

Environmental Impact of Pollution in Mexico City



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How does the high pollution of Mexico City impact the people of the city?

GRADES

6 - 8

DISCIPLINE

Studies

COURSE

6th Grade
World
Studies
(Georgia)

PACING

O N/A

Section 1: What Task?

Teaching Task

Task Template IE6 - Informational or Explanatory

After researching informational articles and environmental websites on pollution in Mexico City, write a report in which you examine cause/s of the city's air pollution and explain the effect/s it has on the health and welfare of the population. Support your discussion with evidence from the text/s.

Standards

Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

CCR.W.6

Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

CCR.R.1

Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

CCR.R.2

Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

CCR.R.4

Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

CCR.R.6

Assess how point of view or purpose shapes the content and style of a text.

CCR.R.10

Read and comprehend complex literary and informational texts independently and proficiently.

CCR.W.2

Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

CCR.W.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CCR.W.5

Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

CCR.W.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCR.W.10

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

RH.6-8.3

Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes law, how interest rates are raised or lowered).

WHST.6-8.2

Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

Performance Standards for Social Studies

Describe the approaches of Latin American countries in dealing with environmental issues; include air pollution in Mexico City, Mexico, and Santiago, Chile; the destruction of the rain forest in Brazil; and oil-related pollution in Venezuela, Mexico, and Ecuador.

Describe how the location, climate, and natural resources of Mexico, Brazil, Chile, and Bolivia have affected where people live, where agricultural and industrial regions are located, and their impact on trade, especially the importance of the Amazon River, the Rio de la Plata, the rain forest, the Mexican Plateau, and the Andes Mountains.

Explain the distribution of natural resources and how that has affected the peoples of the Caribbean.

Georgia Performance Standards for Social Studies - Grade 6

SS6G2 Focus

The student will discuss environmental issues in Latin America.

College, Career, and Civic Life (C3) Framework for Social Studies State Standards

D3.3.6-8 Focus

Identify evidence that draws information from multiple sources to support claims, noting evidentiary limitations.

Texts

A breath of fresh(er) air.

Lexile: 1200L Publication: U.S. News & World Report(06/25/2001) Author: Mandel-Campbell, Andrea U.S. News & World Report (06/25/2001)—Mandel-Campbell, Andrea Reports on efforts to improve air quality in Mexico City, Mexico, as of June, 2001. How local authorities have cleared the air of several

dangerous pollutants; Failure of the city to meet minimum air-quality standards; Impact of the emissions released by the city's public transportation system; Preparation of a ten-year air quality plan. Mexico City makes gains against air pollution Dateline: MEXICO CITY

A breath of fresh air.

Economist (7/31/2010)— The article reports on environmental conditions in Mexico as of July 31, 2010 with a focus on the air quality in Mexico City. The factors that make Mexico City a trap for smog are noted. The city's average concentration of ozone since the early 1990s and air pollution statistics since 1987 are mentioned. The closure of an oil refinery in Azcapotzalco borough and efforts to reduce automobile emissions are noted.

Dirty politics, dirty skies.

Lexile: 1360L Publication: E: The Environmental Magazine(Jan/Feb97) Author: Lipschultz, David E: The Environmental Magazine (Jan/Feb97)—Lipschultz, David Focuses on the political aspects of air quality reform projects in Mexico. Pollution levels; Plans for revamp of transportation; Reactions of environmentalists; Contact information.

Air pollution in the valley of Mexico.

Geographical Review (Apr93)—Collins, Charles O.Scott, Steven L. Studies air pollution in the Valley of Mexico. Result of interaction of a rapidly growing urban population; Ozone; Suspended particulates; Problematic geographical setting; Use of fossil fuels; Control strategies; Consideration of geographical variables.

Clearing the air, literally.

Lexile: 1130L Publication: Christian Science Monitor(8/15/2001) Author: Murphy, Dan Christian Science Monitor (8/15/2001)—Murphy, Dan Reports that on October 15, 2001 Mexico City will mark two straight years without a smog emergency. Efforts of the Mexican government to reduce pollution, which comes mostly from automobiles; Comments of Luis Roberto Acosta, director of Mexico City's International Environmental Monitoring Institute (SIMA), confirming that the skies are clearing above Mexico City.

Bad air in cities kills hundreds of thousands.

Lexile: 1110L Publication: Futurist(Sep/Oct97) States that people living in urban areas may be at risk from poor air quality according to climatology professor Derek Elsom. Worldwide effects of air pollution.

