cwra+

Student Guide

WHAT IS CWRA+?

The College and Work Readiness Assessment (CWRA+) is a performance-based assessment that provides a measure of an institution's contribution to the development of critical-thinking and written communication skills of its students.

CWRA+ uses a Performance Task and a series of Selected-Response Questions to measure critical-thinking and written communication skills. And while CWRA+ allows schools to benchmark the progress their students make relative to the progress of similar students at other high schools, it also provides useful feedback to individual test-takers. The principal goal of CWRA+ is to assist faculty, administrators, and students in improving teaching and learning.

WHY DO SCHOOLS USE CWRA+?

Schools participate in CWRA+ to estimate how, and by how much, they contribute to a students development of higher-order skills. Collecting this information is one step in the process of improving teaching and learning.

WHY DO STUDENTS TAKE CWRA+?

Those students who participate in CWRA+ will learn about their strengths as well as areas to improve upon. The more students that participate in the assessment, the more confidence an institution can have in its results.

ASSESSMENT OVERVIEW

CWRA+ is comprised of a Performance Task and a series of Selected-Response questions. CWRA+ is administered online. The Performance Task contains an open-ended prompt that requires written responses. The Selected-Response Questions ask the student to choose the best response based on the document library provided.

CWRA+ tasks are designed to assess students' general critical-thinking and written communication skills, regardless of their academic concentrations. These skills include scientific and quantitative reasoning, analytic reasoning and evaluation of information, problem solving, writing effectiveness, and writing mechanics. These skills are necessary, not only for success in college; they are important for success in the workplace and other aspects of life outside the classroom. No prior knowledge of any particular field is necessary in order to perform well.

Why Is Your Participation Important To Your School?

An assessment program like CWRA+ requires the cooperation of many members of your institution, including administrators, faculty, and students.

The students who participate in CWRA+ contribute to the results and data that inform your institution about its students; learning. The more students who participate in the assessment, the more confidence an institution can have in its results.

Not only does your participation in CWRA+ help to demonstrate your school's contribution to your learning, but by attempting to do your best on CWRA+, you are also helping your peers.

PERFORMANCE TASKS

Each Performance Task assesses analysis and problem solving, writing effectiveness and writing mechanics by asking students to answer several open-ended questions about a hypothetical but realistic situation. Students have 60 minutes to complete a Performance Task.

A Performance Task also has its own Document Library that includes a range of information sources, such as letters, memos, photographs, charts, or newspaper articles.

To complete Performance Tasks, a student may have to weigh different types of evidence, evaluate the credibility of various documents, spot possible bias, and identify questionable or critical assumptions. It is important to note that there is no single correct answer to a Performance Task.

Characteristics of a high-quality Performance Task response:
• Evaluates whether evidence is credible or unreliable
• Provides analysis and synthesis of the evidence
• Draws conclusions that follow from the provided evidence
• Is well-organized and logically developed, with each idea building upon the last
• Shows strong command of writing mechanics and vocabulary

EXAMPLE PERFORMANCE TASK:

SCENARIO

First, Dr. Eager said that Mayor Stone's proposal for reducing crime by increasing the number of police officers is a bad idea. Dr. Eager said "it will only lead to more crime." Dr. Eager supported this argument with a chart that shows that counties with a relatively large number of police officers per resident tend to have more crime than those with fewer officers per resident.

Second, Dr. Eager said "we should take the money that would have gone to hiring more police officers and spend it on the Strive drug treatment program." Dr. Eager supported this argument by referring to a news release by the Washington Institute for Social Research that describes the effectiveness of the Strive drug treatment program. Dr. Eager also said there were other scientific studies that showed the Strive program was effective.

Third, Dr. Eager said that because of the strong correlation between drug use and crime in Jefferson, reducing the number of addicts would lower the city's crime rate. To support this argument, Dr. Eager presented a chart that compared the percentage of drug addicts in a Jefferson ZIP Code area to the number of crimes committed in that area. Dr. Eager based this chart on crime and community data tables that were provided by the Jefferson Police Department.

ROLE

You are a staff member who works for an organization that provides analysis of policy claims made by political candidates and makes recommendations to endorse specific candidates. Pat Stone is running for reelection as the mayor of Jefferson, a city in the state of Columbia. Mayor Stone's opponent in this contest is Dr. Jamie Eager. Dr. Eager is a member of the Jefferson City Council. Dr. Eager made three arguments during a recent TV interview.

TASK

In advance of the debate later this week, your office must release a report evaluating the claims made by Dr. Eager and make a recommendation endorsing either Mr. Stone or Dr. Eager.

