

Internet Resources for Professional Information and Support [garland]

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library media specialists and teachers via postings to various education listservs. The National Center for Supercomputing Applications (NCSA) publication, *An Incomplete Guide to the Internet Especially for K-12 Teachers and Students, Part Two: Internet Navigation Tools and Methods*, was also consulted.

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This chapter contains Internet resources selected for ease of use and the value of their content for teachers and school library media specialists. Every effort has been made to include quality sources that were available as of March 1995, but be aware that the Internet is a dynamic environment in which information sources can and do appear and disappear quickly. No claim is made that these sources will be available indefinitely or that they will continue to contain the same information described in the entries below.

This guide was prepared in a slightly different form as part of a manual for school library media specialists participating in an Internet Institute directed by Kathleen Garland and sponsored by the U.S. Department of Education in August of 1994. Descriptions and addresses have been revised to reflect changes made to the resources in the ensuing months. In addition, World Wide Web (WWW) sites accessible by using software such as Mosaic and Netscape have been added. As a preliminary step to selecting these resources, the names of favorite Internet resources were solicited from school

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This chapter is divided into three sections. The first section describes and evaluates discussion lists (listservs) for K-12 educators. The listservs are subdivided into general lists, professional specialty lists, subject lists, school library media/educational technology lists, and projects lists. Some lists are archived, meaning that messages posted to them are saved at a separate address and can be viewed at leisure, usually at a gopher or World Wide Web site. Scanning a listserv's archives can be useful in determining whether to subscribe to the list, or to read archived discussions without subscribing. A personal e-mail account is necessary in order to subscribe to a list. Persons without e-mail access can gain access to the archives via gopher or the World Wide Web, in most cases. Archives addresses are listed for each entry, if one is available. The volume of mail is indicated for each list because it can be very time consuming to subscribe to some of the lists. Heavy mail indicates that fifty or more messages will appear in your e-mail each week. Moderate mail indicates that fewer than fifty messages will appear, and light mail indicates that fewer than ten messages will appear. A "moderated list" is one for which someone reads the messages. Other listservs are programmed to automatically handle details like subscribing, mailing, and unsubscribing. Be sure to read about Internet etiquette (Netiquette or Net etiquette) before participating in a list for the first time.

The second section describes and evaluates two text and image files containing technology plans and lesson plans. The third section describes and evaluates gophers and World Wide Web sites (the latter accessible via software such as Mosaic and Netscape) that contain information of specific interest to the K-12 community.

All entries in the guide include Internet addresses for the resources, in addition to a description and evaluation of the resource. Addresses and subscribing information that must be keyed in when accessing these resources are written in bold letters. Gopher and Web sites may not contain identical information, even though they have the same name and are maintained by the same organization.

General K-12 Discussion Lists (Listservs)

Name: KIDSPHERE

Description

This educational list is broad in scope. Its stated purpose is to set up an international network for the use of children and their teachers. Two separate discussion lists are maintained, one for children and one for teachers. Main topics of discussion include commercial information, Internet resources, projects, surveys, teaching, and technology.

Mail: Heavy

Problems/Advantages

There is a great deal of mail, but nuisance and irrelevant mail is screened out because the list is moderated.

Evaluation

This may be the best overall list for teachers. Either this list or EDNET are musts. Subscribers have found it to be "an incredible resource," full of variety and moderated well.

Addresses

- To subscribe:* E-mail request to **kidsphere-request@vms.cis.pitt.edu**
The message is **Subscribe Kidsphere [first name] [last name]**
- Teacher postings:* E-mail messages to **kidsphere@vms.cis.pitt.edu**
- Student postings:* E-mail messages to **kids@vms.cis.pitt.edu**
- Archives of previous postings:* gopher to **ericir.syr.edu** and look for the heading,
Educational Listservs Archives
- URL of archives:* **gopher://ericir.syr.edu:70/11/Listservs/KIDSPHERE-List/**

Name: EDNET

Description

EDNET is a "forum exploring the educational potential of the Internet." It seeks to link educators with similar interests, to introduce students to local and net information sources, to provide analysis of or suggestions for projects, proposals and articles. It is an independent, unmoderated list.

