Part of a larger report on the Four Directions Project, an American Indian technology innovation project, this section includes 10 "pathfinders" to locating information on learning and instructional technology resources. The pathfinders were designed by students in the Graduate School of Library and Information Science at the University of Texas at Austin in response to specific requests by educators in reservation schools. The pathfinders are bibliographic instructional aids that outline methods to locate information on topics of interest to a particular client. Each pathfinder includes an introduction that describes the nature of the topic, scope of the pathfinder, assessment of client needs, and steps taken in identifying and evaluating relevant resources; an annotated bibliography of 15-25 resources, including print reference works, monographs, indexes, journal titles, electronic resources, and organizations; and the pathfinder proper, a guide to locating resources on the topic. The pathfinders are: (1) "Native American Learning Resources: A Pathfinder" (Beth Royall); (2) "The Psychology of Human Learning: A Pathfinder for High School Teachers" (Ruth K. Chiego); (3) "Building a Virtual Museum: A Pathfinder of Resources for the Four Directions Project" (Lee Bell); (4) "Pathfinder on QuickTime" (Jennifer Thomas); (5) "Introduction to Adobe Photoshop Pathfinder" (Roger Magnus); (6) "Pathfinder to Animation: Using Technology To Learn, Learning To Use Technology" (Hope Kandel); (7) "Tips for Better Photography: A Pathfinder" (Jennifer Morley); (8) "Oral History: Resources for Teachers" (Michelle Beattie); (9) "Starting on Your Ojibwe Family History: Internet Resources" (Candice Weaver); and (10) "The Impact of Technology on Indigenous Cultures: A Pathfinder" (Gina Leiss). (SV)
Curricular / Instructional Technology Resources

In: Pathfinders for Four Directions: An Indigenous Educational Model

Dr. Loriene Roy (Comp)
# Table of Contents

Native American Learning Resources (Beth Royall) ............... 121-129
The Psychology of Human Learning (Ruth K. Chiego) ............. 130-141
Building a Virtual Museum (Lee Bell) ............................. 142-143
Pathfinder on QuickTime (Jennifer Thomas) ....................... 144-152
Introduction to Adobe Photoshop (Roger Magnus) .................. 153-163
Pathfinder to Animation (Hope Kandel) ......................... 164-173
Tips for Better Photography (Jennifer Morley) ..................... 174-183
Oral History (Michelle Beattie) .................................... 184-194
Starting on Your Ojibwe Family History (Candice Weaver) ...... 195-205
The Impact of Technology on Indigenous Cultures
   (Gina Leiss) .................................................. 206-214
NATIVE AMERICAN LEARNING RESOURCES
A Pathfinder

by Beth Royall

October 14, 1997
LIS 382L.13
Dr. Loriene Roy
University of Texas at Austin
Graduate School of Library and Information Science

INTRODUCTION:

Research on Native American learning compasses a range of theories and issues. One current topic is the learning or cognitive styles of students, and if or how these styles are affected by the students’ tribal cultures. Other topics of interest are whether particular learning environments and strategies prove more successful for Native American students. Researchers and educators caution against stereotyping a Native American learning style. Many, though, agree that the Indian tribal cultures nurture values and behaviors that may not facilitate success in mainstream schools.

This pathfinder is designed to assist educators in locating information about learning research relevant to kindergarten through high school age Native American students. It is meant to be of particular use to Dr. Paul Resta in his work with the 4Directions project. The 4Directions members are interested in knowing where the current research on indigenous learning is taking place, and what resources exist for incorporating Indian cultural themes into classroom curricula. The bibliography consists of sources that provide coverage of general learning theories and research, and also sources that specifically apply the information to indigenous students. Sources are limited to those readily available at the University of Texas at Austin General Libraries. Preference was given to sources published within the last ten years, particularly those with bibliographies of at least ten other sources.

In compiling the bibliography, I first consulted ERIC, using the keywords “learning styles,” “learning environments,” and “learning strategies.” I examined the subject headings assigned to articles containing these keywords, and combined these subject headings with the subject headings “American Indian education” or “indigenous populations.” These articles gave me a broad view of the major journals and authors associated with the topic, in particular:

My next search was in the University of Texas at Austin on-line catalog (UTCAT), using combinations of the subject keywords “cognitive style,” “indigenous education,” and “North American Indian education.” I also used UTCAT to locate dictionaries and encyclopedias on education or educational psychology. Examining the citations of these publications led me to other likely sources.

My final search for sources was via the internet, using the search engine Hotbot. Hotbot allows for elaborate Boolean searching, a great advantage with a loosely defined topic such as Native American learning research. The search statement I used was similar to the ERIC search, but longer, in order to compensate for the lack of any subject indexing on the Internet:

(“learning styles” OR “learning environments” OR “learning strategies” OR “cognitive style” OR education OR research) AND (“Native American” OR indigenous OR Indian)

I found the most specifically relevant sources to be in journals and on the world-wide web. Many other sources included Native American learning research within the broader context of multi-cultural or second language education.
HANDBOOKS & ENCYCLOPEDIAS:

   LC 1099.3 H35 1995 PCL Reserves

   This large reference book includes 2 articles of particular interest: “Educating Native Americans” (p. 331-347), by K. Tsianina Lomawaima, and “Learning Styles and Culturally Diverse Students: A Literature Review,” by Jacqueline Jordan Irvine and Darlene Eleanor York (p. 484-497). Lomawaima provides an excellent overview of research and trends, with extensive citations to the literature of the last 30 years. Irvine and York expand on Lomawaima’s overview, including a chart of selected learning-styles identification instruments, suggested teaching strategies. They conclude with an evaluation of the problems as well as promising aspects of indigenous learning research.

   LB 15 E49 1992 V.3 PCL Stacks

   Although the title of this encyclopedia indicates an emphasis on higher education, the article “Student Learning and Study Strategies,” p. 1730-1740, by N. Entwistle, summarizes a broad range of study skills and strategies, reviewing the literature and identifying major theories. Does not specifically address Native Americans. The extensive bibliography includes many British and Australian references. See also the article “Student Development,” by G. D. Kuh and F. K. Stage (p. 1719-1730.)

   E 76.2 R43 1995 PCL Reference Dept.

   A single-volume work—not an encyclopedia in the traditional sense, but a combination directory, bibliography and who’s who. Organized in 4 sections, the first is a directory of U.S. tribes, institutions, organizations, schools, etc. The second is a Canadian directory. Section 3 is an extensive bibliography, with a subject index. The “Education” entry lists dozens of publications dealing with Indian education. Section 4 is biographical.

SPECIAL ISSUES & REPRINTS

   LC 1099.3 C85 1989 PCL Stacks
This book contains mainly reprints of journal articles, emphasizing African American, Native American, and Mexican American cultures. Three chapters focus specifically on Native American children, as well as a chapter on creating culturally compatible classrooms.


Though now eight years out-of-date, this special issue presents comprehensive coverage of Native American learning style research through 1989. The nine articles include literature reviews, research results, as well as specific recommendations for teachers.

**MONOGRAPHS**


A brief, 50-page book, presenting a clear overview of learning theories, research, and applications. While not directly addressing the theories in relation to Native American students, it cautions against stereotyping students or cultural groups into one particular style.


This publication includes an article, "Learning Processes and Teaching Roles in Native Education: Cultural Base and Cultural Brokerage," by Arlene Stairs, p. 139-153, that explores the traditional Native processes of education using the North Baffin Inuit as an example. Stairs contrasts these concepts with formal education, and suggests a possible synthesis.


Though now 12 years old, this book provides not only an overview of topics, but also specific teaching suggestions and examples. Includes Pepper’s ideas of what teachers of Indian students should know, from suggestions for effective classroom and time management, to parent and community involvement.

Although only 3 pages, this ERIC Digest begins with a review of the literature, then compares the cultural patterns of American Indian and Alaskan Natives with typical classroom learning environments. Swisher concludes with practical recommendations for teachers.

