



What is the *iSkills*[™] assessment?

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Overview

Digital Fluency and Critical Thinking

Assessing Digital Fluency

Some results about Digital Fluency







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Frankenstein

Search

[Advanced Search](#)
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Web

Results 1 - 10 of about 8,240,000 for Frankenstein [definition]. (0.34 seconds)

Image results for Frankenstein



[Online Literature Library - Frankenstein](#)

Contains complete story by the author, Mary Shelley.

www.literature.org/authors/shelley-mary/frankenstein/ - 7k - [Cached](#) - [Similar pages](#)

[Frankenstein Exhibit Home Page](#)

The Birth of Frankenstein · The Celluloid Monster · Promise and Peril · Frankenstein: The Modern Prometheus. dot History of Medicine Home Page ...

www.nlm.nih.gov/nmd/frankenstein/frankhome.html - 4k - [Cached](#) - [Similar pages](#)

[Frankenstein \(1931\)](#)

Frankenstein - Cast, Crew, Reviews, Plot Summary, Comments, Discussion, Taglines, Trailers, Posters, Photos, Showtimes, Link to Official Site, Fan Sites.

www.imdb.com/title/tt0021884/ - 56k - Nov 5, 2005 - [Cached](#) - [Similar pages](#)

[Shelley's Frankenstein](#)

Hypertext (HTML) edition of the 1831 edition of Shelley's Frankenstein. ... Full Information on Branagh's Mary Shelley's Frankenstein. ...

www.georgetown.edu/irvinemj/english016/franken/franken.htm - 9k - [Cached](#) - [Similar pages](#)

[My Hideous Progeny: Mary Shelley's Frankenstein](#)

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Download 2 Free Horror Audio Books!
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www.SoundsGood.com

[Double Feature](#)

Movies

eBay

www.eBay.com

[Frankenstein Movie Poster](#)

Gifts and Occasions

Target

www.Target.com

[Gigafast Van](#)

Notebooks - Carrying Cases

Hardware at PriceSaving.com

www.PriceSaving.com

[Frankenstein Costume](#)

For Dogs

InterShopZone Marketplace

www.intershopzone.com

[Monster Patrol Model Kit](#)

Vehicles & Trains

Toys & More at SmartBargains.com

www.SmartBargains.com

Trustworthiness of Information

Information from libraries is...	
<u>Less</u> trustworthy than information from search engines	9%
<u>More</u> trustworthy than information from search engines	21%
NO DIFFERENCE in trustworthiness	70%

Source: De Rosa, Cathy, and others. *Perceptions of Libraries and Information Resources*. (OCLC, November 2005) <http://www.oclc.org/reports/2005perceptions.htm>





Headlines in the Press Listening. Learning. Leading.®

College Notes on the Web: Learning, or Laziness?

-New York Times

The Tyranny of Information

—Los Angeles Times

Americans Give Mixed Reviews to Use of
Web for Schoolwork

—San Diego Union-Tribune

Information Inundation
Imperils Our Children

—Los Angeles Times

Point, Click,
Plagiarize

*-San Francisco
Chronicle*

How to Handle Cyber-Sloth in Academe

-Chronicle of Higher Education

Professors Vie with Web for Class's Attention

—New York Times

Homework
Copycats
Prosper on the
Net

*—San Francisco
Chronicle*

Lessons in the School of Cut and Paste

—New York Times

Abe Lincoln and the Truth Get Mugged at the Click of a Mouse

-Los Angeles Times

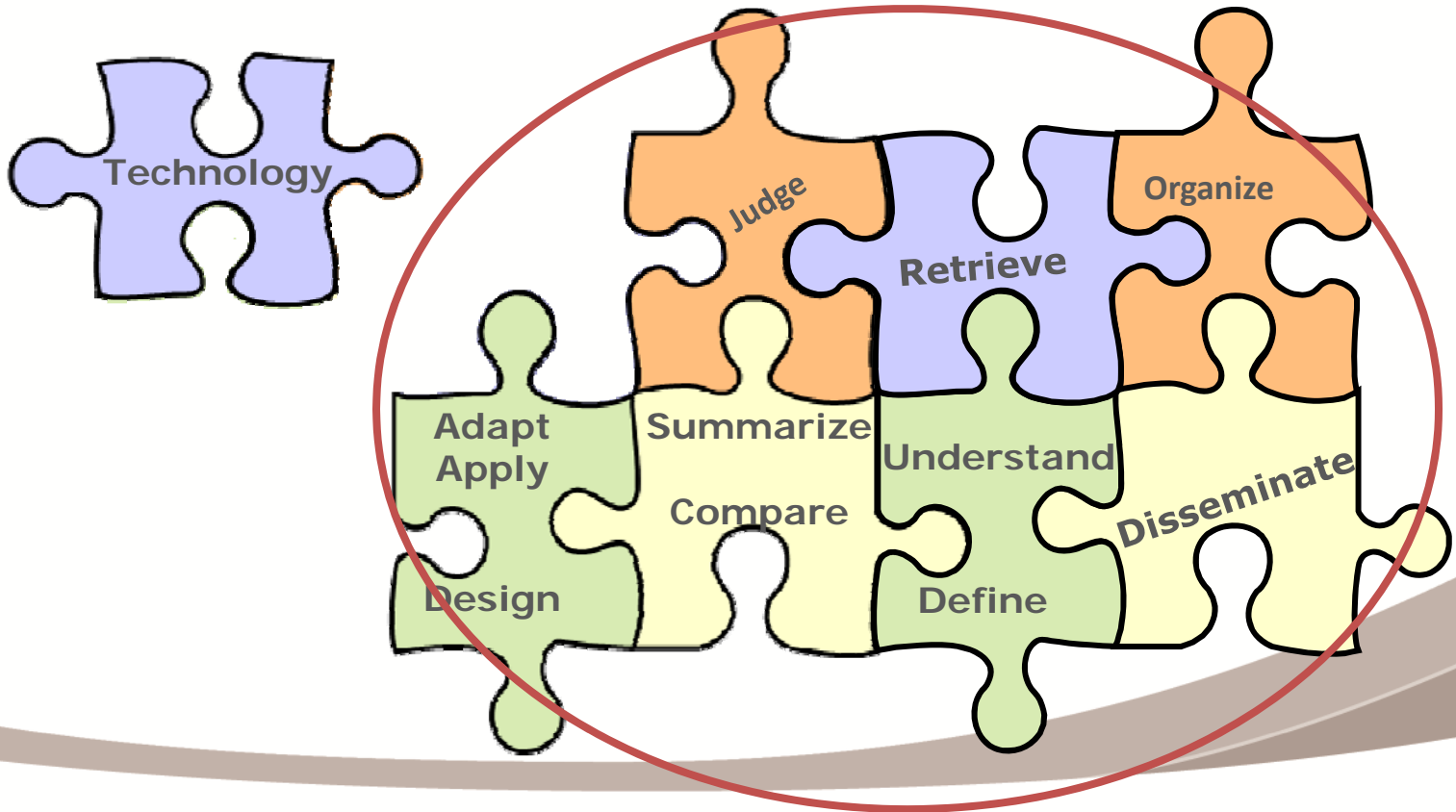
Technology Challenges Students

- Identifying trustworthy and useful information
- Managing the overabundance of information
- Communicating information effectively



Digital Fluency is *More* than Technology Skill

Critical Thinking



Digital Fluency

A bridge between...