Mail: Heavy

Problems/Advantages

The rate of mail and introductions are time consuming, but the content is worth the effort. This list can be searched, but make sure your search is narrow or you will receive more mail than you can handle.

Evaluation

Subscribing to either EDNET or KIDSPHERE is a must for every educator. Participants find EDNET a useful resource for their work. The list is very responsive to members' requests.

Addresses

- To subscribe:* E-mail request to **Listserv@nic.umass.edu**
The message is **Subscribe Ednet [first name] [last name]**
- Postings:* Address messages to **ednet@nic.umass.edu**
- Moderator/Owner:* e-mail Prescott Smith at **pgsmith@educ.umass.edu**
- Archives of previous postings:* gopher to **ericir.syr.edu** and look for the heading,
Educational Listservs Archives

·URL of archives: **gopher://ericir.syr.edu:70/11/Listservs/EDNET-List**

Specialty Listservs

***Name:* ECENET-L (Early Childhood Education)**

Description

This list addresses topics on early childhood education, infant through kindergarten. It is sponsored by ERIC, (Education Resources Information Clearinghouse) and membership is open to administrators, teachers and parents. Topics for discussion include Internet resources, readiness, reading instruction technology, and professionalism in child care.

Mail: Moderate

Problems/Advantages

Parents are included in the membership and may air insights, concerns and grievances.

Evaluation

This list is responsive to members. It will be valuable to those in early childhood education as it is a good resource for obtaining and exchanging information on ECE and technology.

Addresses

·To subscribe: E-mail request to **listserv@vmd.cso.uiuc.edu**

The message is **Subscribe ECENET-L [first name] [last name]**

·Postings: E-mail messages to **ecenet-l@vmd.cso.uiuc.edu**

·Moderator/Owner: E-mail Dianne Rothenberg at **rothenbe@uuc.edu**

·Archives of previous postings: gopher to **ericir.syr.edu** and look for the heading,
Educational Listservs Archives

·URL of archives: **gopher://ericir.syr.edu:70/11/Listservs/ECENET-L/**

***Name:* TAG-L (Talented and Gifted Education)**

Description

TAG-L is a list for teachers, students, and parents who have a special interest in talented and gifted education. The main topics discussed are inclusion, program set-up, recommended resources for planning and promoting TAG education, and Internet resources.

Mail: Moderate

Problems/Advantages

The main advantage is the discourse between teachers and parents.

Evaluation

The members stay on topic and are responsive to requests from parents and teachers. This would be a valuable resource for any teacher.

Addresses:

- To subscribe:* E-mail request to **listserv@vm1.nodak.edu**
The message is **Subscribe TAG-L [first name] [last name]**
- Postings:* E-mail message to **tag-l@vm1.nodak.edu**
- Moderator/Owner:* E-mail Jolene Richardson at **NU172504@vm1.NODAK.EDU**
- Archives:* Send **INDEX TAG-L** message to Administrative Address (above) for a list of files and dates of coverage; then send message **GET TAG-L [filename]** for the specific files wanted.
- URL of archives:* **gopher://lib-gopher.lib.indiana.edu:3050/OR64497-65021-lm/kovac-list-ti/acadlist.l.ti**

***Name:* K-12ADMIN (K-12 Administration)**

Description

This is a world-wide discussion group for K-12 administrators. Participants share information and resources and discuss problem solving strategies. They are kept abreast of upcoming conferences and events. Subjects areas often addressed include school management, curriculum, grading, portfolios, technology, and Internet resources, services, operations, and activities.

Mail: Heavy

Problems/Advantages

The list is specific to administrative topics, but does not seem to cover concerns of superintendents as much as those of principals.

Evaluation

This is an excellent list for principals and guidance counselors as well.

Addresses

- To subscribe:* E-mail request to **listserv@suvmsyr.edu**
The message is **Subscribe K12ADMIN [first name] [last name]**
- Postings:* E-mail messages to **k12admin@suvmsyr.edu**
- Moderator/Owner:* E-mail Mike Eisenberg at **eric04@suvmsyr.edu** and Mary Lou Finne at **cate@uoregon.edu**
- Archives of previous postings:* gopher to **ericir.syr.edu** and look for the heading, Educational Listservs Archives
- URL of archives:* **gopher://ericir.syr.edu:70/11/Listservs/K12admin-List**

Subject Listservs

Name: DINOSAUR LIST

Description

This list is designed to distribute information and foster dialogue among people in the electronic community who share a scientific interest in dinosaurs. The list also discusses flying and swimming archosaurs and other prehistoric animals. It includes information on relevant publications.

