



PISA 2018 Released Field Trial New Reading Items

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Reading Literacy - Overview

Fourteen items from the 2018 Field Trial and seven items from a unit that was not administered in the Field Trial were approved by the Reading Literacy Expert Group for release as sample items. The items are presented within their units as they were designed and in the case of two units, as they were administered in the Field Trial. The cognitive process is provided for each released item, showing how the item was classified according to the construct categories in the 2018 Reading Literacy framework that will be used for scaling. Each cognitive process is explained more fully in the framework. A summary from the framework is provided here for reference.¹

Cognitive Processes

Successful reading, whether reading a single text or reading and integrating information across multiple texts, requires an individual to perform a range of processes. The 2018 Reading Literacy framework defines several cognitive processes that span a range of difficulty. Each cognitive process is assigned to a superordinate category which will be used for the final scaling of the 2018 Main Survey data: Locate information, Understand, and Evaluate and Reflect. The cognitive processes within each category are briefly defined below.

Locate information

- Access and retrieve information within a text scanning a single text in order to retrieve target information consisting of a few words, phrases or numerical values.
- Search for and select relevant text searching for information among several texts to select the most relevant text given the demands of the item/task.

Understand

- Represent literal information comprehending the literal meaning of sentences or short passages, typically matching a direct or close paraphrasing of information in the question with information in a passage.
- Integrate and generate inferences going beyond the literal meaning of information in a text by integrating information across sentences or even an entire passage. Tasks that require the student to create a main idea or to produce a summary or a title for a passage are classified as "integrate and generate inference" items.
- Integrate and generate inferences across multiple sources integrating pieces of information that are located within two or more texts.

Evaluate and Reflect

 Assess quality and credibility – evaluating whether the information in a text is valid, current, accurate, unbiased, reliable, etc. Readers must identify and consider the source of the information and consider the content and form of the text or in other words, how the author is presenting the information.

¹ For additional information, please consult the PISA 2018 Reading Framework, https://www.oecd.org/pisa/data/PISA-2018-draft-frameworks.pdf

- Reflect on content and form evaluating the form of the writing to determine how the author is
 expressing their purpose and/or point of view. These items often require the student to reflect on
 their own experience and knowledge to compare, contrast or hypothesize different perspectives
 or viewpoints.
- Detect and handle conflict determining whether multiple texts corroborate or contradict each
 other and when they conflict, deciding how to handle that conflict. For example, items classified
 as "detect and handle conflict" may ask students to identify whether two authors agree on the
 stance of an issue or to identify each author's stance. In other cases, these items may require
 students to consider the credibility of the sources and demonstrate that they accept the claims
 from the more reliable source over the claims from the less reliable source.

Texts

Texts can be classified along four different dimensions described in the framework: source, organization and navigation, format, and type. Each dimension is briefly described below.

Source

- Single a single unit of text that has an author or a group of authors, a time of writing or publication date and a reference title or number.
- Multiple multiple units of texts where each has a different author, different publication times or have different titles or reference numbers.

Organization and Navigation

- Static texts with simple organization and a low density of navigation tools; typically texts with one or several pages organized in a linear way.
- Dynamic texts with a more complex, non-linear organization and a higher density of navigation tools.

Format

- Continuous texts formed by sentences that are organized into paragraphs.
- Non-continuous texts composed of a number of lists or elements such as tables, graphs, diagrams, advertisements, schedules, catalogues, indexes, forms, etc.
- Mixed texts containing both continuous and non-continuous elements.

Type

- Description texts with information that refers to properties of objects in space. Description texts provide an answer to "what" questions. Examples include a depiction of a place in a travelogue, a catalogue or a process in a technical manual.
- Narration texts with information that refers to objects in time. Narration texts provide answers to "when" or "in what sequence". Examples include a report, a news story, a novel, a short story or a play.
- Exposition texts with explanations of how different elements interrelate in a meaningful way and provide answers to "how" questions. Examples include a scholarly essay, a diagram

- showing a model of memory, a graph of population trends, or a concept map for an entry in an online encyclopedia.
- Argument texts that present the relationship among concepts or propositions. Argument texts
 provide answers to "why" questions. An important subclassification of argumentative texts is
 persuasive and opinionative texts, referring to opinions and points of view. Examples include a
 letter to the editor, a poster advertisement, posts in an online forum or a review of a book or film.
- Instruction a text that provides instructions on what to do. Examples include a recipe, a series of diagrams showing how to give first aid or guidelines for operating software.
- Transaction a text that aims to achieve a purpose such as requesting that something is done, organizing a meeting or making a social engagement with a friend. Examples include a letter, an email or a text message.

Scenarios

Reading is a purpose-driven activity; that is, it occurs when a reader wishes to accomplish a particular goal, such as locating information to fill out a form or understanding a topic well enough to participate in a discussion with peers. In many traditional reading assessments, however, the "goal" is simply to answer a few discrete questions about a text on a general topic and then move on to the next. In contrast to this artificial world of traditional reading assessments, the Reading Literacy units developed for 2018 are scenario-based. Each unit begins with a fictional scenario that describes the over-arching goal for reading the text or collection of texts in the unit. Thus, the reader is given both a context and a purpose that helps to shape the way he or she searches for, comprehends, and integrates information.

Scenarios were developed to address a range of situations. The framework describes several types of situations that relate to the overarching scenario developed for each unit:

- Personal situations that contain text that satisfies an individual's personal interests in both practical and intellectual ways. Examples include personal letters, fiction, biography and informational texts that are read to satisfy curiosity or for leisure as well as personal emails, instant messages and blogs.
- Public situations that contain text that relates to activities and concerns of the society at large.
 Examples include official documents, information about public events, message boards, news websites and public notices.
- Educational situations that contain text designed for the purpose of instruction and that is often chosen by an instructor rather than the reader. Examples include printed or electronic textbooks and interactive learning software.
- Occupational situations that contain text that supports the accomplishment of an immediate task. Examples include texts used to search for a job such as printed classified ads or online job websites, and texts that provide workplace directions.

Released Items

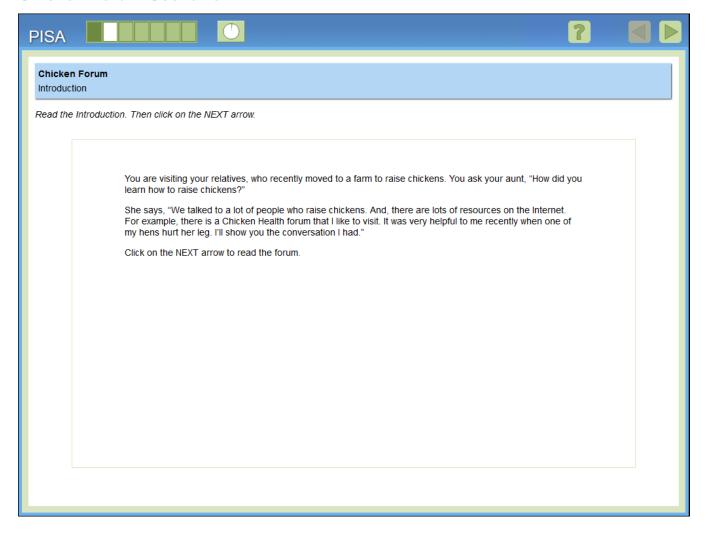
Below, released items for three units are presented. The units Chicken Forum and Cow's Milk were administered in the PISA 2018 Field Trial. They were omitted from the Main Survey based on objections to the content within the unitsⁱ; however, most of the items demonstrated strong measurement properties. Two items that did not demonstrate adequate measurement properties have not been released for the unit Cow's Milk.

The unit The Galapagos Islands was omitted prior to the Field Trial based on the recommendation of the Reading Expert Group. While the content and items were acceptable and tapped into elements of digital literacy that are important to assessing reading literacy, the content of the stimuli prepared for the website did not allow for a rich diversity of item types. Thus, in the interest of retaining units that did allow for a richer item diversity, The Galapagos Islands was omitted from the Field Trial. Consequently, the items presented here were not administered and their measurement properties were not ascertained. Nevertheless, some of the items are provided in this report to give the reader an idea of how reading units based on a simulated website with multiple webpages were designed in order to measure students' ability to locate and comprehend information about a topic.

Estimated levels of difficulty for each item in Chicken Forum and Cow's Milk are provided. However, the levels must be interpreted with caution because they have been estimated using only Field Trial data, which is a smaller data set than the Main Survey data set and hence prone to greater measurement error. Official levels for items are generally released based on data acquired in the Main Survey. No difficulty information can be provided for the items released for The Galapagos Islands because these items were not administered in the Field Trial.

