



ANNEX A2

Electronic reading sample tasks

The electronic reading sample tasks are examples of questions students answered in the PISA 2009 survey to assess their competencies in reading electronic texts. This part of the survey was optional.

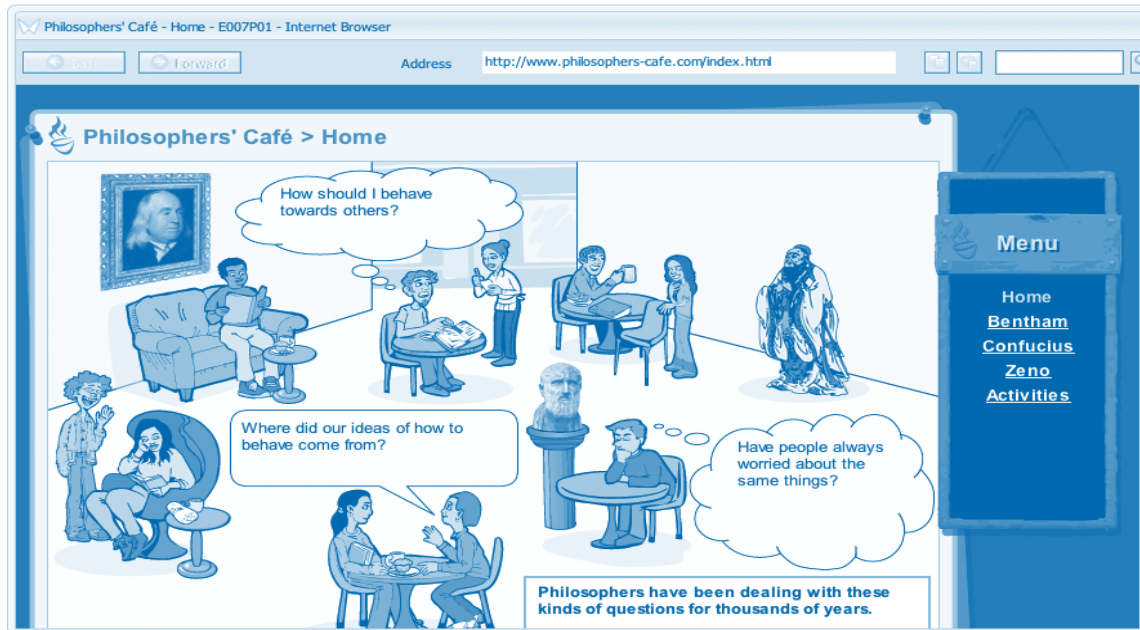
All electronic sample tasks may be viewed on the website for publicly released items of the PISA electronic reading assessment: <http://erasq.acer.edu.au>.

username: public
password: access

Note that the images of the electronic reading assessment stimuli are multicoloured. The true colours as presented on the screen are therefore not reflected in this publication.

ELECTRONIC READING UNIT 1

Philosophers' Café



This unit is based on the idea of a Web Quest, a type of website that typically involves teaching and learning activities, including tasks and resources. It therefore fits into the educational context. The stimulus for Philosophers' Café includes encyclopaedia-style entries on philosophy loosely related to the notion of the good life, in a way intended to exploit the visual and interactive possibilities of the ERA environment. The screen shot above shows the Home page for the Philosophers' Café. On the right is a menu with links to information about three philosophers, Zeno, Confucius and Bentham, as well as to a series of activities. The central part of the screen shows a café scene populated by young people. It includes thought bubbles with philosophical questions that visitors to the café (or students of philosophy) might be considering. It also includes images of the three philosophers, Zeno, Confucius and Bentham. Each of the images of philosophers has a hyperlink to the same page of information as the matching menu item to the right.