Mail: Heavy

Problems/Advantages

Participants need extensive background or good reference materials in order to understand special terms.

Evaluation

This list might be of interest to high school students, advanced middle school students or teachers. Terminology level is difficult, and there is quite a bit of redundancy, but the list is responsive to questions.

Addresses

- To subscribe:* E-mail request to **listproc@lepomis.psych.upenn.edu**
The message is **Subscribe DINOSAUR [first name] [last name]**
- Postings:* E-mail messages to **dinosaur@lepomis.psych.upenn.edu**
- Moderator/Owner:* Mickey Rowe
- Archives of previous postings:* None at this time

Name: NCTM-L (National Council for Teachers of Mathematics)

Description

This list addresses topics of concern to teachers of mathematics. Topics of discussion observed on this list include word problems, history of mathematics, social issues that relate to the teaching of math, and jokes.

Mail: Heavy

Problems/Advantages

There does not seem to be a great deal of weeding out as some topics do not seem to merit the amount of mail they receive.

Evaluation

This list is valuable to math teachers looking for some support. List members are very responsive.

Addresses

- To subscribe:* E-mail request to **listproc@sci-ed.fit.edu**
The message is **Subscribe nctm-l [first name] [last name]**
- Postings:* E-mail messages to **nctm-l@sci-ed.fit.edu**
- Moderator/Owner:* E-mail Kevin Barry at **barry@sci-ed.fit.edu**
- Archives previous postings:* E-mail Administrator (address above) with this message,
Index NCTM-L

School Library Media/Technology Listservs

Name: EDTECH (Educational Technology)

Description

This list is oriented toward educational technology and brings together students, faculty and interested others in the field to share information and ideas. EDTECH has over 1,300 subscribers from more than thirty countries. Topics addressed include technology coordination, multi-media resources, problems using educational technology, descriptions of good and bad software and hardware, current research and dissertations in educational technology, course offerings at various schools, and announcements of conferences, events and workshops.

Mail: Heavy

Problems/Advantages

The list carries "Edupage," a summary of news items on information technology.

Evaluation

EDTECH is a must for anyone interested in educational technology. It offers more on the topics of distance learning, publications and software than other lists.

Addresses

- To subscribe:* E-mail request to **listserv@msu.edu**
- Postings:* E-mail message to **edtech@msu.edu**
- Owner/Moderator:* E-mail Vickie Banks at **21602VB@msu.edu** and Dr. Joe Byers at **20506jlb@msu.edu**
- Archives of previous postings:* gopher to **ericir.syr.edu** and look for the heading, Educational Listservs Archives. May also be retrieved from Administrator (at above address). Send message **Index EDTECH**; then choose a file and send message **Get EDTECH [filename]**
- URL of archives:* **gopher://ericir.syr.edu:70/11/Listservs/Edtech**

Name: LM_NET (Library Media Net)

Description

LM_NET is open to all school library media specialists worldwide. It features discussions of the role of the media specialist and solutions to common problems shared by subscribers. Topics of discussion include Internet resources, library administration, CD-ROM and other technologies, school library media services, operations and activities, ways to link schools through media centers, new publications, and upcoming conferences and other events.

Mail: Very heavy--as many as forty or more messages daily

Problems/Advantages

Handling the abundance of mail will take diligence. LM_NET Internet Assistance is a special feature on this list; it gives the names of volunteers who will help others navigate the Internet, and they are responsive. The archives of this list can be searched by topic by choosing the search option from the main archives menu.

Evaluation

If you are a school library media specialist, you will want to explore this list. The members are fairly responsive to requests for information.