Student Work Rubric - Informational or Explanatory Task - Grades 6-8

	Emerging	Approaches Expectations	Meets Expectations	Advanced
	1	2	3	4
Controlling Idea	Presents an unclear or unfocused controlling idea.	Presents a general controlling idea that addresses the prompt , with an uneven focus .	Presents and maintains a clear controlling idea that addresses all aspects of the prompt.	Presents and maintains a clear and specific controlling idea that addresses all aspects of the prompt and takes into account the complexity of the topic.
Selection & Citation of Evidence	Includes minimal details from sources. Sources are used without citation.	Includes details, examples, and/or quotations from sources that arerelevant to the controlling idea. Inconsistently cites sources.	Includes details, examples, and/or quotations from sources that are relevant to the controlling and supporting ideas. Consistently cites sources with minor formatting errors.	Includes well-chosen details, examples, and/or quotations from sources that support the controlling and supporting ideas. Consistently cites sources using appropriate format.
Development / Explanation of Sources	Explanation of ideas and source material is irrelevant, incomplete, or inaccurate.	Explanation of ideas and source material is minimal or contains minor errors .	Accurately explains ideas and source material and how they support the controlling idea.	Thoroughly and accurately explains ideas and source material, using reasoning to support and develop the controlling idea.
Organization	Lacks an evident structure. Makes unclear connections among ideas, concepts, and information.	Groups ideas and uses some transitions to connect ideas, with some lapses in coherence or organization.	Groups and sequences ideas to develop the controlling idea. Uses transitions to clarify the relationships among ideas, concepts, and information.	Groups and sequences ideas logically to develop the controlling idea and create cohesion. Uses varied transitions to clarify the relationships among ideas, concepts, and information.
Conventions	Major errors in standard English conventions interfere with the clarity of the writing. Language or tone is inappropriate.	Errors in standard English conventions sometimes interfere with the clarity of the writing. Uses language and tone that are sometimes inappropriate to the audience and purpose.	Consistently applies standard English conventions; minor errors, while noticeable, do not interfere with the clarity of the writing. Uses language and tone appropriate to the audience and purpose.	Consistently applies standard English conventions, with few errors. Demonstrates varied syntax and precise word choice. Consistently uses language and tone appropriate to the audience and purpose.
Content Understanding (Generic)	Attempts to include disciplinary content in explanation or argument but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate.	Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation.	Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding.	Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding.

Background for Students

Synthesis of learning about Mexico within Latin America

Extension

Have students suggest "Solutions" to the air pollution problem in Mexico City.

Section 2: What Skills?

Preparing for the Task

BRIDGING CONVERSATION > **ACTIVATING PRIOR KNOWLEDGE**: Ability to connect the task and new content to existing knowledge, skills, experiences, interests, and concerns.

TASK AND RUBRIC ANALYSIS > TASK ANALYSIS: Ability to understand and explain the task's prompt and rubric.

Reading Process

ACTIVE READING > **NOTE-TAKING**: Ability to select important facts and passages for use in one's own writing.

PRE-READING > **ESSENTIAL VOCABULARY**: Ability to apply strategies for developing an understanding of text(s) by locating words and phrases that identify key concepts and facts, or information.

POST-READING > **ACADEMIC INTEGRITY**: Ability to use and credit sources appropriately.

ACTIVE READING > **NOTE-TAKING**: Ability to select important facts and passages for use in one's own writing.

Transition to Writing

BRIDGING CONVERSATION > **PREPARING FOR WRITING**: Ability to begin linking reading results to writing task.

Writing Process

INITIATION OF TASK > ESTABLISHING THE CONTROLLING IDEA: Ability to establish a claim and consolidate information relevant to task.

PLANNING > **OUTLINING THE WRITING**: Ability to develop a line of thought and text structure appropriate to an information/explanation task.

DEVELOPMENT > **BODY PARAGRAPHS**: Ability to construct an initial draft with an emerging line of thought and structure.

REVISION, **EDITING**, **AND COMPLETION** > **REVISION**: Ability to refine text, including line of thought, language usage, and tone as appropriate to audience and purpose.

REVISION, **EDITING**, **AND COMPLETION** > **EDITING**: Ability to proofread and format a piece to make it more effective.

REVISION, **EDITING**, **AND COMPLETION** > **FINAL DRAFT**: Ability to submit final piece that meets expectations.

Section 3: What Instruction?

