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# Digital Natives, but Not Information Fluent: Assessing Information Literacy

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# Digital Natives, But Not Information Fluent—Assessing Information Literacy

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first "St. Patrick's Day Parade"

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Results 1 - 10 of about 653,000 for [first "St. Patrick's Day Parade"](#) with Safesearch on

### [The History of St. Patrick's Day - The History Channel](#)

In 1737, Irish immigrants to the United States began observing the holiday publicly in Boston and held the **first St. Patrick's Day Parade** in New York City ...

[www.history.com/minisites/stpatricksday/?page=history](http://www.history.com/minisites/stpatricksday/?page=history) - 37k - [Cached](#) - [Similar pages](#)

### [St. Patrick's Day History - The History Channel](#)

The **first St. Patrick's Day parade** took place not in Ireland, but in the United States. Irish soldiers serving in the English military marched through New ...

[www.history.com/minisite.do?content\\_type=Minisite\\_Generic&content\\_type\\_id=851&display\\_order=2...](http://www.history.com/minisite.do?content_type=Minisite_Generic&content_type_id=851&display_order=2...) - 32k - [Cached](#) - [Similar pages](#)

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### [Saint Patrick's Day - Wikipedia, the free encyclopedia](#)

The **first St. Patrick's Day parade** held in the Irish Free State was held in Dublin in 1931 and was reviewed by the then Minister of Defence Desmond ...

[en.wikipedia.org/wiki/Saint\\_Patrick's\\_Day](http://en.wikipedia.org/wiki/Saint_Patrick's_Day) - 104k - [Cached](#) - [Similar pages](#)

### [Scituate Chamber of Commerce, Scituate Massachusetts, Shop ...](#)

Scituate Chamber of Commerce's **St. Patrick's Day Parade** ... take right at bottom of ramp and follow to **first** set of lights and take right onto Route 123. ...

[weloveaparade.com/](http://weloveaparade.com/) - 12k - [Cached](#) - [Similar pages](#)

### [2008 Saint Patrick's Day Parade - Monday, March 17, 2008 11 A.M. ...](#)

Colonial New York City hosted the **first** official **St. Patrick's Day parade** in 1762, when Irish immigrants in the British colonial army marched down city ...

[www.saintpatricksdaysparade.com/NYC/newyorkcity.htm](http://www.saintpatricksdaysparade.com/NYC/newyorkcity.htm) - 27k - [Cached](#) - [Similar pages](#)

### [The First Ever Fifth Annual World's Shortest St. Patrick's Day ...](#)

The **First** Ever Third Annual World's Shortest **St. Patrick's Day Parade**. "Norm" from Cheers for 2005 Grand Parade Marshal. Pub Crawlin'. Pub Crawlin' ...

[www.hotsprings.org/festivals\\_events/stpat\\_parade.asp](http://www.hotsprings.org/festivals_events/stpat_parade.asp) - 28k - [Cached](#) - [Similar pages](#)

# Resources Used by Students

Google	71%
Yahoo	64%
MSN Search	48%
Ask Jeeves	46%
AltaVista, Lycos (tie)	28%
Netscape	26%
Library Web Site	21%
Online librarian/"Ask a Librarian"	5%

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

# Students' Perception of Resource Quality

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

**Source:** De Rosa, Cathy, and others. *Perceptions of Libraries and Information Resources*. (OCLC, November 2005)

<http://www.oclc.org/reports/2005perceptions.htm>

# Information Literacy

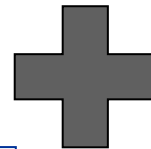
**Information Literacy:** “To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information ...” (ACRL, 1989)

# Digital Literacy, a bridge between...

## Technical Literacy

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

- Can I bold a word?
- Can I open a database?



## Information Literacy

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

- Can I find information?
- Can I evaluate authority?