The screen shot below shows the page that can be accessed by clicking on the menu item Confucius, or on the image of Confucius in the top right of the café scene. There are similar pages for Zeno and Bentham. Each text presents some historical context for the philosopher, and one of his central ideas. It is expected that some students would be familiar with the names of one or more of the philosophers, but that they would not necessarily know much about his life or beliefs. The context is thus likely to be unfamiliar, while the subject matter is considered to be complex, since it deals with highly abstract ideas developed in the past, sometimes a very distant past.



Task 1: PHILOSOPHERS' CAFÉ

Philosophers' Café - Confucius - E007P05 - Internet Browser

Address <http://www.philosophers-cafe.com/confucius.html>

Philosophers' Café > Confucius

"Do not do to other people what you do not want them to do to you."

Confucius was a Chinese philosopher who lived from 551 to 479 BC. His father died when he was three, and he was brought up in poverty by his mother. It was a time of chaos and constant war in China. Confucius saw the suffering of people around him and wanted to try to put an end to it. He wanted peace and prosperity for the people.

Confucius believed that if society were to improve, people needed to change their own behaviour. He thought that this was especially important for rulers, because their behaviour had a strong influence on the lives of ordinary people. Our fundamental aim should be to live in harmony with other people.

According to Confucius, one of the most important ways we can achieve harmony is through what he called "Ren", which can be translated as "kindness": that is, consideration of one human being for another.

Fact!
There are approximately 6 million Confucians in the world today.

Menu

- [Home](#)
- [Bentham](#)
- [Confucius](#)
- [Zeno](#)
- [Activities](#)

You are at the Philosophers' Café Home page. Click on the link for Confucius. What did Confucius mean by "Ren"?

- A Peace and prosperity.
- B Living in chaos and war.
- C The behaviour of rulers.
- D Kindness to other people.
- E Living in harmony.

Framework Characteristics

Situation	Educational
Medium	Electronic
Environment	Authored
Text format	Multiple
Text type	Exposition / description
Aspect	Access and retrieve: Retrieve information
Question intent	Locate a definition that is directly stated in a short text containing complex or unfamiliar information
Item format	Multiple choice

CODING GUIDE

Full Credit

Code 1: D. Kindness to other people.

No Credit

Code 0: Other responses.

Code 9: Missing.

About two-thirds of the students in the field trial gained full credit for this task. Both the navigation and text processing demands are low. The task requires students to follow the explicit instruction to click on one of the links (either the name “Confucius” or his image in the café scene) in order to open the page describing Confucius. The information required is explicitly stated in the text. Students can read to the end of the text to find the term “Ren” contained in the stem, then make a match between the “kindness” in the text and in the key.

Task 2: PHILOSOPHERS' CAFÉ

Go to the Activities page. Look at Scenario 2. Which of Zeno's teachings does this comic illustrate?

- A We should consider others in order to live happily.
- B We should be concerned about our appearance.
- C We should not let our desires control us.
- D We should not try to change the past.



Framework Characteristics

Situation	Educational
Medium	Electronic
Environment	Authored
Text format	Multiple
Text type	Exposition / description
Aspect	Integrate and interpret: Develop an interpretation
Question intent	Recognise a similarity of theme between a complex abstract text and a cartoon
Item format	Multiple choice

CODING GUIDE

Full Credit

Code 1: C. We should not let our desires control us.

No Credit

Code 0: Other responses.

Code 9: Missing.

This task requires integration of information from two very different texts. Directed by explicit navigation instructions, students follow two links to locate a page with a comic strip. They have to interpret the meaning expressed in the comic strip and relate it to an idea described on the page for the philosopher, Zeno. Navigation is more complex than in task 1, as they need to visit three pages other than the starting page. They will very likely need to go back to the comic strip at least once to check their answer, either (most efficiently) by clicking on the “back” button, or by using the menu links on the right of each page. The options in the four multiple choice alternatives present four possible attitudes, only the final two of which include ideas attributed to Zeno in the text. The last of the alternatives, however, does not offer a plausible interpretation of the comic. Students who chose one of the first two options would quite likely have interpreted them in relation to the ideas expressed in the comic strip only, without reference to Zeno. The task thus combines a number of fairly explicit navigation steps with a requirement to interpret and integrate information across two texts. This combination of demands helps to explain why this item was more difficult than the first task, with about half of the students gaining full credit.



