Sample High School Fall 2021 Student Report CCRA+ Assessment

### Total Score: 1152

Mastery Level: Proficient

**US Percentile Rank: 61** 

#### **Your Section Scores**

	Your Score	Institution Percentile Rank	US Percentile Rank
Performance Task Score	1101	60	72
Selected Response Score	1050	49	59

NOTE: Total Scores and Section Scores range from approximately 400 to 1600. Percentile rank refers to the percentage of students that scored below your score. For example, a percentile rank of 62 means that you scored better than 62 percent of students who took the test.

### **Your Mastery Level**

	Here is the breakdown of mastery levels at your institution:	Here is the breakdown of mastery levels across the United States:
Proficient	<ul> <li>38% showed Emerging mastery</li> <li>35% showed Developing mastery</li> <li>21% showed Proficient mastery</li> <li>5% showed Accomplished mastery</li> </ul>	<ul> <li>27% showed Emerging mastery</li> <li>32% showed Developing mastery</li> <li>26% showed Proficient mastery</li> <li>13% showed Accomplished mastery</li> </ul>
	1% showed Advanced mastery	2% showed Advanced mastery

### **Understanding Your Results**

Total Score is comprised of two components: your Performance Task section score and your Selected Response Question section score.

The **Performance Task** section score summarizes your performance on the first part of the assessment. In the Performance Task section, you were asked to address a real-world issue and recommend a course of action to take in a purposeful written response by making use of informaton provided in a Document Library.

The **Selected Response Question** section score summarizes your performance on the second part of the assessment. In this part of the assessment, you received 25 document-based Selected Response questions.

Your Mastery Level describes your level of performance based on your Total Score. There are five Mastery Levels, shown below:







### Total Performance Task Score: 1101

US Performance Task Percentile Rank:72

#### Your Performance Task Subscores

	Your Score	Institution Average	US Average
Analysis and Problem Solving	4	2.8	3
Writing Effectiveness	4	2.9	3.1
Writing Mechanics	4	3	3.4

NOTE: The Performance Task subscore categories are scored on a scale of 1 through 6.

### About Your Performance Task Subscores

Each Performance Task subscore represents a distinct skillset within the broader scope of critical thinking and written communication. The specific skills measured in each section are detailed in the table below.

Analysis and Problem Solving	<ul> <li>Identifying facts or ideas and interpreting them accurately</li> <li>Computing values that are pertinent to the task at hand</li> <li>Identifying information that is connected and conflicting</li> <li>Analyzing logic and identifying assumptions in arguments</li> <li>Evaluating the reliability of information</li> <li>Synthesizing information from multiple sources</li> <li>Deciding on a course of action to solve a problem</li> <li>Selecting the strongest data to support a decision</li> <li>Recognizing that a text may leave some matters uncertain</li> </ul>
Writing Effectiveness	<ul> <li>Stating a position clearly</li> <li>Presenting evidence in support of an argument</li> <li>Elaborating on facts or ideas</li> <li>Constructing an organized and logically cohesive argument</li> <li>Including the use of effective transitions</li> <li>Considering counterarguments and addressing weaknesses in them</li> </ul>
Writing Mechanics	<ul> <li>Using vocabulary correctly</li> <li>Demonstrating effective use of varied and complex vocabulary</li> <li>Constructing grammatically and syntactically correct sentences</li> <li>Varying structure and complexity of sentences</li> </ul>



### Total Selected Response Score: 1050

US Performance Task Percentile Rank:59

#### **Your Selected Response Subscores**

	Your Score	Institution Average	US Average
Data Literacy	478	458	508
Critical Reading and Evaluation	552	485	507
Critique an Argument	613	491	510

NOTE: The Selected Response subscore are reported on a scale ranging approximately from 200 to 800.

## **About Your Selected Response Subscores**

Each Selected Response subscore represents a distinct skill set within the broader scope of critical thinking and analytical reasoning. The specific skills measured in each section are detailed in the table below.

Data Literacy	<ul> <li>Making inferences and hypotheses based on given results</li> <li>Evaluating data collection methodology</li> <li>Identifying data that is connected and conflicting</li> <li>Detecting questionable assumptions</li> <li>Supporting or refuting a position with scientific evidence</li> <li>Drawing a conclusion</li> <li>Evaluating alternate conclusions</li> <li>Recognizing when additional research is required</li> </ul>
Critical Reading and Evaluation	<ul> <li>Supporting or refuting a position</li> <li>Analyzing logic</li> <li>Identifying assumptions in arguments</li> <li>Evaluating the reliability of information</li> <li>Identifying connected and conflicting information</li> <li>Making justifiable inferences</li> </ul>
Critique an Argument	<ul> <li>Detecting logical flaws and questionable assumptions</li> <li>Addressing information that could strengthen or weaken an argument</li> <li>Evaluating alternate conclusions</li> </ul>

## **Overview**

A student's total CCRA+ score is an aggregate measure that summarizes a combination of analytical reasoning, problem solving, and written communication skills. It can range from approximately 400 to 1600, with higher values indicating greater mastery of these skills.