PACING	SKILL AND DEFINITION	PRODUCT AND PROMPT	SCORING GUIDE	INSTRUCTIONAL STRATEGIES
Preparing for the Task				
15 mins	BRIDGING CONVERSATION > ACTIVATING PRIOR KNOWLEDGE: Ability to connect the task and new content to existing knowledge, skills, experiences, interests, and concerns.	SHORT CONSTRUCTED RESPONSE In a paragraph frame, fill in information about what you remember about our earlier discussion about pollution in Mexico City. Use the picture to help you remember facts from earlier lessons.	If they complete frame paragraphs with appropriate responses.	 Show students a picture of Mexico City that includes evidence of pollution there. Ask students to complete the frame paragraph with details they remember from earlier lessons. Discuss student responses. Clarify timetable and support plans for the task.
40 mins	TASK AND RUBRIC ANALYSIS > TASK ANALYSIS: Ability to understand and explain the task's prompt and rubric.	NOTES What is a Rubric and how can it help you in an assignment? Analyze the rubric for this assignment.	Students can understand and explain the rubric	•Rubric Analysis Activity – Introduce rubric to class. In small groups, students will translate their assigned piece of the rubric in their own words. Students will then participate in a jigsaw and gallery walk to share/take notes on rubric translations.
Reading	Process			
30 mins	ACTIVE READING > NOTE-TAKING: Ability to select important facts and passages for use in one's own writing.	NOTES - What is the author trying to accomplish? - Which parts of the text show you that?	Answers questions with credible response.	*Invite students to brainstorm ways to figure out any author's intent. • Invite students to share and discuss their answers for this text. • After the discussion, have students begin taking notes for this article by writing down the author's purpose as well as evidence used by the author to support that purpose. Students should also include at least one important quotation that either reveals the author's purpose or that supports that purpose. Use the article below for this whole class activity: Bad air in cities kills hundreds of thousands. Futurist (Sep/Oct97)— States that people living in urbar areas may be at risk from poor air quality according to climatology professor Derek Elsom. Worldwide effects of air pollution.
25 mins	PRE-READING > ESSENTIAL VOCABULARY: Ability to apply strategies for developing an understanding of text(s) by locating words and phrases that identify key concepts and facts, or information.	LIST In your notebook, list words and phrases that are essential to the texts. Add definitions, and (if appropriate) notes on connotation in this context.	- Lists appropriate phrases Provides accurate definitions.	 As students discuss the first article, have them begin to identify important words and phrases. As they read more articles, they should add to their list of important words. After scoring, ask some students to share definitions of terms that others overlooked or misunderstood. After scoring, be willing to provide direct instruction or guide a close reading if needed to work through a key phrase most students missed. Begin to use document "Project Task Organizer"

	Project Task Organiz					
25 mins	POST-READING > ACADEMIC INTEGRITY: Ability to use and credit sources appropriately.	SHORT CONSTRUCTED RESPONSE Define "plagiarism" and list ways to avoid it.	Provides accurate definition * Lists several appropriate strategies	 Discuss respect for others' work to assemble evidence and create texts. Explain how proper note-taking helps students avoid plagiarism. Remind students to indicate in their notes when they take the author's exact words and when the paraphrase. Note that in both cases, students must give credit to the author, but that the exact words of the author must be in quotation marks. 		
25 mins	ACTIVE READING > NOTE-TAKING: Ability to select important facts and passages for use in one's own writing.	NOTES Properly cite sources used in the essay. Introduce how to cite within the essay and how to construct a works cited page.	Can properly cite sources 2 out of 3 times.	Using a rough draft demonstrate how to revise to include citing sources Students will practice with a peer revising various practice paragraphs citing sources properly within texts Independently revise (teacher prepared) rough draft to include citing sources properly EXTRA SUPPORT: Provide students with more guided practice and examples, if needed Use document "Project Task Organizer" Notes: If the teacher has selected all articles and this is the first time students have been required to cite sources, you might choose to make the Works Cited page for students and give each a copy to attach to the paper. Student will learn the importance of give credit for source material, of the Works Cited page, and of aligning parenthetical documentation to the WC page. Creating the page itself could be introduced at a higher grade level or with a later project.		
	Additional Attachments: Project Task Organizer					
1 hr	ACTIVE READING > NOTE-TAKING: Ability to select important facts and passages for use in one's own writing.	NOTES What parts of these articles are crucial in helping you support your essay?	None	Provide the students with the assortment of articles of Air Pollution in Mexico City. Give them different strategies to help the students improve their ability to summarize the given articles. After students identify an write down main ideas, ask them to take notes on the evidence that supports the main ideas. Examples- Selective highlighting, Main Idea Summarizing, etc. You do not have to use all of the articles listed. To allow for differentiation, assign the articles by Lexile Range.		
Transitio	on to Writing					
20 mins	BRIDGING CONVERSATION > PREPARING FOR WRITING: Ability to begin linking reading results to writing task.	LIST In a quick write, write about what you know now that you've read about pollution in Mexico City.	Check that students are making adequate progress	 Discussion-based strategies, such as seminar. Small group discussion using questions. 		