Technical Literacy

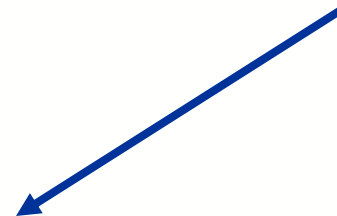
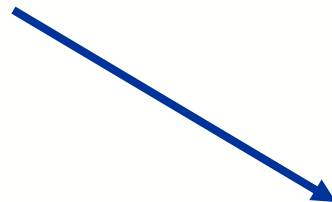
- Italicize a word
- Navigate to a URL

Database	Word Processing	Presentation
----------	-----------------	--------------

Critical Thinking

- Use a focused search strategy
- Judge credibility

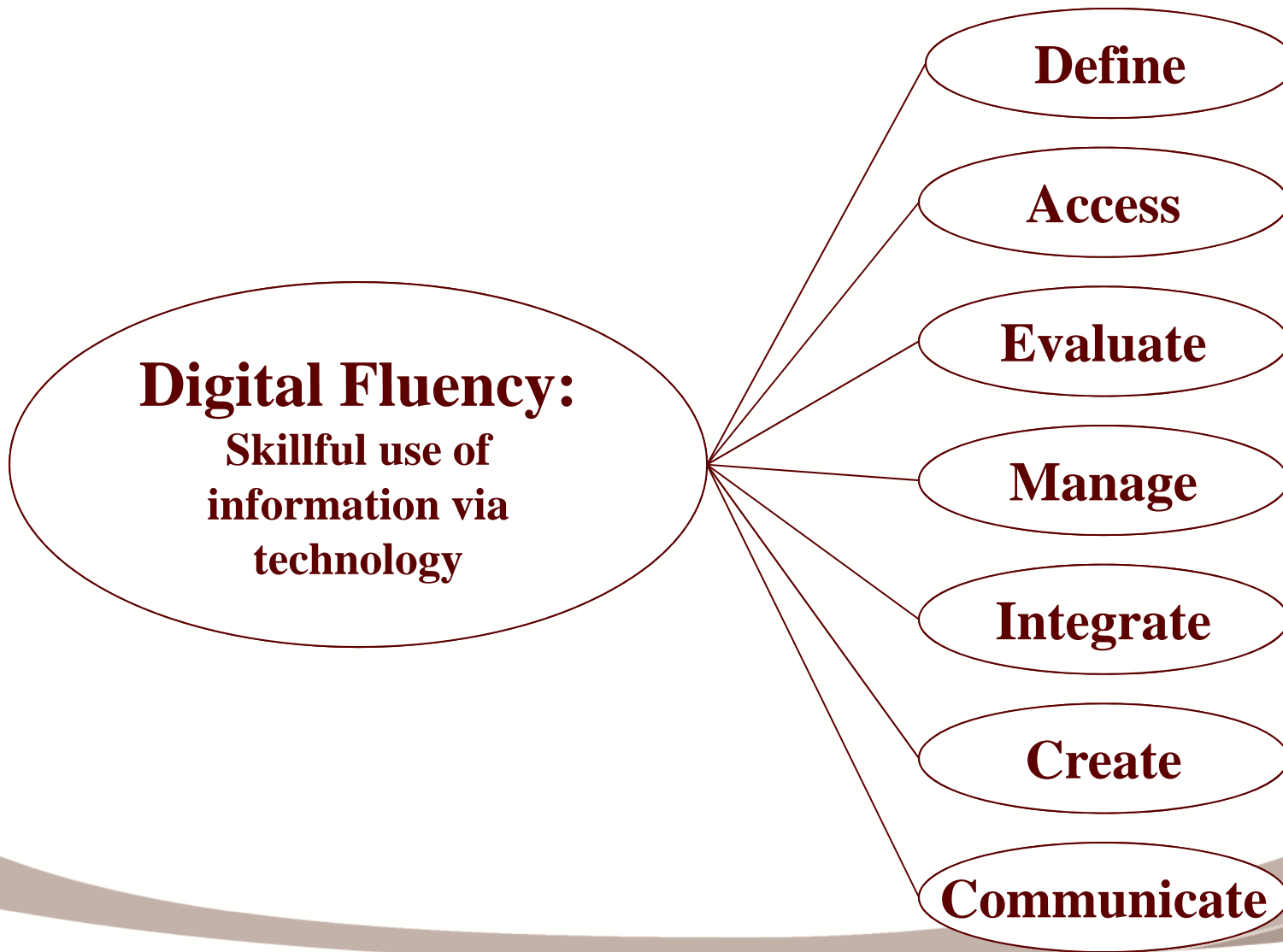
Access	Evaluate	Use
--------	----------	-----



Digital Fluency

Create a persuasive presentation
Identify conflicts of interest in a web site

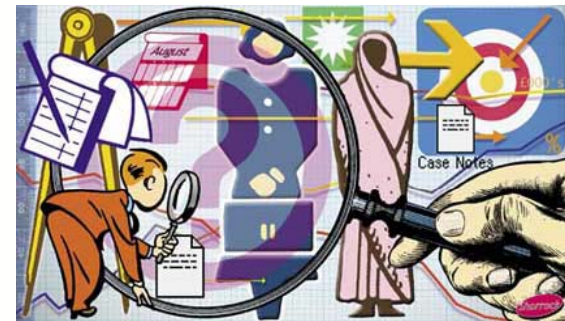




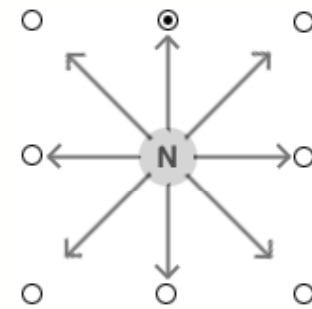
Evaluate: determining the degree to which digital information satisfies the need.

Activities include:

- Selecting the best database for an information need
- Ranking web pages in terms of authority, relevance, objectivity
- Determining whether collected information is sufficient



Define: using digital tools to identify and represent an information need.



Activities include:

- Developing a research topic to fit a particular information need
- Asking questions to clarify the information need

Integrate: interpreting and representing digital information from multiple sources.

Activities include:

- Synthesizing information from IMs into word processing document
- Comparing and contrasting information from web pages in a spreadsheet
- Draw conclusions from information presented in emails, web pages, and print ads



Communicate: communicating digital information properly in its context of use for a particular audience in a particular venue.

Activities include:

- Creating a graph that helps a decision
- Adapting presentation slides to a new audience



Assessment of Digital Fluency

How do we assure students are ready for the digital fluency demands of college and the workplace?



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Challenges in developing a *believable* measure of Digital Fluency

- Design an assessment with face validity
 - Authentic, relevant, performance-based
 - Measure the *application* of knowledge rather than facts or standard procedures
 - Aligned to nationally-recognized standards
- Ensure that it is based on solid measurement principles
 - Quality and Fairness
 - Validity
 - Reliability
- Provide test-takers, instructors, and institutions with useful data and feedback



Assessment Development Process and Timeline



- 2003: Convened Higher Ed ICT Literacy consortium
- 2003-2004: Designed and Developed iSkills
Assessment with Higher Ed faculty
- 2005: Delivered Institution-Level Test
- 2006: Delivered Individual Tests
- 2006-Present: 34,000 students at 150 institutions



Reliability & Validity



- **Reliability (Cronbach alpha)**
 - 50 items: 0.91
 - 15 tasks: 0.84
- **Content validity:** Expert collaboration and reviews
- **Internal validity:** Digital fluency components highly correlated
- **Criterion-related validity:**
 - iSkills scores correlate with 30-item self-assessment of digital fluency activities ($r = .27$)
 - iSkills scores **not** correlated with frequency of digital fluency activities
 - iSkills more strongly associated with verbal skills than math skills (iSkills-SATV: 0.50; iSkills-SATM: 0.35)



The ETS *iSkills*TM Assessment

Features

- o Interactive simulations – *not* multiple choice
- o Critical thinking *about* information while *using* digital tools
- o 14 real-world, problem-solving scenarios

Scenario: Managing Files

Cleaning a Computer

You are giving your old computer to your younger brother and want to delete any personal emails. You also want to save emails related to your job search so that you can transfer them to your new computer.