## Digital Literacy

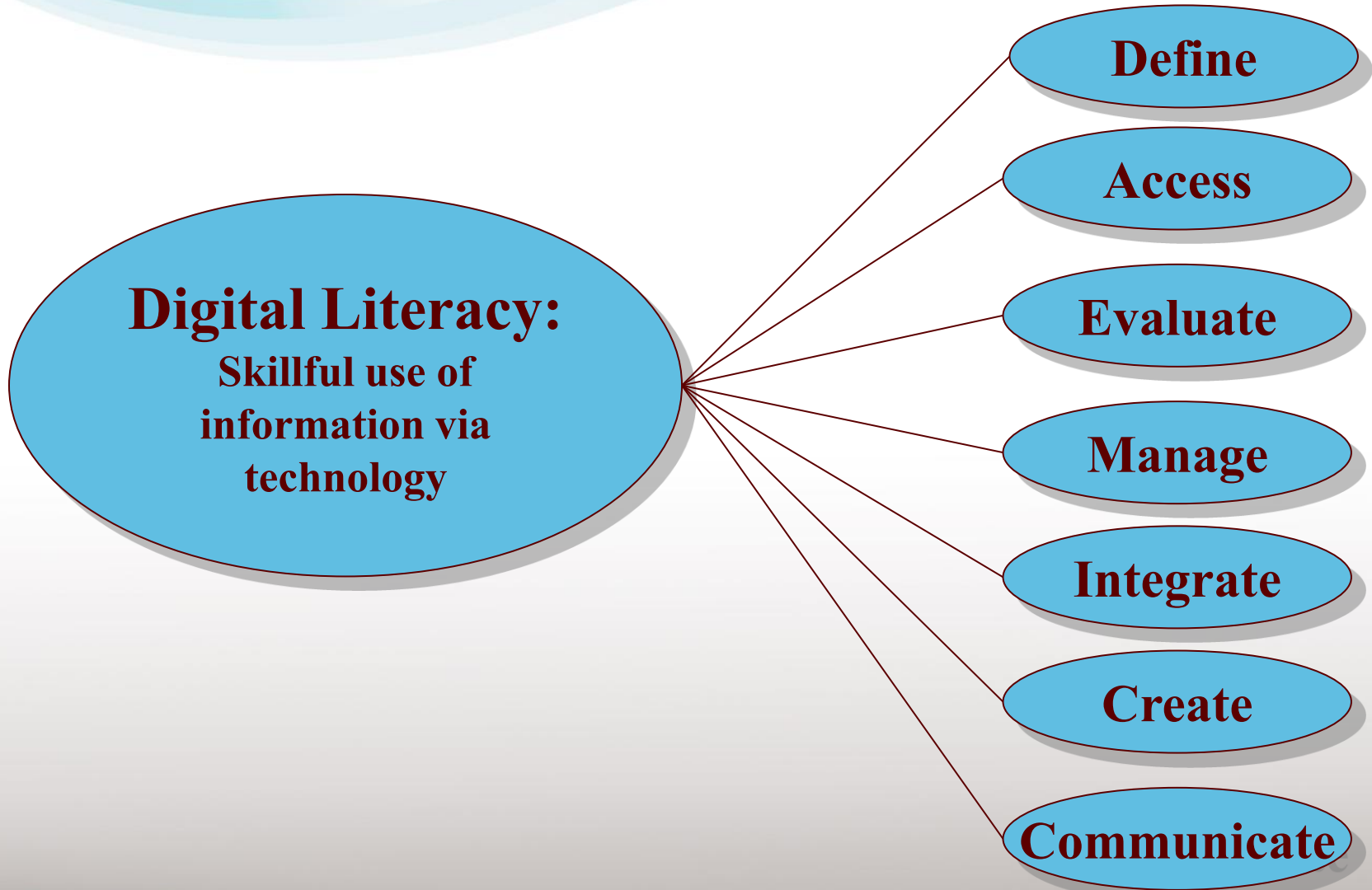
- Can I find information in a library database?
- Can I create a persuasive presentation?
- Can I identify conflicts of interest in a web site?





# Assessing Digital Literacy— With the *iSkills*<sup>™</sup> Assessment

# Components of Digital Literacy



# Why Should We Assess Digital Fluency with the iSkills Assessment?

- Unparalleled access to data that allows you to see/do more
  - National or other broad comparison group
  - Confidence in longitudinal data
  - Performance feedback
  - More analytical power
- Aligned with Association of College & Research Libraries (ACRL) Standards
- Backed by more than 65+ years of ETS experience in assessment development

# Features of the *iSkills*™ Assessment

- Interactive tasks – NOT multiple-choice
- Organized around real-world scenarios
- Designed to measure higher-order problem-solving and critical thinking skills
- Vendor neutral
- Seven digital literacy content areas
- 14 short (4 min) tasks
- Administered (optionally) in two 30-minute sections



# *iSkills*<sup>™</sup> Example Tasks

# 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

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  Publishing Industry Data  Time Span

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

Book Types

- 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
- Select

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

Year	Biography and History	Literature	Mystery	Psychology and Self-Help	Religion and Philosophy	Science Fiction	Textbooks
1930	100,000,000	120,000,000	10,000,000	15,000,000	195,000,000	145,000,000	245,000,000
1940	60,000,000	25,000,000	35,000,000	65,000,000	180,000,000	180,000,000	185,000,000
1950	100,000,000	160,000,000	75,000,000	165,000,000	190,000,000	110,000,000	185,000,000
1960	120,000,000	155,000,000	260,000,000	240,000,000	190,000,000	155,000,000	185,000,000
1970	80,000,000	125,000,000	140,000,000	245,000,000	205,000,000	125,000,000	245,000,000
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	30,000,000	90,000,000	45,000,000	45,000,000	90,000,000
2000	45,000,000	80,000,000	30,000,000	85,000,000	60,000,000	45,000,000	100,000,000

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: 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

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

### Graph Creator

**Average of Sales Revenues, in 2000 dollars**

Legend:

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

What has become the most popular type of book?  
 the x (horizontal) axis? (Click to make or change selection)

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

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

Answering the research questions involves correctly interpreting the graph.