Addresses

·To subscribe: E-mail request to **listserv@suv.m.syr.edu**

The message is **Subscribe LM_NET [first name] [last name]**

·Postings: E-mail message to **lm_net@suv.m.syr.edu**

·Owner/Moderator: E-mail Mike Eisenberg at **mike@ericir.syr.edu** and Peter Milbury at **pmilbur@eis.calstate.edu**

·Archives of previous postings: gopher to **ericir.syr.edu** and look for the heading, Educational Listservs Archives

·URL of previous postings: **gopher://ericir.syr.edu:70/11/Listservs/LM_NET/About LM_NET**

Name: NEW-LIST

Description

New-List announces the creation of new discussion lists (listservs). Guidelines for making announcements are detailed when one subscribes. Significant changes to e-mail lists are also announced here. Lists can cover any subject, and additions pertain to topics as diverse as music groups in Brazil, the Lutheran Church, rural water supplies in developing countries, literary genres, health, and technology.

Mail: Light

Problems/Advantages

The list is moderated so there are few mistakes or irrelevant postings. New-List can be used as a last resort for finding a particular list.

Evaluation

This list of new lists is very valuable and should be monitored by schools or districts since it contains announcements of lists that could be especially valuable for subject area teachers and technology specialists.

Addresses

·To subscribe: E-mail request to **listserv@vm1.nodak.edu**

The message is **Subscribe New-List [first name] [last name]**

·Postings: E-mail messages to **new-list@vm1.nodak.edu**

·Moderator/Owner: E-mail Marty Hoag at **hoag@nodak.edu**

·Archives of previous postings: gopher to **vm1.nodak.edu** and look for the heading
Local Listserv Resources/NEW-LIST Project/New-List Archives

·URL of previous postings:

gopher://vm1.NODAK.EDU:70/00/Local%20LISTSERV%20Resources/NEW-LIST%20Project

Listservs for K-12 Projects Using the Internet

***Name:* INTERCULTURAL E-MAIL CLASSROOM CONNECTIONS (IECC)**

Description

This list is intended for teachers seeking partner classrooms for international and cross-cultural e-mail exchanges. Once you have subscribed you can request a partner classroom. Two other related lists must be joined separately: IECC-PROJECTS and IECC-DISCUSSION.

Interest Level: Teachers, students in all grades

Mail: Light

Problems/Advantages

This list is not for individuals, so it must be set up by the teacher for the classroom.

Evaluation

This list was judged as the best one found by an LM_Net Internet Assistant. A helpful format is provided for use when requesting e-mail partners.

Addresses

·To subscribe: E-mail request to **iecc-request@stolaf.edu**

The message is **Subscribe IECC**

·Postings: E-mail messages to **iecc@stolaf.edu**

·Archives of previous postings: gopher to **gopher.stolaf.edu** and look for the heading,
Internet Resources/St.Olaf's Sponsored Mailing Lists

Name: KIDLINK SOCIETY (for children aged 10-15 years)

Description

The Kidlink Society is dedicated to global dialog between ten - fifteen year olds throughout the world. It runs projects, a number of discussion lists (listservs) in several languages, and does electronic publishing.

Interest Level: Elementary, middle school

Mail: Varies by list

Problems/Advantages

This society provides an excellent example of the use of electronic mail by children. Participating classrooms are not charged a society fee, but individuals and sponsors are.

Evaluation

There are overwhelming possibilities for teachers and students on these lists. Children of 10-15 years of age are ready to explore the world. Classrooms may join Forums. Children can chat around the globe in real time.

Addresses

To subscribe: E-mail request to listserv@vm1.nodak.edu

The message is **Subscribe KIDLINK [first name] [last name]**

Postings: Upon subscription to the KIDLINK list, you will receive a message giving you information about all the KIDLINK lists, the purpose for each, and how to post to them. Some, like the KIDLINK list, are read-only, while others are open discussion forums.

Moderator/Owner: E-mail Odd de Presno at opresno@extern.uio.no

Archives of previous postings: gopher to kids.ccit.duq.edu

Name: HILITES

Description

This list is more like a bulletin board than a discussion list, since only the moderator allows posting to the list. The postings are projects that are accepted. They have a required format. This list has projects/games and covers many subjects for K-12. The projects include such things as environmental surveys that are conducted by one classroom, which requests that other classes join in the project and collect the same information. The request to join and work on a project is e-mailed to the owner of the project.

