Introducing

The BIG 6

Approach to Information Problem-Solving
Survey of Valued Skills
Fall 2001

- Problem Solving
- Information Use
- Speaking
- Independent Work
- Technology
- Group Work
- Writing
- Reading

www.washington.edu/oea/9811.htm
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.”

American Library Association, 1989
A Widely Recognized Need
The Big6™ Skills

1. Task Definition
2. Info Seeking Strategies
3. Location & Access
4. Use of Information
5. Synthesis
6. Evaluation
The Big6™ Skills Model of Information Problem-Solving

1. Task Definition:
   1.1 Define the problem.
   1.2 Identify the information needed.

2. Information Seeking Strategies:
   2.1 Determine all possible sources.
   2.2 Select the best sources.

3. Location and Access:
   3.1 Locate sources.
   3.2 Find information within sources.

4. Use of Information:
   4.1 Engage (e.g., read, hear, view).
   4.2 Extract relevant information.

5. Synthesis:
   5.1 Organize information from multiple sources.
   5.2 Present information.

6. Evaluation:
   6.1 Judge the result (effectiveness).
   6.2 Judge the process (efficiency).
Big6 Examples

Big6 Workshop Handbook p. 174

- 1st grade – language arts – ABC book
- 7th grade – Leon – recycling
- 10th grade – probability
The Big6 Example (p. 174): 7th Grade Social Studies

• Leon -

• Recycling project

• Short paper and oral presentation on the problems and solutions regarding recycling of one type of waste.
Task Definition

1.1 Define the problem

1.2 Identify the information needed

types of information
Information Seeking Strategies

2.1 Determine all possible sources

2.2 Select the best sources

brainstorm & narrow
Lesson: Info Seeking Strategy Criteria

- on the topic (valid)
- reliable/authoritative
- accurate
- precise
- complete
- easy to use
- available
- current
- affordable
- fun
Location & Access

3.1 Locate sources
3.2 Find information within sources
Use of Information

4.1 Engage (read, hear, view)
4.2 Extract relevant, quality information

relevance
Evaluation

6.1 Judge the result
6.2 Judge the process

effective & efficient
Developing Big6™ Understandings

Worksheet 3-2—Literal Level: Identify the Big6™

In the space provided, indicate which of the Big6™ Skills students are using when they perform each of the following activities:

TD = Task Definition
ISS = Information Seeking Strategies
L&A = Location & Access
UI = Use of Information
S = Synthesis
E = Evaluation

When a student:

_____ 1. chooses between an encyclopedia and a magazine for information on the political situation in the Middle East.

_____ 2. creates a weekly classroom newsletter about freedom movements in the world.

_____ 3. interviews a long-time community resident about local history.

_____ 4. assesses the presentations of other students.

_____ 5. uses PowerPoint to create a multimedia show about holiday celebrations in other cultures.

_____ 6. reflects on personal information skills that need improving.

_____ 7. uses appropriate Yahoo or Alta Vista commands.

_____ 8. evaluates the effectiveness of different specific media (e.g. political ads, car commercials, video vs. audio, etc.).

_____ 9. writes a thesis statement.

_____ 10. finds word definitions in a dictionary.

_____ 11. answers questions using a textbook.

_____ 12. selects a specific topic for a science fair project.

See Answer Key p.52
For the Very Young (preK – 1)
The Super 3

• Example:

• Making a picture of signs of Spring
The Super 3

You are the main character in a story:

Beginning - Plan

Middle - Do

End - Review
Creating a “culture of citing”

Use rubber stamps

book
computer
person
self
Summary – The Big6 Approach

Themes of the Big6
Themes of the Big6

1. The Big6 process can be applied in all subjects, with students of all ages, and across all grade levels (K-20).

The Big6 is not just for kids.
Themes of the Big6

2. The Big6 is an adaptable and flexible; it can be applied to any information situation.
Themes of the Big6

3. Technology skills take on meaning within the Big6 process.
Technology - Out of Context

- Word processing
- E-Mail
- Hyperstudio
- Instant Messaging
- Web browsing
- Web page design
- Statistical analysis presentation
- Online catalogs
- Database management systems
- Video production
- Electronic indexes
- Graphics
- Group discussion
- Use of operating systems
- Telnet
- PDAs
- Algorithms
- Programming
- Brainstorming software
- Copy/paste
- Inspiration
- CAD/CAM
- Chat
- Multimedia production (PowerPoint)
- Spell/grammar check
- Upload/download
- Web searching
- Electronic spreadsheets
- ftp
- HTML
Better, But Still Out of Context

- E-Mail
- Word processing
- Group discussion
- Online catalogs
- Electronic indexes
- Web browsing
- Web searching
- Electronic spreadsheets
- Upload/download
- HTML
- Spell/grammar check
- Brainstorming software
- PDAs
- Video production
- Algorithms
- Instant Messaging

- Multimedia production (PowerPoint, Hyperstudio)
- ftp
- Chat
- Graphics
- Database management
- Inspiration
- Use of operating systems
- Web page design
- Copy/paste
- Statistical analysis presentation
- CAD/CAM
- Telnet
- Programming
# Technology in Context

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Task Definition</strong></td>
<td>Students use e-mail, listservs, newsgroups, chat, videoconferencing, and other online communication methods to clarify assignments and brainstorm problems. Students may also use software to generate timelines, organizational charts, etc. to plan and organize complex problems.</td>
</tr>
<tr>
<td><strong>Info Seeking Strategies</strong></td>
<td>Students identify and assess computerized resources as they develop information seeking strategies toward their problem.</td>
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<tr>
<td><strong>Location &amp; Access</strong></td>
<td>Students use online catalogs, searchable periodical indexes, electronic encyclopedias, Web search engines, and other online searching tools to locate useful information.</td>
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<tr>
<td><strong>Use of Information</strong></td>
<td>Students connect to and access online or locally stored electronic information sources, view, download, and decompress files, and use copy-and-paste features to extract relevant information.</td>
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<tr>
<td><strong>Synthesis</strong></td>
<td>Students organize and communicate their results using word processing, database management, spreadsheet and graphics software, and distribute their projects via e-mail, Web publishing, or other media.</td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td>Students evaluate the impact of the technology they used, including its effectiveness and efficiency.</td>
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</table>
Themes of the Big6

4. Using the Big6 is not always a linear, step-by-step process.
The Big6: Not Linear

- Task Definition
- Information
- Seeking Strategies
- Location and Access
- Information Use
- Synthesis
- Evaluation
The Big6 process is necessary and sufficient for solving problems and completing tasks.
Themes of the Big6

7. The Big6 is an ideal approach for integrating information literacy learning with all subject area curricula at all grade levels.
Teaching and Learning the Big6

The key is...

Context!
#1 - the process
- information problem solving - the Big6

#2 - technology in context
- technology within the process

#3 - curriculum
- real needs in real situations
- assignments: papers, reports, projects
- units and lessons
# Big6 Skills by Unit Matrix

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In Closing...
The Big6

• Essential skills.
• A model of the information problem-solving process.
• Simple…but not really.
• Widely applicable.
• Easy to implement.
• Powerful.
Thanks for listening!
www.big6.org

All Big6 resources available from:
Linworth 800-786-5017
linworth@linworthpublishing.com