Task:

- Read the emails (double-click on any that you want to view) and drag them into the appropriate folders.
- After you have finished, delete the emails you do not want to save.

The screenshot shows an email client window titled "Mail". The menu bar includes "File", "Edit", "View", and "Message". Below the menu are buttons for "New", "Reply", "Reply to all", and "Forward". On the left is a folder tree under "Personal Folders" containing "Mailbox", "Inbox", "Save Folder", and "Trash". The main area displays a list of emails with columns for "From", "Subject", "Received", and "Size". The top email is selected and highlighted in yellow.

From	Subject	Received	Size
guzman@romulus.com	Work	2/17 10:13 am	2 KB
guzman@romulus.com	Re: Thank you!	2/15 8:38 am	2 KB
hr@flowers.com	Position 438575A	2/11 2:59 pm	2 KB
guzman@romulus.com	your resume	2/9 4:21 pm	750 KB
sales@wagman.com	winter sale	2/5 1:00 am	2 KB
lherner@jeffersonlib.org	Notice	1/29 12:58 pm	2 KB

Below the list, the details of the selected email are shown:

From: guzman@romulus.com
Subj: Work
Date: 2/17 10:13 am

Hi, sweetie,
I'm at work. Just wanted to say I'm thinking of you. Looking forward to our date tonight.
Pablo

iSkills Sample Tasks

An inside look at the assessment



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Measuring How We *Create*

- Task Length: 4-minute duration
- Task Type **Create**: Generate information by adapting, applying, designing, or inventing information in ICT environments.
- Within the task, the test taker is asked to...
 - Visually represent data in a graph
 - Interpret the graph to answer research questions



Scenario: As part of a project for your cultural studies class, you need to examine long-term trends in the public's taste in books. Use the graph creator on the next page to illustrate how the popularity of different types of books, as measured by consumer spending, has varied since the advent of television half a century ago.

The radio buttons let you choose among different data displays. Once these are selected, the drop-down menus will let you select the data to display. When you have created a graph that effectively represents information you need for your project, use drop-down menus to complete each of the two statements that will appear below the graph.

Note: "revenues"—money collected
"costs"—money paid out
"profit (loss)"—revenues minus costs

In this task, examinees create a visual representation of data to answer two research questions.

Task: Use the graph creator on the right to illustrate how the popularity of different types of books, as measured by consumer spending, has varied since the advent of television half a century ago.

The radio buttons let you choose among different data displays. Once these are selected, the drop-down menus will let you select the data to display.

When you have created a graph that effectively represents information you need for your project, use drop-down menus to complete each of the two statements that will appear below the graph.

Note: "revenues"—money collected
"costs"—money paid out
"profit (loss)"—revenues minus costs

Examinees select which variables to display on each of the axes.

Graph Creator

What do you want to represent on the x (horizontal) axis? (Click to make or change selection)

Book Types Publishing Industry Data Time Span

What do you want to represent on the y (vertical) axis? (Click to make or change selection)

Book Types Publishing Industry Data Time Span

What do you want to represent with line(s) on the graph? (Click to make or change selection)

Book Types Publishing Industry Data Time Span

Task: Use the graph creator on the right to illustrate how the popularity of different types of books, as measured by consumer spending, has varied since the advent of television half a century ago.

The radio buttons let you choose among different data displays. Once these are selected, the drop-down menus will let you select the data to display.

When you have created a graph that effectively represents information you need for your project, use drop-down menus to complete each of the two statements that will appear below the graph.

Note: "revenues"—money collected
"costs"—money paid out
"profit (loss)"—revenues minus costs

Identifying the correct time span involves considering the implicit requirements of the information need.

Graph Creator

What do you want to represent on the x (horizontal) axis? (Click to make or change selection)

Book Types Publishing Industry Data Time Span

From: 1950 To: 2000

What do you want to represent on the y (vertical) axis? (Click to make or change selection)

Book Types Publishing Industry Data Time Span

What do you want to represent with line(s) on the graph? (Click to make or change selection)

Book Types Publishing Industry Data Time Span

Task: Use the graph creator on the right to illustrate how the popularity of different types of books, as measured by consumer spending, has varied since the advent of television half a century ago.

The radio buttons let you choose among different data displays. Once these are selected, the drop-down menus will let you select the data to display.

When you have created a graph that effectively represents information you need for your project, use drop-down menus to complete each of the two statements that will appear below the graph.

Note: "revenues"—money collected
"costs"—money paid out
"profit (loss)"—revenues minus costs

Identifying the correct dependent variable (y-axis) involves thinking about how best to reflect "popularity."

Graph Creator

What do you want to represent with line(s) on the graph? (Click to make or change selection)

Book Types

What do you want to represent with line(s) on the graph? (Click to make or change selection)

Book Types

What do you want to represent with line(s) on the graph? (Click to make or change selection)

Book Types Publishing Industry Data Time Span

Select

- Number of editions
- Number produced
- Number sold
- Profit (loss), unadjusted
- Profit (loss), in 2000 dollars
- Publishing costs, unadjusted
- Publishing costs, in 2000 dollars
- Sales revenues, unadjusted
- Sales revenues, in 2000 dollars

To: 2000

Task: Use the graph creator on the right to illustrate how the popularity of different types of books, as measured by consumer spending, has varied since the advent of television half a century ago.

The radio buttons let you choose among different data displays. Once these are selected, the drop-down menus will let you select the data to display.

When you have created a graph that effectively represents information you need for your project, use drop-down menus to complete each of the two statements that will appear below the graph.

Note: "revenues"—money collected
 "costs"—money paid out
 "profit (loss)"—revenues minus costs

Graph Creator

Average of Sales Revenues, in 2000 dollars

Select has become the most popular type of book.

What do you want to represent on the x (horizontal) axis? (Click to make or change selection)

Book Types
 Publishing Industry Data
 Time Span

From: To:

What do you want to represent on the y (vertical) axis? (Click to make or change selection)

Book Types
 Publishing Industry Data
 Time Span

What do you want to represent with line(s) on the graph? (Click to make or change selection)

Book Types
 Publishing Industry Data
 Time Span

Examinees have the opportunity to try out different graphs before settling on their response, and this process is factored into their score.

Task: Use the graph creator on the right to illustrate how the popularity of different types of books, as measured by consumer spending, has varied since the advent of television half a century ago.

The radio buttons let you choose among different data displays. Once these are selected, the drop-down menus will let you select the data to display.

When you have created a graph that effectively represents information you need for your project, use drop-down menus to complete each of the two statements that will appear below the graph.

Note: "revenues"—money collected

Answering the research questions involves correctly interpreting the graph.