Interest Level: Teachers, all students

Mail: light

Problems/Advantages

This list allows for nationwide or global participation.

Evaluation

These projects/games look like a great way for students and teachers to collaborate, to share lessons, and to do research. Hilites is also a good source of ideas for lessons and projects to be used in the classroom.

Addresses

·To Subscribe: E-mail request to **fred@acme.fred.org** SUB hilites

·Postings: Moderator requests you not to post.

·Administrative: E-mail proposed projects to **ideas-listk@acme.fred.org**

·Moderator/Owner: E-mail Erica Rogers at **erogers@bonita.cerf.fred.org**

Text Files of K-12 Lesson Plans and Technology Plans

Technology Plans: From the National Center for Technology Planning (NCTP)

Description

A variety of technology plans from around the U.S., Australia, and Canada are found here. There are district plans and at least one state plan of high quality, chosen to serve as exemplars for other states and districts developing their own plans.

Evaluation

This gopher site is a good source of examples of K-12 technology plans.

Address: Gopher to **gopher.msstate.edu** and look for the heading, Resources Maintained at MsState University/NCTP

Lesson Plans: From Education Resources Information Clearinghouse (ERIC)

Description

This is a rich text source of lesson plans for astronomy, Discovery Online, language arts, mathematics, National Aeronautics and Space Administration, (NASA), science, social studies and miscellaneous (Indexed).

Evaluation

There are other locations for lesson plans but this is by far the best non-commercial site. ERIC Lesson Plans can be searched easily by subject. These lesson plans are especially valuable for current events and science. Complete units as well as lessons are found at this Internet site.

Addresses

Gopher to **ericir.syr.edu**

Telnet to **hafnhaf.micro.umn.edu** (Usual login: **gopher**)

FTP to **ericir.syr.edu** (User name: **anonymous** and Password: [your e-mail address])
 URL: <http://ericir.sunsite.syr.edu/>

General K-12 Gopher and World Wide Web Sites for Educators

Name: Armadillo (The Texas Studies Gopher from HISD)
 State: Texas
 Address: gopher to **riceinfo.rice.edu 1170**

URL: <http://chico.rice.edu/armadillo/>

Contact: **dperkins@tenet.edu** (gopher) or **armadillo@rice.edu** (WWW)

Description: Armadillo is both a gopher and a World Wide Web site. It was originally created as a gopher with the purpose of providing support to middle school Texas history teachers. Information on all middle school subjects is available here, however, since an interdisciplinary approach to history is taken. The newer WWW site “will continue to be developed in conjunction with the Armadillo Gopher, branching out with more detailed and richer resources,” according to the About Armadillo file. Interesting resources not seen at many other education sites include a collection of text files pertaining to acceptable and unacceptable use of Internet resources for the K-12 audience, policies and guidelines from various states, and the ALA Bill of Rights.

Don't miss the regionally focused Texas Studies Instructional Information and Resources, with information on Texas history, geography, and the environment.

Under Library Resources and Services there are useful links to literature like Aesop's Fables and other out-of-copyright literature, the CIA Factbooks, and to Project Gutenberg.

One part of Armadillo teachers might be particularly interested in is Super Projects, that has projects done by Texas students in the areas of mathematics, history, folktales, science, and others. Under Technology Help, Software, and Lessons, look under Pictures for DOS and Mac viewing software. Under CoSN K12 Internet Projects, a directory of education listservs tells how to subscribe to lists like ED-NET (for K-12 educators) and H-NET (History Online).

Evaluation: This site has some resources you do not see everywhere. Good organization and many online Help and AboutMe files make getting around Armadillo easy. Be sure to look at Super Projects.

Name: AskERIC Virtual Library

Location: New York
 Address: Gopher to **ericir.syr.edu**
 URL: **<http://ericir.sunsite.syr.edu/>**
 Contact: Dave Lankes at rdlankes@ericir.syr.edu

Description: ERIC and its progeny, AskERIC, a federally funded national information system located at Syracuse University, provides access to educational literature as well as to services and products at all education levels. The AskERIC service responds within 48 working hours to requests for information. **askeric@ericir.syr.edu** is the address to which questions should be e-mailed.