INDEXES


An e-mail service that provides photocopies of tables of contents from selected journals. This service also allows patrons to submit search strategies. These are matched against the CARL index of more than 17,000 journals, and the results are emailed to the patron.


The most comprehensive index to education literature, specifically journal literature. Available in print, CD-ROM and on-line formats, ERIC is updated frequently, and utilizes a formal thesaurus of subject headings. The online index contains the two print indexes RIE, Resources in Education, and CIJE, Current Index to Journals in Education. Useful subject terms: cognitive style, teaching styles, learning strategies, learning processing, American Indian education, instructional preference, educational strategies, active learning, indigenous populations, multisensory learning.


These five volumes provide subject access to Books In Print. Volume five includes a thesaurus of subject terms. The most useful for this topic is “Indians of North America—Education.”

INTERNET RESOURCES


Sponsored by the Alaska Federation of Natives, the University of Alaska, the National Science Foundation, and the Annenberg Rural Challenge. The stated mission is “to serve as a resource for compiling and exchanging information related to Alaska Native knowledge systems and ways of knowing...[and] to provide support for the integration of Alaska Native knowledge and ways of knowing into the educational systems of Alaska.” A very well-organized web site providing information on indigenous knowledge systems and indigenous education worldwide. Included is a Culturally-Based Curriculum Resources Database of actual lesson plans.

A listing, with descriptions, of primarily electronic resources about "theories, research, programs, and techniques" addressing learning styles (not specific to indigenous populations.) Anderson has organized the citations by format, including internet sites (gophers, listservs, telnet, and web pages) as well as print sources. Includes instructions for subscribing or otherwise accessing.


This is a listserv for people interested in the learning organization concept, as described by Peter M. Senge in *The Fifth Discipline*, published in 1990. A learning organization is any group dedicated to collaborative learning and a common goal. The listserv began in June of 1990. The archives are searchable by subject and date.


The NCBE website includes full-text articles and is searchable. Karen Swisher’s article “American Indian Learning Styles Survey: An Assessment of Teachers [sic] Knowledge” from volume 13 of the *Journal of Educational Issues of Language Minority Students* is presented in full. To go directly to Native American resources access http://www.ncbe.gwu.edu/links/langcult/native.html.
The topic, Native American learning, represents a broad range of ideas including learning styles, learning environments and learning strategies. As educators continue to try to improve education for Native Americans, attention has been focused on providing culturally relevant materials in pre-college curriculum.

Prepared for Dr. Paul Resta, 4Directions Project
By Beth Royall, University of Texas at Austin, GSLIS
Call numbers refer to UT General Libraries locations.

Start with handbooks and encyclopedias for historical and current summaries of theories and practices.

   (LC 1099.3 H35 1995 PCL Reserves)

Look at: “Educating Native Americans” (p. 331-347) and “Learning Styles and Culturally Diverse Students: A Literature Review” (p. 484-497).

   (LB 15 E49 1992 V.3 PCL Stacks)

Look at: “Student Learning and Study Strategies” (p. 1730-1740) and “Student Development” (p. 1719-1730).

Special issues and reprints are useful for conveniently bringing together articles on a particular topic. Check both UTCAT and ERIC. Special issues will be shelved with the journal, and indexed in ERIC. Reprints of articles from more than one journal will be published as a book, and can be found through the library catalog.

   (E 97.5 J645 PCL Stacks)

Comprehensive coverage of Native American learning style research through 1989, including literature reviews, research results, as well as specific recommendations for teachers.

   (LC 1099.3 C85 1989 PCL Stacks)

Three chapters focus specifically on Native American children, as well as a chapter on creating culturally compatible classrooms.
Online or print indexes can uncover the most recent journal publications on a topic.


ERIC is the most comprehensive index to education literature, specifically journal literature. Updated frequently. Useful subject terms:

cognitive style  teaching styles  educational strategies
learning strategies  learning processing  active learning
American Indian education  instructional preference  multisensory learning
indigenous populations

⇒ Uncover Reveal. (electronic mail alert service) Denver, CO: The UnCover Company. (UT Library homepage “Indexes, Abstracts and Full Text”)

Request copies of the tables of contents of new issues of The Journal of American Indian Education. Also submit up to 25 search strategies using ERIC subject terms for notification of new articles. Do not use Boolean logic—limit each strategy to a few keywords.

Internet websites can contain everything from lists of resources, to full-text articles, to complete layouts of special projects. Use a search engine to locate potential sources. HINT: try Hotbot at http://www.hotbot.com

• Change TO LOOK FOR ALL THE WORDS to
  BOOLEAN PHRASE
• Enter terms such as those recommended for ERIC.
• Enclose a phrase in quotation marks to look for an exact match.
• Connect phrases with OR to find synonyms.
• Use AND to limit by culture or grade-level.

EXAMPLE:
("cognitive styles" OR "learning styles") AND ("Native American" OR "American Indian" OR indigenous)

Good websites:

⇒ Alaska Native Knowledge Network.
http://zorba.uafadm.alaska.edu/ankn/index.html

Parallels many goals of the 4Directions Project. Contains information on Alaska Native cultural resources, indigenous knowledge systems, and culturally-based curriculum resources.

http://www.cua.edu/www/eric_ae/infoguide/LEARNSTY.HTM

An annotated bibliography of electronic and paper resources on learning styles.

Sign up with Uncover Reveal for automatic notification of new publications. Check ERIC and the internet frequently for very recent information. UTCAT and Subject Guide to Books in Print are worth checking annually.
THE PSYCHOLOGY OF HUMAN LEARNING:
A PATHFINDER FOR HIGH SCHOOL TEACHERS

LIS 382L.3
Professor Roy

By
Ruth K. Chiego
October 14, 1997

Citation Manuals:


Citations of Internet sources are derived from the essential principles of academic
citation in:
Turian, Kate L. A Manual for Writers of Term Papers, Theses, and Dissertations.
Introduction:

In 1931, psychologist Edward L. Thorndike, a pioneer in the use of experimental methods to investigate learning, wrote Human Learning. He noted that humanity's power to change resides in learning. Learning can be defined as obtainment of any relatively permanent change in behavior, patterns of thought or emotion as a result of study or experience. The cumulative nature of human learning creates a kind of snowballing effect, influencing growth of academic and social abilities. As facilitators of learning teachers often want to obtain more information about learning and the psychological aspects emphasizing the acquisition of skills that are largely unique to humans. Information sources covering the psychology of human learning can help teachers isolate some important influences on the nature of humans that are specialized in, expert at, and highly dependent upon ability to learn.

The purpose of this pathfinder is to facilitate access to information available in academic libraries that discusses the psychology of human learning in its relevance to instruction, educational issues, and educational problems that would be useful to high school teachers. This pathfinder was designed for teachers employed at schools participating in the Four Directions Project. Questions teachers have may include:

1.) What are the basic principles of learning?
2.) How do I examine learning exceptionalities (e.g., hearing impaired, dyslexic, and accelerated students) in relation to learning theories?
3.) How can learning theories be applied to teaching specializations (e.g., mathematics, and language arts)?
4.) How can I utilize learning theories to analyze, evaluate and design instructional strategies?
I found sources that were too theoretical for teachers to use and apply to their teaching needs, therefore the sources in this pathfinder were chosen based on usefulness in preparing for successful classroom teaching. Also considered was the clarity with which sources gave an overview of this broad subject of study for those not in the field of educational psychology.

