Beyond the basic skills of reading, writing, and arithmetic, the citizen/worker of the twenty-first century needs complex analytical skills. The technological tools of the Information Age--computer networks, telecommunications systems, and databases--have put an unprecedented volume of information at our fingertips. Yet how
aware are we of what is available, when to use it, and how to find out about it?

Education systems and institutions must take seriously the challenges of the Information Age. This includes restructuring the learning process to reflect the use of information in the real world, changing the role of the teacher from presenter of prefabricated facts to facilitator of active learning, and including the library/media specialist as a collaborator in curriculum planning for effective use of information resources.

INFORMATION LITERACY

For many years educators have heard about a variety of literacies--print, visual, computational, cultural, computer, scientific--and their importance in every child’s education. Each of the literacies prescribes a process by which the learner can more easily negotiate the content unique to a particular area of study. Each of the literacies operates in isolation of the others, and each has its own vocabulary and conventions for study. Information literacy, on the other hand, is a potential tool of empowerment for all learners, reached through a "resource-based" learning approach. Briefly defined, information literacy is an individual’s ability to:

- recognize a need for information;
- identify and locate appropriate information sources;
- know how to gain access to the information contained in those sources;
- evaluate the quality of information obtained;
- organize the information; and
- use the information effectively. (Doyle, 1992)

Information literacy programs encourage shifts in the roles of teachers and learners.
Such changes are essential to prepare learners to live and work in an information-centered society.

SHIFTS IN TEACHING AND LEARNING

In an information literate environment, students engage in active, self-directed learning activities, and teachers facilitate students' engagement through a more adventurous style of instructional delivery. Students involved in information literate activities:

- seek a rich range of information sources;
- communicate an understanding of content;
- pose questions about the content being learned;
- use the environment, people, and tools for learning;
- reflect on their own learning;
- assess their own learning; and
- take responsibility for their own learning.

These students feel good about themselves as learners, and they leave school feeling passionate about some content.

Teachers trying to create an information literate environment for their students have given up the view that teaching is telling, that learning is absorbing, and that knowledge is static. They constantly make difficult choices about old curriculums, examining subject-area requirements closely, setting priorities, and considering process as well as content. They look beyond their classrooms for resources that will enrich the learning
environment. They engage in collaborative activities which enrich their own professional development and their students' learning experiences. They seek the expertise of their school library media specialists as partners in the curriculum planning process.

Teachers involve students in complex tasks that have purposes beyond the limits of the classroom and the teacher's critical evaluation. They also create collaborative situations to develop students' social skills and problem-solving skills. They are familiar with a variety of learning tools, both print-based and electronic, and they encourage their students to move beyond the textbook when seeking information and solving problems.

RESOURCES FOR INFORMATION LITERACY

Information literacy thrives in a resource-based learning environment. In such an environment, students and teachers make decisions about appropriate sources of information and how to access them. Aside from more traditional print resources--textbooks, encyclopedias, newspapers, magazines--they use technological resources such as videotape and videodisc, CD-ROM, software tools, and simulation/modeling tools. They use computer networking and telecommunications for both data access and participation in learning communities. They use multimedia technologies as materials for gathering data and as production tools. They use their school library media centers to locate and use many of these resources.

In addition to using technological resources, learners also reach beyond classroom walls into their local communities for the rich supply of materials and authoritative information provided by businesses, social services agencies, citizens' groups, and public and university libraries. The mass media--cable and network television, radio broadcasts, and other national and international print and electronic services--provide yet another rich source for information.

BENEFITS OF INFORMATION LITERACY

For Students:

Information literacy--and the resource-based learning programs that foster it--counteracts the information dependency created by traditional schooling, where students must rely on the teacher to dispense information. It requires active learning. Students take more control of their learning, and the teacher is freed from the role of omniscient expert. Yet the teacher becomes more important in the role of facilitator of interaction at the small-group or individual level. The final product of resource-based learning is usually a paper, presentation or exit performance. Regardless of where and how information literacy skills are acquired, they are applicable in any school, play, or work situation.
Resource-based learning accommodates varied interests and ability levels. Students don't need to read exactly the same materials on the same topic when they are identifying their own approaches to a theme or topic of study. When teachers encourage students to do their own research, students take responsibility for their learning, and they retain more of the information they have gathered for themselves.

Information literate students are more effective consumers of information resources. They learn to recognize that information is packaged in a variety of ways, that it is packaged using a variety of techniques, that it serves a variety of interests, and that it contains a variety of value messages. Information literate students are more critical when they make decisions about the resources they use.

For Citizens:

Lengthening lifespans and increasing leisure time have altered the formula for what constitutes a productive, healthy, and satisfying life. To respond effectively to an ever-changing environment, people need more than just a knowledge base. They need techniques for exploring, making connections, and making practical use of information.

Information-literate citizens know how to use information to their best advantage at work and in everyday life. They identify the most useful information when making decisions such as where to locate a business, how to vote, or whether to have a child. They are able to evaluate newscasts, advertisements, and political campaign speeches, recognizing when statistics are being used to support only one aspect of a complex issue. Current policy questions pose unprecedented complexity and international implications--immigration and "brain drain," the drug crisis, and the state of the environment. When statistics saturate all aspects of an issue, information literacy enables citizens to recognize deception and disinformation, so that they may make a truly informed decision.

These citizens appreciate the value and power of information. They believe in the need for information to address problems and questions in their own lives, in their communities, and in society. They understand that information is not necessarily knowledge until it has been analyzed, questioned, and integrated into their existing body of knowledge and experiences. They are equipped to be lifelong learners because they know how to learn.

For Workers:

The workplace of the present and future demands a new kind of worker. Reading and
arithmetic ability simply are not enough. In a global marketplace, data is dispatched in picoseconds and gigabits. The deluge of information must be sorted, evaluated, and applied, and workers must be able to gather, synthesize, interpret, and evaluate. Lack of these skills currently costs business billions of dollars annually in low productivity, accidents, absenteeism, and poor product quality. Workers must be information literate.

For the individual worker, the workplace has become a place of cataclysmic change and untold opportunity. Adapting to a rapidly changing work environment will mean multiple career and job changes. An early commitment to learning as a process, not as an end product, and the role information literacy plays in this process, will enable workers to see these changes as transitional, not traumatic.

RESOURCES


AMERICAN LIBRARY ASSOCIATION PRESIDENTIAL COMMITTEE ON INFORMATION LITERACY. FINAL REPORT. (1989). Chicago, Illinois: American Library Association. ED 315 074. (Single copies are available free by writing ALA, 50 East Huron St., Chicago, IL 60611.)


ERIC Resource Center

teacher, learner. NASSP BULLETIN, 75(535), 15-22.


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For further information on this topic, contact the National Forum on Information Literacy, Dr. Patricia Senn Breivik, Chair, c/o American Library Association, 50 East Huron St., Chicago, IL 60611.

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