**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 [ ] to [ ]

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**



# *iSkills*<sup>™</sup> Reports

# 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

# 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 21<sup>st</sup> 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

# Student Score Report



**ICT Literacy Assessment**



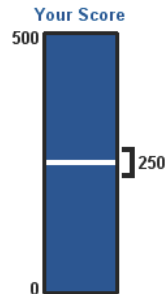
Version: iSkills Academic

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 Web site:  
<http://www.ets.org/iskills>

**Name:** John Smith  
**Date of Birth:** June 15, 1995  
**Test Location:** ETS University  
  
**ETS ID #:** 9999-9999  
**Date of Test:** January 1, 2013

**Your Score: 250 Percentile: 52**



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

**What was I asked to do?**

**How did I do?**

Answer three questions to clarify a research project

- You selected the best initial question to help clarify the project
- You selected the best database variable to provide useful information for the project
- You chose the best research question

Choose a research topic according to specific criteria and explain your choice

- You did not choose a research topic
- You did not report the criteria fulfilled by the research topic

*The ICT Literacy Assessment measures 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?**

Answer three questions to clarify a research project

- You selected the best initial question to help clarify the project
- You selected the best database variable to provide useful information for the project
- You chose the best research question

Choose a research topic according to specific criteria and explain your choice

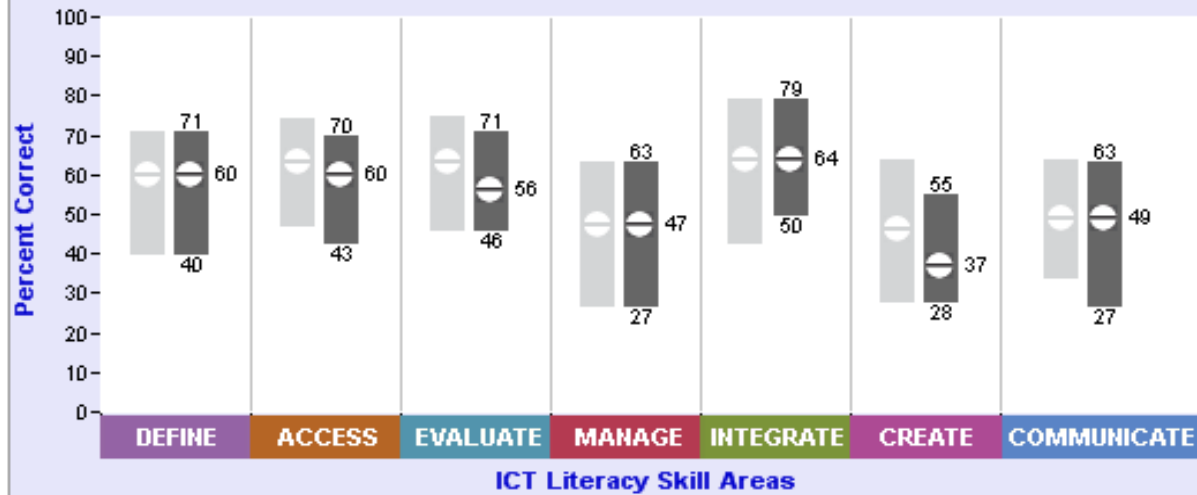
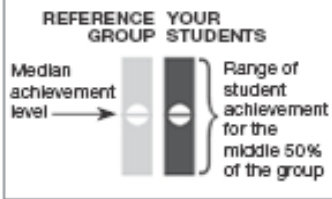
- You did not choose a research topic
- You did not report the criteria fulfilled by the research topic



