

Overview

Overview | Pollution in Mexico City



Pollution in Mexico City

by Sherry Sims and Monica Osborne

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

Grades: 6 7 8

Discipline: Social Studies

Teaching Task: Task Template 24 (Informational or Explanatory and Cause/Effect)

Author Information:

Sherry Sims (Washington)

Monica Osborne (Kentucky)

Section 1: What Task?

TEACHING TASK

Task Template 24 [1 Level]

Informational & Cause/Effect

L1: After researching informational articles and environmental websites on pollution in Mexico City , write a report that examines the causes of air pollution and explains the effects on the health and welfare of the citizens . What conclusions or implications can you draw? Support your discussion with evidence from your research.

STUDENT BACKGROUND

Mexico City has had a dramatic increase in their population which in turn has created a huge air pollution problem. After studying and researching informational articles and environmental websites on pollution in Mexico City , you will write a report that examines the causes of air pollution and explains the effects on the health and welfare of the citizens .

EXTENSION

Rubric

Scoring Elements	Not Yet		Approaches Expectations		Meets Expectations		Advanced
1	1.5	2	2.5	3	3.5	4	
Focus	Attempts to address prompt, but lacks focus or is off-task.		Addresses prompt appropriately, but with a weak or uneven focus.		Addresses prompt appropriately and maintains a clear, steady focus.		Addresses all aspects of prompt appropriately and maintains a strongly developed focus.
Controlling Idea	Attempts to establish a controlling idea, but lacks a clear purpose.		Establishes a controlling idea with a general purpose.		Establishes a controlling idea with a clear purpose maintained throughout the response.		Establishes a strong controlling idea with a clear purpose maintained throughout the response.
Reading/Research	Attempts to present information in response to the prompt, but lacks connections or relevance to the purpose of the prompt. (L2) Does not address the credibility of sources as prompted.		Presents information from reading materials relevant to the purpose of the prompt with minor lapses in accuracy or completeness. (L2) Begins to address the credibility of sources when prompted.		Presents information from reading materials relevant to the prompt with accuracy and sufficient detail. (L2) Addresses the credibility of sources when prompted.		Accurately presents information relevant to all parts of the prompt with effective selection of sources and details from reading materials. (L2) Addresses the credibility of sources and identifies salient sources when prompted.
Development	Attempts to provide details in response to the prompt, including retelling, but lacks sufficient development or relevancy. (L2) Implication is missing, irrelevant, or illogical. (L3) Gap/unanswered question is missing or irrelevant.		Presents appropriate details to support the focus and controlling idea. (L2) Briefly notes a relevant implication or (L3) a relevant gap/unanswered question.		Presents appropriate and sufficient details to support the focus and controlling idea. (L2) Explains relevant and plausible implications, and (L3) a relevant gap/unanswered question.		Presents thorough and detailed information to strongly support the focus and controlling idea. (L2) Thoroughly discusses relevant and salient implications or consequences, and (L3) one or more significant gaps/unanswered questions.
Organization	Attempts to organize ideas, but lacks control of structure.		Uses an appropriate organizational structure to address the specific requirements of the prompt, with some lapses in coherence or awkward use of		Maintains an appropriate organizational structure to address the specific requirements of the prompt.		Maintains an organizational structure that intentionally and effectively enhances the presentation of information as required by the

			the organizational structure.			specific prompt.
Conventions	Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage, and mechanics. Sources are used without citation.		Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources.		Demonstrates a command of standard English conventions and cohesion, with few errors. Response includes language and tone appropriate to the audience, purpose, and specific requirements of the prompt. Cites sources using an appropriate format with only minor errors.	Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors. Response includes language and tone consistently appropriate to the audience, purpose, and specific requirements of the prompt. Consistently cites sources using appropriate format.
Content Understanding	Attempts to include disciplinary content in explanations, 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.

