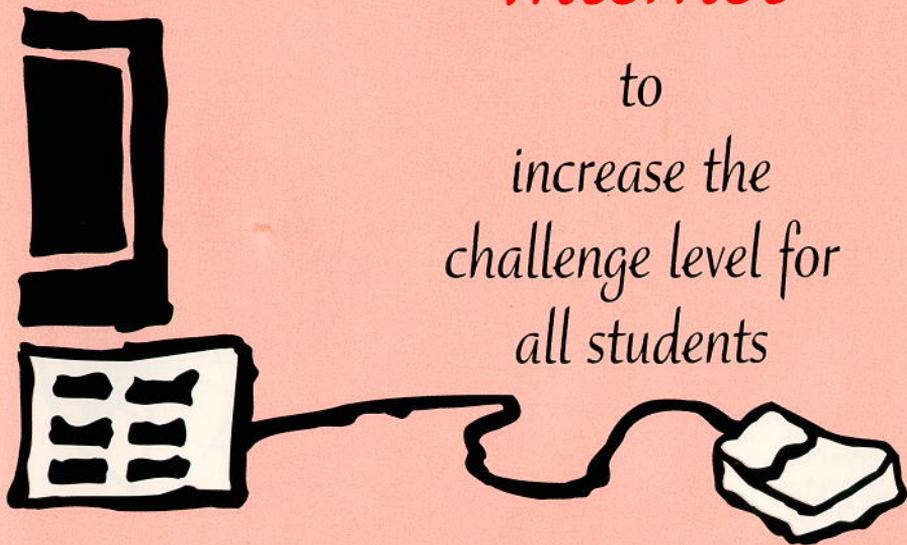


10

BIG LINKS

for using the
Internet

to
increase the
challenge level for
all students



Why the Internet?

Information and technology permeate almost every aspect of our lives in the 21st century. Schools are no exception. Within the past five years, significant state and national initiatives have enabled schools to install the telecommunications infrastructure they need to access extensive resources on the Internet. As more classrooms are wired, vast information resources now are literally at the fingertips of students and teachers.

Technological advances have changed the way people work, interact and learn. While these changes have created new challenges for educators, they also have opened new and exciting opportunities to support and enrich learning for all students. In particular, Internet-based information and projects offer support for a wide range of interactive, collaborative, challenging and research-based tasks that are comparable to those done by professionals. Teachers can use the important resources available on the Internet to increase the challenge level of instruction for all students.

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booklet are examples of content-area projects, as well as those that have numerous links to other Internet-based projects. Since new projects become available frequently, teachers are encouraged to consult with both technology teachers and library media specialists within their districts and to check their own professional literature to learn of new opportunities.

In addition, this brochure contains a list of 10 criteria teachers can use to identify Internet-based projects that are appropriate for their students. These criteria can be used as a checklist to determine whether a particular project will align with curriculum objectives, the needs and interests of students, and the supporting resources available within the school. The guidelines also can be used to evaluate other technology-based projects.

The purpose of this brochure is to assist teachers in locating and using high-quality, Internet-based learning projects to enhance their instruction and facilitate student learning. The sites listed in this



B!G LINKS

1 Lightspan: Online Learning for School and Home
(www.Lightspan.com)

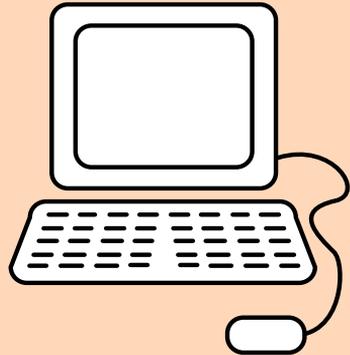
This is a project directory and is a gateway for online projects. The site includes an annual CyberFair (a performance-based, web-building competition), the Global Schoolhouse, field trips, online expeditions and a project directory listed by grade level, starting and ending date, and content area.

