

**Note:** This is the fourth of a series on the Big6™, the most widely used approach to information problem-solving in the world. Students go through the Big6 stages—consciously or not—when they seek or apply information to solve a problem or make a decision. In addition to considering the Big6 as a process, the Big6 can be viewed as a set of basic, essential life skills that can be applied across situations—to school, personal, and work settings, and in school to all subject and grade levels. Students use the Big6 Skills whenever they need information to solve a problem, make a decision, or complete a task.

This article includes a brief overview of this Big6 stage, Use of Information, by Mike Eisenberg, one of the creators of the Big6, followed by articles by two exemplary Big6 teachers, Barbara Jansen and Rob Darrow, who offer practical uses of the Big6 in elementary and secondary situations, respectively. Melinda Tooley concludes the set by introducing a specific function of the new software product, Big6™ TurboTools, relevant to this Big6 stage.

Use of Information marks a major shift in focus in the information problem-solving process. Previously, most of the Big6 action revolved around finding information sources to match information needs. But now things change—from selecting and accessing sources to using information itself. This is where we get to the heart of the matter; it requires heavy-duty “critical thinking” as students engage the information in a source and decide what relevant information to use from each source (Big6 #4.1). Then, after determining the relevant information, the challenge is to extract it in an efficient way through some form of note taking (Big6 #4.2).

Engaging information (Big6 #4.1) is all about literacy—reading text and processing other forms of media. Literacy is primarily the concern of classroom teachers, particularly language arts and reading teachers. Library media specialists can also help students be more effective



By Michael B. Eisenberg

in “Use of Information” by teaching them to make sure they fully understand the task and key questions

before engaging a source. Teaching skimming and scanning techniques can also help students effectively and efficiently gather relevant information.

Extracting the relevant information through note taking (Big6 #4.2) is a skill that has been taught by library media specialists and classroom teachers for many years. This usually involves some form of the “note-card” method—writing single ideas from a source on a 3" x 5" card along with a notation that links the card to the full citation for the source. Information about the sources is usually stored on bibliography cards. However, the note-card method is somewhat laborious and time-consuming. Most adults probably wouldn't use the note-card method if they were asked to write a scholarly paper on some topic.

Before computers, many of us may have used some form of the “photocopy-highlight” method of extraction of information. We used the catalog or periodical indexes to identify relevant books and journal articles (Big6 #3.1), located the important sections in the books and articles (Big6 #3.2), took a quick look to make sure that the sections were what we wanted (Big6 #4.1), and then made photocopies of the pages. We would also make sure that we noted the full citation of the source on the photocopied page.

That's extraction of information—Big6 #4.2. Later, we would go back and read the copies in detail (Big6 #4.1), highlighting specific sections that we wanted to use (Big6 #4.2). Finally, we would use some method for taking that information and organizing it for our paper (Big6 #5.1). This might involve marking up the highlighted sections using some form of coding scheme related to the outline of our paper, or rewriting the notes according to a draft outline of the paper (Big6 #5.2). Today, most of us would use word processing software to assist with this endeavor.

*Continued on page 112*

## The Big6™

### 1. Task Definition

- 1.1 Define the information problem
- 1.2 Identify information needed in order to complete the task (to solve the information problem)

### 2. Information Seeking Strategies

- 2.1 Determine the range of possible sources (brainstorm)
- 2.2 Evaluate the different possible sources to determine priorities (select the best sources)

### 3. Location and Access

- 3.1 Locate sources (intellectually and physically)
- 3.2 Find information within sources

### 4. Use of Information

- 4.1 Engage (e.g., read, hear, view, touch) the information in a source
- 4.2 Extract relevant information from a source

### 5. Synthesis

- 5.1 Organize information from multiple sources
- 5.2 Present the information

### 6. Evaluation

- 6.1 Judge the product (effectiveness)
- 6.2 Judge the information problem-solving process (efficiency)