AskERIC has entered into collaboration with Sun Microsystems, Inc., which will enable the addition of sound, video, and multimedia to its Web site. The collaboration also enables users to link to Sun information and to SunSITES around the world.

The World Wide Web (WWW) site has links to AskERIC, ERIC's collections, lesson plans, and a beta test site of the ERIC database currently covering the years 1983-1994. NASA's SIR-CED Lesson Plans which offers Lesson Modules, Images from the Jet Propulsion Laboratory, and information on imaging radar are also available. Other resources include teacher program materials from The Discovery Channel, the Learning Channel, and the Public Broadcasting Service science series, *Newton's Apple*.

The AskERIC gopher is accessible from the WWW site and is very comparable in its breadth to the WWW site. The ERIC gopher has a map showing the organization of the Virtual Library's files and resources and is a good starting point for the exploration of ERIC's incredible wealth of information.

Evaluation: Every teacher should know about the education related material located here, including information about the Internet. Both the gopher and Web sites are well organized and easy to navigate. A possible problem with the WWW site, however, is that the large images are slow to load and display.

Name: CICNet (Cooperation in Communication Net)
 State: Michigan
 Address: Gopher to **gopher.cic.net**
 URL: **<http://www.cic.net/>**
 Contact: Rhana Jacot at rjacot@cic.net

Description: K-12 information is found under the Other CICNET

Projects and Gopher Servers on the gopher's main menu or the Web home page. This part of the gopher is a collection of resources to be used by K-12 educators, administrators, and students. Information on the Web site is identical to that on the gopher; the Web site points to the gopher. K-12 gopher, World Wide Web, telnet, and FTP sites, among other interesting choices, are to be found here. There is also information about how to use the Internet in the classroom, how to get started searching, and how to do K-12 networking.

Telnet sites include the Cleveland FreeNet where the full text of many historical documents can be found, the Weather Underground, the Food and Drug Administration Bulletin Board, and NASA Spacelink.

EE-Link, an environmental education gopher, the Smithsonian's Natural History Gopher, and Best of K-12 Internet Resources are some interesting places to look for information.

Information at FTP sites includes Lyrics and Discography, the List of Lists (information about the Internet), Project Gutenberg (electronic texts information), and Project Hermes (Supreme Court decisions).

Look also for discussion lists (listservs), library catalogs, classroom activities and projects, and publications information.

Notices, News Flashes, and Other Short-term Information directory, are kept up to date with a variety of interesting and useful announcements and information that currently begins with "1995 Summer Seminars for School Teachers (NEH)."

Evaluation: The organization of the CICNet gopher is easy to comprehend and there are not many layers of gopher hierarchy to reach the resources. Best of Internet Resources and Using the Internet in the Classroom appear to be especially useful to teachers. CICNet is searchable and has helpful ReadMe files for most menu levels.

Name: Eisenhower National Clearinghouse (ENC)
 State: N/A
 Address: Gopher to **enc.org**
 URL: **gopher://enc.org/**
 Contact: info@enc.org

Comments: The mission of the Eisenhower National Clearinghouse is "to improve learning in mathematics and science by providing better access to resources for all who are interested in creating an effective learning environment," according to the gopher.

This gopher site contains curricular materials, electronic journals in the areas of science and uses of technology in education, and Internet shareware for IBM compatibles and Macintosh (Mosaic, JpegView, etc.) that can be downloaded. An interesting menu choice is titled Promising Practices in Schools and Classrooms.

The ENC gopher has some education guides to the Internet in the areas of Math and Science and a good Internet Resource Directory. These guides are all full text and offer addresses and short descriptions of the sites. In addition, there are government guides to Earth Science, Environmental Resources, Chemistry, and Biology.

Evaluation: Users will find much worthwhile material, but they will have to do some digging to find it. For example, the About This Gopher directory does not describe the gopher's purpose; it lists all the menu titles in alphabetical order.

Name: NYSED (New York State Education Department) Gopher
State: New York
Address: Gopher to **unix5.nysed.gov**
URL: **gopher://unix5.nysed.gov**
Contact: George Casler at **gcasler@unix5.nysed.gov** (Write "feedback" in the subject line.)

