Digital Natives, but Not Information Fluent: Assessing Information Literacy

Anne-Marie Stephenson
ETS iSkills, astephenson@ets.org

Follow this and additional works at: https://digitalcommons.georgiasouthern.edu/gaintlit

Part of the Curriculum and Instruction Commons, and the Information Literacy Commons

Recommended Citation
https://digitalcommons.georgiasouthern.edu/gaintlit/2013/2013/26

This presentation (open access) is brought to you for free and open access by the Events-Conferences and Programs at Digital Commons@Georgia Southern. It has been accepted for inclusion in Georgia International Conference on Information Literacy by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.
Digital Natives, But Not Information Fluent—Assessing Information Literacy

Ann-Marie Stephenson
Assessment Solutions Advisor
Educational Testing Service
www.ets.org/iskills
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 - 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... - 32k - Cached - Similar pages
More results from www.history.com »

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 - 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/ - 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.saintpatricksdayparade.com/NYC/newyorkcity.htm - 27k - Cached - Similar pages

The First Ever Fifth Annual World's Shortest St. Patrick's Day ...
www.hotsprings.org/festivals_events/stpat_parade.asp - 28k - Cached - Similar pages
<table>
<thead>
<tr>
<th>Resource</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google</td>
<td>71%</td>
</tr>
<tr>
<td>Yahoo</td>
<td>64%</td>
</tr>
<tr>
<td>MSN Search</td>
<td>48%</td>
</tr>
<tr>
<td>Ask Jeeves</td>
<td>46%</td>
</tr>
<tr>
<td>AltaVista, Lycos (tie)</td>
<td>28%</td>
</tr>
<tr>
<td>Netscape</td>
<td>26%</td>
</tr>
<tr>
<td>Library Web Site</td>
<td>21%</td>
</tr>
<tr>
<td>Online librarian/“Ask a Librarian”</td>
<td>5%</td>
</tr>
</tbody>
</table>

## Students’ Perception of Resource Quality

<table>
<thead>
<tr>
<th>Information from libraries is…</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Less</strong> trustworthy than information from search engines</td>
<td>9%</td>
</tr>
<tr>
<td><strong>More</strong> trustworthy than information from search engines</td>
<td>21%</td>
</tr>
<tr>
<td><strong>NO DIFFERENCE in trustworthiness</strong></td>
<td>70%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Technical Literacy</th>
<th>Information Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database</td>
<td>Access</td>
</tr>
<tr>
<td>Word Processing</td>
<td>Evaluate</td>
</tr>
<tr>
<td>Presentation</td>
<td>Use</td>
</tr>
</tbody>
</table>

- Can I bold a word?
- Can I open a database?
- Can I find information?
- Can I evaluate authority?
- 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™* Assessment
Components of Digital Literacy

Digital Literacy: Skillful use of information via technology

- Define
- Access
- Evaluate
- Manage
- Integrate
- Create
- Communicate
Why Should We Assess Digital Fluency with the iSkills Assessment?

• Unparalleled access to data that allows you to see/do more
  o National or other broad comparison group
  o Confidence in longitudinal data
  o Performance feedback
  o 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™ Example Tasks
• 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…
  o Visually represent data in a graph
  o Interpret the graph to answer research questions
In this task, examinees create a visual representation of data to answer two research questions.
Identifying the correct time span involves considering the implicit requirements of the information need.
Identifying the correct dependent variable (y-axis) involves thinking about how best to reflect “popularity.”
Examinees have the opportunity to try out different graphs before settling on their response, and this process is factored into their score.
Answering the research questions involves correctly interpreting the graph.
The two research questions require different degrees of analytic skill.
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
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
**ICT Literacy Assessment**