Graph Creator

Year	Biography and History	Literature	Mystery	Psychology and Self-Help	Religion and Philosophy	Science Fiction	Textbooks
1930	120,000,000	120,000,000	10,000,000	10,000,000	195,000,000	145,000,000	245,000,000
1940	60,000,000	20,000,000	35,000,000	60,000,000	180,000,000	180,000,000	180,000,000
1950	75,000,000	160,000,000	75,000,000	165,000,000	110,000,000	190,000,000	110,000,000
1960	120,000,000	155,000,000	265,000,000	235,000,000	185,000,000	190,000,000	185,000,000
1970	75,000,000	125,000,000	140,000,000	245,000,000	205,000,000	125,000,000	125,000,000
1980	35,000,000	110,000,000	85,000,000	135,000,000	110,000,000	110,000,000	135,000,000
1990	45,000,000	70,000,000	35,000,000	85,000,000	45,000,000	45,000,000	85,000,000
2000	45,000,000	80,000,000	35,000,000	85,000,000	60,000,000	45,000,000	85,000,000

What has become the most popular type of book?

What is the x (horizontal) axis? (Click to make or change selection)

Publishing Industry Data Time Span

From: 1950 To: 2000

What is the y (vertical) axis? (Click to make or change selection)

Publishing Industry Data Time Span

Average of sales revenues, in 2000 dollars

What do you want to represent with line(s) on the graph? (Click to make or change selection)

Book Types Publishing Industry Data Time Span

All types, separately

- Biography and History
- Literature
- Mystery
- Psychology and Self-Help
- Religion and Philosophy
- Science Fiction
- Textbooks

Task: Use the graph creator on the right to illustrate how the popularity of different types of books, as measured by consumer spending, has varied since the advent of television half a century ago.

The radio buttons let you choose among different data displays. Once these are selected, the drop-down menus will let you select the data to display.

When you have created a graph that effectively represents information you need for your project, use drop-down menus to complete each of the two statements that will appear below the graph.

Note: "revenues"—money collected

The two research questions require different degrees of analytic skill.

Graph Creator

Average of Sales Revenues, in 2000 dollars

Select ▼ experienced the most rapid rate of growth over a 10-year period, from Select ▼ to Select ▼

What do you want to represent on the x (horizontal) axis? (Click to make or change selection)

Book Types
 Publishing Industry Data
 Time Span

From: 1950 ▼ To: 2000 ▼

What do you want to represent on the y (vertical) axis? (Click to make or change selection)

Book Types
 Publishing Industry Data
 Time Span

Sales revenues, in 2000 dollars ▼

What do you want to represent with line(s) on the graph? (Click to make or change selection)

Book Types
 Publishing Industry Data
 Time Span

All types, separately ▼

Click Next when finished with this question

Measuring How We *Access*

- Task Length: 4-minute duration
- Task Type **Access**: Collect and/or retrieve information in digital environments.
- Within the task, the test taker is asked to...
 - Formulate an advanced search, utilizing Boolean operators, syntactic elements (parentheses, quotes), and search parameters.
 - Use feedback on likely results to improve search strategy





Scenario: You are in your university library, researching a topic for a class project. You want to find information from pamphlets and government publications, with text and graphics, on plans that various California state or municipal governing bodies have implemented since 2000 to help ensure the safety of the public in the event of an earthquake. You already have all the information you can use on San Francisco. You need to construct a search that will efficiently return the information you need. The search engine for the database

- uses Boolean logic (NOT, AND, OR) in analyzing search requests
- requires quotation marks around terms in which words appear in a specified order—e.g., "North Pole" and "affirmative action"
- uses the asterisk to include alternate forms of a word in the search—e.g., farm* to include farms, farmer, farming, etc.

This task requires examinees to construct an advanced search based on a complex information need.

Scenario: You want to find information from pamphlets and government publications, with text and graphics, on

A successful examinee must enter the correct search terms and combine them using Boolean operators and syntax...

analyzing search requests

- requires quotation marks around terms in which words appear in a specified order—e.g., "North Pole" and "affirmative action"
- uses the asterisk to include alternate forms of a word in the search—e.g., farm* to include farms, farmer, farming, etc.

Browser

File Edit

Articles Database

Search

Limit your search:

Publication Type

Document Type

Publication Dates TO

Peer reviewed

Text with Graphics

Expand your search: Also search within the full text of the article

Automatically "OR" search terms

...and must also select other appropriate parameters for the search.

Scenario: You want to find information from pamphlets and government publications, with text and graphics, on plans that various California state or municipal governing bodies have implemented since 2000 to help ensure public safety in the event of an earthquake. You already have all the information you can use on San Francisco.

- Task:**
Construct a search that will efficiently return the information you need. The search engine for the database
- uses Boolean logic (NOT, AND, OR) in analyzing search requests
 - requires quotation marks around terms in which words appear in a specified order—e.g., "North Pole" and "affirmative action"
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Browser

File Edit

Articles Database

Search

Limit your search:

Publication Type

Document Type

Publication Dates TO

Peer reviewed

Text with Graphics

Expand your search: Also search within the full text of the article
 Automatically "OR" search terms

Examinees are scored on the characteristics of their searches as well as their ability to modify their search strategy in response to feedback.

Scenario: You want to find information from pamphlets and government publications, with text and graphics, on plans that various California state or municipal governing bodies have implemented since 2000 to help ensure public safety in the event of an earthquake. You already have all the information you can use on San Francisco.

- Task:**
- Construct a search that will efficiently return the information you need. The search engine for the database
 - uses Boolean logic (NOT, AND, OR) in analyzing search requests
 - requires quotation marks around terms in which words appear in a specified order—e.g., "North Pole" and "affirmative action"
 - uses the asterisk to include alternate forms of a word in the search—e.g., farm* to include farms, farmer, farming, etc.

Browser

File Edit

Articles Database

The feedback describes characteristics of likely search results.

Search earthquake safety in California

Search

Warning

The articles returned by this search do not cover all of the relevant topic areas, do not focus on the information you need, and will not all be the kind you want. Please review the description of your information needs; then modify, focus, and refine your search.

OK

Limit y
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Per

Text with Graphics

Expand your search: Also search within the full text of the article
 Automatically "OR" search terms

Scenario: You view from pamphlets, publications, with plans that various municipal government implemented since public safety in the earthquake. You information you Francisco.

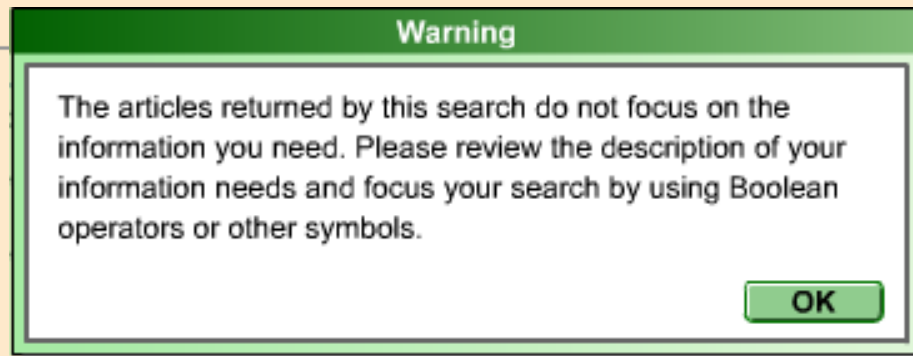
Task: Construct a search return the information search engine for

- uses Boolean logic (NOT, AND, OR) in analyzing search requests
- requires quotation marks around terms in which words appear in a specified order—e.g., "North Pole" and "affirmative action"
- uses the asterisk to include alternate forms of a word in the search—e.g., farm* to include farms, farmer, farming, etc.

In light of the initial feedback, the examinee performs a second search that...

- includes the key content words
- properly limits and expands the search

...but does not have all of the correct syntactic elements (e.g., quotes, asterisk).



The feedback becomes increasingly specific with each unsuccessful search.