Task 3: PHILOSOPHERS' CAFÉ

Go to the Activities page. Find the Timeline. Use the information in the website to find when each of the three philosophers (Bentham, Confucius and Zeno) was born. Then use the drop down menus in the timeline to show when each philosopher was born.

Framework Characteristics

Situation	Educational
Medium	Electronic
Environment	Authored
Text format	Multiple
Text type	Exposition / description
Aspect	Access and retrieve: Retrieve information
Question intent	Locate several pieces of information that are explicitly stated across multiple sites
Item format	Complex multiple choice

CODING GUIDE

Full Credit

Code 1: Selects correct dates for all three philosophers.

- Confucius: 600 – 400 BC
- Zeno: 400 – 200 BC
- Bentham: 1600 – 1800 AD



No Credit

Code 0: Other answers.

Code 9: Missing.

This task asks students to place the three philosophers in chronological history, on a timeline that runs from 1000 BC to 2000AD, with the present day shown as “Now”. Students respond within the simulated website, rather than in the task area at the bottom of the screen. The task requires a minimum of six navigation steps, imposing a relatively high navigational demand compared to the difficulty of the text processing required. It requires students to follow two explicitly described links in order to find the timeline where they respond. They then go to the pages for each of the three philosophers and locate the dates when each one lived. These are explicitly and prominently stated in the texts, and cover a lengthy time span, from Confucius (551 to 479 BC) and Zeno (333 BC to about 264 BC) to Bentham (1749 to 1832 AD). There are 15 drop-down menus available, each covering a period of 200 years, from which students need to select the three that correspond to the times when the philosophers lived. If they wish to change their answers, they can reset any individual drop-down menu to be blank.

ELECTRONIC READING UNIT 2

Ice Cream

Ice Cream - Global Search - E008P02 - Internet Browser

Address <http://www.globalsearch.com>

GLOBAL SEARCH

ice cream

- [Miracle Ice Cream Diet](#)
The Hollywood actress says she lost 25 pounds in six weeks ... - by stuffing herself with confectioneries such as chocolate, **ice-cream** and pudding ... "I ate whichever desserts I liked ...
www.diet-blog.com/archives/2007/09/30/miracle_ice_cream_diet.php
- [The Tribune, Chandigarh, India - Ludhiana Stories](#)
Dr Grewal talked about different milk products especially those of Indian origin like kheer, kulfi (a kind of **ice-cream**), rabri, milk cake, gajrela and sweets which can be ...
www.tribuneindia.com/2000/20001220/ldh1.htm
- [Thai Menu](#)
Sweet and sour fish prepared Thai style with steamed Basmati rice ... soup - Tom yam Koong, Prew wan Kai, Basmati Rice, **ice cream**. ... **Ice Cream** with chocolate and nuts ...
www.indianraja.lv/Thaimenu.html
- [Food Standards Agency - Committee members](#)
... served in a number of Government departments ... dietary and lifestyle risk factors ... he led the development of many well known brands of **ice cream**. ...

The stimulus for this unit is a set of internet search results, similar to those obtained using a typical search engine. It thus represents the kind of information commonly seen in daily life, whether at school, at home or in a work context. The results presented vary substantially in both their sources and the kinds of information they include. Although search results are typically generated on the basis of terms selected by an individual, the types of information included in the results tend to be very broad. The majority of the sites referred to in the results are government, commercial and news websites rather than those with a personal focus. To take account of this diversity of content this stimulus is categorised as being in the public category. The topic chosen, ice cream, is considered to be very familiar to students.