## INDEX TO ADVERTISERS

<b>ABC-CLIO</b> .....	17, 46-47
<b>Alexandria</b> (Companion Corporation) .....	11
A & E Television .....	13, 19
Bearport Publishing .....	89
<b>The Big6</b> .....	96, 97, 112, 113
Children's Press (Scholastic Library Publishing) .....	7
Clearvue & SVE .....	3
<b>Companion Corporation</b> (Alexandria) .....	11
Compass Point Books .....	93
Consortium for School Networking .....	107
Enslow Publishers, Inc .....	75
<b>Follett Library Resources</b> .....	Cover 2, 61
Greenwood Publishing Group .....	79
Grolier Online (Scholastic Library Publishing) .....	27-28
Hyperion Books for Children/Disney Publishing .....	51
Libraries Unlimited (Greenwood Publishing Group) .....	9
<b>Linworth Publishing, Inc.</b> .....	25, 35, 39, 41, 49, 50, 55, 91, 96, 97, 103, 113
Maupin House Publishing .....	113
National Geographic Society .....	57
NASA Center for Distance Learning .....	113
Orca Book Publishers .....	32
Oxford University Press .....	42-43
Picture Window Books .....	100
Proquest Information and Learning .....	Cover 3
Recorded Books, LLC .....	67
Rosen Publishing Group .....	54
Sagebrush Corporation .....	Cover 4
<b>Scholastic Library Publishing</b> (Children's Press) .....	7
<b>Scholastic Library Publishing</b> (Grolier Online) .....	27-28
Teaching Books.net .....	99
Thomson Gale .....	5, 35
World Book .....	52

Computer technology provides new opportunities and challenges for Use of Information and Synthesis. One way to get students to stop printing out everything is to teach them the “copy and paste” method. Here, students copy online text and paste it in a word processing document. Of course, the key is always to note the source of the information being copied. And, students will need to learn how to combine various pieces of information into something that’s theirs: something in their own words. That’s the next stage of the Big6, Synthesis.

Another computer approach is to use PowerPoint (or HyperStudio® or a similar presentation slide program) for note taking. Each individual slide is used like a note card, and students may copy and paste or type notes on individual slides. It’s also easy to include the bibliographic citation information. Slides may be moved around and arranged in various ways. This really helps students move to the next stage of the Big6, Synthesis, which will be covered in the next issue!

Extracting information from all kinds of sources is a skill that students must learn. As you can see, with the help of Big6 Stage 4, Use of Information, and new computer technologies, this task can become easier and more efficient for all learners. ■

**Michael B. Eisenberg** is dean of the Information School of the University of Washington. Mike, and his co-author **Bob Berkowitz**, created the **Big6 approach to information problem-solving**, and has worked with thousands of students (preK through higher education), as well as people in public schools, business, government, and communities to improve their information and technology skills. Mike has written numerous books and articles on aspects of information science and librarianship, information literacy, library media work, and information technology. He can be reached at [mbe@u.washington.edu](mailto:mbe@u.washington.edu) or [www.ischool.washington.edu/mbe](http://www.ischool.washington.edu/mbe). Visit [www.linworth.com](http://www.linworth.com) for Big6 titles, posters, and bookmarks.



# SAVE THE DATE & TIME

**MAJOR BIG6 EVENT PLANNED FOR  
AASL CONFERENCE IN PITTSBURGH:  
October 6, 1:30 - 3:00 p.m. - details to follow!**

Together with Big6 Associates, Big6 Learning Tools, and Linworth Publishing, we are planning a BIG Big6 event at the American Association of School Librarians conference in Pittsburgh on October 6, 2005. We guarantee it will be fun, relevant, and the talk of the conference! If you are going to be at AASL or just in the Pittsburgh area, you won't want to miss this.

Copyright of Library Media Connection is the property of Linworth Publishing, Inc.. The copyright in an individual article may be maintained by the author in certain cases. Content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.