Unit CR548: Chicken Forum

Chicken Forum Scenario

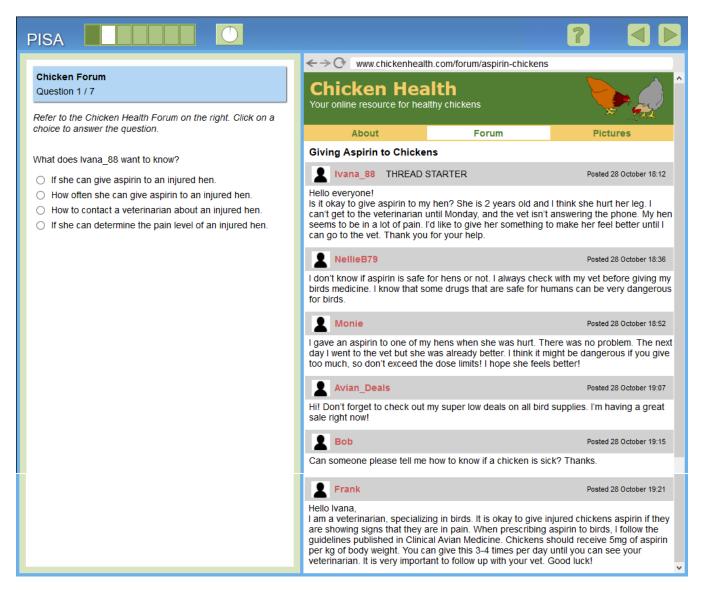


In this unit's scenario, the student is visiting family members who raise chickens. The aunt describes an Internet forum that focuses on chicken health and was a useful resource when one of her chickens was injured. The situation is classified as personal because it represents an individual satisfying personal interests through an Internet forum.

The text in this unit is the set of posts on the web forum used by the aunt. It is classified as: multiple text (the posts on the forum are written by distinct authors at different times); static (while the original conversation would have unfolded dynamically, the student is presented with the full and final conversation; continuous; and transactional.

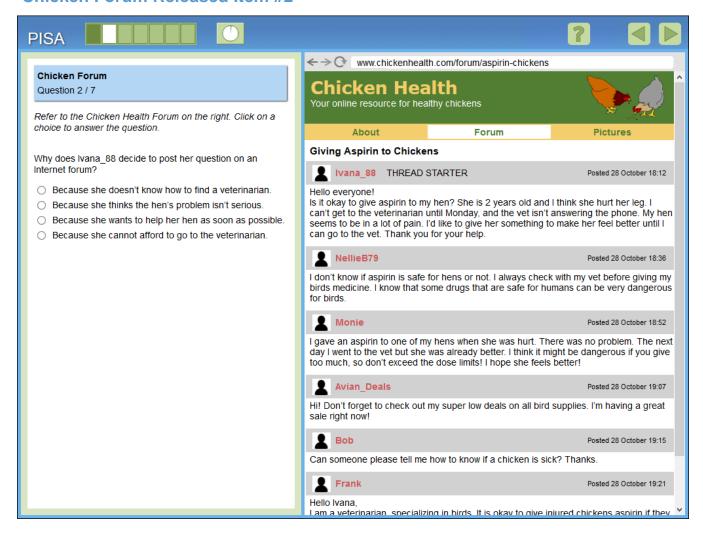
This text was designed to be accessible for a wide range of student abilities. It is short, but it possesses all the complexities of multiple texts where multiple points of view need to be considered, and the origin and content of the posts need to be evaluated to determine credibility. In this way, the test developers felt that even low ability students would have a chance to succeed when faced with a transactional, multiple text.

Please note that the screenshot provided for Released Item #1 shows the full text of the forum for the purposes of this report. The student had to scroll to see the full text in the programmed version.	



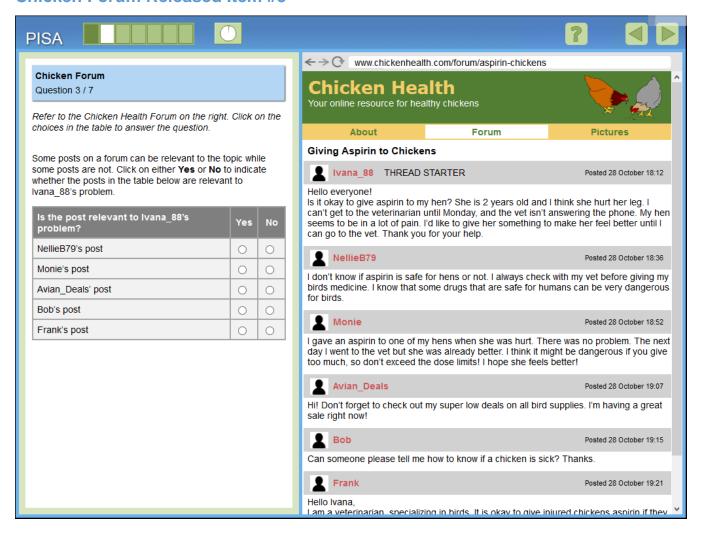
In this item, the student must consider Ivana_88's post and understand the literal meaning of the post. The student must match the paraphrase of Ivana_88's initial question (Is it okay to give aspirin to my hen?) to the options in the item. This not simply an "Access and retrieve information within a text" item because there is not a direct, verbatim match between the item options and the stimulus. Here, the correct answer is (A) If she can give aspirin to an injured hen.

Item Number	CR548Q02
Cognitive Process	Represent literal meaning
Response Format	Simple Multiple Choice – Computer Scored
Estimated Level	1a



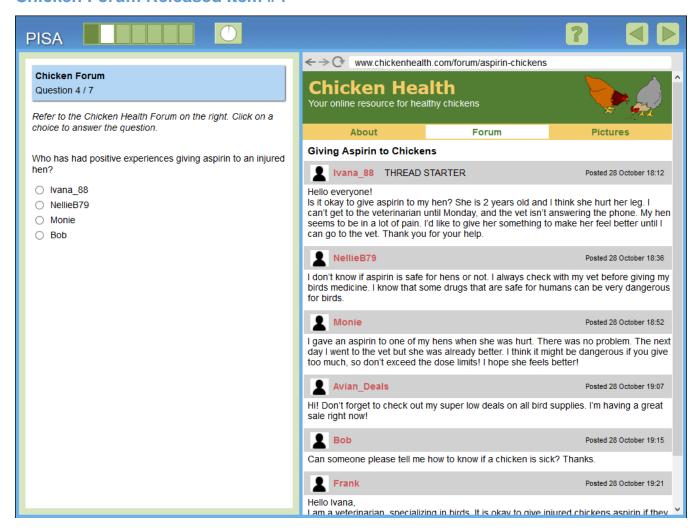
In this item, the student must understand Ivana_88's post at a deeper level than in the previous item. The student must go beyond what is represented literally in the post (I can't get to the veterinarian until Monday, and the vet isn't answering the phone) and the full context of her post to identify the correct answer. Here, the correct answer is (C) Because she wants to help her hen as soon as possible. The student can infer that because her hen is in a lot of pain and she is not able to get a quick response in another way (going to the vet or calling), she has posted on the forum.

Item Number	CR548Q03
Cognitive Process	Integrate and generate inferences
Response Format	Simple Multiple Choice – Computer Scored
Estimated Level	1a



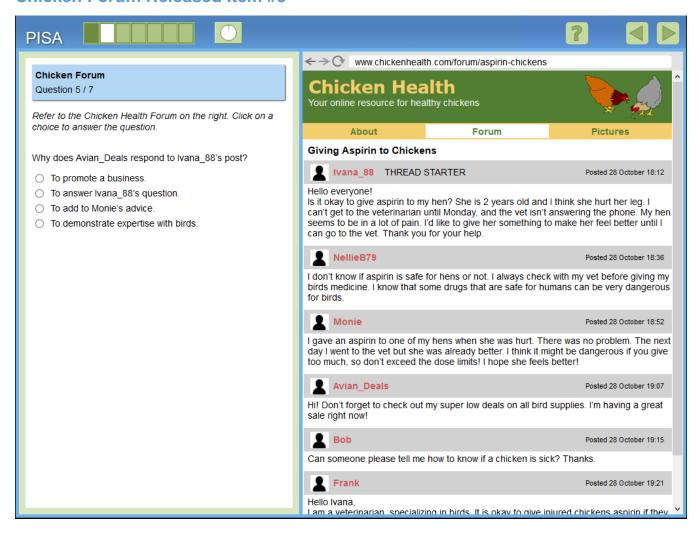
In this item, the student must complete a table by selecting "Yes" or "No" for each row. The question asks the student to identify whether each post in the forum is relevant to the topic. The student must first understand the literal meaning of each post and then reflect on the content and how it relates to the main topic – Giving Aspirin to Chickens. To receive credit for this item, the student was required to get all 5 rows correct. The correct answers are: Yes, Yes, No, No, Yes.