30 mins	INITIATION OF TASK > ESTABLISHING THE CONTROLLING IDEA: Ability to establish a claim and consolidate information relevant to task.	SHORT CONSTRUCTED RESPONSE Write an opening paragraph that includes a controlling idea and sequences the key points you plan to make in your composition	Writes a concise summary statement or draft opening. Provides direct answer to main prompt requirements. Establishes a controlling idea. Identifies key points that support development of argument.	Offer several examples of opening paragraphs. Ask class to discuss what makes them strong or weak. Review the list that students created earlier to identify needed elements (from Cluster 1, skill 2).
30 mins	PLANNING > OUTLINING THE WRITING: Ability to develop a line of thought and text structure appropriate to an information/explanation task.	OUTLINE Create an outline based on your notes and reading in which you state your claim, sequence your points, and incorporate your supporting evidence.	- Creates an outline or organizer Supports controlling idea. Uses evidence from texts read earlier.	 Provide and teach one or more examples of outlines or organizers. Invite students to generate questions in pairs about how the format works, and then take and answer questions.
1 hr	DEVELOPMENT > BODY PARAGRAPHS: Ability to construct an initial draft with an emerging line of thought and structure.	NOTES • How do I develop an effective informational paragraph (Informational Rubric Development: Presents thorough and detailed information to strongly support the focus and controlling idea)	If student can create a paragraph with a minimum of a main idea and 3 supporting details	 Show an article and deconstruct it by finding the main idea and supporting details Have the students write 1 paragraph on 1 aspect of pollution in Mexico City Have the students trade papers with their "elbow partner" to apply the deconstruction strategy. Students revise as needed
50 mins	REVISION, EDITING, AND COMPLETION > REVISION: Ability to refine text, including line of thought, language usage, and tone as appropriate to audience and purpose.	LONG CONSTRUCTED RESPONSE Refine composition's analysis, logic, and organization of ideas/points. Use textual evidence carefully, with accurate citations. Decide what to include and what not to include.	- Provides complete draft with all parts Supports the opening in the later sections with evidence and citations Improves earlier edition.	- The students will use their group members to proofread and provide feedback - The reviewers will point out the deficiencies in the essay that the writer needs to remedy - Reviewers will use highlighters and pens to help in the review process: Going Green Revision 1. Students use GREEN highlighter to highlight all topic sentences 2. Students use YELLOW highlighter to highlight all supporting sentences; use a black pen to underline supporting sentences that include evidence from assigned reading. 3. Students use PINK highlighter to highlight all concluding/wrap-up sentences 4. Peer Edit/Partner Edit to ensure topic sentences relate to or support the thesis statement. 5. Ensure that they have appropriate support for topic sentences and are of sufficient length. 6. Ensure that the wrap-up sentence restates the purpose without repeating.
40 mins	REVISION, EDITING, AND COMPLETION >	LONG CONSTRUCTED RESPONSE	Provides draft free from	Briefly review selected skills that many students need to improve.

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	EDITING : Ability to proofread and format a piece to make it more effective.	Revise draft to have sound spelling, capitalization, punctuation, and grammar. Adjust formatting as needed to provide clear, appealing text.	distracting surface errors. * Uses format that supports purpose.	Teach a short list of proofreading marks. Assign students to proofread each other's texts a second time.
30 mins	REVISION, EDITING, AND COMPLETION > FINAL DRAFT: Ability to submit final piece that meets expectations.	LONG CONSTRUCTED RESPONSE Turn in your complete set of drafts, plus the final version of your piece	• Fits the "Meets Expectations" category in the rubric for the teaching task.	Not Provided

Instructional Resources

No resources specified

Section 4: What Results?

Student Work Samples

Advanced

Advanced

Meets Expectations

- Meets #1
- Meets #2
- Meets #3

Approaches Expectations

- Approaches #1
- Approaches #2
- Approaches #3

Teacher Reflection

Not provided

All Attachments

- Advanced: https://s.ldc.org/u/bk8q5g0tb1ci2ivgyap8v36e7
- Meets #1: https://s.ldc.org/u/472p46b20ze6imopd85cgm5xd
- Meets #2: https://s.ldc.org/u/a16tzzpa64ojd5j00mm2w7g3r
- Meets #3: https://s.ldc.org/u/3l2ou9nfzt68l1mnilv91xt5k
- Approaches #1: https://s.ldc.org/u/1duznn1p2jq7yo0s3n13ndi61
- Approaches #2: https://s.ldc.org/u/34fncr5xdtwjangmw4fu2l0jq
- Approaches #3: https://s.ldc.org/u/22hvdzjaqc640drkgbr7kj6kw