify key insights about:
    - **Where**: Current state of green spaces/lack of them
    - **Who**: Community needs and preferences (residents, schools, businesses)
    - **Why**: Environmental challenges (heat, flooding, pollution, mental health)
    - **How**: Feasible types of planting or design interventions

Why:

- Critical analysis ensures that solutions are based on verified needs and context-specific evidence.

Step 3: Ideate Evidence-Based Solutions (Lesson 6)

Teacher Action:

- Encourage students to propose solutions **based on empirical evidence and analysis**.
- Ensure solutions address feasibility, sustainability, and community/environmental benefits.

Student Action:

- Map or image of the chosen area.
- Describe the current state and explain why a change is needed.
- Identify the motivation for change and the vision for greening the space.
- Present a clear design proposal (trees, gardens, green roofs, etc.) justified by evidence.

- Identify stakeholders' priorities and outline the impact of change.
- Propose a maintenance plan identifying how the new space will be maintained (refer to smart tools and community engagement where relevant).

Why:

- Guarantees that design proposals are grounded in evidence, are practical, and socially and environmentally responsible.

LESSONS 7 - 8: Present, Feedback, Reflect

Objective: *Students present proposals, receive feedback, and refine final solutions.*

Presentation & Feedback (Lesson 7)

Teacher Action:

- Explain that peer and expert review are important when preparing a proposal; they help improve the overall quality of the end product.
- Facilitate presentations to class or panel.
- Encourage external feedback from community members, parents, experts or other students.

Student Action:

- Present proposals using visuals and clear explanations.
- Reflect on feedback and make adjustments where needed.

Reflection Prompts:

- What have we learned?
- What does it mean for the future generation?
- What did peers/stakeholders like/dislike? Why? Can these be accommodated?
- Did everyone succeed in delivering their assignments?
- What can be improved next time?

Why:

- Reflection and feedback improve solution quality and develop metacognitive and collaboration skills.

Final Submission & Voting (Lesson 8)

Teacher Action:

- Collect refined proposals and facilitate voting.

Student Action:

- Submit final proposal.

- Vote for the strongest solution based on evidence, feasibility, and stakeholder impact.
- Submit proposals to your local authority

Optional Extensions

- **Field Trip:** Observe local green spaces and note potential improvements.
- **Guest Speaker:** City planner or environmental expert to discuss urban greening challenges.