DOCUMENT LIBRARY
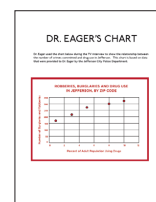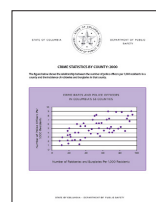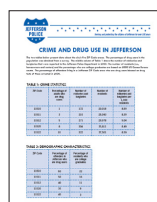
STUDENT INTERFACE: PERFORMANCE TASK

cwra+ (Tutorial)

14 min 51 sec

Performance Task Instructions

Reviewing Documents
The right side of the screen is your Document Library. Use the drop-down menu to select the document you want to see. You will need to use the documents to complete the entire task, but only some may be necessary for each question.

Some documents do not fit entirely on the right side of the screen. If the document is taller than the screen, use the scroll bar on the right side of the screen to move the document up and down.

You can also change the width of the left and right side of the screen by clicking and dragging the center gray bar that divides the screen.

Reviewing Your Task
After viewing the performance task scenario, you will be required to enter text in the response box provided for your concluding essay before navigating to another screen. If you would like to review the scenario again, you must first enter a few words of text before you can click back. If you navigate past the concluding essay before time has expired you will see a yellow warning screen. If you choose to click next on the warning screen, your essay will be marked complete and you will not be allowed to return to the task.

Entering Text
The left side of the screen is your Workspace. Here you will see the specific questions you are to answer and the area in which you will write your response.

The sizes of the response boxes are not fixed, so your answers to each

Select document: Document Library Contents ▼
- Document Library Contents
- Document 1
- Document 2
- Document 3
- Document 4
- Document 5

Selected... brary Contents

Document 1

Document 2

Document 3

Document 4

Document 5

HELP   BACK   NEXT

SELECTED-RESPONSE QUESTIONS

The Selected-Response questions are designed to evaluate targeted skill sets. You will be presented with a set of questions as well as one or two documents to refer to when answering each question. The supporting documents include a range of information sources, such as letters, memos, photographs, charts, or newspaper articles.

The Scientific & Quantitative Reasoning section contains 10 questions that require students to use information and arguments provided in (an) accompanying document(s) to: make inferences and hypotheses based on given results; support or refute a position; identify connected and conflicting information; detect questionable assumptions (such as implications of causation based on correlation); evaluate the reliability of the information provided (such as the experimental design or data collection methodology); draw a conclusion or decide on a course of action to solve a problem; evaluate alternate conclusions; or recognize that the text leaves some matters uncertain and propose additional research to address these matters. The supporting documents in this section present and discuss real-life research results.

The Critical Reading & Evaluation section also contains 10 questions that require students to use information and arguments from (an) accompanying document(s) to: support or refute a position; identify connected and conflicting information; analyze logic; identify assumptions in arguments; make justifiable inferences; or evaluate the reliability of the information provided. The supporting documents in this section may present debates, conversations, or multiple literary or historical texts with opposing views on an authentic issue.

The Critique an Argument section contains 5 questions. Students are presented with a brief argument about an authentic issue, and must use their critical-thinking skills to critique the given argument. Some of the questions may require students to: evaluate alternate conclusions; address additional information that could strengthen or weaken the argument; detect logical flaws and questionable assumptions in the argument; and evaluate the reliability of information, including recognizing potential biases or conflicts of interest.

SAMPLE SELECTED-RESPONSE QUESTIONS:

SUPPORTING DOCUMENTS

Fueling the Future

In a quest to solve the energy problems of the twenty-first century—that is, to find sustainable and renewable sources of energy that are less destructive to the environment yet economical enough to have mass appeal—scientists throughout the world are experimenting with innovative forms of fuel production. While oil is still the most common source of fuel, there is a finite amount of it, and new alternatives will become necessary to sustain the supply of energy that we are accustomed to.

Corn-based ethanol, the most common alternative to traditional fossil fuels (primarily coal, petroleum, and natural gas), is mixed into gasoline in small quantities, and it now accounts for about 10% of the fuel supply from sources within the United States. Because corn is grown on farmland it is subject to price fluctuations based on supply and demand of the crop, as well as disruptions resulting from naturally occurring events, such as droughts and floods. At present, nearly 40% of the corn grown in the United States is now used for fuel, and the demand for corn-based ethanol is rising. To meet this demand, wetlands, grasslands, and forests are all being converted into farmland with the sole intention of growing corn for more ethanol production. Corn grown for ethanol has become a more valuable commodity for farmers than crops grown for food, and this has negatively affected consumers worldwide, as shown by the increasing price of food over time.
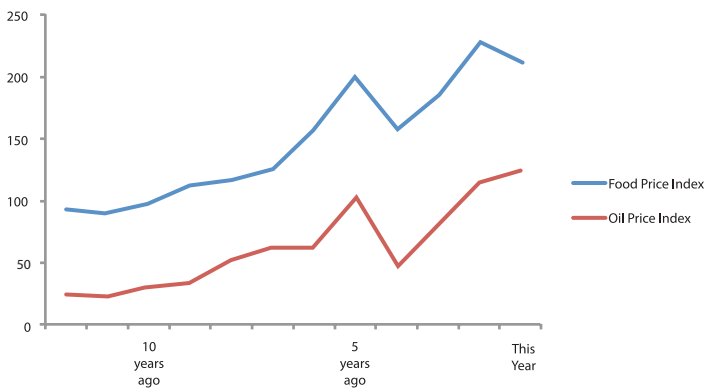

Figure 1: Food and oil price indices (based on information found at www.fao.org and www.indexmundi.com)

Another alternative that has gained attention in recent years is the harvesting of biofuel from algae. Biodiesel, a type of biofuel, is produced by extracting oil from algae, much like the process involved in creating vegetable oils from corn or soybeans. Ethanol can also be created by fermenting algae.