The screen shot above shows what readers see when they begin the unit. The full stimulus consists of a single page of ten search results, of which only the first four are initially visible. The reader needs to scroll down to see the full set. The number of search results included in the stimulus thus entails some navigation in order to complete the tasks, and also provides what, from an assessment perspective, can be regarded as a large number of multiple-choice distractors.

Task 1: ICE CREAM

This page shows search results for ice cream and similar foods from around the world. Which search result is most likely to provide a history of ice cream? Click the button next to the link.



Framework Characteristics

Situation	Public
Medium	Electronic
Environment	Authored
Text format	Non-continuous
Text type	Description
Aspect	Integrate and interpret: Form a broad understanding
Question intent	Identify relevant search result by recognising the main theme of a short description
Item format	Multiple choice

CODING GUIDE

Full Credit

Code 1: Ice Cream – Online Encyclopaedia Article about Ice Cream.

No Credit

Code 0: Other answers.

Code 9: Missing.

This question asks students to select which of the series of results is most likely to provide information of a specific kind. It asks them to form a broad understanding of the likely content of the links in each search result, rejecting those nine results that are irrelevant to their needs, and identifying the only relevant result. This is the kind of operation needed every time a person uses an internet search engine and examines a page of search results. Since the stimulus is on a single page, the only navigation demand is scrolling. The key terms in the questions are “ice cream” (the subject of all the results) and “history”. The first nine results provide links to information about ice cream recipes or menus (from India, Latvia, Ireland and Turkey), a personal blog referring to a Hollywood actress, technical information on ice cream, and the page for members of a government agency; all of these can be rejected as unlikely to give a history of ice cream. To gain credit, students need to recognise that expressions in the final result, “the Chinese invented”, “oldest evidence in Europe”, “the early 20th century” and “One of the oldest types of ice cream”, collectively refer to the history of ice cream, and suggest that this link would provide more information on this topic.

The navigation demand is low compared to the demand imposed by the need to obtain a general understanding of each search result. The item was moderate in difficulty, with between half and two-thirds of students gaining full credit.



Task 2: ICE CREAM

This page shows search results for ice cream and similar foods from around the world. You want to know if ice cream can be part of a healthy diet. Which search result is most likely to give accurate advice? Click the button next to the link.

Framework Characteristics

Situation	Public
Medium	Electronic
Environment	Authored
Text format	Non-continuous
Text type	Description
Aspect	Reflect and evaluate: Reflect on and evaluate content of text
Question intent	Evaluate search results in terms of relevance and credibility/ trustworthiness of information
Item format	Multiple choice

CODING GUIDE

Full Credit

Code 1: National Food Information Centre: The Food Guidelines-Food Label Connection.

No Credit

Code 0: Other answers.

Code 9: Missing.

This question represents another very typical task faced by users of the Internet, that is, evaluating the trustworthiness of the results for a particular purpose, in this case the quality of advice about whether or not ice cream may be part of a healthy diet.

In order to gain credit for this task, students need to evaluate the various links in terms of both relevance and likely authoritativeness. This process should lead them to reject results which provide links to recipes and menus, which are not relevant to the focus of the research question referred to in the stem. They must also reject results that refer to diet but that lack authoritativeness, such as the blog referring to the Hollywood actress “stuffing herself with confectioneries”; and results which have some reference to potentially credible sources, but are not likely to be relevant, such as Dr Grewal describing varieties of milk products. Possibly the strongest distractor is the result for the Food Standards Agency, which has a name that sounds both relevant and credible and includes the words “dietary and lifestyle risk factors”. However, this search result refers only to committee members of this agency, not to health guidelines. Students need to recognise that the fifth result links to a plausibly reliable national organisation, “National Food Information Centre”, and contains not only relevant information on diet recommendations but also the kind of technical language one would expect from a reputable organisation of this kind, such as “serving size” and “National Dietary Guidelines suggest you eat a diet providing 30 per cent or less of calories (joules)”.