STANDARDS

Kentucky Culture (Elements of Culture)

SS-06-2.1.1: Students will explain how elements of culture (e.g., language, the arts, customs, beliefs, literature) define specific groups in the global world of the present day and may result in unique perspectives.

Kentucky Geography (Regions)

SS-06-4.2.2: Students will describe and give examples of how places and regions in the present day change over time as technologies, resources and knowledge become available.

Common Core Anchor Standards Reading

R.CCR.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.

R.CCR.2: Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

R.CCR.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.

R.CCR.6: Assess how point of view or purpose shapes the content and style of a text.

R.CCR.10: Read and comprehend complex literary and informational texts independently and proficiently.

Common Core Anchor Standards Writing

W.CCR.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.

W.CCR.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

W.CCR.5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

W.CCR.6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

W.CCR.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.

W.CCR.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.

Common Core Anchor Standards Language

L.CCR.1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

L.CCR.2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

L.CCR.6: Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

Custom Standards

Section 2: What Skills?

Selected Skills

Preparing for the Task

TASK ENGAGEMENT: Ability to connect the task and new content to existing knowledge, skills, experiences, interests, and concerns.

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

Reading Process

ACTIVE READING/NOTE TAKING: Ability to identify the central idea and main supporting elements of a text. Ability to find cause and effects in articles.

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.

ACADEMIC INTEGRITY: Ability to use and credit sources appropriately.

NOTE-TAKING: Ability to read purposefully and select relevant information; to summarize and/or paraphrase.

Transition to Writing

BRIDGING: Ability to begin linking reading results to writing task.

Writing Process

CONTROLLING IDEA: Ability to establish a controlling idea and consolidate information relevant to task.

PLANNING: Ability to develop a line of thought and text structure appropriate to an information/explanation task.

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

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

EDITING: Ability to proofread and format a piece to make it more effective.

COMPLETION: Ability to submit final piece that meets expectations.

Section 3: What Instruction?

MiniTasks

Preparing for the Task

TASK ENGAGEMENT: Ability to connect the task and new content to existing knowledge, skills, experiences, interests, and concerns.

SHORT CONSTRUCTED RESPONSE

10 minutes

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.

Scoring Guide (Work Meets Expectations If):

they complete frame paragraphs with appropriate responses.

Instructional Strategies:

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.

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

NOTES

50 minutes

In your own words, what are the important features of a good response to this prompt?
What qualities and/or characteristics do you expect to find in an argument?
Analyze rubric.

Scoring Guide (Work Meets Expectations If):

Students can understand and explain the rubric

Students will write 2-4 sentences explaining important features of a good response.

Instructional Strategies:

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

ACTIVE READING/NOTE TAKING: Ability to identify the central idea and main supporting elements of a text. Ability to find cause and effects in articles.

NOTES

50 minutes

- What is the author's central idea?
- What are the causes and the effects listed by the author?
- Which parts of the text show you that?

Scoring Guide (Work Meets Expectations If):

- Answers questions with credible response.

Instructional Strategies:

*Invite students to brainstorm ways to figure out central idea.

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 central idea as well as evidence used by the author to support his/her central idea. Students should also include the causes and effects listed by the author.

Use the article below for this whole class activity:

"A breath of fresh(er) air" (See digital articles)

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

10-15 minutes

In your notebook, list words and phrases that are essential to the texts. Add definitions, and (if appropriate) notes on connotation in this context.

Scoring Guide (Work Meets Expectations If):

- Lists appropriate phrases.
- Provides accurate definitions.

Instructional Strategies:

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.

ACADEMIC INTEGRITY: Ability to use and credit sources appropriately.

SHORT CONSTRUCTED RESPONSE

20-30 minutes

Define "plagiarism" and list ways to avoid it.

Scoring Guide (Work Meets Expectations If):

Provides accurate definition * Lists several appropriate strategies

Instructional 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 they 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.

NOTE-TAKING: Ability to read purposefully and select relevant information; to summarize and/or paraphrase.