Algae biofuel has some unique benefits that separate it from other fossil fuel alternatives. To begin with, while all fuels create carbon dioxide when they are burned, algae have the ability to recapture and use that carbon dioxide during photosynthesis while they are growing. In this regard, the advantage is enormous. The process of growing algae actually absorbs more carbon dioxide than is released into the atmosphere when it is burned for fuel. Most manufacturing processes strive for "carbon neutrality"—or the balance between carbon emissions and depletion corresponding to a net carbon output of zero. Even better, algae-based biofuel can be described as "carbon negative."

Other forms of biofuel can make similar claims. For example, ethanol from corn also eliminates carbon dioxide in the atmosphere through photosynthesis. Unlike corn, however, algae grow in water, usually in man-made ponds built on land not used for crops. Additionally, algae do not require fresh water. Instead algae can be grown in salt water, and in some cases even sewage water and other waste material.

The most promising aspect of algae biofuel stems from its yield. When compared to other biofuel producers, algae's fuel yield per harvested acre is over 500 times greater than corn-based ethanol. The following chart compares commonly used biofuel crops on several important factors.

Table 1: Comparison of biofuel crops (based on information found at: algaefuel.org and c1gas2org.wpengine.netdna-cdn.com)

Product	Oil Yield Gallons/Acre	Harmful Gas Emissions	Use of Water to Grow Crop	Fertilizer Needed to Grow Cop	Energy Used to Extract Fuel from Crop
Ethanol from Corn	18	high	high	high	high
Biodiesel from Soybeans	48	medium	high	low-medium	medium-low
Ethanol from Canola	127	medium	high	medium	medium-low
Biodiesel from Algae	10,000	negative	medium	low	high

Which of the following negatively affects algae biofuel's ability to be a "carbon-negative" energy source?

    A. It takes 3000 liters of water to create one liter of biofuel from algae, which is highly inefficient and wasteful of resources.

    B. The process of extracting biofuel from algae requires more energy than is generated by burning the biofuel itself.

    C. The construction of facilities needed to extract algae biofuel would initially require the use of fossil fuels for energy.

    D. Algae biofuel is about 25 years away from being commercially viable, by which point there will be more efficient alternative energy sources.

Answer: B

STUDENT INTERFACE: SELECTED-RESPONSE QUESTIONS

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☐ Mark | 1 of 3 | 14 min 41 sec

Instructions

Reviewing Documents
The selected-response questions will refer to the document(s) on the right side of the screen. The questions are administered in sets of 5 or 10. Each set of questions will refer to the displayed document. When navigating past one set of questions a new document will be displayed.

Some documents do not fit entirely on the right side of the screen. If the document is taller than the screen, use the scroll bar on the right side of the screen to move the document up and down.

You can also change the width of the left and right side of the screen by clicking and dragging the center gray bar that divides the screen.

Sample Question
The selected-response questions will appear on the left side of the screen. These items consist of a statement or question followed by response options. Select the best answer to the question.

1. What is the color of the sky?

○ A) Purple
○ B) Yellow
○ C) Green
○ D) Blue

Sample Document

During your assessment, document content will appear here.

HELP REVIEW BACK NEXT

NAVIGATION: SELECTED-RESPONSE QUESTIONS

The following table provides an overview of buttons and features that are available in the selected-response section. Please note that you will be able to return to previous screens at any time during testing; there are no restrictions on moving forward or backwards through the exam until you reach the warning screen.

Button	Overview
☐ Mark	The "Mark" button will allow you to mark a question to review it later. Uncheck the box to remove the mark flag.
Strike out	By right clicking on the text of the answer choice, a line will appear through that choice. You may strike out as many answer choices as you wish. You can undo your strike-through by right clicking on the answer choice text a second time.
✓ Review Incomplete	The "Review Incomplete" button will allow you to quickly review unanswered items.
✓ Review All	The "Review All" button will allow you to quickly review all items.
✓ Review Marked	The "Review Marked" button will allow you to quickly review marked items.
⊘ Mark Complete	The "Mark Complete" button will allow you to submit your completed test and exit the testing session.
➡ Next	The "Next" button will move you forward to the next screen.
⬅ Back	The "Back" button will move you backward to the previous screen.
? Help	The "Help" button will allow you to refer to the information contained in this tutorial at any point during your assessment.