Scenario: You want to find information from pamphlets and government publications, with text and graphics, on plans that various California state or municipal governing bodies have implemented since 2000 to help ensure public safety in the event of an earthquake. You already have all the information you can use on San Francisco.

- Task:**
- Construct a search that will efficiently return the information you need. The search engine for the database
 - uses Boolean logic (NOT, AND, OR) in analyzing search requests
 - requires quotation marks around terms in which words appear in a specified order—e.g., "North Pole" and "affirmative action"
 - uses the asterisk to include alternate forms of a word in the search—e.g., farm* to include farms, farmer, farming, etc.

Browser

File Edit

Articles

Examinees are allowed three attempts to formulate a correct search.

Search

Search

Task completed

You have completed the task.
Click **Next** to continue.

OK

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Text with Graphics

Expand your search: Also search within the full text of the article
 Automatically "OR" search terms

Measuring How We *Integrate*

- Task Length: 4-minute duration
- Task Type ***Integrate***: Interpret and represent information in an ICT context, including synthesizing, summarizing, comparing, and contrasting information from multiple sources.
- Within the task, the test taker is asked to...
 - Summarize information from three different types of sources
 - Compare the information to reach a conclusion



Scenario: You are working in the office of a large architectural firm in which many of the architects are left-handed. The office manager has emailed you, saying:

Can you help me find a good source of products and gifts designed for left-handers? I'd like someplace that offers a wide range of merchandise with product guarantees--also that has an online catalog and online ordering. Discounts would also be a plus.

You've received emails about three potential sources; now you want to combine the information into a single table and rank the possibilities for your office manager.

You need to

- read the three emails in your inbox (some of which will have links to further information)
- fill out the table provided, showing whether each source has the features of interest to the manager

When you have finished your table, click "Next." You will then be asked to

- rank the potential sources from most preferable (1) to least preferable (3).

In this task, examinees summarize information from a variety of sources and then draw conclusions from their summary.

Scenario: Your office manager has emailed you, saying:

Can you help me find a good source of products and gifts designed for left-handers? I'd like someplace that offers a wide range of merchandise with product guarantees--also that has an online catalog and online ordering. Discounts would also be a plus.

You've received emails about three potential sources; now you want to combine the information you've gathered into a single table and rank the possibilities for your office manager.

Task: You need to

- read the three emails in your inbox (some of which will have links to further information)

- fill out the table provided, showing

with information

3. Advertisement

When you have finished your table, click "Next." You will then be asked to rank the potential sources from most preferable (1) to least preferable (3).

Examinees are presented with an information need and three different types of information sources:

The screenshot shows an email client interface. On the left, there is a folder icon labeled 'Inbox (3)'. The main area displays a list of three emails:

From	Subject	Date	Size
Danny Frankel	The Left Stuff	10/30 8:33 pm	1 KB
Nancy Corley	Left-Overs	10/30 7:56 pm	2 KB
Alex Kozinski	Left Field	10/30 7:24 pm	14 KB

The email from Alex Kozinski is selected and its content is displayed below:

From: Alex Kozinski
10/30 7:24 pm
Subj: Left Field

Check out this ad. I've attached an ad from a place called "Left Field." Hope it helps.

The 'File Viewer' window displays an advertisement for 'Left Field'.

Left Field
"Outdoor Gear and Sporting Equipment for Those in Their Right Mind"

Left Field contains a full line of sporting goods, gear, and training equipment designed with lefthanders in mind. We offer high-quality products for

- baseball and softball
- camping and climbing
- hunting and fishing
- golf--and more

	The Left Stuff	Left-Overs	Left Field
Select...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The three sources present information according to different conventions. A successful candidate must be able to locate the relevant information in each source.

Scenario: Your office manager has emailed you, saying:

Can you help me find a good source of products and gifts designed for left-handers? I'd like someplace that offers a wide range of merchandise with product guarantees--also that has an online catalog and online ordering. Discounts would also be a plus.

You've received emails about three

Deciding how to compare the sources involves identifying the requirements of the stated information need.

The screenshot shows an email client interface with a menu bar (File, Edit, View, Message) and buttons for New, Reply, Reply to all, and Forward. The inbox contains three emails:

From	Subject	Date	Size
Danny Frankel	The Left Stuff	10/30 8:33 pm	1 KB
Nancy Corley	Left-Overs	10/30 7:56 pm	2 KB
Alex Kozinski	Left Field	10/30 7:24 pm	14 KB

The selected email from Danny Frankel is open, showing the text: "I think I've got a place that will come in handy, as it were. It's a store called 'The good gifts there last summer and saw lots more cool things. Here's their link:'". Below the email is a browser window displaying a website for "orthodox Accoutrements for the Sinister Lifestyle" with the address: "3 Izquierdo Blvd, Narciso, CA 99999, 00-555-LEFT (5338)".

A dropdown menu is open over the email list, listing various search criteria:

- Select...
- address
- catalog, online
- catalog, paper
- customer service department
- discounts
- guarantees/warranties
- locations (convenient/multiple)
- mailing list
- ordering, mail
- ordering, online
- phone number
- 800 number
- return policy
- shipping and handling
- variety of merchandise

At the bottom of the interface, there is a table with columns for "The Left Stuff", "Left-Overs", and "Left Field", and rows for each email with checkboxes for selection.

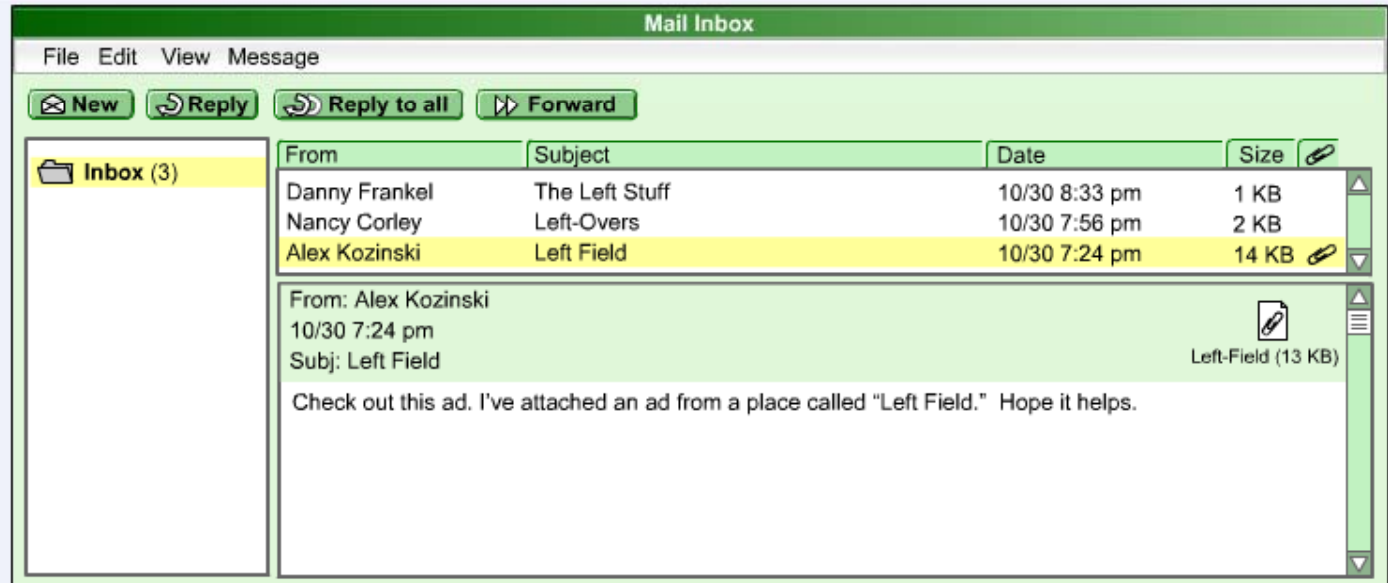
Scenario: Your office manager has emailed you, saying:

Can you help me find a good source of products and gifts designed for left-handers? I'd like someplace that offers a wide range of merchandise with product guarantees--also that has an online catalog and online ordering. Discounts would also be a plus.