**Methodology:**

I started compiling a list of potential sources with a search of UTCAT, the online catalog at the University of Texas at Austin. Key words such as, “human learning,” “cognition,” “classroom learning,” “secondary school learning,” and “learning theory” were used in my search for pathfinder sources throughout the selection process. I discovered that locating repeatedly cited sources in bibliographies of paper-based sources and in references within articles on CD-ROM products such as the index PsycLit useful in making selection decisions. I also chose current (published after 1985) sources produced by reputable publishers. These sources were often less cited, or not cited at all, therefore I selected these, and all sources, by evaluating their clarity, uniqueness, or applicability to the needs of high school teachers with questions about the psychology of human learning. After these preliminary findings I began investigating Internet sites of institutions offering courses in educational psychology and gained further sources to examine from bibliographies, syllabi, and links to psychology and education related sites. I entered my key words into search engines such as HOTBOT, Excite, and Alta-Vista (advanced search).
BIBLIOGRAPHY:

Directories/Bibliographies:


Borchardt and Francis have designed this ready reference guide to enable users to find sources containing detailed information on a variety of fields in psychology. Serving as a guide to basic concepts in psychology and the structure and contents of research materials commonly used in the field of psychology, this book can be used as a tool to make locating information in unfamiliar sources a less daunting task. Borchardt and Francis give advice on how to use these research materials and the bibliographic information of selected titles. Although this source is no longer current, it provides invaluable information for those unfamiliar with the arrangement and terminology used in some of the most valuable sources in the field of psychology.


Loke provides thorough annotations to 356 periodicals in psychology and education. One page is devoted per journal to the basic bibliographic information (publisher, editor) and details which briefly address the current focus, subject matter, special features, and recent topics covered within the selected publication. This is a good selection tool for finding journals that feature articles that address psychology and learning. Users may locate the described journals through the information about where the journal is indexed. Three separate indexes allow the user to find a particular journal by title, publisher, or editor. This guide can also act as a directory for those interested in manuscript submission or simply the journals produced by a particular publisher.

Encyclopedias:


A single volume of 1001 alphabetically arranged entries, varying in length from a few sentences to several pages long. Gregory and Zangwill present users with an excellent reference source on various mental phenomena (e.g., learning and learning theories, the biological basis of memory, and the effects of brain developments. Discussion is not limited to topics such as “learning theories” and “children's understanding of the mental world,” as they relate to psychology, instead discussing these issues in terms of philosophy and physiology broadens the scope. Bibliographies included provide sources of further reading, and the entries are made accessible through a comprehensive index.

Containing 189 alphabetically arranged, signed articles, some accompanied by bibliographies, this single volume contains valuable and clear information pertaining to the biological aspects of learning that occur in the brain. The illustrations included are helpful, and the clean format and writing style make this book easy to use and understand. Entries vary in length, but all entries are cross-referenced extensively so that further information on related topics can be obtained. Basic developmental concepts, the history of learning theories, school instructional learning, and other topics of interest are only represent tiny portion of what can be found in this source in relation to the psychology of human learning.

Indexes:


This indexing and abstracting service is updated tri-annually and is a source for reference to current literature related to the growth and development of children. Sources of interest may be covered under subject headings such as, "cognitive," "gifted students," "disabilities," "learning" and "theory of mind." Educational psychology is among the many disciplines which contribute to the 275 journal titles (e.g., Psychology in the Schools, Cognitive Development, Journal of Applied Developmental Psychology, and Journal of Adolescent Research) within this source containing book reviews and abstracts of articles featured in them. This particular service can also be accessed through Psychological Abstracts.


The electronic version of CIJE (Current Index to Journals in Education) and RIE (Resources in Education). ERIC indexes journal articles, unpublished research reports, conference papers, publications of associations and government agencies, and some books. The information sources contained cover a variety of subjects pertaining to education including school and educational psychology, and counseling. Some helpful subject headings for using in ERIC search formulations are "Behaviorism," cognitive processes," "Piagetian Theory," "learning theories," and "Constructivism." One can search ERIC thorough using a variety of key word strategies and other methods which one can learn more about if they choose to read the easily accessible search instructions.

The electronic version of *Psychological Abstracts* provides summaries of periodical literature related to the field of psychology. The table of contents divides this broad field into areas of psychology study including general psychology, experimental psychology, developmental psychology, applied psychology and educational psychology. Searches on various topics are under subject headings such as "learning theories," "cognition," and "learning strategies" will provide relevant information. Author and subject indexes are published annually to provide access to author, subject and citation number. Some journals of direct relevance in *PsycLit* that cover issues pertaining to the study of human learning are *Journal of Educational Psychology, Cognition and Instruction, Instructional Science*, and *Learning and Instruction*.

**Books:**


Byrnes has designed this book to summarize psychological research on students' learning in reading, mathematics, writing, social studies, and science. This book discusses how children learn different subject areas so teachers can improve individual instruction within diverse classrooms. Byrnes offers information about learning strategies and covers theories of cognition and links all of these things to the specific areas of study students encounter in the classroom. A section on instructional implications appears towards the end of each chapter to help the reader apply theory to practice.


*Computers and the Collaborative Experience of Learning* examines the impact of new technology on educational practice. Crook takes as his central theme the sociocultural nature of education and the importance of the various interactions made possible by new technology. For example, pupils can interact with the computer, with each other through the computer, with each other at the computer while carrying out a task, or with the teacher. An analysis of how computers can be used as a tool to help students work together may negate worries some may have regarding the potential for isolating students from one another instead of allowing them engage in classroom socialization. This is an invaluable source of information for those who would like to read and learn about the changes taking place in our culture and our classrooms which can effect the psychological aspects of learning.


Dembo's book functions as an instructional model for how instructors can apply educational psychology in the classroom. Teachers are presented as decision-makers.
in control of their classrooms. Learning theories are covered in relation to behavioral, instructional and cognitive approaches to learning. Dembo lays groundwork for more effective teaching by revealing how an understanding of psychology and a productive classroom go hand in hand. Measurement and evaluation is discussed in relation to what teachers can do if they would like to analyze the progress of students or test scores. Each section of the book is followed with helpful examples, hints, and suggestions for further reading.


Glover and Bruning’s goal in writing this book is to tell teachers who are interested how to make learning more meaningful for their students. Their focus is to facilitate discussion on teaching effectiveness and how to achieve it. Because this is the third edition of this book Glover and Bruning have generated and tested several exercises which apply to teaching and have provided them as motivation for teachers to leave a lasting learning impression on children and to build on the good foundations they have already begun.


Hergenhahn provides a contained chapter to each major theory/theorist (e.g., Skinner, Thorndike, Pavlov, Piaget, and Estes). He sets a foundation for readers with an introduction to learning which is clearer and more complete than most. He defines learning at the outset in its narrowest and broadest senses. Each chapter concludes with an evaluation section including conditions and criticisms of theories and concepts of learning developed from these theories. Two helpful and synthesizing features Hergenhahn offers are biographical sketches of each theorist and quotes from those theorists, which shed some light on the subtleties of the theories.


An excellent textbook for those who want learning theory covered in detail but with clarity. Hohn provides a good synthesis of competing learning theories. He emphasizes the importance of learning study, learning theories, and the history of these theories, because he wants to assure his intended audience, educators, that the study of learning is a worthwhile pursuit. Hohn spends some time discussing the importance of a parents’ education and issues of race and ethnicity. He also includes a section on computer assisted instruction and discusses the effects of new technology on group learning, gender differences, and motivation. This type of instruction is discussed in relation to their effects on instruction and the learning process in general. Pluses in this book are the extensive bibliography and the clear marginal notes, which assist readers’ comprehension of some otherwise complex information.

Phye provides a comprehensive resource on the mechanisms and processes of academic learning. Beginning with general themes that cross subject and age level, he discusses what motivates students to learn and how knowledge can be made personal for better learning and remembering. Individual chapters identify proven effective teaching methods for the specific domains of math, reading, writing, science, and critical problem solving, how students learn within those domains, and how learning can be accurately assessed for given domains and age levels. He discusses the development of basic literacy skills, providing a foundation for more advanced problem solving. Constructivism is discussed in the context of recognition that the social dimension of classroom learning emphasizes the motivational elements as essential learner characteristics. This book is designed to empower educators to develop, implement, and field test authentic instructional practices at their school site. The book provides a review of the literature, theory, research, and skill techniques for effective teaching and learning.