Item Number	CR548Q01
Cognitive Process	Reflect on content and form
Response Format	Complex Multiple Choice – Computer Scored
Estimated Level	2



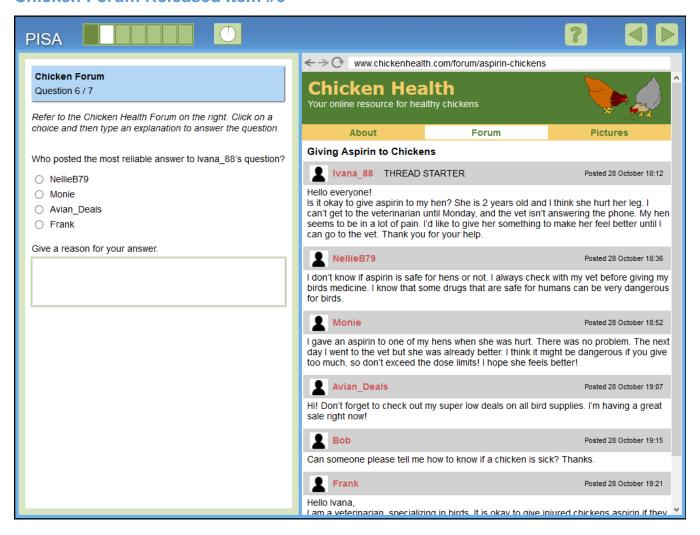
In this item, the student is required to understand the literal meaning of the posts by Ivana_88, NellieB79, Monie and Bob. If the student has understood the literal meaning of each, the student would understand that Ivana_88 is asking about whether she can give aspirin to a hen, NellieB79 is warning Ivana_88 about giving medicine to hens, Bob has posted something irrelevant, and it is Monie who has said she has given aspirin to her hen and it was okay. Here, the correct answer is (C) Monie.

Item Number	CR548Q04
Cognitive Process	Represent literal meaning
Response Format	Simple Multiple Choice – Computer Scored
Estimated Level	1a



In this item, the student must go beyond the literal meaning provided in the text of Avian_Deals's post and make an inference about why this person has made the post. The post by Avian_Deals does not explicitly state that they are promoting their business, thus the student must infer that from the information provided in the post. The correct answer is (A) To promote a business.

Item Number	CR548Q05
Cognitive Process	Integrate and generate inferences
Response Format	Simple Multiple Choice – Computer Scored
Estimated Level	1a

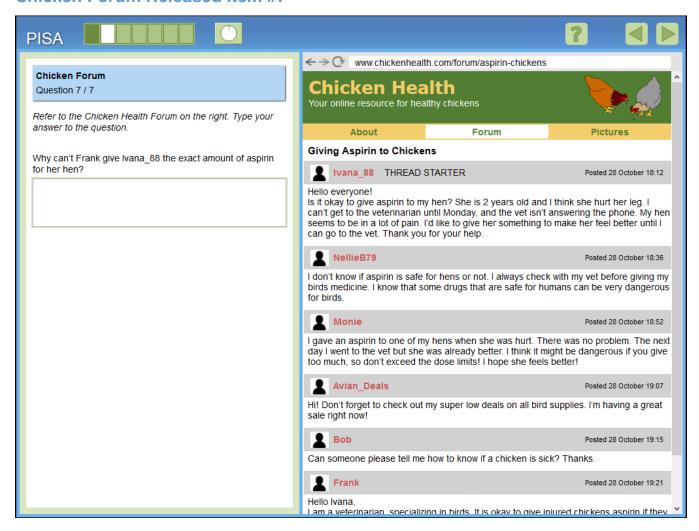


This item asks the student to consider the elements of quality and credibility of the posts by NellieB79, Monie, Avian_Deals and Frank. The student must first represent the literal meaning of each post and then think about what elements of each post make it a reliable answer to Ivana_88's question. This is an open response – human coded item, and the coding guide used in the Field Trial is provided below. For this item, the student could select any option except Avian_Deals and receive credit provided that the student gave one of the correct elements described below which supports why the selection is reliable. This item was coded with high reliability in the Field Trial.

Item Number	CR548Q07
Cognitive Process	Assess quality and credibility
Response Format	Open Response – Human Coded
Estimated Level	2

Full Credit

- Code 1: Selects or responds NellieB79 explicitly or implicitly AND states that NellieB79's answer implied that Ivana_88 should check with her veterinarian before giving any medicine to her hen.
 - [NellieB79] Nellie said she asks her vet first.
 - [No selection] NellieB79 didn't tell Ivana_88 what to do, but she said she checks with her vet before she gives medicine.
- OR: Selects or responds Monie explicitly or implicitly AND states that Monie gave aspirin to her own hen, and the hen recovered.
 - [Monie] Monie gave aspirin to her hen, and the bird got better.
 - [Monie] Monie has a hen that recovered when she gave her aspirin.
- OR: Selects or responds Frank explicitly or implicitly AND states that Frank is a veterinarian/bird specialist or has knowledge about treating birds.
 - [Frank] He's a veterinarian.
 - [Frank] Frank specializes in birds.
 - [Frank] Frank knows the dosage guidelines for chickens.
 - [No selection] Frank talks about a book about bird medicine.



In this item, the student must integrate information from across the posts by Ivana_88 and Frank. The student must understand what Frank has provided in his post (the dosage information - 5mg of aspirin per kg of body weight) and understand what he has not provided (the exact amount of aspirin Ivana_88 should use for her hen). The student must then understand why. This is because Ivana_88 has not provided the weight of her hen, which is what Frank needs to know in order to provide the exact amount of aspirin. This is an open response – human coded item, and the coding guide used in the Field Trial is provided below. This item was coded with high reliability in the Field Trial.

Item Number	CR548Q09
Cognitive Process	Integrate and generate inferences across multiple sources
Response Format	Open Response – Human Coded
Estimated Level	2

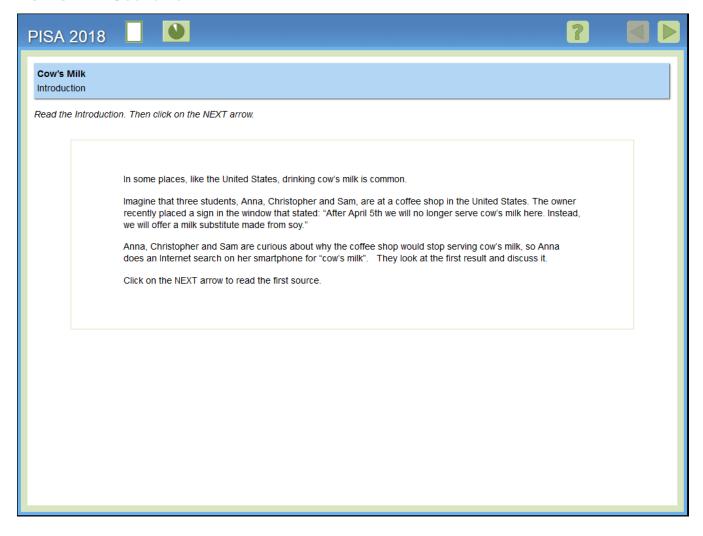
Full Credit

Code 1: States that the weight or size of the chicken was not provided/is not known.

- Ivana_88 didn't include the weight of her chicken in her post.
- Frank doesn't know how much her chicken weighs.
- The chicken's weight is missing.
- The size of the chicken is not known.

Unit CR557: Cow's Milk

Cow's Milk Scenario



In this unit's scenario, three students in the United States encounter an announcement at a coffee shop. The announcement states that the shop will no longer be serving cow's milk and will, instead, use a soy substitute. The three students are curious, so they search for information about cow's milk on their smartphones and discuss the results. The situation is classified as personal because it represents three individuals (the students in the coffee shop) satisfying their personal curiosity by reading the text.