You've received emails about three potential sources; now you want to combine the information you've gathered into a single table and rank the possibilities for your office manager.

Task: You need to

- read the three emails in your inbox (some of which will have links to further



Mail Inbox

File Edit View Message

New Reply Reply to all Forward

Inbox (3)	From	Subject	Date	Size
	Danny Frankel	The Left Stuff	10/30 8:33 pm	1 KB
	Nancy Corley	Left-Overs	10/30 7:56 pm	2 KB
	Alex Kozinski	Left Field	10/30 7:24 pm	14 KB

From: Alex Kozinski
10/30 7:24 pm
Subj: Left Field

Left-Field (13 KB)

Check out this ad. I've attached an ad from a place called "Left Field." Hope it helps.

After filling in the table, examinees must interpret the summary to rank the three sources correctly.

Please rank the three sources based on the information collected in your table:

Select...	The Left Stuff
Select...	Left-Overs
1	
2	
3	

	The Left Stuff	Left-Overs	Left Field
catalog, online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
discounts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
guarantees/warranties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ordering, online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
variety of merchandise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Select...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Preliminary Research Results

The reality about your students' digital fluency



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Ongoing iSkills Data Collection

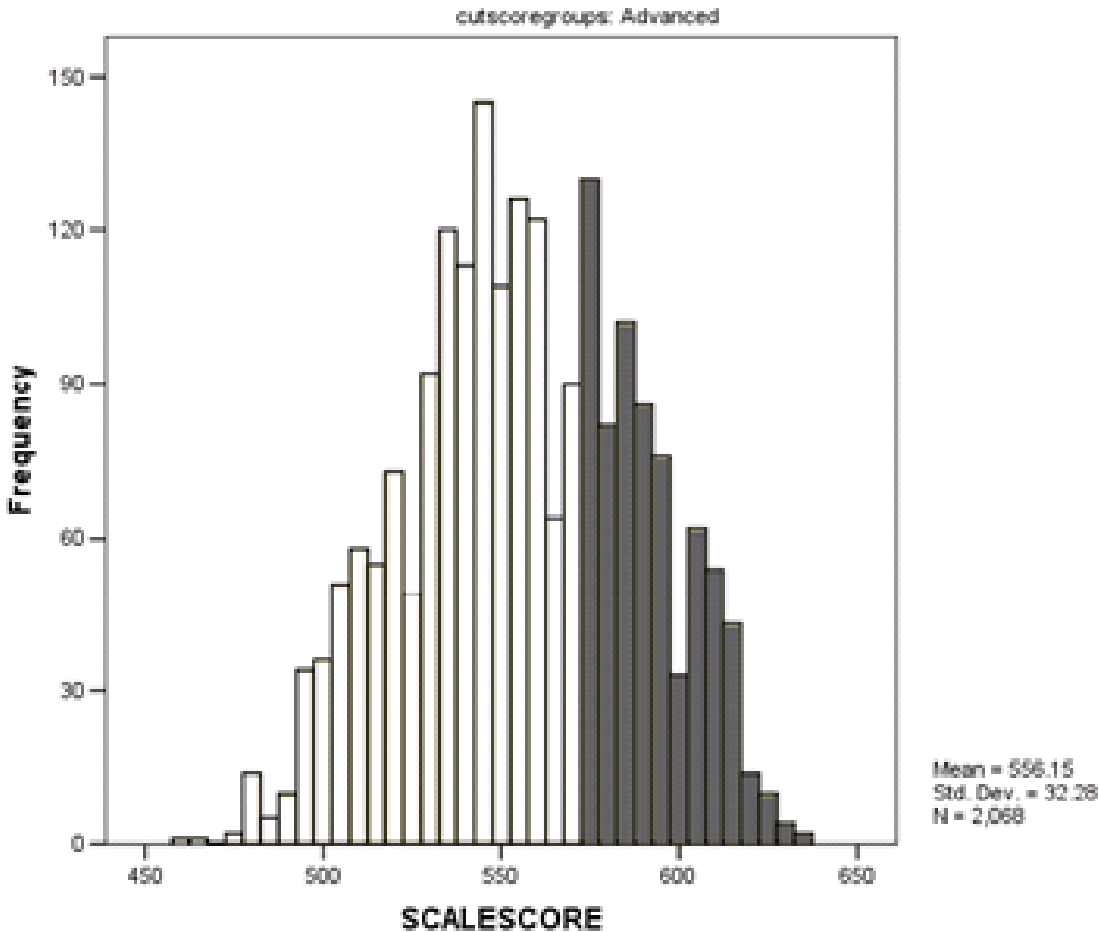
- Students from 76 institutions (N = 12,000)*
 - 56 Colleges/Universities
 - 11 Community/Technical Colleges
 - 9 High schools

* Results not necessarily representative of all college students



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Juniors and Seniors at 4-Year Colleges



Only 27 % meet digital fluency expectations

Room for Student Improvement

- When selecting a research statement for a class assignment, 25% of test takers picked statements that did not address the assignment.
- When asked to narrow an overly broad search, more than 80% of students could not correctly describe a specific problem with their initial search.
- When asked to evaluate a set of websites, only 48% of test takers identified the website that met the criteria of currency, authority and objectivity.



iSkills Reports

The various uses of the data that iSkills generates



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Why Should We Assess Digital Fluency?

- Accreditation
 - Institutional (General Education)
 - Program (Discipline-specific)
- Strategic planning
- Renewed focus on institutional/program effectiveness and continuous improvement
 - Trend analysis (longitudinal/cross-sectional studies)
 - Benchmarking
 - Comparison with other institutions/programs
- Measure instructional effectiveness
 - Curriculum alignment
 - Teaching methods
- Facilitate student feedback/counseling/advising
- Performance funding/making effective resource allocation decisions
- Dispel the myths about what we think students/employees can do



Institutional Data and Reports Offered

Data Download

- Allows you to determine whether or not your school needs to change elements of its curricula to better prepare your students for 21st Century jobs
- Provides credible information that you can analyze to determine whether to implement, continue, or change an intervention program

Institutional Skill Area Report

- Allows you to quickly assess your student performance on a comparative basis for the seven skill areas
- Provides critical benchmark information to support your accreditation reporting needs

Aggregate Task Performance Feedback Report

- Allows you to pinpoint specific skills and associated tasks that you need to change to better prepare your student
- Provides information that you can use to identify specific remediation to focus on

How do institutions use iSkills Institutional Data and Reports?

- Test results are a **portion** of the data that might be used for different decision making
- This is how some institutions are using the results:
 - Helping to determine placement of transfer students
 - Pre- and post-testing in conjunction with intervention
 - End-of-course exams
 - Measuring outcomes
 - Meet accreditation requirements

- Guide student in their academic careers
- Collect evidence used for accreditation
- Perform curriculum evaluation

Individual Student Score Report



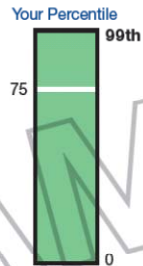
Version: Advanced Level

This report provides your score on the assessment and feedback on your performance on specific tasks.