NOTES

30-40 minutes

What parts of these articles are crucial in helping you support your essay?

Look for the causes and effects discussed in the articles.

Scoring Guide (Work Meets Expectations If):

None

Instructional Strategies:

Provide the students with the assortment of articles on Air Pollution in Mexico City. Give them different strategies to help the students improve their ability to summarize the given articles. After students identify and write down central ideas, ask them to take notes on the evidence that supports the central ideas.

Examples- Selective highlighting, Central Idea Summarizing, etc.

You do not have to use all of the articles listed. To allow for differentiation, assign the articles by Lexile Range.

NOTES

10 minutes

Properly cite sources used in the essay. Introduce how to cite within the essay and how to construct a works cited page.

Scoring Guide (Work Meets Expectations If):

Can properly cite sources.

Instructional Strategies:

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

Transition to Writing

BRIDGING: Ability to begin linking reading results to writing task.

LIST**30-50 minutes per article**

Review the task and identify key points and information from text(s) that will help you address the task. (central idea, causes and effects)

Scoring Guide (Work Meets Expectations If):

- identifies relevant elements from the passage and writes it on their graphic organizer.
check that student work is in the assigned format

Instructional Strategies:

Graphic organizer for notes

Discussion-based strategies, such as seminar.

Small group discussion using question.

Notes:

Teacher will use the strategy, "I do, we do, you do"

Please check the student module booklet uploaded for this module.

Writing Process

CONTROLLING IDEA: Ability to establish a controlling idea 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

Scoring Guide (Work Meets Expectations If):

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.

Instructional Strategies:

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).

PLANNING: 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.

Scoring Guide (Work Meets Expectations If):

- Creates an outline or organizer.

- Supports controlling idea. Uses evidence from texts read earlier.

Instructional Strategies:

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.

DEVELOPMENT: 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)

Scoring Guide (Work Meets Expectations If):

If student can create a paragraph with a minimum of a main idea and 3 supporting details

Instructional Strategies:

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

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

LONG CONSTRUCTED RESPONSE**2 class periods**

Refine compositions analysis, logic, and organization of ideas/points. Use textual evidence carefully, with accurate citations. Decide what to include and what not to include.

Scoring Guide (Work Meets Expectations If):

- Provides complete draft with all parts.
 - Supports the opening in the later sections with evidence and citations.
 - Improves earlier edition.
-

Instructional Strategies:

- The students will use their group members to proofread and provide feedback
 - See editing review sheets in writer's notebook
-

EDITING: Ability to proofread and format a piece to make it more effective.

LONG CONSTRUCTED RESPONSE

Revise draft to have sound spelling, capitalization, punctuation, and grammar. Adjust formatting as needed to provide clear, appealing text.

Scoring Guide (Work Meets Expectations If):

Provides draft free from distracting surface errors. * Uses format that supports purpose.

Instructional Strategies:

Briefly review selected skills that many students need to improve.

Teach a short list of proofreading marks.

Assign students to proofread each others texts a second time.

COMPLETION: 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

Scoring Guide (Work Meets Expectations If):

Fits the Meets Expectations category in the rubric for the teaching task.

Instructional Strategies:

Selected Articles

[That Stinks!](#)

(<http://modulecreator.com/ModuleCreator/#page=login&moduleId=21457&scrollTo=articles>)

Odyssey (Apr2006)O'Meara, Stephen James

The article presents the experience of the author on his visit to the Mexico City as it is one of the most polluted city.

1040L

[In Search of MIRACLES.](#)

(<http://modulecreator.com/ModuleCreator/#page=login&moduleId=21457&scrollTo=articles>)

Faces (07491387) (Mar2012)Tuell, Todd

The article discusses on the air pollution in Mexico City. It states that the due to influx of people in the Mexico City, many factories came into being and this lead to pollution. It mentions that the heavy concentrations produced in Mexico City could affect visibility, human health, and the ecosystems of cities faraway too. The crops were affected by acid rain. It states that the project Megacity Initiative: Local and Global Research Observations (MILAGRO) rapidly cleaned the air pollution.