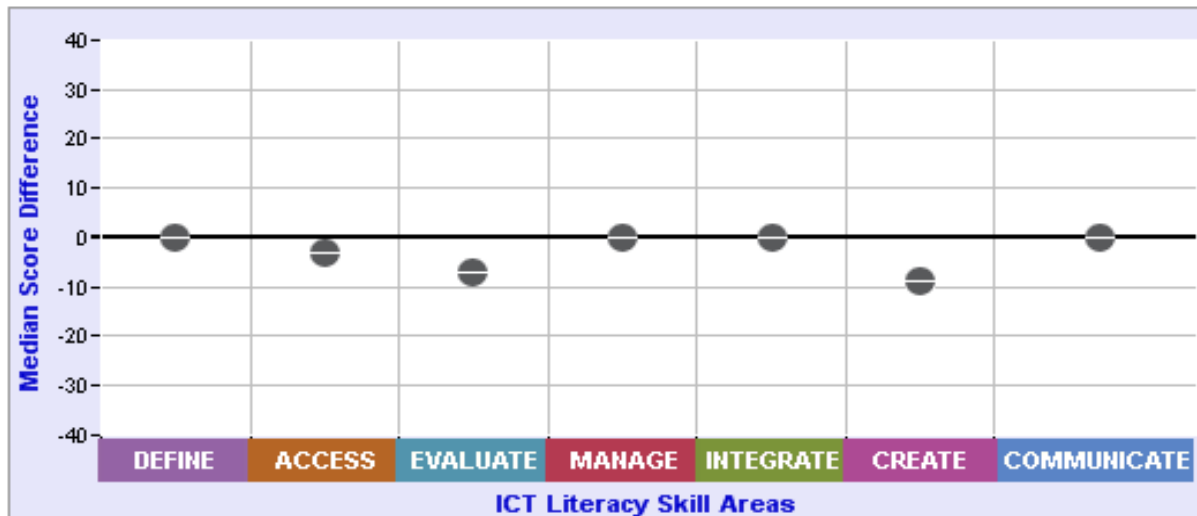
# Institutional Skill Area Report

## 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

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
<b>DEFINE Skill Area</b>				
<b>Answer three questions to clarify a research project (Clarifying a Project: <i>DoRight Foundation</i>)</b>	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%
<b>Choose a research topic according to specific criteria and explain your choice (Finding a Topic: <i>Journalism Class</i>)</b>	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%

# 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

# *iSkills*™ Certificates of Achievement

- Describes three different levels of proficiency based on three different score ranges
  - Developing
  - Foundational
  - Advanced
- Certificate describes the skills typically demonstrated by individuals attaining that level of proficiency
- Research-based
- Score range attained can be used for placement/opt-out
- Certificates are retrieved by the students from an online student portal.

The *iSkills* certificate can help motivate your students to make a serious effort on the assessment.

# Motivate your students to deliver a more accurate gauge of institutional effectiveness!

- Getting students to take optional assessments can be a challenge.
- To help you motivate students to perform their best and increase participation, the *iSkills*<sup>™</sup> assessment now includes Certificates of Achievement.
- Recently published ETS research, “Motivation Matters: Measuring Learning Outcomes in Higher Education,” proved that motivation:
  - has an important impact on student performance.
  - has a statistically significant and substantial impact on scores, and
  - can skew a college's average value-added score.

**Improved student motivation** leads to a **more accurate picture of institutional effectiveness** and ultimately helps institutions to better position themselves **for accreditation and performance funding.**

**Certificate Level:**

Shows the ICT literacy level achieved on the assessment.



# CERTIFICATE OF ACHIEVEMENT

*This is to certify that*

*John Smith*

*achieved the qualifying score to attain the level of*

*Foundational ICT Literacy*

*on the iSkills™ assessment*

Refer to the pages that follow for clarifying information about the various levels of certificate that can be attained and the varying degrees of skills related to each level.

**Electronic Certificate:**

The student receives a system-generated electronic certificate based on the score earned. This electronic format enables unlimited sharing by the student in academia & beyond.

## **Developing ICT Literacy (iSkills score 130-250)**

Individuals possessing developing ICT literacy skills demonstrate the ability to define and perform tasks, to identify needs, and to access, manage, and evaluate information in an effective, efficient, and responsible manner in education or work.

Individuals scoring at the **Developing** level tend to demonstrate the following skills:

- Moderate ability to articulate and clarify the demands of a research task
- Consistent success in searching a well-defined database to locate and retrieve information
- Moderate ability to judge the adequacy of information for a specific purpose
- Basic ability to use a simple organizational scheme to categorize information

### **Meaningful scores:**

Students can earn certificates in one of three different performance levels based on their score range.

**Detailed explanation:**  
Skills typically associated with each level are clearly defined on the certificate.

...ant information to draw fundamental conclusions

...cused presentations that meet the needs of an identified

For more information about the skills and concepts that the *iSkills*<sup>™</sup> assessment was designed to measure, visit [www.ets.org/iSkills](http://www.ets.org/iSkills).



# Questions and Comments?

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