Theories, research, and practical issues related to achievement motivation are integrated in this book to provide an overview of current theories in the field of educational psychology. The text gives concrete examples and practical guidance for diagnosing and improving students' motivation, focuses on motivation in the school setting and also gives examples from athletic and other achievement contexts. Charts, checklists, and diagnostic tools are provided to help teachers diagnose motivational problems in students. This book is unique because it provides profiles of real children with motivation problems. Newly introduced terms are summarized at the end of each chapter.

Internet:


“Engines for Educators” is a site designed for those who have interest in “how people learn and what that says about how we should educate them.” Cognitive scientists join forces with educators, psychologists, and artificial intelligence experts in the collation of this work. The project is an on-line book covering topics briefly, and gives basic information on subjects such as, motivation, human memory, learning theory, Progressivism, Constructivism, and cognitive cognitive styles. An exceptionally helpful feature of this site is the variety of teaching tips it supplies. The institution/group of scholars supporting this site is the Institute for Learning Sciences at Northwestern University.
Wyman is the founder of The Center for New Discoveries in Learning, and her organization's award-winning web site provides information on learning strategies and a variety of educational resources, as the site's title suggests. One of these resources is a basic learning style assessment test called a "personal learning style inventory." The test is designed to allow one to pinpoint their own learning style or someone else's learning style, because it provides results indicating which learning style the test-taker favors. After users take the test they are referred to a page discussing the ways they learn best as visual, auditory, or kinesthetic learners, or a mix of two styles, or all three. Wyman chiefly uses this site as a way to supply jargon-free information about some very complicated learning disabilities for anyone interested in their impact on learning.
Works Not Examined


Brain-Based Learning. Videocassette. Prod. Chemeketa Community College, 1994, 64 min.


Gredler, Margaret E. Learning and Instruction: Theory into Practice. New York: Prentice Hall, 1996.


THE PSYCHOLOGY OF HUMAN LEARNING:
A PATHFINDER FOR HIGH SCHOOL TEACHERS

Learning can be defined as the obtainment of any relatively permanent change in behavior, patterns of thought or emotion as a result of study or experience. The purpose of this pathfinder is to facilitate access to information available in academic libraries that discusses the psychology of human learning in its relevance to instruction, educational issues, and educational problems that would be useful to high school teachers. This pathfinder was designed for teachers employed at schools participating in the Four Directions Project.

Q: Which sources offer brief background information on topics such as, learning, learning theories, child psychology, and the biological aspects of learning occurring in the brain?

A: Encyclopedias covering these topics and other related topics such as:

Q: Where can I find the most current information and research reports related to the psychology of human learning?

A: Indexes will lead you to the most current books, and articles within journals including Psychology in the Schools, Contemporary Educational Psychology, Learning and Instruction and Cognition and Instruction. Useful indexes for these purposes are:
  - The electronic version of CIJE (Current Index to Journals in Education) and RIE (Resources in Education).
  - The electronic version of Psychological Abstracts.

Q: How do I use these indexes? How can I find out what kind of information specific journals feature?

A: Directories and bibliographies can provide information about how sources are organized and best used; a useful resource is:

Some sources provide content descriptions of journals, one of these is:

Q: Are there sources that will give me clear and in-depth information pertaining to classroom situations and the psychology of human learning?

A: Books designed to educate teachers are valuable for their applied coverage of psychology in the classroom. The following is a list of such books, and a brief description of what makes them unique.

- Both of these sources identify areas of study (i.e., mathematics and reading) and address ways in which instructors can improve their teaching.

- A thorough source which synthesizes competing learning theories while also covering the impact of race and ethnicity in its relation to learning is:

- An examination of computers in the classroom and its effects on learning can be found in:

- The psychology of motivation and its impact on learning is evaluated in:

Q: What are some Internet sites useful for obtaining information about learning?

A: Two sites with pertinent information are:


***THIS IS BY NO MEANS AN EXHAUSTIVE LIST OF SOURCES FEATURING HELPFUL INFORMATION FOR GAINING MORE INFORMATION ON THIS TOPIC. IF YOU ARE NEED ADDITIONAL ASSISTANCE, ASK A LIBRARIAN FOR HELP. GOOD LUCK IN YOUR SEARCH FOR SOURCES DISCUSSING THE PSYCHOLOGY OF HUMAN LEARNING!***

Created by: Ruth K. Chiego 10/97
Building a Virtual Museum:
a pathfinder of resources for the Four Directions Project
prepared by Lee Bell

Since the final home for your virtual museum will be on the World Wide Web, it only stands to reason that you can find many resources there. The following are various websites where you can find resources to help you build your virtual museum.

Are there other schools working on virtual museums? What are they doing?

"Bellingham Schools Virtual Museum" http://www.bham.wednet.edu/bpsmuse.htm

The Bellingham, WA Public Schools have an excellent website outlining their curriculum for building virtual museums. Items on the site include articles about virtual museum concepts, links to classroom resources, including webpages for the schools' Introductory and Advanced Virtual Museum classes.

Have any schools worked with QTVR? Do they have any advice for someone else using QTVR?


A group of Library and Information Studies students at the University of Michigan share what they have learned from using the manuals for QTVR, including what works and what does not. They promise you might find some helpful tips not found in the manuals.

Is there anyone who has done lots of work with virtual museums and can offer some resources?

"From Now On" http://fromnowon.org/recent.html

This page presents several articles from "From Now On" an educational technology journal. Three of the articles are by Jamie McKenzie, who worked with the Bellingham, WA Schools on their virtual museum project.

"Live Text Topics" http://www.ilt.columbia.edu/k12/livetext/topics/

The Institute for Learning Technologies at Columbia has dozens of links to pages about various uses of technology in schools. One of the menu topics is "museum projects" which will lead to some sources about virtual museums in schools.

How do I find information on the internet about Native American tribes that can be included in my virtual museum project?

Using a search engine such as InfoSeek or Yahoo, type in the search term "native american resources." You will likely get hundreds of hits. The following are some sites that are particularly useful.


"Index of Native American Resources on the Internet"
http://hanksville.phast.umass.edu/misc/NAresources.html

"Native American Sites" http://info.pitt.edu/~lmitten/indians.html


What are some good examples of non-school oriented virtual museums on the web?
Many of the "virtual museums" on the internet are not true virtual museums in the sense they don't really have virtual tours of exhibits or use technology such as QTVR. The following are some interesting virtual museums.

"The Louvre" http://mistral.culture.fr/louvre/


"Uffizi Gallery" http://www.uffizi.firenze.it/

"Inter-Tribal Gallery" http://www.indart.com/gallery/gallery.htm

Good luck on the virtual museums projects. Maybe soon you will be a resource for others trying to build their own virtual museums!
Jennifer Thomas

Pathfinder on QuickTime

October 14, 1997
QuickTime (QT) is a system extension program that performs support for multimedia in two ways. First, QT allows a computer user to create, edit, and view movies of digital images. Second, QT works in concert with image and audio applications to enhance their multimedia capabilities. For example, QT works with the Macintosh application Movie Player in order to view or to hear files that were made without QT. The latest expansion of QT, QuickTime Virtual Reality (QTVR), allows the creation and viewing of 3D panoramas or objects or images on Power PC Macintoshes or Power PCs.

The QT pathfinder is intended for use by teachers from schools participating in the Four Directions project. Four Directions is a consortium of schools located in ten states that provide Internet access in the goal of "integrating Native American culture and technology into education". The intention of the pathfinder is to introduce teachers to the program, to explain its functions and capabilities, to provide examples that could be used in classroom activities, and to provide opportunities for further learning. The pathfinder therefore includes resources that define QT, outline how to create a simple movie using QT, describe the software and hardware required to use it, briefly define and describe the functions of QTVR, and lead the audience to examples and additional resources for self-learning.