2 Blue Web'N
(www.kn.pacbell.com/wired/bluwebn/)

Blue Web'N is a starting point for locating high-quality learning experiences for students, K-12. Resources are arranged by content, but also can be searched by subject or grade level.

3 Webquests
(<http://edweb.sdsu.edu/webquest/webquest.html>)

This website is designed to serve as a resource to those using the Webquest model as an instructional strategy. It contains an interesting history of the instructional strategy and hundreds of examples of current webquests, listed by grade level and subject area.

**4 Teacher's Guide to International Collaboration on the Internet**
(www.ed.gov/Technology/guide/international)

The Teacher's Guide to International Collaboration was developed by the U.S. Department of Education to help teachers "reach out" globally. The web pages, containing hundreds of projects, are listed by content area, as well as by grade level.

5 Collaborative Learning Environments On-Line (CLEO) (www.cleo.terc.edu/cleo)

CLEO, sponsored by TERC (an educational research organization), supports inquiry and collaboration in science and mathematics by publishing classroom investigations on the Internet. Teachers and students can join existing projects and submit data to the shared data table and later analyze the combined data set.

6 Content-Specific Research Projects:
Journey North (www.learner.org/jnorth)

This project is a collaborative study of wildlife migration. The journeys of a dozen migratory species are tracked for four months each spring, with students sharing their own field observations.

JASON Project (www.jasonproject.org)

The JASON Projects offers students, Grades 4-9, a multimedia approach to learning in science, technology, mathematics and geography.

7 The Quest Channel (www.quest.classroom.com)

Quest Interactive offers interactive expeditions that give students an opportunity for "virtual" travel to solve great mysteries around the world.

8 NASA Quest (<http://quest.arc.nasa.gov/home/index.html>)

NASA Quest allows teachers and students to meet and learn about NASA people and a variety of space science projects.

9 ThinkQuest (www.thinkquest.org)

ThinkQuest and ThinkQuest Junior encourage the advancement of education through the use of technology and competitions. Teams of students and educators develop educational websites that are published in the ThinkQuest Library.

10 Kathy Schrock's Guide for Educators: Projects and Internet Integration
(<http://school.discovery.com/schrockguide/eduproj.nhtml>)

This site includes a list of annotated, linked sites that focus on the Internet as a resource for research, collaboration and communication. It also contains links for teachers who want to develop skills to use the Internet as a tool for teaching

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CRITERIA

- 1** Ensure that Internet-based programs align with curriculum and instructional goals and the age and ability level of students. If possible, speak with a teacher who has participated in the program.
- 2** Verify the start time and duration of the Internet-based project. Determine that the time frame is appropriate to the class(es) and that student interest can be sustained.
- 3** Obtain a sample of student support materials, if possible. Examine the materials for high-quality content, comprehensiveness, bibliographies, currency and links to other sites. Determine that the project supports higher-level thinking skills and opportunities for real-world problem solving.
- 4** Determine the level of participation required of students. Verify that students have the appropriate skills and time to complete the required procedures (e.g., measurements, data analysis).
- 5** Identify the hardware and software that are necessary for students to participate meaningfully in the project and whether the necessary tools are available to students on an ongoing basis. Can the school network support the online activity? Is there sufficient hardware and Internet connectivity to enable all students to participate?
- 6** Establish the level of teacher commitment, as well as the teacher skill level, that will be required to assist student participants. Ensure that the potential benefit for student learning is balanced with the scope of teacher commitment and any required professional development.
- 7** Explore the website of the sponsoring organization to identify the purpose and motive for the Internet-based project. Examine project overviews and sponsors for inappropriate biases or content.
- 8** Assess the costs that are associated with participation in the project. Some projects have fees; others charge for supplementary materials.
- 9** Find out the extent of fieldwork that will be required. Ensure that resources are available to support any off-site activities (e.g., transportation to field sites).
- 10** Investigate whether the Internet-based program has opportunities for differentiation of learning activities so students of varied abilities can participate fully. What options are available for classroom extensions of the project (e.g., research on related questions or hypotheses)?