**Student Score Report**

**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 #:** 9899-9899  
**Date of Test:** January 1, 2013

**Your Score:** 250  
**Percentile:** 52

---

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

<table>
<thead>
<tr>
<th>What was I asked to do?</th>
<th>How did I do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer three questions to clarify a research project</td>
<td>• You selected the best initial question to help clarify the project</td>
</tr>
<tr>
<td></td>
<td>• You selected the best database variable to provide useful information for the project</td>
</tr>
<tr>
<td></td>
<td>• You chose the best research question</td>
</tr>
<tr>
<td>Choose a research topic according to specific criteria and explain your choice</td>
<td>• You did not choose a research topic</td>
</tr>
<tr>
<td></td>
<td>• You did not report the criteria fulfilled by the research topic</td>
</tr>
</tbody>
</table>

---

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.
Institutional Skill Area Report

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.

Your Students Compared With Reference Group

Percent Correct

<table>
<thead>
<tr>
<th>Skill Area</th>
<th>Median Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFINE</td>
<td></td>
</tr>
<tr>
<td>ACCESS</td>
<td></td>
</tr>
<tr>
<td>EVALUATE</td>
<td></td>
</tr>
<tr>
<td>MANAGE</td>
<td></td>
</tr>
<tr>
<td>INTEGRATE</td>
<td></td>
</tr>
<tr>
<td>CREATE</td>
<td></td>
</tr>
<tr>
<td>COMMUNICATE</td>
<td></td>
</tr>
</tbody>
</table>

ICT Literacy Skill Areas

Median Score Difference

Copyright © 2012 by Educational Testing Service. All rights reserved. ETS, the ETS logo and LISTENING. LEARNING. LEADING. are registered trademarks of Educational Testing Service (ETS). iSKILLS is a trademark of ETS. 19876
### Aggregate Task Performance Feedback Report

<table>
<thead>
<tr>
<th>What students were asked to do</th>
<th>Feedback on highest-scoring response</th>
<th># of your students who provided highest-scoring response</th>
<th>% of your students who provided highest-scoring response</th>
<th>% in reference group who provided highest-scoring response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEFINE Skill Area</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Answer three questions to clarify a research project (Clarifying a Project: <em>DoRight Foundation</em>)</td>
<td>You selected the best initial question to help clarify the project</td>
<td>32 of 52</td>
<td>62%</td>
<td>59%</td>
</tr>
<tr>
<td></td>
<td>You selected the best database variable to provide useful information for the project</td>
<td>27 of 52</td>
<td>52%</td>
<td>43%</td>
</tr>
<tr>
<td></td>
<td>You chose the best research question</td>
<td>27 of 52</td>
<td>52%</td>
<td>50%</td>
</tr>
<tr>
<td>Choose a research topic according to specific criteria and explain your choice (Finding a Topic: <em>Journalism Class</em>)</td>
<td>You chose a research topic that fulfilled all of the criteria given</td>
<td>21 of 52</td>
<td>40%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>You correctly reported the criteria fulfilled by the research topic selected</td>
<td>6 of 52</td>
<td>12%</td>
<td>9%</td>
</tr>
</tbody>
</table>
**Administrative Information**
- Candidate test date
- Product tested
- School where test was administered

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

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

**Student Demographic Data**
- Race
- Gender
- Birth date

**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

- 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™ assessment now includes Certificates of Achievement.
• Recently published ETS research, “Motivation Matters: Measuring Learning Outcomes in Higher Education,” proved that motivation:
  o has an important impact on student performance.
  o has a statistically significant and substantial impact on scores, and
  o 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**.
This is to certify that

John Smith
achieved the qualifying score to attain the level of

Foundational ICT Literacy

on the iSkills™ assessment

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 organize information in an effective, efficient, and responsible manner in education or work settings.

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

- 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
- Ability to use multiple sources of information to draw fundamental conclusions
- Ability to create and give focused presentations that meet the needs of an identified audience

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

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

For more information about the skills and concepts that the iSkills™ assessment was designed to measure, visit www.ets.org/iSkills.
Questions and Comments?

Ann-Marie Stephenson
Assessment Advisor
astephenson@ets.org
609-683-2682
www.ets.org/iSkills