In the total search I used the World Wide Web, ERIC, UTCAT, and a local bookstore. The search began with the World Wide Web. I visited the Apple Web site where I found numerous links offering samples of a QT tutorial. I visited the Four Directions home page to learn about the needs of the client. Next, I conducted a Web search using the search engine Altavista. I used a variety of combinations of the words QuickTime, teacher, classroom, tutorial, instructional technology, how-to, and multimedia. Because Web searching returned many irrelevant hits, I tried ERIC and UTCAT to search for journal and book resources. In these places I was
able to focus on instructional related searching better and found two educational books and popular journal articles. My last search involved going to a local bookstore to find the latest books regarding multimedia. I found a particularly effective book with many QT tutorials for educators.

I chose sources on the basis of authority, accuracy, currency, and technological sophistication. Sources had authority if the entity responsible for their content was an organization or professional with a history in the computer field or education. I judged sources for accuracy by whether they used correct grammar, or, if Web pages, had working links. Because the computer field changes constantly, I chose to include sources that were one year old or less. The last criteria was the level of technical writing in the sources. If sources contained words or concepts too difficult for a teacher new to the topic, they were not included.
Part II: Annotated Bibliography


   Apple's homepage is the definitive resource on its product, QT. Because it features information ranging from specification sheets and technology briefs to software downloads and tutorials, it can overwhelm the first-time QT learner. This site primarily serves as a list of links about the latest developments or version upgrade of QT, but also includes links to Web pages of a more introductory nature that are more appropriate for the first-time QT user. The most useful links for the pathfinder's purposes include a tutorial, samples, and software. Apple claims that over 20,000 Web sites offer QT content.

   The latest extension of QT, QuickTime Virtual Reality (QTVR), is the focus of this Web site that ranges from simple to technical information, and contains links to software, samples, specifications, and tutorials. With QT, video and image files can be created which represent a 3D object or panorama. QTVR requires more sophisticated computer system characteristics, such as available hard disk space, RAM, and processor speed than the basic QT. When including resources about QTVR in the pathfinder, it is essential to include information on these required system requirements and software.

   How does QTVR transform digital photographs to 3-dimensional images? This page gives a brief description to the 3-d object and panorama capabilities of QTVR. It serves as an excellent introduction to QTVR's functions in a clear and jargon-free manner.

   For those who would like to see examples of QT's capabilities, this Web page offers 40 links to other Web pages which incorporate QT features. There are links to Web pages which have QT enhanced components embedded in the pages, and other pages which offer examples of QT movies, music and audio files available for download. However, none of the sample links included information relating to the use of QT for educational purposes, although this type of information would have been helpful for the teacher audience. The best link for pathfinder purposes is the "video vault" of the Cable News Network, discussed elsewhere. The other sample pages seem too diverse in type, difficulty, and system requirements for teachers who are new to QT.

Here a user may download QT for Macintosh, Windows 3.1, and Windows 95 machines. One may also download a free movie editor program and the QTVR plug-in for viewing QT movies in Web browsers. The instructions for download are simple and include links to help pages for performing the download. Because these components are essential for using QT, this page will referenced in the pathfinder.


Geared toward users who have no experience with QT, this page defines QT and the QT Netscape plug-in. It offers a tutorial in the creation of a postcard, allowing for the download of QT and the necessary video programs and system requirements to accomplish the exercise. Although the site leads the user in the use of QT in this one technique, it does not explain other functions further, nor does it give links to sites for further tutorials.


Although similar to the general QT software page, this is an important site because it includes options for downloading the QTVR Player, essential for viewing e-d objects made in the QTVR environment. This page offers links to help and requirements for download as well.


Serving as an example of the educational value of using QT, this resource is excellent. The Web page is written for students to teach them about volcanoes, and for teachers to provide them with an educational resource. The site incorporates a variety of ways of presenting the material, including QT video clips of volcanoes, including one erupting, available for download. The site is also commendable for its nicely designed pages.


At this Web site a project using QTVR by the pathfinder client is discussed. QTVR program is being used to create 3D images for a "Virtual Museum." Because some of the explanation is repeated from the Four Directions QTVR tutorial page, this page will not be referenced in the pathfinder. However, it is very useful for understanding one way in which the client may find the pathfinder useful.


Here is a searchable archive of video clips from television, movie, news, and popular culture materials. The majority of the clips are QT videos less than one minute long that can be run within the browser or downloaded and run from the
user's computer hard drive. The first page of clips are timely news items ranging from international disasters to the Pope's travels to humorous human interest stories. This site is excellent in the demonstration of QT video and offers a variety of video clip resources that an educator could use in his or her lesson plans, after having learned from other Pathfinder resources how to download and setup the QT software, if necessary.


Provides an excellent introduction to the creation of QTVR objects from regular photographs. This site is from the Web site of Four Directions, the pathfinder client. Includes directions on camera positioning for photograph taking, and the steps in making the photos into a QT movie and then into a QTVR movie. The only site found outside of Apple giving tutorial information.


This article is a layperson's description of QT version 2.5. It clarifies the complex nature of QT, without becoming overwhelming in the technical specifications. It effectively describes the market context in which QT exists, and the reader can appreciate the multiplatform nature of the program. Because the article is one year old, and the 3.0 version of QT is due to come out in 1997, this site is not a good choice for current information in the pathfinder.


The author of this page is a contributor to *Macworld* and author of the *New Complete Mac Handbook*. Here one may find a brief description of QT in layperson's language and a discussion of how QT is used in a variety of areas, including education. The information is elementary and effective as an introduction to QT, but has a Mac focus.


Written by members of the Berkeley Macintosh Users Group and authors of *QuickTime: the Official Guide for Macintosh Users*. This site is updated biweekly and features functions of QT and Movie Player, a Macintosh program for creating, editing, and viewing on-line movies. Although it is current and offers cutting edge advice, this site is too technical for teachers who are just becoming introduced to the product. This site's audience is primary audience are Web developers and multimedia professionals.


Written by a graduate student in Instructional Technology at Stanford, this is an excellent guide to multimedia Web design in general and includes extensive information on QT. The author offers numerous tutorials on using QT, including "Creating QT Digital Video and Animation for the Web", "Creating Your QT Movie
Step-by-Step” and “Adding QT to Your Web Site.” Because this resource was written by someone in the educational field and emphasizes teaching QT for use in instruction, it is an excellent choice for the pathfinder.


Panimation is a commercial entity devoted since 1996 to creating helper applications that work with QT VR to make it easier to create 3D objects and panoramas. This subsite of Panimation’s main page provides links to examples of three 3D objects and eight 3D panoramas.


Here one can find Frequently Asked Questions regarding QT, composed of over 70 pages of information. The FAQ does not appear in the form of a Web page, but is offered at this site in a downloadable version, readable through Acrobat Reader. Because of the length and the highly specialized nature of the questions addressed as well as the need for a peripheral program for reading it, this Web page will not be cited in the pathfinder.

***************

To be examined:


What is QuickTime?

Do you want to learn how to:

- create or view movies on your computer?
- create 3D objects or environments on your computer?
- incorporate multimedia into your learning activities?

QuickTime allows you to perform these activities and more to create fun and effective learning activities.

- **What is QuickTime?**
  QuickTime is a software product of Apple Computer, Inc. that extends the multimedia capabilities of both Macintosh and Windows computers. By using QuickTime, audio and image computer files playback on your computer more efficiently because of the way QuickTime works with computer applications to synchronize the different files of digital data.

  *Apple QuickTime Tutorials* (http://www.quicktime.apple.com/tutorials)
  This will give you an overview of QuickTime, plus an opportunity to download it and a movie program to perform a hands-on example of QuickTime's video capabilities.