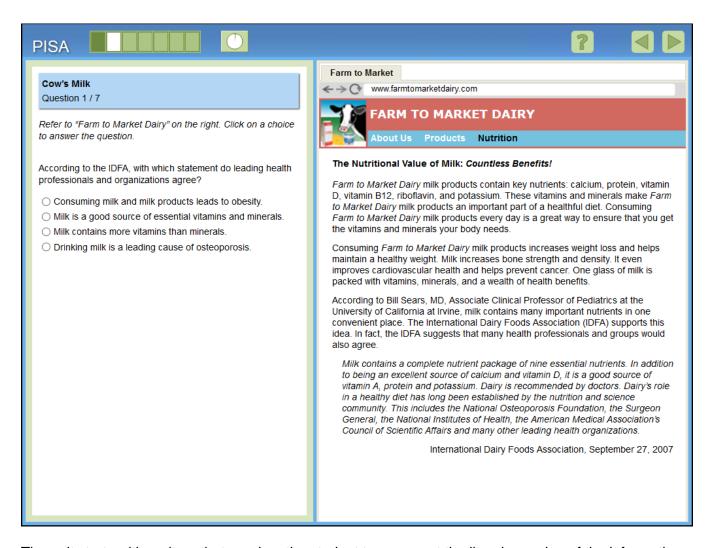
The text in this unit consists of two webpages. The first webpage is from "Farm to Market Dairy" a business that sells dairy products, including cow's milk. The second webpage is from a health website and presents an article entitled "Just Say 'No' to Cow's Milk". The text is classified as: multiple text; static; continuous; and argumentative.

Initially, the student is provided with the "Farm to Market" webpage only. Several questions are presented that focus only on the content of this webpage. Then, an update to the scenario is presented, and the student receives the second webpage. After reading the second webpage, the student

responds to a set of questions that focus solely on its content. Then, the student is given items that require integrating the information from both webpages.

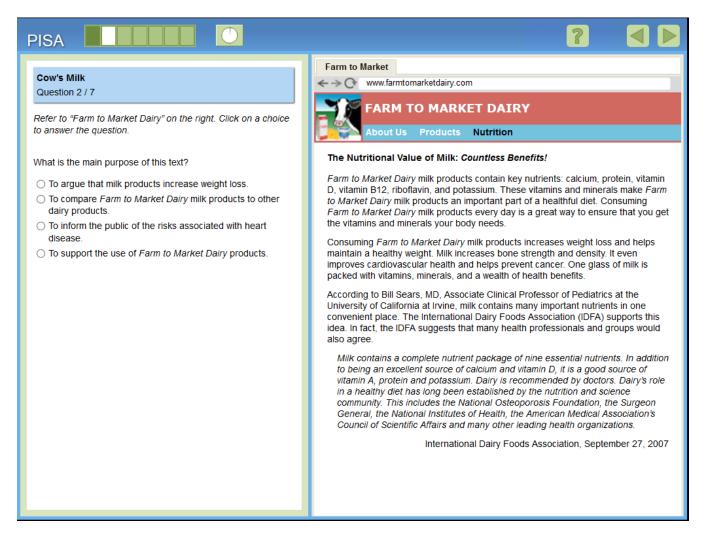
This model was used for several of the multiple-text units in the new material developed for Reading Literacy. This approach was chosen because it allows the student first to demonstrate proficiency on questions that relate to one text and then to demonstrate the ability to handle information from multiple texts. This is an important design feature because there may be readers who can succeed with information when it is presented in a single text and even integrate information within one text, but who struggle when asked to integrate *across* multiple texts. Thus, this design allows students with varying levels of ability to demonstrate proficiency on at least some elements of the unit.

The "Cow's Milk" unit was intended to be of moderate difficulty. The two webpages result in a larger amount of information to work through within the unit compared to a single text unit. In addition, the way the two webpages relate to one another needs to be considered by the student, requiring him or her to recognize whether they corroborate each other or whether they differ in their stances. This kind of cognitive engagement with the material and the unit overall is expected to require more effort than a unit that presents all the information within one text.



The unit starts with an item that requires the student to represent the literal meaning of the information presented by the IDFA. Specifically, the student needs to understand that the IDFA suggests "many health professionals and groups would also agree" that "Milk contains a complete nutrient package of nine essential nutrients" and goes on to list vitamins that occur in milk. Thus, the question stem connects fairly directly with the sentence in the webpage that introduces the quote from the IDFA and option B provides a paraphrase of the first two sentences in the quotation. The student does not have to go beyond the literal meaning presented in the webpage to find that the correct answer is (B) Milk is a good source for essential vitamins and minerals.

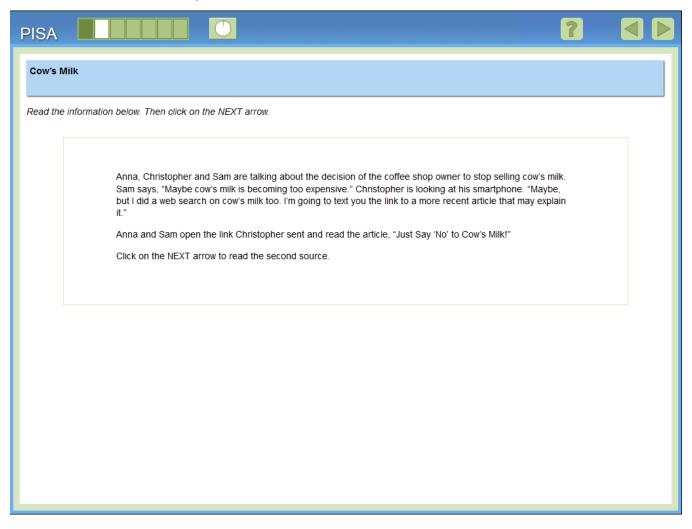
Item Number	CR557Q03
Cognitive Process	Represent literal meaning
Response Format	Simple Multiple Choice – Computer Scored
Estimated Level	1a



In this item, the student is asked to identify the main *purpose* of the webpage. Note that the student is not asked to identify the main idea. Instead, the student must understand the overall meaning of the webpage and then consider *why* it is being presented and *how* it has been written. The student must reflect on the content and form of the text. Here, the correct answer is (D) To support the use of *Farm to Market Dairy* products.

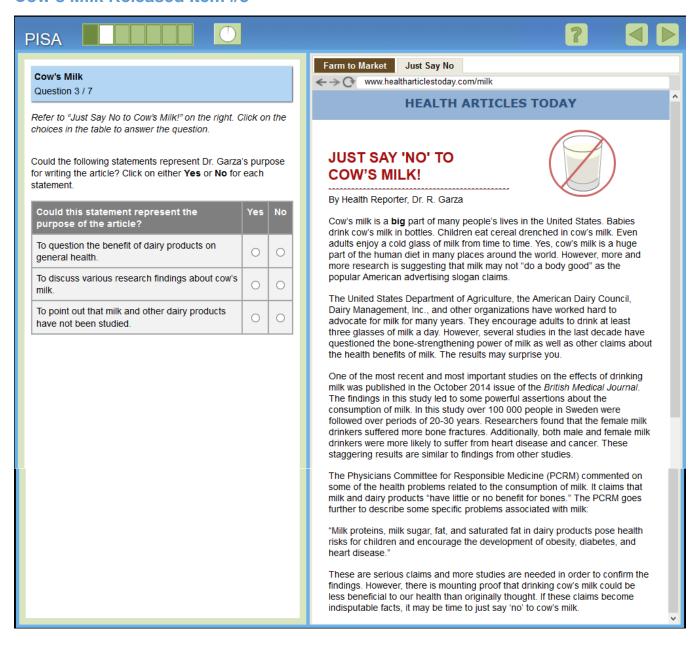
Item Number	CR557Q04
Cognitive Process	Reflect on content and form
Response Format	Simple Multiple Choice – Computer Scored
Estimated Level	2

Cow's Milk Scenario Update



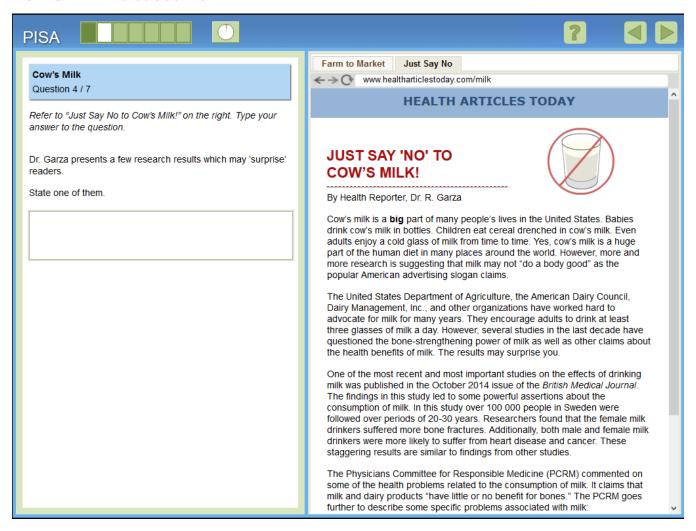
At this point in the unit, the student reads an update to the scenario, learning that one of the students in the scenario finds a different article about cow's milk and shares it with his friends. The article is called "Just Say 'No' to Cow's Milk!", which indicates that this article may not present such favorable information about cow's milk.