You can find more information about the assessment and the tasks on our website: <http://www.ets.org/ictliteracy>.

Name: Tanisha Beck
Date of Birth: May 15, 1986
Test Location: 1234 Revford College
ETS ID #: 9999-9999
Date of Test: March 10, 2006

Your Score: 600 Percentile: 75



Scores can range from 400 to 700. The midpoint of the scale (550) represents the average performance of all early 2006 test takers.

The bracket represents the range of scores you might expect to receive if you take this test again.

The percentile shows how you did compared with all the people who took the test early in 2006. For example, if you received a score in the 60th percentile, you did better than 60% of all test takers.

Performance Feedback

The ICT Literacy Assessment measures seven different skill areas of information and communication technology literacy. The feedback below describes your performance on the tasks you saw, organized by these skill areas. This feedback is for your information only and is not predictive of future performance.

Define: Formulate a research statement to facilitate the search for information.

What was I asked to do?	How did I do?
Formulate a research statement to facilitate the search (Finding a Topic: <i>Vietnam Project</i>)	<ul style="list-style-type: none"> • Agna faccumsandit lor augait wisi el ullan ex eugait acipis nim. • Facipsustrud erostrud dolor suscilis nim velis etue faccums. • Drem accumsa ndigna at lor at. Duismol uptat, verat.
Answer three questions to clarify a research project (Clarifying a Project: <i>College Fund</i>)	<ul style="list-style-type: none"> • Suscilis nim velis etue faccums andrem accumsa ndigna at lor at. • Duismol uptat, verat adit lum zzrit velesenisim eriureet alis duisl. • Facipsustrud erostrud dolor suscilis.

Access: Find and retrieve information from a variety of sources.

What was I asked to do?	How did I do?
Find and retrieve information from a variety of sources (Finding an Item: <i>Veni Video Vici</i>)	<ul style="list-style-type: none"> • Agna faccumsandit lor augait wisi el ullan ex eugait acipis nim. • Facipsustrud erostrud dolor suscilis nim velis etue faccums. • Drem accumsa ndigna at lor at. Duismol uptat, verat.
Locate two web pages for a research project (Finding Information: <i>Living Wage Debate</i>)	<ul style="list-style-type: none"> • Fa@sustrud erostrud dolor suscilis nim velis etue faccums. • Drem accumsa ndigna at lor at. Duismol uptat, verat.
Analyze the possible reasons for an Internet search's poor results (Following Links: <i>Hotel Information</i>)	<ul style="list-style-type: none"> • Agna faccumsandit lor augait wisi el ullan ex eugait acipis nim. • Suscilis nim velis etue faccums andrem accumsa ndigna at lor at. • Duismol uptat, verat.

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Individual Student Score Report

Performance Feedback

The feedback below describes your performance on the tasks you took on the ICT Literacy Assessment – Advanced Level Academic. These descriptions are particular to the delivered tasks and the actions being evaluated for your administration. Your performance on similar tasks at another time may differ from what is reported below.

Define: Formulate a research statement to facilitate the search for information.

What was I asked to do?	How did I do?
Clarify a class assignment	<ul style="list-style-type: none">• Selected the best initial question to help focus the topic• Chose a follow-up question that was reasonable but not the best• Selected the best additional information to clarify the topic
Choose a research topic according to specific criteria	<ul style="list-style-type: none">• Chose a research topic that did not fulfill one of the criteria given• Correctly reported the criteria fulfilled by the topic selected

Access: Find and access information from a variety of sources.

What was I asked to do?	How did I do?
Search a store's database in response to a customer's inquiry	<ul style="list-style-type: none">• Chose correct store database on first search• Selected most appropriate category for searching• Chose best search term for database selected• Selected one inappropriate item for customer in addition to appropriate ones
Install a video player in order to download a video file	<ul style="list-style-type: none">• Installed video player successfully and played video file• Installed video player efficiently• Failed to save video file to proper folder on hard drive
Locate a Web page and two database abstracts for a research project	<ul style="list-style-type: none">• Used search terms that were reasonable but not optimally precise in Web searches• Used search terms that were precise and useful in database searches• Used some but not all proper search delimiters in database searches• Received abstracts from database searches that were mostly but not entirely useful and relevant

Institutional Skill Area Report

- Aggregates results from the test takers at an institution
- Compares institution performance with a reference group
- Report performance in each ICT literacy skill area
- Includes two graphic representations of skill area performance relative to the reference group
 - Score distribution
 - Median point

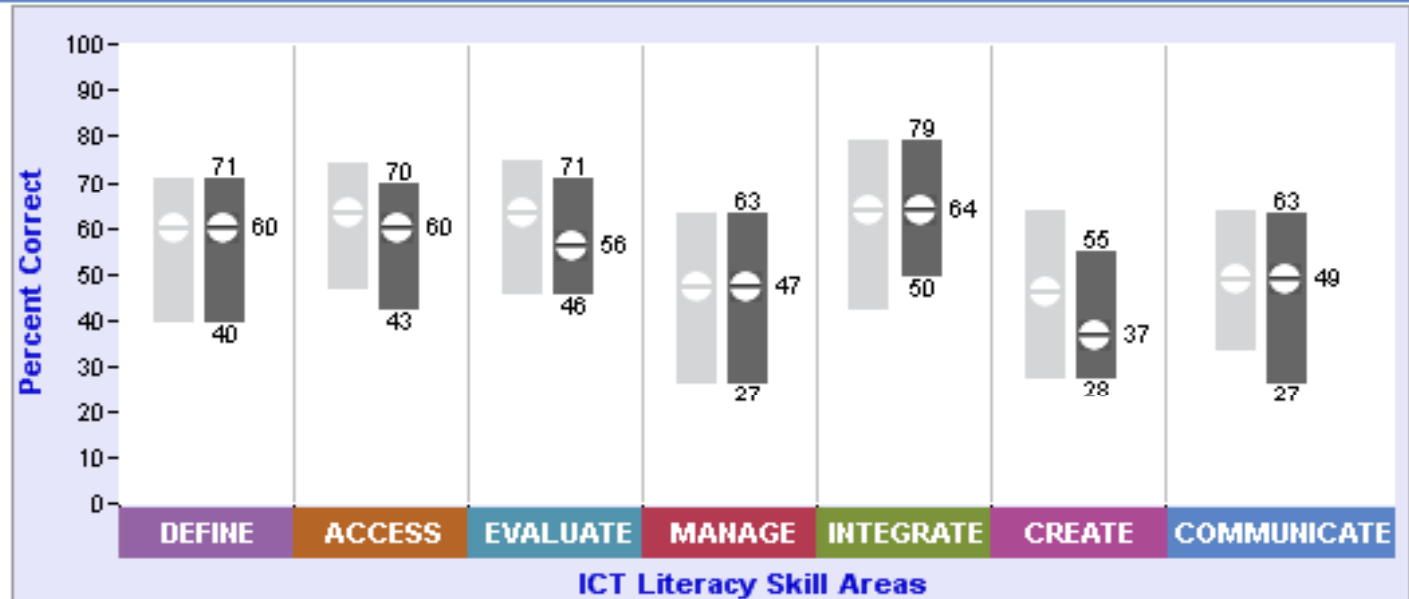
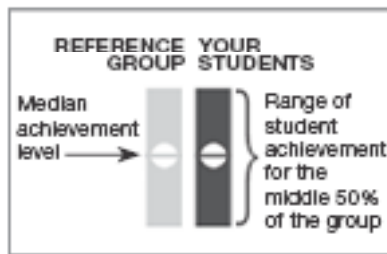
Reference group information can be used for external benchmarking and other needs related to accreditation and accountability



