EXERCISE 6 GREEN BUILDING DESIGN PROJECT (45 MINUTES)





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Exercise 6 - Green Building Design Project (45 minutes)





Goal of the exercise

The goal of this exercise is to develop a concept for a building that adheres to the principles of green architecture, focusing on minimizing environmental impact and promoting sustainable living. Participants will design buildings that incorporate innovative solutions in materials, technology, and space layout to improve the quality of life for residents and protect natural resources.





GreenPower

The facilitator introduces participants to the concept of green architecture, explaining that it involves designing buildings that are energy-efficient, sustainable, and have minimal environmental impact. They discuss how elements such as passive houses, green roofs, vertical gardens, and sustainable building materials contribute to this goal. The facilitator also emphasizes creativity in green architecture, highlighting how an innovative approach to building design can significantly enhance both efficiency and appeal.

To initiate the discussion, the facilitator poses a question: "What elements of green architecture have you seen around you? What makes them unique?"

Facilitator's Task:

- Divide participants into groups (3–5 people). Each group's task will be to create a concept for a green building that could be used in an urban or rural setting. Each group should consider elements such as:
 - Sustainable building materials (e.g., wood, recycled bricks, biodegradable materials).
 - Energy-saving technologies (e.g., solar panels, passive heating systems).
 - Nature-friendly features (e.g., green roofs, vertical gardens, rainwater collection systems).
- Participants may prepare a sketch or description of their project, explaining how their building aligns with the principles of green architecture.

Example Ideas:

- A building with a green roof and vertical garden that purifies the air around it.
- A passive house that uses natural ventilation and sunlight to minimize energy use.
- A housing complex with rainwater collection systems and solar panels integrated into the building facades.
- Monitor the group work by asking questions that support their creativity, such as: "What innovative solutions could further minimize energy consumption in your building?" or "What materials could support the sustainable development of your project?"
- Ask the groups to assess the environmental and social impact of their project. Participants should reflect on how their building:
 - Reduces energy and resource consumption.
 - Promotes contact with nature and enhances residents' quality of life.
 - Supports a sustainable lifestyle (e.g., through water conservation, material recycling).
- Encourage groups to consider potential challenges in implementing their project, such as costs, technical issues, or social acceptance.







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Supporting Questions:

- What innovative technologies could further improve the energy efficiency of your project?
- What benefits would the completion of your building bring to the local community?

Ask each group to present their project, describe the main features of the building, and explain how it minimizes environmental impact. Participants should also introduce the innovative aspects of their project and discuss how the building can enhance the quality of life for residents.

- Encourage other participants to ask questions and share their opinions. Ask them to assess the innovation and functionality of the presented projects.
- Introduce a discussion element by asking: "What other solutions could further minimize energy use or improve water management in these projects?"
- Summarize the main conclusions from the presentations and discussions, emphasizing the crucial role of creativity in designing buildings that follow green architecture principles. Highlight how innovative solutions can contribute to the sustainable development of cities and improve the quality of life for their residents.
- Encourage participants to reflect on how they can apply their knowledge of green architecture in their professional or personal lives.

Final Question:

"What elements of green architecture do you consider the most innovative, and which ones have the potential for widespread application?"

To enrich the exercise, you may present examples of existing buildings designed in line with green architecture principles, such as the Bullitt Center in Seattle or Bosco Verticale in Milan.

You can also suggest that groups incorporate aspects related to social integration and support for resident interaction in their projects, such as communal gardens, recreational spaces, or eco-friendly initiatives in residential buildings.







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Bullitt Center in Seattle and Bosco Verticale in Milan





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