Please note that the screenshot provided for Released Item #3 shows the full text of the article for the purposes of this report. The student must scroll to see the full text in the programmed version.



In this item, the student must complete a table by selecting "Yes" or "No" for each row. The question asks the student to identify whether each row of the table could represent Dr. Garza's purpose for writing the article. The student must first understand the overall meaning of the article, then reflect on the content of the article and how it is presented. Then, the student must evaluate whether each statement in the table accurately represents a purpose for writing the article. To receive credit for this item, the student was required to get all 3 rows correct. The correct answers are: Yes, Yes, No.

Item Number	CR557Q07
Cognitive Process	Reflect on content and form
Response Format	Complex Multiple Choice – Computer Scored
Estimated Level	3



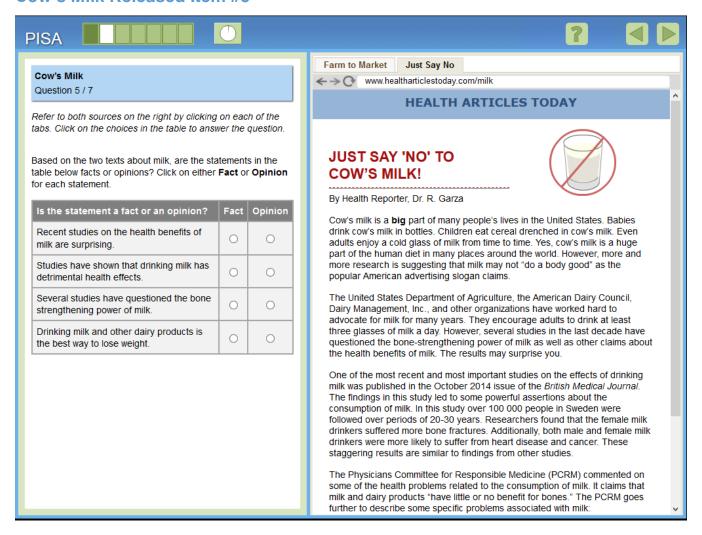
This item asks the student to identify the research results reported in the article and to state one of them. Here, the student needs to represent the literal meaning of information in the article by identifying one of the findings and providing it. Note that in the coding guide used for the Field Trial, there were only two findings that were allowed for this item because there were only two "surprising" research results described. The coding guide that was used in the Field Trial is provided below. This item was coded with high reliability in the Field Trial.

Item Number	CR557Q10
Cognitive Process	Represent literal meaning
Response Format	Open Response – Human Coded
Estimated Level	3

Full Credit

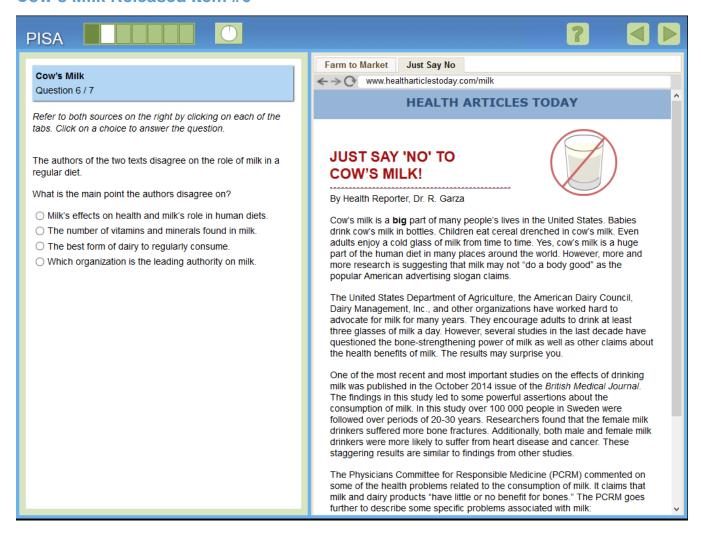
Code 1: Quotes or paraphrases one of the following <u>research results</u> stated in the text:

- 1. Female milk drinkers suffered more bone fractures.
- 2. Both male and female milk drinkers were more likely to suffer from heart disease and cancer
 - Women who drank milk had more broken bones.
 - People who drink milk had more heart disease and cancer.



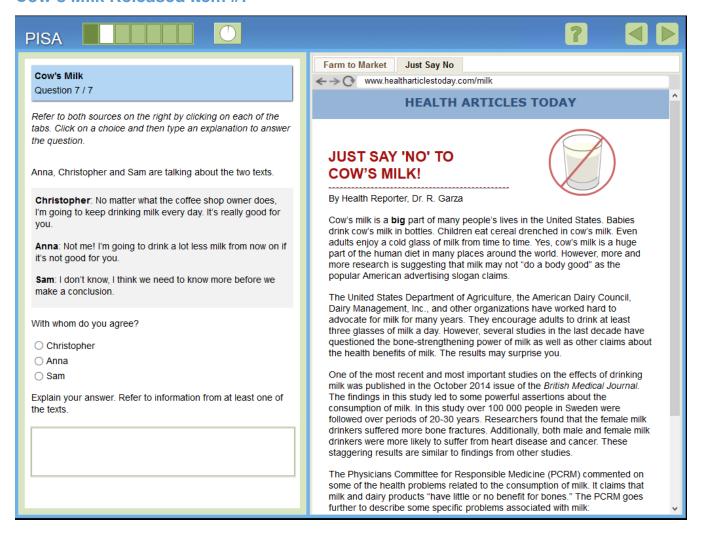
In this item, the student must integrate information across both webpages and infer whether the statements in the table represent facts that were presented in the webpages or represent opinions that were presented in the webpages. For this item, full credit was awarded if the student got all 4 correct, and partial credit was awarded if the student got 3 out of 4 correct. The correct answers are: Opinion, Fact, Fact, Opinion.

Item Number	CR557Q12
Cognitive Process	Integrate and generate inferences across multiple sources
Response Format	Complex Multiple Choice – Computer Scored
Estimated Level	5



In this item, the student must understand how each webpage describes the role of milk within a regular diet and must be able to identify the main point on which they disagree. This is a "Detect and handle conflict" item, but it is easier than many others presented in the PISA 2018 Field Trial because the item already lets the student know that there is a conflict between the two webpages. We expect the difficulty of these types of items to increase when the student first has to detect whether or not a conflict exists, then determine what the conflict is, and then figure out how to handle the conflict. Here, the correct answer is (A) Milk's effects on health and milk's role in human diets.

Item Number	CR557Q13
Cognitive Process	Detect and handle conflict
Response Format	Simple Multiple Choice – Computer Scored
Estimated Level	2



In this item, the student reads three stances provided in the item stem: one that supports continuing to drink milk, one that supports drinking less milk and one that says more needs to be known before a conclusion is reached. The student can select any of the three students in the scenario associated with these stances, but the student must provide a reason from at least one of the texts to support his or her selection. The coding guide for this item is provided below, which lists the acceptable ways a student can support their selection for each of the three options.

This item focuses mainly on the element of handling the conflict rather than detecting it. By asking the student to come to a conclusion and use the webpage or webpages to support the answer, the student demonstrates how he or she handles the conflict between the information presented in the two webpages.

Please note that this item was very challenging to code in the Field Trial, and several countries had difficulty achieving reliable coding. It is not clear to the Test Developers how the coding guide would have been improved, thus, this item would have likely been eliminated for the Main Survey if the unit had not been omitted. However, it is included here for the purpose of illustrating an open response, "detect and handle conflict" item.

Item Number	CR557Q14
Cognitive Process	Detect and handle conflict
Response Format	Open Response – Human Coded
Estimated Level	3

Full Credit

Code 1: Selects one of the names and gives an appropriate explanation as described below. If a name is not selected, responses clearly state a choice for Christopher, Anna, or Sam and provide an explanation for the choice by referring to one of the texts.