1100L

[A breath of fresh\(er\) air.](#)

(<http://modulecreator.com/ModuleCreator/#page=login&moduleId=21457&scrollTo=articles>)

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.

1200L

[Bad air in cities kills hundreds of thousands.](#)

(<http://modulecreator.com/ModuleCreator/#page=login&moduleId=21457&scrollTo=articles>)

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.

1110L

[Clearing the air, literally.](#)

(<http://modulecreator.com/ModuleCreator/#page=login&moduleId=21457&scrollTo=articles>)

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.

1130L

 [Dirty Minds: Pollution harms not only lungs but also brains.](#)

(<http://modulecreator.com/ModuleCreator/#page=login&moduleId=21457&scrollTo=articles>)

Psychology Today (Mar/Apr2012)Treadway, Laura Wright

The article reports on a study by neuropathologist and toxicologist Lilian Calderon-Garcidueas which suggested that air pollution might affect cognitive function such as memory and learning. Calderon-Garcidueas recruited for her study healthy children from Mexico City, Mexico and nearby Polotitln where the air is much cleaner. Her study also found that severe air pollution leads to neuroinflammation and damages the brain's white matter.

1110L

Uploaded Files

 [LDC module - writer's notebook SS pollution.docx](#)

(http://literacybytechnology.s3.amazonaws.com/teacherresourceuploads/21457/156681554_May_13_2014_155313496.docx)

Writer's Notebook

Keywords

*Links**

* These Lexile measures were computed automatically and did not undergo human review. They are not certified measures and should not be published or recorded in any way.

Other Resources

 Geography Alive 6th grade SS book
page 145 - picture

Section 4: What Results?

Classroom Assessment Rubric	
Not Yet	
Focus	Attempts to address prompt but lacks focus or is off-task.
Reading/Research	Attempts to present information relevant to prompt.
Controlling Idea	Controlling idea is weak and does not establish a purpose and/or address a research question.
Development	Tends to retell rather than present information in order to answer questions, solve problems; lacks details to develop topic. *L2 Implications are weak or not relevant to topic. L3 Does not identifies a relevant gap or unanswered question.
Organization	Applies an ineffective structure; composition does not address requirements of the prompt.
Conventions	Demonstrates a weak command of standard English conventions; lacks cohesion; language and tone are inappropriate to audience and purpose.
Meets Expectations	
Focus	Addresses prompt with a focused response.
Reading/Research	Presents and applies relevant information with general accuracy.
Controlling Idea	Establishes a controlling idea that states the main purpose and/or question for the tasks. L2 Addresses the credibility of sources.
Development	Presents sufficient information in order to examine or convey topics or issues, answer questions, solve problems; identifies salient themes or features; explains key information with sufficient detail. *L2 Discusses relevant implications to topic. L3 Identifies a gap or unanswered question.
Organization	Applies a generally effective structure to address specific requirements of the prompt.
Conventions	Demonstrates a command of standard English conventions and cohesion; employs language and tone appropriate to audience and purpose.

Classroom Assessment Task

No Classroom Assessment Task for this module

Exemplar Work

Uploaded Files

[pollution - SS - sample meets.docx](#) (Meets Expectations)

(http://literacybytechnology.s3.amazonaws.com/worksampleuploads/21457/895435986_May_13_2014_15501254.docx)

student sample

[pollution - SS - sample exceeds.docx](#) (Advanced)

(http://literacybytechnology.s3.amazonaws.com/worksampleuploads/21457/1819967963_May_13_2014_155102193.docx)

student sample

[pollution - SS - sample approaches.docx](#) (Not Yet)

(http://literacybytechnology.s3.amazonaws.com/worksampleuploads/21457/1077242124_May_13_2014_155143976.docx)

student sample

Comments

Author Notes

Other Comments