

Climate change and pollution

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THEME

Addressing the topic and gaining a insight into the climate change and pollution

CONTEXT

Climate change and pollution are pressing global issues that require urgent attention and action. This activity plan aims to educate students/participants about the causes, impacts, and solutions related to climate change and pollution, using the JustNow educational video as a primary learning resource.

GOALS

- To educate students/participants about the causes and consequences of climate change and pollution
- To explore the interconnected nature of environmental issues and their impacts on ecosystems and human health
- To discuss mitigation and adaptation strategies for addressing climate change and pollution
- To empower students/participants to take action towards sustainability and environmental stewardship

METHODOLOGY

- Screening of the JustNow educational video on climate change and pollution
- Facilitated discussions and group activities to deepen understanding and encourage critical thinking
- Interactive exercises to explore climate change and pollution concepts and their real-world implications
- Reflection and goal-setting activities to inspire personal and collective action

LEARNING OUTCOMES

- Identify sources and impacts of pollution on the environment and human health
- Discuss the goals and challenges of mitigating climate change and reducing pollution
- Explain the greenhouse effect and its role in climate change
- Evaluate individual and collective actions to promote sustainability and combat climate change and pollution

MATERIAL & EQUIPMENT NEEDED

- Projector and screen for screening the educational video
- Printed handouts with key information and discussion questions
- Whiteboard or flip chart with markers for group activities
- Laptops or tablets for accessing online resources
- Zoom or other video conferencing platform for online setup implementation
- Pen and paper for note-taking

Overview of activities (process)

Duration: 90 minutes

PART 1: 45 MINUTES

Introduction to Climate Change and Pollution: 15 minutes

The teacher/educator briefly explains what is expected from the students/participants in terms of their participation in this workshop. Afterward, the teacher/educator tries together with students/participants to define the terms climate change and pollution. The teacher/educator can present statistics and case studies to illustrate the scope of impact that climate change is having on local, national and global level.

Screening of Educational Video: 10 minutes

As a teacher/educator screen the JustNow educational video on climate change and pollution, which will be allowing students/participants to gain a foundational understanding of the topics.

Discussion and Reflection: 15 minutes

The teacher/educator is facilitating a discussion on key concepts presented in the video, such as the greenhouse effect, pollution sources, and impacts. Afterwards he/she/they encourages students/participants to reflect on their own understanding and perceptions of climate change and pollution.

Group Activity and Presentation (Causes and Impacts): 30 minutes

As a teacher/educator you are dividing the students/participants into small groups and provide each group with a scenario related to climate change or pollution. The scenarios can be: Deforestation and habitat loss, Plastic pollution in oceans, Climate-induced natural disasters, Agricultural pollution and water contamination, Urban heat island effect, etc.

Ask the students/participants to identify the causes and impacts of scenario which is assigned to them, as well propose solutions for mitigation or adaptation needed.

Each small group should make a presentation in front of other students/participants. Encourage other students/participants to ask questions in relation to the presentations.

Strategies for Action: 10 minutes

Start a discussion about mitigation and adaptation strategies for addressing climate change and pollution at individual, community, and global level. Encourage students/participants to share examples of successful initiatives or actions they have taken or could take in their own lives.

Conclusion and Action Planning: 10 minutes

As a teacher/educator summarize key takeaways from the workshop and emphasize the importance of collective action in addressing climate change and pollution. Invite students/participants to set personal or group goals for reducing their environmental impact and promoting sustainability. As well, encourage students/participants to talk with others about this topic and encourage other members of their community to reduce their environmental impact.

ADDITIONAL IDEAS ON IMPLEMENTATION

- **Action in the school/organization/institution:** Encourage students/participants to take action within the school/organization/institution environment by implementing sustainability initiatives, such as starting a composting program, organizing a tree planting event, or advocating for energy-efficient upgrades to school/organization/institution facilities.
- **Inviting guest speakers:** Arrange for guest speakers such as environmental scientists, activists, or policymakers to speak to the class/workshop about their work and experiences related to climate change and pollution. Guest speakers can provide valuable insights and inspire students/participants to take action.
- **Field Trips:** Organize field trips to local environmental sites such as nature reserves, recycling facilities, or renewable energy installations. Field trips provide hands-on learning opportunities and allow students/participants to see firsthand the impact of environmental issues and solutions.
- **Cross-Curricular Integration:** Collaborate with other subject areas to integrate environmental themes into various disciplines, such as incorporating climate change into science experiments, pollution into social studies discussions, or sustainability into math calculations.
- **Project-Based Learning:** Implement project-based learning activities that allow students/participants to investigate real-world environmental problems and develop solutions collaboratively. Projects could involve designing sustainable cities, creating public awareness campaigns, or conducting scientific experiments on environmental issues.

HOMEWORK IDEAS

- **Research Assignment:** Assign students/participants to research a specific aspect of climate change or pollution discussed in the workshop, such as the impact of deforestation on biodiversity or the role of renewable energy in mitigating greenhouse gas emissions. Students/participants can prepare a short report or presentation to share their findings with the class.
- **Environmental Audit:** Encourage students/participants to conduct an environmental audit of their home or school/organization/institution environment, identifying areas where energy consumption, waste generation, or pollution could be reduced. Students/participants can create action plans for implementing sustainable practices and share their recommendations with classmates/peers.
- **Community Outreach:** Task students/participants with organizing a community outreach event or awareness campaign focused on climate change and pollution. This could include organizing a recycling drive, hosting a screening of an environmental documentary, or collaborating with local organizations on a cleanup effort.
- **Personal Reflection:** Prompt students/participants to reflect on their own carbon footprint and environmental impact, considering lifestyle choices such as transportation, diet, and consumption habits. Students/participants can journal about their reflections and set goals for reducing their environmental footprint over time.
- **Policy Analysis:** Have students/participants analyze environmental policies and initiatives at the local, national, or international level, assessing their effectiveness in addressing climate change and pollution. Students/participants can present their findings and recommendations for policy improvements to the class.

ONLINE ADAPTATION

This activity plan can be easily implemented in online set-ups, utilizing breakout rooms for small group discussions and activities. As well, the usage of pooling features to gather feedback and facilitate interactive discussions can be used, as well as the usage of the chat function for questions and comments of the students/participants. During the implementation in an online set-up, a shared screen option can be used for multimedia presentations and videos. As a teacher/educator, you can also provide downloadable resources and links to relevant articles or reports for further exploration.



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