Selects "Christopher" and provides one or more of the explanations below from the first text, "The Nutritional Value of Milk: *Countless Benefits!*" OR mentions that the second text "Just Say 'No' to Cow's Milk!" isn't balanced/objective.

- 1. Milk contains (key) nutrients/many vitamins/minerals/specifically mentions one or more vitamin or mineral (e.g. potassium) that is important for good health.
- 2. Milk increases weight loss/helps maintain a healthy weight.
- 3. Milk improves cardiovascular health.
- 4. Milk prevents cancer.
- 5. The Farm to Market webpage uses support from a doctor.
- 6. The Farm to Market webpage cites the International Dairy Foods Association/provides support from the IDFA.
- 7. The "Just Say 'No' to Cow's Milk!" article/second text is not balanced/is not objective or gives an example of how it isn't balanced or objective.
 - [Christopher] A doctor says it contains many important nutrients. [Explanation 1/5]
 - [Christopher] Milk has minerals we need to be healthy. [Explanation 1]

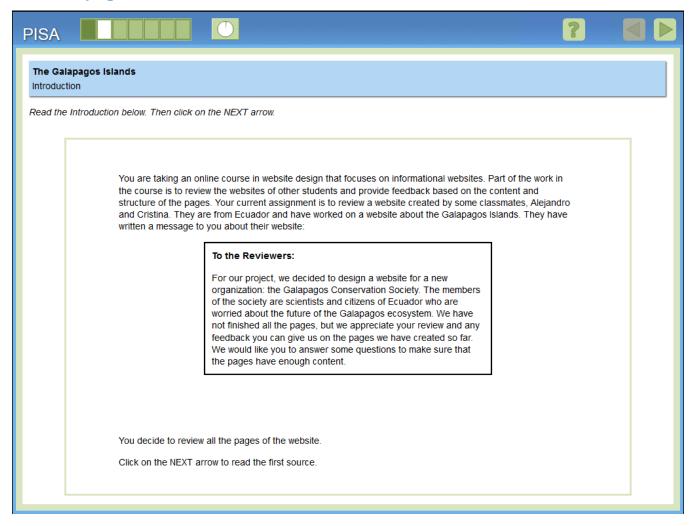
OR: Selects "Anna" and provides one or more of the explanations below from the second text, "Just Say 'No' to Cow's Milk!" OR mentions that the first text "The Nutritional Value of Milk: Countless Benefits!" is biased or trying to sell its products.

- 1. Milk may not be as good for you according to new research.
- 2. Milk may lead to weaker bones/more bone fractures.
- 3. Milk may cause more heart disease/cancer.
- 4. The article provides support from the Physicians Committee for Responsible Medicine (PCRM).
- 5. The article talks about growing proof that milk isn't as good for people as originally thought.
- 6. A study in Sweden showed that people who drank milk had more heart disease AND/OR cancer AND/OR bone fractures.
- 7. The "Nutritional Value of Milk: Countless Benefits!" (can refer to the article as the first text) or Farm to Market Dairy is a biased source/is trying to sell its products and the claims can't be trusted.
 - [Anna] They did a study in Sweden that showed that women who drank milk had more broken bones. [Explanation 6]
 - [Anna] That first one is just trying to sell us their milk, so you can't really trust them. [Explanation 7]

- OR: Selects "Sam" and provides an explanation that refers to the content or limitations of the texts to support the stance that a conclusion cannot be reached at this time. Responses include one of the following explanations:
 - 1. The "Just Say 'No" to Cow's Milk!" article/the second text points out that more studies are needed to confirm the research findings.
 - 2. Milk has been consumed regularly for a long time and the studies mentioned in the second article are new, so more time or research is needed to draw a conclusion.
 - 3. These are only two texts and more research is needed before a conclusion can be made.
 - 4. It would be good to verify the information found in each article before making a conclusion.
 - 5. The two texts contradict one another, so a conclusion cannot be drawn OR provides a specific example of how they contradict one another (one text says milk creates strong bones and the other one says it causes more fractures).
 - [Sam] Just Say No says that more studies are needed before we will really know. [Explanation 1]
 - [Sam] I need to make sure that what each article says is true before I can decide. [Explanation 4]

Untested Unit: The Galapagos Islands

The Galapagos Islands Scenario



In this unit's scenario, the student is participating in an online website design course where classmates review each other's websites. The student is asked to review a website produced by some classmates and answer questions to help them determine whether there is enough content in the existing pages. The website that the student is to review is about a fictional organization called the Galapagos Conservation Society and covers information about the Galapagos Islands off the coast of Ecuador. The situation is classified as educational. The text in this unit consists of four webpages for the site ("About"; "Animals"; "Conservation"; and "Volunteer"). The text is classified as: multiple; dynamic; mixed; and expository.

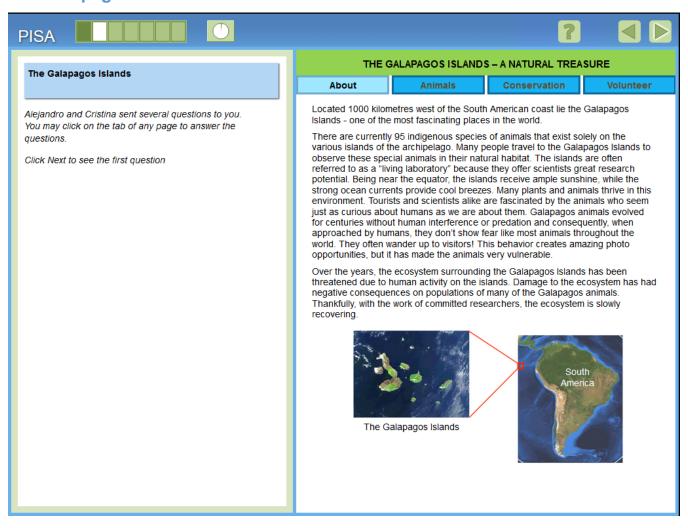
This unit was designed to fully address the digital aspects of reading literacy discussed in the Reading Literacy framework. The text consists of a simulated website with four webpages. It was designed to have the navigational elements typical of a standard website with navigational tabs at the top of the page, each labeled with a title to link the tab with the content of the page. In order to complete each item, the student must search among the four webpages to find the answers to the questions. Some items direct the student explicitly to the page where the information is to be found while other items do

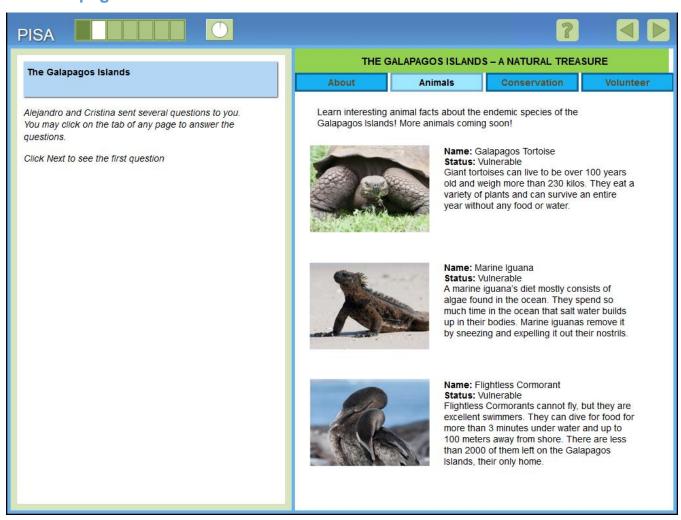
not. Items that do not direct the student to a specific page all share a core cognitive process of search and select the relevant text. Some items only require the students to search for and select the relevant text to locate a specific piece of information that is a direct match with the question stem or one of the response options. Other items require the student to search for and select the relevant text but then go beyond this cognitive process to engage more deeply with the text. The released items below demonstrate this range of depth of text engagement.