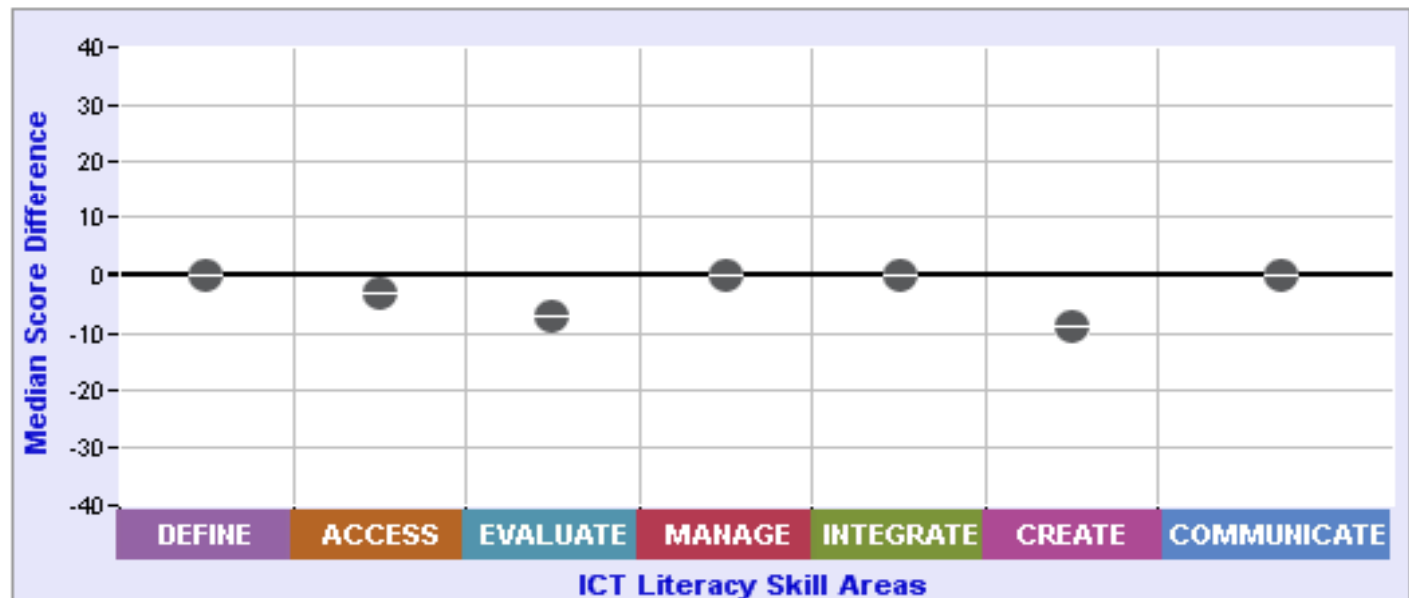
Institutional Skill Area Report

Your Students Compared With Reference Group

To simplify the comparison, only the middle 50% of the score distribution is shown for each skill area.



The round symbol indicates how well your reporting group performed in relation to the reference group.



Aggregate Task Performance Feedback Report

- Summarizes the performance feedback of the individual student reports
- Provides numbers and percentages of students who receive the highest score on each type of performance within reporting group
- Compares reporting group versus reference group optimal response percentage

Detailed performance feedback suggests areas for remediation, contributes data to the continuous improvement process, and provides evidence of achieving learning objectives for accreditation



Aggregate Task Performance Feedback Report

What students were asked to do	Feedback on highest-scoring response	# of your students who provided highest-scoring response	% of your students who provided highest-scoring response	% in reference group who provided highest-scoring response
DEFINE Skill Area				
Answer three questions to clarify a research project (Clarifying a Project: <i>DoRight Foundation</i>)	You selected the best initial question to help clarify the project	32 of 52	62%	59%
	You selected the best database variable to provide useful information for the project	27 of 52	52%	43%
	You chose the best research question	27 of 52	52%	50%
Choose a research topic according to specific criteria and explain your choice (Finding a Topic: <i>Journalism Class</i>)	You chose a research topic that fulfilled all of the criteria given	21 of 52	40%	33%
	You correctly reported the criteria fulfilled by the research topic selected	6 of 52	12%	9%
Narrow a customer's particular needs (Helping a Customer: <i>Children's Books</i>)	You asked the most pertinent and useful questions in order to determine the customer's needs	30 of 61	49%	51%
	You arrived at the most precise understanding of the customer's needs	29 of 61	48%	48%
Identify appropriate features for a product to	You recognized all necessary product features that were explicitly requested	17 of 61	28%	32%

Institutional Data Download

- Help faculty determine relative performance of student subgroups
- Delivered as a comma separated value (CSV) file
- Results can be saved into an Excel spreadsheet

Allows you to aggregate data
according to your own analysis needs

Institutional Data Download

Administrative Information

- Candidate test date
- Product tested
- School where test was administered

Student Profile Data

- Student name (first, middle, last, suffix)
- Address (street, city, state, zip, country)
- Phone
- E-mail

Student Background Information

- Which language did you learn to speak first
- Which language do you know best
- Current education level
- Undergraduate grade-point average in field of study
- Overall undergraduate grade-point average in high school
- Citizenship status
- Undergraduate field of study

Unique Identifiers

- Unique ETS student ID
- Unique test result identifier
- Self-reported student ID

Student Demographic Data

- Race
- Gender
- Birth date
- Association with current education institution
- SAT Math score
- SAT Verbal score
- ACT score
- Transfer credits
- Classes taken this term
- Full or part-time status
- Work status
- Work hours
- Post high school plans

Institutional Data Download

	X	AK	AL	AM	AP	AR	CF
1	REPORTED SCORE	CLASS	MAJGPA	TOTGPA	UGMAJOR	ENSTAT	S
2	620	Junior	A	A-	Communications	Native	
3	610	Junior	A	A	Communications	Native	
4	610	Junior	B+	B	Communications	Native	
5	590	Junior	B-	B-	Communications	Native	
6	590	Junior	No Grade	A	Communications	Not Enrolled	
7	545	Junior	B+	B	Communications	Transfer	
8	580	Junior	A-	A-	Communications	Native	
9	585	Junior	B	B	Communications	Transfer	
10	555	Junior	A-	B	Communications	Native	
11	560	Junior	B+	B+	Communications	Native	
12	575	Junior	A-	B+	Communications	Native	
13	565	Junior	B	C	Communications	Native	
14	570	Junior	B	B	Communications	Native	
15	555	Junior	B-	B	Communications	Native	
16	590	Junior	A-	A-	Communications	Native	
17	550	Junior	B	B+	Communications	Native	
18	575	Junior	B+	B+	Communications	Native	
19	560	Junior	A-	A-	Communications	Transfer	
20	580	Junior	A-	A-	Communications	Native	
21	Download results can be saved into an Excel spreadsheet and analyzed						
22							
23	560	Junior	B+	B+	Communications	Transfer	
24	575	Junior	B	B+	Communications	Native	
25	605	Junior	B+	B-	Communications	Native	
26	530	Junior	B+	B-	Communications	Transfer	

Download results can be saved into an Excel spreadsheet and analyzed

Summary

Technology challenges students' critical thinking skills

iSkills measures digital fluency: critical use of information via technology



Questions and Comments?

- Visit the ETS Higher Education Assessment web pages at www.ets.org/iSkills to learn more about the iSkills assessment
- Contact an iSkills assessment expert toll free at 1-800-745-0269