Description: This gopher collects and distributes information relating to telecommunications and provides a gathering and organizing place for resources useful to classroom teachers.

Educators can find Conferences and Calls for Papers here. Education News has current telecommunications information of specific interest to educators, while TelecommNews includes general interest news, individual announcements of Internet happenings, and several electronic journals devoted to Internet news.

K-12 Resources will be especially useful to teachers. The folders here are grouped by curriculum area, with links to information on the Arts and Humanities, Mathematics, Science and Technology, Social Studies, and more.

Internet resources are found in abundance. There are guides, FAQs (frequently asked questions), and training materials and tutorials covering gopher and the World Wide Web among others, that will be useful to people learning about the Internet.

Evaluation: This is a well organized, frequently updated gopher with good online help. Particularly noteworthy is the collection of

telecommunications policy papers and items such as the Electronic Frontier Foundation's electronic journal.

Name: OERI (Office of Educational Research and Improvement)
 State: Washington, D.C.
 Address: Gopher to **gopher.ed.gov**
 URL: **http://inet.ed.gov**
 Contact: **wwwadmin@inet.ed.gov** or gopheradm@inet.ed.gov

Description: This site is available via the World Wide Web (WWW) and Gopher. The Web site is experimental, however, and is not as comprehensive as the gopher. Both sites seek to make information previously available on the OERI Bulletin Board accessible here. This includes OERI publications, announcements, grant information, program descriptions, research findings and statistical tables as well as teaching materials and computer programs. Survey data sets, documentation files, and code books from the National Center for Education Statistics can be found here.

Extensive government research-related information resources are located here. Teachers might be especially interested in the Teachers Guide to the U.S. Department of Education and What's New on the Server. The ED/OERI Full-Text Publications are indexed, have summaries, and can be ordered in hard copy. Categories include Education Statistics, Research Synthesis and Literature Reviews, Reports and Studies, and Resource Directories.

You can link to the White House and the District of Columbia home page from the Planet Earth World Wide Web site.

The software needed to open and read image and compressed text files is stored in the Educational Utilities directory. There is also Educational Software users can download for their IBM, Apple, Tandy, or Atari machines.

Evaluation: The information in this gopher is timely. It is updated at least weekly. Although much of the information may not be directly suited to classroom use, this site is an excellent place to learn about what is happening in education at the national level. No gopher help is available here.

Name: StarkNet: A K-99 Education Network
 State: Ohio
 Address: Gopher to **bigbird.stark.k12.oh.us**
 URL: **http://bigbird.stark.k12.oh.us:70/**

Contact: jmb@bigbird.stark.k12.oh.us

Description: These sites are the project of a consortium of school districts and affiliates in Stark County, Ohio. The purpose of the gopher and the World Wide Web (WWW) site is to help persons in these school districts share ideas by e-mail; to transfer text, sound, and video; and to participate in cooperative learning projects. The user help and About Me files make these sites both unusually friendly and useful. The sites appear to be nearly identical, although the WWW site takes advantage of the multimedia capabilities of the Web. For example, maps, photographs, and diagrams are currently available there.

Internet tutorials are found at both sites, in Quick Lessons on the Internet, and the Whirlwind Tour of the Internet. These sites also contain Internet reference sources, including links to shared projects information; the ERIC database and the LM_Net archives; the National Service Learning Clearinghouse for K-12; shareware archives for Macintosh and PC that provide downloadable Netscape, Fetch, and JpegView among others; and text files covering "Issues in Internet Use" and "Elementary School Success Stories."

There is also interesting information about Stark County Student Projects.

Do not miss the DONUT Moo (Starknet's Multi-User, Object-Oriented Virtual Reality), a collaboration by students to build the Virtual School of the Future. Look for images and hypercard stacks as well as text files of information that students have assembled.

Evaluation: StarkNet is unusually user-friendly, with excellent organization, on-line help, and a fine regional focus. A particularly nice feature of these sites is the ability to search all menus by keyword. In addition to offering many K-12 links to other resources, StarkNet is a great source of original information regarding how schools are using the Internet right now.