This reflection and evaluation task, which relies heavily on text processing and little on navigation, was difficult for students in the field trial, with only about one-third selecting the correct search result.



ELECTRONIC READING UNIT 3

Phishing

Phishing - Intro - E010P01 - Internet Browser

Address <http://www.phishingeducation.org>

The Online Phishing Resource Site > Home

[Home](#)

What is Phishing?

Phishing is a form of identity theft. Its purpose is to trick people into handing over their personal information. People who collect this information may then use it for illegal activities such as stealing money from a bank account. A phishing e-mail is an e-mail that imitates a well-known company, or claims to offer a genuine service, and asks the recipient to provide personal information. An example is an e-mail that pretends to be from a bank, and asks the recipient for login details such as a username and password. A common technique is to request urgent action to ensure that an account remains valid.

Phishing is not always easy to identify, because many phishing e-mails look genuine.

Is Phishing a Real Problem?

As access to the Internet and the use of e-mail have spread, so has phishing.

Phishing Facts

Average loss to each person who is a victim of successful

The material presented in this unit deals with a common problem that arises from living in a technology-rich environment: phishing, the attempt to trick people into providing personal information about themselves, so that it may be used for criminal gain. The stimulus, entitled “The Online Phishing Resource Site”, is based on authentic websites that explain this problem, giving suggestions to readers about how to identify phishing and how to avoid becoming a victim of phishing. The home page, an extract of which is shown in the screen shot above, explains what phishing is and provides some background information about the extent of the problem. It is classified as a public text, in that it relates to activities and concerns of the larger society (though it may have a personal application). As a kind of online public notice, it assumes anonymous contact with the reader.

Task 1: PHISHING

You are at the Home page of the Online Phishing Resource Site. According to the information on this page, which one of the following is a feature of a phishing e-mail?

- A It asks for personal information.
- B It contains unwanted advertising.
- C It offers a genuine service.
- D It comes from a well-known company.



Framework Characteristics

Situation	Public
Medium	Electronic
Environment	Authored
Text format	Continuous
Text type	Exposition
Aspect	Access and retrieve: Retrieve Information
Question intent	Locate an important component of an explicitly stated definition
Item format	Multiple choice

CODING GUIDE

Full Credit

Code 1: A. It asks for personal information.

No Credit

Code 0: Other responses.

Code 9: Missing.

No navigation is required for this task, as the paragraph with all the target information appears on the screen when students begin the unit, so the level of difficulty is driven entirely by text processing. To answer this question students need to identify that the wording of the key, “asks for personal information”, is a paraphrase of the idea stated in the second sentence of the definition on phishing, “Its purpose is to trick people into handing over their personal information”. The distractors include a common misperception (“unwanted advertising” is a common feature of the Internet) as well as ideas referred to in the text but which are features of legitimate e-mails, rather than of attempts at phishing. About two-thirds of students gained full credit for this task.

Task 2: PHISHING

How many phishing e-mails are sent around the world in an average month?

- A 1,200.
- B Over 6 billion.
- C About 25,000.
- D 55,000.



Framework Characteristics

Situation	Public
Medium	Electronic
Environment	Authored
Text format	Continuous
Text type	Exposition
Aspect	Access and retrieve: Retrieve information
Question intent	Identify the reference of a number in a list
Item format	Multiple choice

CODING GUIDE

Full Credit

Code 1: B. Over 6 billion.

No Credit

Code 0: Other responses.

Code 9: Missing.

This task uses the same page of stimulus as the first task, but in contrast to that task, this one does make a minimal navigation demand, as students have to scroll down a short way in order to reveal the four facts about phishing under the heading “Is Phishing a Real Problem”, each of which includes one of the numbers in the four options for this question. Students are cued to the need to scroll down because the bottom of the screen they first see contains only part of a sentence. There is a further cue to the relevance of this section of the text in the word “average”, which occurs in both the question stem and in the text, “Average loss to each person ...”. Very little text processing is required to identify the answer, which is explicitly stated in the sentence, “Phishing e-mails sent world-wide each month: **over 6 billion**”.