  *What is QuickTime?* (http://www2.heidsite.com/heidsite/video/whatisqt.html)
  Here you will find a descriptive overview, with a brief discussion of some practical applications written by Jim Heid a contributor to *Macworld*.

- **What is QuickTime Virtual Reality? Is it different than QuickTime?**
  QuickTime Virtual Reality (QTVR) is a new development of QuickTime's video capabilities. With QTVR, you may view or create movies of 3-dimensional object images and panoramas. QTVR is only available on Power PC Macintoshes or Power PCs.

  Describes how QTVR takes regular photographs and transforms them to 3-D images.

  *QuickTime Reality for Educators and Just Plain Folks* (http://www.4Directions.org/VR_Tutorials/Index.html)
  Provides a tutorial on the creation of QTVR objects.

*Pathfinder by Jennifer Thomas*
Do I need to have special computer programs or specifications in order to run QuickTime or QuickTime Virtual Reality?

Yes, you must have QuickTime to run downloaded QT movies, the QuickTime plug-in to run a QT movie in your Web browser, and the QTVR Player to run 3-D files in your Web browser. If you have not downloaded these applications yet, you may use the following sites to do so.

This is the essential site for free downloads of QuickTime software for Macintosh, Windows 3.1, and Windows 95 computers. Includes links to help and discussion of computer requirements.

  Includes some of the software offered above, but includes the QuickTime VR Player. Also offers links to help and information on computer system requirements.

Are there any examples of using QuickTime for that could be used in the classroom?

Once you have downloaded the QuickTime software that you would like to use, you may try it out using these sites that you could use in your classroom activities.

  You may view video clips of news clips or movies online, or download them to your system at this Web site. Includes a search engine for finding clips relevant to your course content.

Volcano Clips on Volcano World (http://volcano.und.nodak.edu/vwdocs/movies/movie.html)
  An excellent site demonstrating the use of QT videos within an educational context.

Panimation Gallery (http://panimation.com/Gallery.html)
  This site offers links to three 3-D object images and eight panorama object images, including Easter Island, for view online.

Where can I go for further information?

Apple QuickTime Home Page (http://quicktime.apple.com)
Apple QuickTime VR Home (http://qtvr.quicktime.apple.com)
  Once you have been introduced, you may want to peruse the many links offered at the home pages for QuickTime and QuickTime Virtual Reality. The announcement of the latest versions, white papers (describing technical aspects of the products), samples, and technical specification papers are available.

  This text, written by a professional in instructional technology, discusses design of Web pages in particular, but offers numerous tutorials on using QuickTime.

Pathfinder by Jennifer Thomas
INTRODUCTION TO ADOBE PHOTOSHOP
PATHFINDER

by Roger Magnus

LIS382.13
Dr. Roy

October 14, 1997
INTRODUCTION

An Introduction to Adobe Photoshop is the topic of this pathfinder. It was compiled for the students and teachers of educational institutions affiliated with 4Directions, a venture that aims to create a computer network “community” that will ultimately connect approximately 20 Native American Schools and will enable them to share and exchange ideas and learning materials.  

Photoshop is a type of desktop publishing software that is mainly used to modify and refine graphical images, such as line drawings and photographs, created in other computer programs or scanned in digitally. Basic Photoshop features include palettes to apply colors and visual effects, a tool box to select and work on different parts of the image, and layers to distinguish and order different graphical elements that otherwise could become blended and confusing. Although Photoshop is one of the costliest pieces of software available at a retail price of $895 and a definite memory hog, it is an invaluable tool for creating colorful, appealing, and lively World Wide Web pages that warrant attention.

As this pathfinder was supposed to be an “introduction” to Photoshop, I assumed that the audience using it had little or no prior exposure to the software. I also wanted to build in to this document growth potential and included a number of sites with moderately advanced techniques that I hoped would interest, inspire, and challenge these learners as they progressed. In addition, the sources in the pathfinder (though not the bibliography) all had to be web pages, as it was being added to a network library. These conditions created a difficulty in locating sources because many of them (especially on
the Web) were written by design practitioners and only appropriate for experienced and advanced users. There were two other dilemmas: what version(s) of Photoshop (3.0 or 4.0) to include in the pathfinder and whether or not to differentiate between varieties of the software for Macintosh and Windows. I resolved the version issue by including both, as there were still a large number of sources on each. The platform issue I decided not to tackle figuring that most key features would be the same on both.

Early on in the search, it was actually much easier to deduce what types of questions my audience would not ask. It quickly became apparent they would not care about sophisticated image effects, so I tried to concentrate on fundamentals. I looked at a couple of general print serial sources and books, but since they could not be included in the pathfinder, turned my attention to Internet sites. I started off by plugging in “Adobe Photoshop” in the Yahoo! directory since it has a category for computers. I came up with almost 200 hits, with a number of these sites not only containing specific information but also general lists to others. Painstakingly, I followed these links until better sources revealed themselves and generated user questions that should have been initially obvious, but were not. Examples included 1.) What are the strengths and weaknesses of Photoshop?, 2.) Are there sites that describe basic features or give tutorials?, 3.) How have others learned, and more importantly, taught Photoshop?, and 4.) When I get stumped, where can I ask a question?. After I had obtained a good core set of sites, I went into Alta Vista Advanced Search and did more specific searches (PHOTOSHOP near TUTORIAL and PHOTOSHOP AND SYLLABUS*) to enhance understanding of particular aspects of the bibliography and pathfinder.

1 Excerpted from 4Directions web site at http://4direction.org
ANNOTATED BIBLIOGRAPHY

Style Manual:

BOOKS


   With an emphasis on creating graphics for the Web, this book covers file formats, different kinds of backgrounds, special effects, fancy bullets and buttons, and animation in Photoshop 4.0. Also comes with a compatible CD for practice and reinforcement of concepts. Although not intended for beginners, this book is only 300 pages and is short by software manual standards. Additionally, it provides step-by-step instructions and plenty of helpful illustrations and, coupled with a little user knowledge, can be an invaluable resource for enlivening web pages.

INDEXES AND ABSTRACTS


   Provides one to two paragraph summaries of articles related to various computer hardware and software products, including Photoshop. Accompanying these abstracts are several types of article indexes, but it is easiest to look up individual Photoshop items under the Product Name Index. *Microcomputer Abstracts* can save the novice Photoshop user valuable time in investigating these articles because this individual can get a taste of their content and make an informed decision whether or not to pursue their acquisition further.

SERIALS


   Provides a one half page to one page description of various software programs’ purposes and capabilities and provides a list of recent periodical articles that critique each product. Since evaluations can appear more than once in a calendar year, some write-ups include computer hardware requirements, somewhat more extensive reviews, even a list of software strengths and weaknesses. To find a particular summary, look up the name of the software product in the index. This resource is most useful when first investigating the software.
USENET NEWS GROUPS

   <news:alt.graphics.photoshop>

The postings to this discussion group are fewer in number and somewhat more basic in nature than comp.graphics.apps.photoshop (see below). Otherwise, it works much the same way. This is the group to start with and test to see if its assistance is adequate and appropriate for the novice user.

   <news:comp.graphics.apps.photoshop>

A forum for discussion of Photoshop issues and getting quick answers and multiple-person feedback for Photoshop concerns. Although the topics on this group appear to be somewhat advanced, members seem more than willing to answer the most basic and routine of questions. When I reviewed it, over 11,000 messages had been sent in the last two weeks. This is certainly a popular and busy newsgroup, so responses should be plentiful.

WEB SITES

General

   <http://www.bgsu.edu/departments/tcom/photoshop.html>

Aptly entitled “Best Photoshop Help Links”, this page lists only about 25 sites. Many fewer than comparable listings. Fortunately, most of them are top-notch, including several to online tutorials for beginning users. Because it was last updated recently, this is definitely a site to monitor for future helpful additions.