The CCRA+ score is comprised of the student's the following two section scores:

- Performance Task (PT): The score students receive on the written portion of the assessment
- Selected-Response (SR): The score students receive on the multiple-choice section of the assessment

# **Mastery Levels**

Mastery Levels contextualize CCRA+ scores by interpreting test results in relation to the qualities exhibited by students. Each Mastery Level corresponds to a specific rank of critical-thinking and writtencommunication skills. A student's score may fall into one of five mastery levels along the following continuum: Emerging, Developing, Proficient, Accomplished, or Advanced.



## **Percentile Rankings**

Percentile rankings allow for normative interpretations of your students' performance. These rankings indicate how well your institution performed relative to other CCRA+ colleges and universities. Percentile rankings indicate the percentage of CCRA+ institutions whose scores are equal to or less than your own.



## CCRA+ Subscores – Drill Down

In addition to a total CCRA+ score, there are six sub scores. The Performance Task—the essay-based section of the exam—is scored in three skill areas: Analysis and Problem Solving (APS), Writing Effectiveness (WE), and Writing Mechanics (WM). Students receive criterion-referenced subscores for each skill category based on key characteristics of their written responses.



### Average PT Subscores, by Class

Selected-Response Questions are also scored in three skill areas: Data Literacy (DL), Critical Reading and Evaluation (CRE), and Critiquing an Argument (CA). These subscores are scored based on the number of correct responses that students provide.



### Average SR Subscores, by Class



## **CCRA+ Total and Section Scores – Growth Estimates**

The institutional report contains two types of growth estimates: effect sizes and value-added scores.

*Effect sizes* show a standardized estimate of the amount of growth shown between classes. Unlike with raw comparisons, effect sizes account for score variability. This means that, if the students in one class have a particularly high degree of variability in their scores (i.e. their scores are more "spread out"), then the effect-size estimate will adjust for this variation. Effect sizes are reported in standard deviation units. (Standard deviation is a measure of the how close each score in a data set is to the mean, or average score.)

#### Effect-Size, versus Freshmen

	Total CCRA+ Score	Performance Task Score	Selected-Response Score
Sophomores	14	14	14
Juniors	.14	.14	.14
Seniors	.14	.14	.14

*Value-added scores* estimate the level of cognitive growth relative to other CCRA+ schools. Specifically, valueadded scores (reported in standard deviation units) indicate the degree to which the average senior CCRA+ scores meet, exceed, or fall below expectations. This is based upon the following two factors: the level of education attained by the parents of the seniors and the mean CCRA+ performance of their freshmen counter parts.

In other words, the value-added score compares actual senior performance against expected seniors' performance. This figure accounts for class demographics as well as freshman exam scores.

	Expected Senior Mean Score	Actual Senior Mean Score
Total CCRA+ Score	1196	1132
Performance Task Score	1151	1074
Selected-Response Score	1243	1189

	Value-Added	Value-Added Performance Score Level	Percentile Rank	Confidence Interval	
	Score			Lower	Upper
Total CCRA+ Score	1.47	Above	54	0.43	2.51
Performance Task Score	1.47	Above	60	0.39	2.55
Selected-Response Score	1.24	Above	48	0.08	2.40



Class	Mastery Level	Data Literacy Score
Freshmen	Proficient	500
Sophomores	Proficient	500
Juniors	Accomplished	600
Seniors	Accomplished	600

## Data Literacy (DL) – Next Steps

- → The national average DL score for students who performed at the Proficient mastery level was 532.
- → The national average DL score for students who performed at the Advanced mastery level was 601.

The above table shows how your students at each class level performed on the Data Literacy portion of CCRA+ relative to the national average. Below is an in-depth view of the Data Literacy KSAs (knowledge/skills/abilities) measured by this assessment, as well as functional examples of how students demonstrate mastery of these skills.

To help your students improve upon their Data Literacy skills, you may wish to embed the following KSAs into classroom assignments. We recommend incorporating the language from our KSA criteria into classroom rubrics.

Data Literacy KSAs	Criteria
Making inferences and hypotheses based on given results	Identifies a logical hypothesis that explains or predicts a relationship between the variables presented in a research study
	Considers a given hypothesis and correctly predicts what a given graph or chart should look like if that hypothesis is true or false.
Supporting or refuting a position	Provided a series of claims about a particular trend or phenomenon, students refer back to given data or research findings to select which claim is evidence-based.
Identifying information or quantitative data that is connected and conflicting	Interprets an advanced chart or graph (e.g. A scatterplot or stacked bar graph) and accurately describes the relationship being depicted in that chart or graph.
	Selects a visual display that most accurately represents given data.

Data Literacy KSAs	Criteria
Detecting questionable assumptions	Recognizes and calls out flaws in the author's interpretation of a research study, such as an overstatement of generalizability or a conflation of correlation and causation.
Evaluating the reliability of a given experimental design or data collection	Selects a randomized-controlled experiment as the best method for determining causality.
methodology.	Identifies the purpose of various methods used in a research study (e.g. Random assignment, inclusion of a control group).
Deciding on a course of action to solve the problem.	Recommends a course of action that in most in line with the outcomes predicted by data presented in a graph or chart.
Recognizing when a text has open issues that require additional research	Identifies a potential relationship between variables that warrants further examination.
Evaluating alternate conclusions	Recognizes a plausible alternate explanation to an author's conclusion about a research study.
	Demonstrates awareness that there may be more than one possible explanation for a given observation.