This question was easier than the previous one, with almost three-quarters of students gaining credit for it.

What is Phishing?

Phishing is a form of identity theft. Its purpose is to trick people into handing over their personal information. People who collect this information may then use it for illegal activities such as stealing money from a bank account. A phishing e-mail is an e-mail that imitates a well-known company, or claims to offer a genuine service, and asks the recipient to provide personal information. An example is an e-mail that pretends to be from a bank, and asks the recipient for login details such as a username and password. A common technique is to request urgent action to ensure that an account remains valid.

Phishing is not always easy to identify, because many phishing e-mails look genuine.

Some Typical Features of Phishing E-mails

#1. Sender's E-mail Address [\(Read more\)](#)
 #2. E-mail Greeting [\(Read more\)](#)
 #3. Requests for Personal Information [\(Read more\)](#)
 #4. Links in an E-mail [\(Hide\)](#)

Links within an e-mail can be faked. The link might say "www.BankNorthside.com" but it could take you elsewhere. It could take you to a website that imitates the site it pretends to link to.

Sample Phishing E-mail

Verify your E-mail with Bank Northside - Message (Rich Text)

File Edit View Insert

Reply Reply to All Forward

To: PISA Student
 From: bank29@publicmail.com

Dear Bank Northside user,

This e-mail was sent by the Bank Northside server to verify your e-mail address.

You must complete this process by clicking on the link below and entering your Bank Northside Credit / Debit Card number and password in the spaces provided.

This process is necessary for your protection - because some of our members no longer have access to their e-mail addresses and we must verify them.

To verify your e-mail address and access your bank account, click on the link below:

https://web.BankNorthside.com.au/signin/citifi/scripts/e-mail_verify.jsp

This task starts on a different page of the phishing website from the first two tasks. The new page gives examples of what different features of phishing e-mail messages may look like. As the screen shot above shows, on the left of the page are links that allow readers to read more or to hide additional information about typical features of phishing e-mail messages, under numbered headings. This represents a different kind of navigation to both scrolling and clicking on links that open new pages, since the additional information appears (or can be hidden) on the same page. In this screen shot the user has clicked on “#4. Links in an E-mail”, thereby displaying the explanatory paragraph below; and an example of this feature is highlighted in colour at the bottom of the e-mail on the right, “https://web.BankNorthside.com.au/signin/citifi/scripts/e-mail_verify.jsp”.

To answer this question, students need to click on one or more of these numbered links, until they locate a match between the question and the information under heading #4. Both navigation and text processing demands are relatively low, although not insignificant, and nearly two-thirds of students obtained full credit for this task.

Task 3: PHISHING

Which of the following tricks is explained on the “Recognising Phishing” page?

- A The e-mail asks the recipient to donate money to a fake charity.
- B The phishing e-mail installs spyware on the user's computer.
- C The author of the e-mail inserts a fake link to a fake website.
- E The e-mail pretends the recipient has won a prize.



Framework Characteristics

Situation	Public
Medium	Electronic
Environment	Authored
Text format	Continuous
Text type	Exposition
Aspect	Access and retrieve (retrieve information)
Question intent	Locate explicitly stated information
Item format	Multiple choice

CODING GUIDE

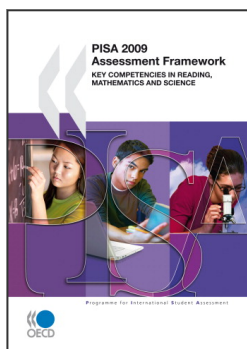
Full Credit

Code 1: C. The author of the e-mail inserts a fake link to a fake website.

No Credit

Code 0: Other responses.

Code 9: Missing.



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