   <http://www.mediabuilder.com/graphicstutor.html>

A long, alphabetized hyperlinked listing of general online graphics-related tutorials, many of which are for Photoshop. For each, there are short summaries and appropriate skill level designations (beginning, intermediate, and advanced). Most, but not all of the Photoshop sites, are for users of version 3.0. A great place to learn about not only the software’s capabilities but also related issues such as gif and jpeg file formats and web graphics. This site’s usefulness that will grow proportionally to learner progress with the software.

Good general source to various kinds of Internet-related sites on Photoshop and graphics information. Includes hypertext links to helpful Usenet newsgroups, FAQ (Frequently Asked Questions) sites, and listserv electronic mailing lists. Also includes book recommendations and brief summaries of them. The non-web electronic sites are especially valuable for the development of a Photoshop novice as it gives this person a forum to ask questions, express opinions, and convey feelings with others who are in similar circumstances.

Specific


This online review from Mac World on Photoshop 3.0 will acquaint the Photoshop beginner with its basic features and terminology and provide this person with an understanding of the software’s strengths and weaknesses. This article discusses price, layers, palettes, colors, and, of special note, memory considerations. A second reading at a later stage of learning may also prove valuable. Best of all, there is no need to take time go to the library to locate this online article or a different piece on version 4.0 at http://www8.zdnet.com/macweek/mw_1101/rv_photoshop.html (see below).


Maintained by Adobe, this site contains many suggestions for advanced users. In spite of this, there are a few tips interspersed for a more novice audience (differentiating between gif and jpeg web images, manipulating colors, utilizing layers, and other hints). Also, because the advice is written by Adobe personnel who have high credibility, this site should still be examined for its fresh, unusual ideas and ways to integrate other Adobe graphic products, such as Illustrator, with Photoshop. After learners have had a rather prolonged exposure to the software, this may be a good site to reinforce concepts and techniques.


A course syllabus intended for beginning and intermediate students sitting in front of a computer for six, three hour classes. Provides sample of topics to cover that can be tailored and modified to a particular course and student population. May aid in need to become aware of software features and method to sequence their instruction in a logical manner.

This site succinctly covers a small number of fundamental features such as palettes, tools, creating and editing images. Yet, it may be surprising to know that it that also discusses copyright extensively. The only drawback to the site is that it is 100% text, and no helpful images of the Photoshop's interface are captured here. Otherwise, it is a good place to start learning about the software, especially if the learner has limited time.


Online book ordering service where customer usually receives purchase(s) within 24 hours. To locate item, can do keyword search by title, author, and subject. Provides basic information about book such as title, author, publisher, ISBN, cost, number of pages and displays graphic of its cover. Convenient one-stop shopping.

<http://seurat.art.udel.edu/Site/InfoDocs/GIFToot/PhotoTut.HTML>

These three tips are intended to aid the novice in a particular, yet vital, skill involving Photoshop: repairing scanning blemishes. The hints give guidance on removing unwanted shadows, adjusting actual hues of color, and manipulating differences between these colors. Provides screen captures to demonstrate concepts. Besides these recommendations, this page also contains links on how to create a gif image.

<http://www.yorku.ca/teachtec/archive/summer96/photoshp/toc.htm>

This site covers all the fundamentals that a beginning Photoshop user would want to know. These fundamentals encompass background issues such as what Photoshop is and when to use it, features such as the symbols on the toolbar and different palettes (what they mean and what are their functions), and an item-by-item explanation of important drop-down menus. Significant aspects of the actual interface are captured and enhance the explanations. When the user has mastered these core concepts, this individual is led step-by-step through sample exercises to create simple effects. If the new learner has several hours to spare, this person will be well on his/her way to basic Photoshop proficiency.

<http://www.art.uiuc.edu/workshop/photoshop/photo_tutor.html>

Contains step-by-step directions on a few simple yet important effects such as cropping, resizing the image, affecting resolution of it, and more. For each effect, the tutorial explains what it does, where it can be accessed in the program, and how it affects the appearance of an image. This is a good source to enhance a prior basic knowledge of the software.
<http://www.aa.nett-davidh/PSBooks/PhotoBooks.html>

Contains title, author, cost, publisher, ISBN, and page length information on various books written about Adobe Photoshop. Simply click on the image of the book’s cover and a one page review of it appears. These books are split into four topical categories, with one especially designated for New Users. There is also a composite list of books for 3.0 and 4.0 versions. A great site that eliminates the need to research and compile book reviews from multiple places.

<http://es.rice.edu/projects/ravl/pshop/>

Geared to version 3.0. Despite being slightly dated, this site still offers helpful insight into very basic Photoshop issues and subjects. These include what to monitor when scanning images, what file formats Photoshop accepts, how to select and tweak these images, layers, colors, the text tool, and how to print the final product. Though this site does not contain a comprehensive list to other web articles on Photoshop, it is still the first place to turn for someone who has never used the software.

<http://adscape.com/eyedesign/photoshop>

A good place to start to learn about Photoshop for the novice user. There are separate pages for versions 3.0 (no longer being actively maintained) and 4.0. Each offers coverage of fundamental software issues, such as Photoshop’s general design philosophy, cost, version history, and specific capabilities (tool bar, layers, colors). At the bottom of each page, there are hyperlinked cross references to related pages on the site. There is also a hypertext list, categorically organized, to over 50 other web sites that pertain to Photoshop.

Internet. 5 October 1997.  
<http://www.8.zdnet.com/macweek/mw_1101/rv_photpshop.htm1>

This critique of the latest rendition of Photoshop describes changes to it such as layer and selection behavior and memory and quotes prices of for both new and upgraded software. Though the review is written with a more advanced audience in mind, the user -- along with the other review on version 3.0 (http://www.zdnet.com/macuser/mu_0195/review1.html) -- can still trace the history and evolution of this software and comprehend its fundamental principles.

Useful model in developing a curriculum for teaching Adobe Photoshop. Site contains an eight week long course syllabus and shows which software aspects are covered each week. Though gives some ideas of how to sequence these concepts, can be modified depending on time allotted to course and age and level of students.


This short online article from Mac World is intended for all levels of users and provides simple yet, less well-known pointers, in areas such as magnifying images, moving between the software’s various “palettes”, colors, selecting layers, and more. An easy way to expand upon a user’s basic understanding of the Photoshop.
What's the big deal about Adobe Photoshop??

Adobe Photoshop is a large, sophisticated, and expensive desktop publishing software package. Though it can create graphical images and effects, it is often employed to modify, improve, and tweak the appearance of these drawings or photographs that often are designed in another program or digitally scanned. With the explosion in popularity of the World Wide Web, Photoshop has now also become an important tool in adding zip, sparkle, and pizzazz to these hypertext documents. As this pathfinder is meant as an "introduction" to the subject, most of the following web sites cover simple techniques and fundamental issues. But please be aware that this document strives not to be static and is intended to be useful at multiple stages of Photoshop learner development. Thus, there are a couple of sites that are useful for beginners but also may also include more advanced Photoshop terminology, skills, and methods.

Q: I need to acquaint myself with Photoshop. What are some of its basic features?

A: Well, which version, 3.0 or 4.0. Both are popular right now. How about an online review of each?

- Photoshop 3.0 -- http://www.zdnet.com/macuser/mu_0195/review1.html
- Photoshop 4.0 -- http://www.8.zdnet.com/macweek/mw_1101/rv_photpshop.html

Q: Where can I start to learn actual hands-on, design techniques and acquire a more in-depth understanding of its capabilities?

A: First, look over general sites to tutorials.

- Dr. K's Photoshop Tutorial Links -- http://www.bgsu.edu/departments/tcom/photoshop.html

: Then try out some specific instructional sites.