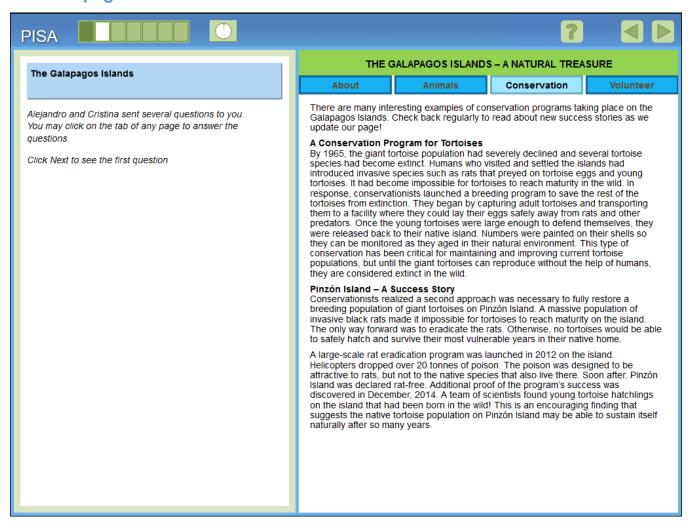
Below, each webpage of the website is presented to show the content presented in the entire stimulus. The student begins the unit with the "About" webpage visible. This webpage introduces the islands and describes how and why the animals that inhabit the islands are unique. The webpage also describes how the islands' ecosystems have been threatened. The second webpage provides brief descriptions of three animals that are endemic to the islands. The student navigates to this stimulus by clicking on the tab labeled "Animals". The third webpage is titled "Conservation" and describes two programmes that have been successful in restoring the Galapagos Tortoise population. The final webpage is titled "Volunteer". This webpage is "under construction" and does not contain information.

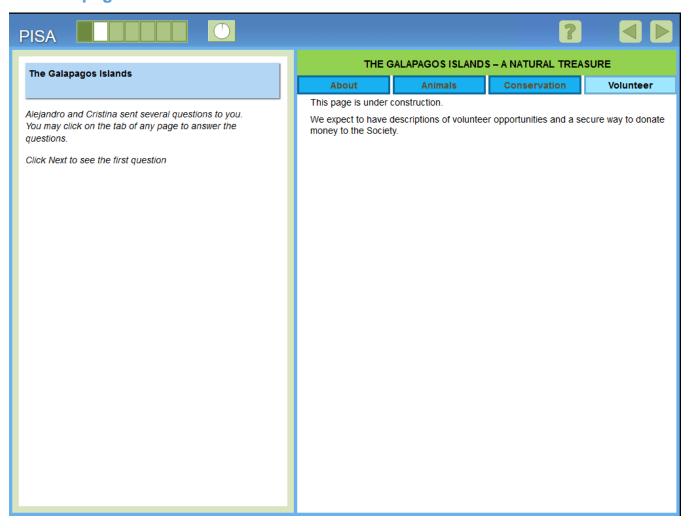
This unit was not programmed because the Reading Expert Group chose to exclude it from the Field Trial. If it had been programmed, the student would have started each new item with the "About" webpage on the right side of the screen. Even if the student had ended the previous item while viewing a different webpage, the "About" webpage would have been presented for the new item. This standardized each item across all students.

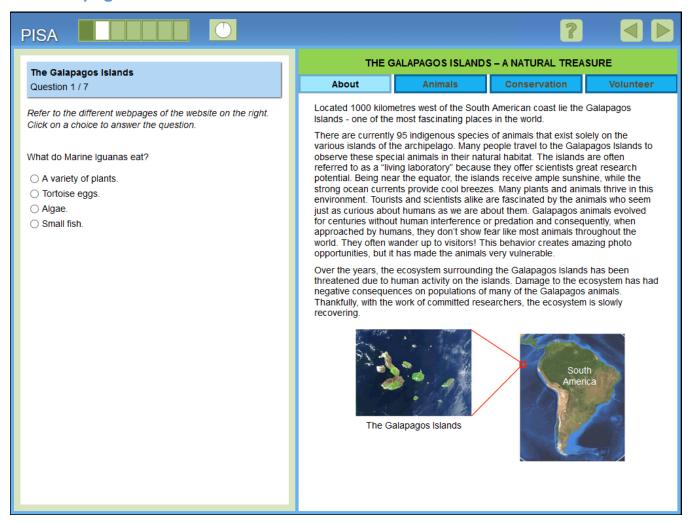
Please note that the graphics for this unit were designed by Test Developers so that members of the PISA team in each country could get an idea of how the unit would "look and feel". The other released units ("Chicken Forum" and "Cow's Milk") went through a formal design and programming process. Additionally, the French Source was not developed for this unit. The process of creating the French version improves the linguistic clarity of the English version of the unit. However, because the French version of this unit was not developed, the English version presented here did not go through that linguistic refinement.





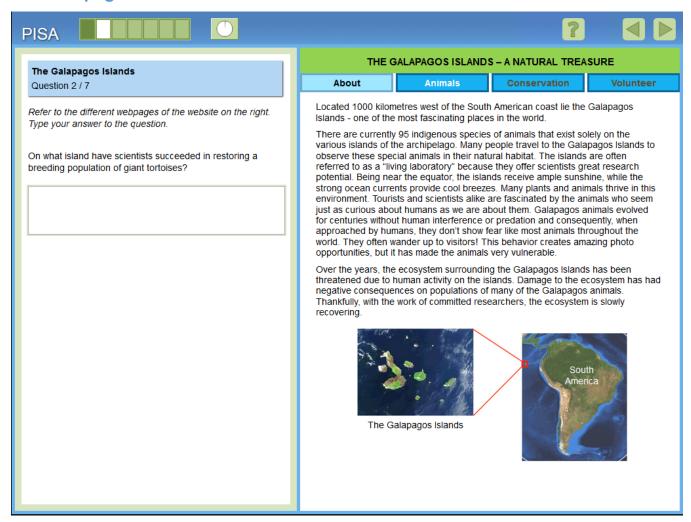






In this item, the answer is not located on the "About" webpage, so the student must search through the different webpages to find the answer. By providing the correct answer, the student demonstrates that he or she has selected the relevant text ("Animals"). Once the correct text has been located, a simple match is made between the content within the section on the Marine Iguana and the options in the stimulus. Thus, while this item encourages engagement with the different webpages, it does not require a deep level of engagement with the relevant text. Here, the answer is (C) Algae.

Item Number	CR571Q13
Cognitive Process	Search for and select relevant text
Response Format	Simple multiple choice

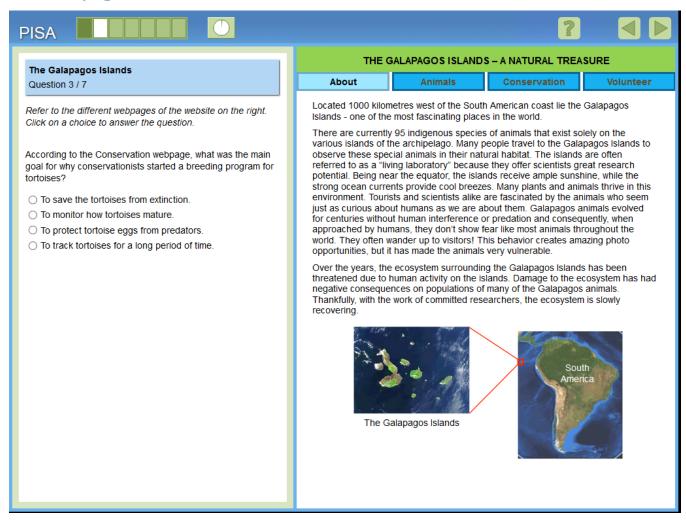


This item is similar to the Released Item #1 in that the student is not given information about where the answer to the question is located. Thus, the student must search among the four webpages and select the relevant text ("Conservation"). Here, the student must provide the answer in their own words, and the coding guide for the item can be found below.