Name: Teacher Education Information Server (TEIS)
 State: N/A
 Address: Gopher or telnet to **teach.virginia.edu** (telnet login: **gopher**)
 URL: **http://curry.edschool.virginia.edu/teis/**
 Contact: Bernard Robin at brobin@uh.edu

Description: TEIS was "established to explore ways in which the Internet could benefit teacher education programs around the world, according to the information provided in the gopher. It is a collaborative effort of the Society for Information Technology and Teacher Education,

the University of Virginia, and the University of Houston. The gopher is fully operational and the World Wide Web site is in development, therefore the comments listed below refer only to the gopher.

This gopher for teachers focuses on ways to utilize instructional technology and computers together. There are Teach-It modules which are downloadable self-instructional modules on various subjects in information technology.

The Telecommunications and Networking Information directory includes an Overview of the Internet, Net Etiquette, New Users, an Internet Tour and an Internet Starter Kit for Educators. There are also electronic versions of education journals like the *Ed-Tech Review* (published by the Association for the Advancement of Computing in Education).

This gopher also has interactive capabilities, the maintainers claim. Users can take part in online discussions, make comments and suggestions about the gopher, and take an active part in the construction of content areas such as Mathematics, Science, Language Arts, and Elementary Education.

Evaluation: This site should be of interest to educators interested in integrating technology into the classroom. At present, however, some directories have scant offerings.

Name: TIES: Technology and Information Education Services
 State: Minnesota
 Address: Gopher to **ties.k12.mn.us**
 URL: **<http://www.ties.k12.mn.us:70/1>**
 Contact: **ties@ties.k12.mn.us**

Description: The TIES gopher and World Wide Web site is part of a project to provide Internet access to all preK-12 public schools in Minnesota. This site has some very good and unusual links. Because it is constantly updated, the description that follows is only suggestive of the kinds of resources available at TIES.

Of special interest here is the excellent Software Archive of downloadable shareware, located under the heading InforMNs Gopher Server on the main menu. The archive is arranged by application in categories like Gopher Client Programs, Graphics Viewers, Sound Players, Compression Software, and World Wide Web Client Programs (Mosaic, Netscape, MacWeb). Mac, Windows, and DOS client software is available.

A Minnesota K-12 directory has some very interesting links that have included a multimedia presentation called "Internet in K-12 Minnesota" for the Mac; Actividades en Español; Current Road Conditions; a

Dinosaur Unit with text and image files about dinosaurs; the Minnesota Valley National Wildlife Refuge's environmental education lesson plans; a good directory of Selected Math and Science Resources; and Teacher On-line Projects which are "designed to develop online services to support rural classrooms in the application of problem solving techniques for community based projects..." according to information found at this site.

Also worth a look are two other directories: Pictures, Quicktime Movies, and Sounds; and Best of the K-12 Internet Resources.

Evaluation: These sites are well organized and contain some very valuable full text, visual, and software resources. A particularly nice feature of these sites is the ability to search for information by keyword.

Name: Web66
 State: Minnesota
 Address: There is no comparable gopher to this World Wide Web site.
 URL: <http://web66.coled.umn.edu/>
 Contact: WebMaster@web66.coled.umn.edu

Description: This World Wide Web (WWW) site has three goals: to provide information for K-12 educators on how to set up an Internet server, to provide links to K-12 WWW sites, and to provide access to information resources on the WWW. Web66 is a project of Hillside Elementary School, the University of Minnesota College of Education and the Center for Applied Research and Educational Improvement. An unusual feature of the site is the wealth of information available on setting up your own Web site. The information covers many different platforms and configurations within platforms. In addition, there is a lot of information on software (browsers, etc.), and built in capability for downloading it.

The Web66 What's New Page is modeled after the National Center for Supercomputing Applications (NCSA) What's New page. It is a wonderful resource to turn to for the latest information about WWW resources of interest to the K-12 community.

Other information available here includes a discussion group called Mailing List that is intended primarily for school that produce their own WWW information, and a registry of K-12 schools on the WWW.

Evaluation: There is so much information here on setting up your own Internet server that K-12 educators who are involved in this activity or contemplating doing it will not want to miss this Web site. Even if you do not have your

own server, this site is worth a look for the new resources found on the Web66 What's New page. This source is one of the best available for the K-12 community.