Item Number	CR571Q14
Cognitive Process	Search for and select relevant text
Response Format	Open response – human coded

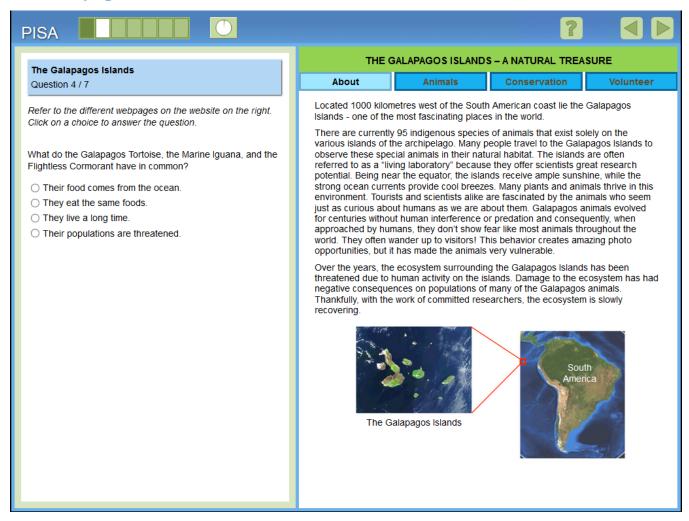
Full Credit

Code 1: Pinzón Island or Pinzón



This item is a good contrast to the previous two items. In the two previous items in this unit, the item did not explicitly identify the relevant text for the student. Thus, searching for the relevant text was required to complete the item accurately. Here, the item explicitly refers to the "Conservation" webpage. This should be a strong signal to the student that they need to navigate to the "Conservation" webpage to find the answer. Once students are on the correct webpage, they need to match the information in the question stem (started a breeding program for tortoises) and the webpage (launched a breeding program). Option A is also a very close match with what is in the webpage (...to save the rest of the tortoises from extinction). The correct answer is (A) To save the tortoises from extinction. By contrasting this item and the previous two items, one can see the difference between the two cognitive processes of access and retrieve information within a text, and search for and select relevant text.

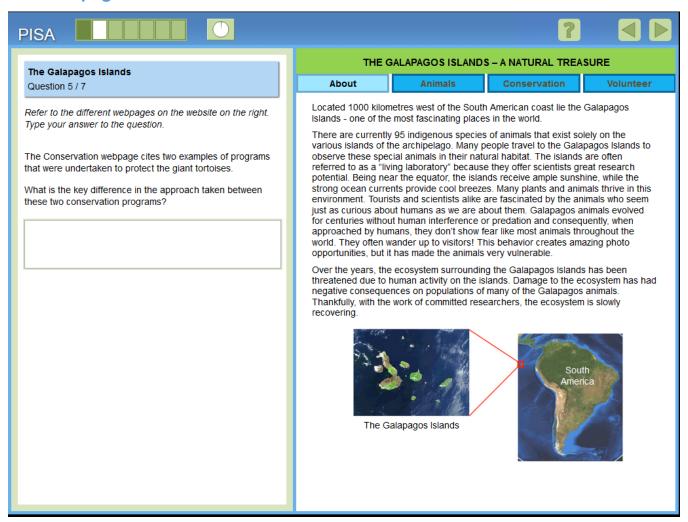
Item Number	CR571Q08
Cognitive Process	Access and retrieve information within a text
Response Format	Simple multiple choice



For this item, the student begins the task by searching for the relevant text to locate the webpage that discusses animals of the Galapagos Islands. If the student has successfully navigated to the "Animals" webpage in the first item, then he or she will likely know where to go to complete this item. However, because the unit would always revert to the "About" webpage had it been programmed, this item would have had, at its core, the cognitive process of searching for and selecting relevant text. Unlike the previous items, this item requires the student to engage more deeply with the information in the webpage. Once the student has navigated to the correct webpage, it is necessary to integrate information across all three descriptions to correctly identify the commonality among the three animals. Because this commonality is not explicitly stated in the webpage and requires integration, this is an "integrate and generate inference" item. Here, the answer is (D) Their populations are threatened.

Item Number	CR571Q06
Cognitive Process	Integrate and generate inferences
Response Format	Simple multiple choice

The Galapagos Islands Released Item #5

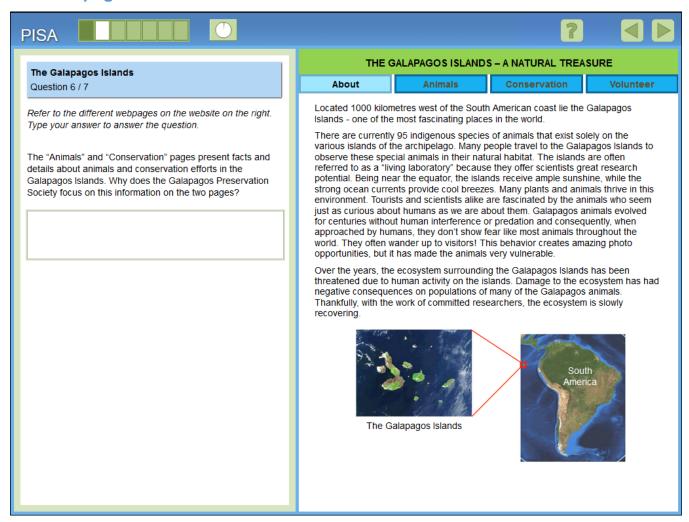


In contrast to the previous item, the question stem indicates to which webpage the student must navigate in order to find the answer to the question. However, this item shares similarities with the previous item in that it requires the student to integrate information across one webpage and understand information that is not explicitly stated in the webpage. Thus, this is an "integrate and generate inference" item. It is an open response – human coded item, and the draft coding guide for the item is presented below.

Item Number	CR571Q07
Cognitive Process	Integrate and generate inferences
Response Format	Open response – human coded

Full Credit

Code 1: Responses indicate that one program focused on the breeding of native species while the other program focused on the eradication of invasive species.



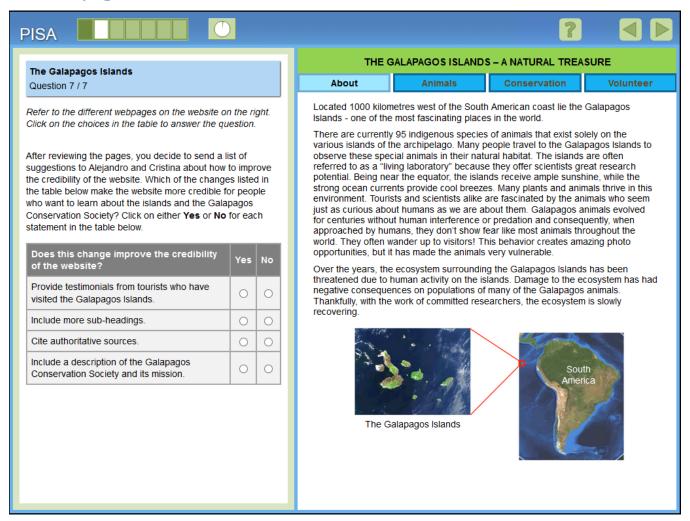
This item explicitly tells the student to consider the information presented on two specific webpages, which limits the amount of searching a student needs to do in order to complete the item. To correctly answer this item, the student must understand the content of both webpages with respect to how each discusses the animals and conservation efforts on the islands. The student must go beyond understanding the content and reflect on the way its presentation shapes its purpose.

This item represents how the cognitive processes in the Reading Literacy assessment can build upon one another. First, the student must understand the literal meaning of sentences and paragraphs in the webpage. Then the student has to integrate the information within each webpage as well as across both webpages. Finally, the student must think about how the content is presented to consider a purpose for which the texts may be used. The draft coding guide for this item is presented below.

Item Number	CR571Q11
Cognitive Process	Reflect on content and form
Response Format	Open response – human coded

Full Credit

Code 1: Responses indicate that the society uses the facts and details to encourage people to support programs to save the animals and the islands.



For the final item in the unit, the student must consider the content of the full website and how it could be improved to present the information in a more credible way for future readers whose purpose is to find out more about the islands and the Galapagos Conservation Society. This item relies on knowledge of what makes a source more credible.

The first statement describes a way to promote tourism to the islands but does not address aspects of credibility with respect to learning more about the islands and the conservation society. The correct answer is No. The second statement addresses a way in which the content could be organized in order to improve the *readability* of the website but not the *credibility*. The correct answer is No. The third statement is a clear way to make a website or text more credible. The correct answer is Yes. Finally, the fourth statement could improve the quality and credibility of the website because a clearly-stated description of the society and its mission might allow readers to better contextualize the content within the pages. Readers would know that the society's goal is rooted in science and aims to preserve the islands' ecosystem. Without this knowledge, readers are less aware of who the author is and whether or not there is inherent bias in the information presented. The correct answer is Yes.

Item Number	CR571Q12
Cognitive Process	Assess quality and credibility
Response Format	Complex multiple choice

¹ The "Chicken Forum" unit describes a person who is seeking information about how to help an injured chicken. Although the information presented in the unit is accurate and medically-sound, some objections were raised regarding the propriety of recommending any pharmaceutical solution to a health problem within the context of the PISA assessment.

The "Cow's Milk" unit contains a stimulus from a milk producer that touts milk's ability to help its drinkers lose weight. Some objections were raised with respect to this claim and its focus on body image, even though the unit itself drew attention to the biased nature of the stimulus.