- A Brief Photoshop Tutorial – specifically geared to problems with scanning http://seurat.art.udel.edu/Site/InfoDocs/GIFToot/PhotoTut.HTML
- Joseph Squier's Photoshop Tutorial – a few essential techniques http://www.art.utuc.edu/workshop/photoshop/photo_tutor.html
• Introduction to Photoshop – an extensive coverage of fundamentals
  http://www.yorku.ca/teachtec/archive/summer96/photoshp/toc.htm

Q: I would also like to purchase a manual or two on Photoshop for quick reference. Is it possible I get some advice ahead-of-time before making my selection?

A: Yes. I guarantee this site will become a favorite.

• PhotoBooks – almost any book on Photoshop is here and each comes with complete descriptive information and a one page review
  http://www.aa.net/~davidh/PSBooks/PhotoBooks.html

: Then you can purchase them without ever leaving your computer.

• Amazon.com – online bookstore; many purchases delivered within one day
  http://www.amazon.com

Q: What if I have problems or questions while I am learning the software? Is there anyone I can talk to?

A: As a matter of fact, yes. With Usenet News Groups (an online discussion forum) just for Photoshop users, you can send a message that will reach hundreds or thousands of people and several will probably respond back with helpful insight.

• alt.graphics.photoshop – news:alt.graphics.photoshop
• comp.graphics.apps.photoshop.” news:comp.graphics.apps.photoshop

Q: I have attained a certain mastery with Photoshop, I would now like to teach it to others. Do you know of any sample curriculums?

A: Yes. They will help you to sequence, organize and tailor your lectures and hands-on training sessions.

• Adobe Photoshop Training. -- http://www.nobledesktop.com/photosyllabus.html
• Saint's Photoshop class. -- http://www.metatools.com/metauniv/st220.html

Suggested Terms to Use for Locating Further Information on Topics Presented
--Use Alta Vista search engine (http://www.digital.altavista.com) Advanced Search | *= truncation
1. Software Reviews – Photoshop AND review*, critique*, criticism*
2. Basic Tutorials – Photoshop AND basic, fundamental, AND tutorial*, workshop*
3. Sample Curriculums – Photoshop AND curriculum*, syllabus, “course schedule” NOT vitae
PATHFINDER TO ANIMATION
Using Technology to learn learning to use technology

HOPE KANDEL
146786928
DR. LORIENE ROY
LIS 382L.13
BIBLIOGRAPHIC INSTRUCTION
Web development and publishing have grown extensively in the 1990's. Today it is expected that a learning environments include technology as well as the understanding of the multimedia applications that are often used to optimize computers as a learning tool. Animation is one of the many techniques that we can and should use to enhance our design more importantly to convey our messages to an audience. The world of animation has benefited from the development of computer capabilities both in hardware and software. From a small graphic on a website perhaps a butterfly flying across the page to full length picture movies being created exclusively from 3-D models and rendering all done on a desktop, albeit a highly powered and memory loaded, computer—animation is now almost exclusively produced electronically. Furthermore, animation, while can be appreciated and practiced by many, is a highly skilled craft. This pathfinder on the topic of animation seeks to provide information that is predominantly web based because the information is updated rapidly and thus this medium, besides also being what the client requested, is the best suited for the nature of the subject. However, with that said, there are print resources but they fall under the heading of how-to books and are short on the history and evolution of animation, though where available in the sources chosen these areas were highlighted. Computer animation cannot be done without a computer and furthermore, it is a field that relies heavily on the Web for information, two other important reasons for almost exclusive Internet resources.

In looking at the Four Directions Project web site at http://www.4directions.org, it became clear to me that focusing on hands-on instructional websites and resources would be the most beneficial. The Four Directions Initiative is not just about creating a web presence, but working with and teaching students of a variety of learning ages (predominantly through the high school years) how to create using new multimedia applications. In particular, I included one large website that caters to young children learning programming as well as the more creative side of computer production because it seems that if there are sources geared for even young students then it is incumbent upon
instructors to engage younger learners.

There are important criteria to look for when selecting web resources for a pathfinder of this nature. Firstly, there was commercial and not-for-profit sites of which I tried to rely heavily on not-for-profit, though there were companies that are listed because they didn’t appear to be selling one product over another. Along with that there was the expertise of those who maintained and/or created the sites and/or pages. The field of computer animation and multimedia in general is populated with many individuals who don’t quite consider themselves professionals, yet are quite knowledgeable all the same. I found there to be good information at educational facilities as well as professional and “industry” standards yet finding “credentials” for many organizations and individuals proved to be difficult. In order to feel confident with my choices for this pathfinder I tried to look for other evaluation methods like what Web validators and other resources that listed the given website as well as trying to attain a confidence level from information on the actual page.

The search process began with using standard search guides like Infoseek and Excite. These two are examples of search tools on the Web that have subject heading that one can follow. For example for both Infoseek and Excite the following subject heading string: computers--multimedia--animation, proved to be fruitful. Search engines like Alta Vista and Web Crawler were also productive especially when the subject heading string of: computers--multimedia--animation--tutorial was used. The searches that I performed to complete this pathfinder brought together information and ways to get involved with the computer animation community whether your interest is a small moving object, instructional videos or the next full length feature animated film.
BIBLIOGRAPHY

The following manual style was used to correctly annotate the sources on
this bibliography sheet.

New York:

   [website] Internet.

Grace Sylvan’s Children’s Software and More at
http://www.gamesdomain.com/tigger/sw-program.html is a comprehensive
website that can be used with children or by children to learn and create
multimedia. Almost all the programs on this website have a free-ware
version which may or may not require payment after a certain period, thus
most programs offer a free trial period. This site has been rated "Family-
Approved" by The Dove Foundation, is a Safe Surf and Safe For Kids site,
designed for all ages. Three web sites in particular feature animation.
They are:

   • MIT’s ftp site which features Logomotion
     ftp://cher.media.mit.edu/pub/logo/
   • How Can I Do That?
     http://www.gamesdomain.com/tigger/mac/howcan.html
   • The Caliban Mindwaer Home Page http://www.CalibanMW.com/

   Resource” [website]

Creator Studio http://www.mediom.qc.ca/creator-studio/projects.html is a
company that is dedicated to providing the computer animation community with
tutorials and tips for leading multimedia computer programs. Providing both on-line and off line references, they include Animation Master and Lightwave two heavily used programs in this field.


So you may not be looking to make a short or movie. Want to learn how to do animated GIFs for your webpage? John C. Gilson’s website at http://207.61.52.13/HTML/index.htm has a large selection of step by step tutorials on everything Web. Lesson 15 at http://207.61.52.13/HTML/Lesson15.htm is specific to animated GIFs, signs and banners. His website is recognized by PC Webopedia as an outstanding resource for web publishing as well as the fact that his credentials include teaching math, and writing computer programming books.

Animation Resources


Webreference at http://webreference.com/3d/ is a great place to go for all types of web publishing. This particular link provides many tutorials to challenge the soon to be computer animator. Designed to be a self-teaching set of weekly courses one can find a comprehensive program to learn 3-D animation and should find beginning to fairly advanced lessons.


This is a website that showcases students and instructors creating a variety of multimedia applications and artforms from California Institute of the Arts. One strong feature that might be helpful to teachers who are trying to design courses around these multimedia areas, particularly animation, is their web page of course offerings at http://moy.calarts.edu/curriculum.html. This website had a lot to offer in terms of guidance for lesson planning even for a teacher that might be trying to construct short courses to individuals with a much lower skill level that those students at CalArts.

The Computer Animation Homepage at http://www.bergen.org/AAST/ComputerAnimation/ is part of the The Academy for the Advancement of Science and Technology which is a public magnet school for science and technology located in Bergen County, NJ. Everything from the history of animation to tips and helpful hints, this website also has links for learning the unlimited uses of computer animation and provides files to help get the budding animator on the way.


As an index this this site features not just online resources, but the latest print resources for the larger multimedia category. This site also functions as an electronic bulletin board of sorts with FAQs (frequently asked questions), research postings, conference proceedings and announcements as well as the latest standards for multimedia. There is further subdivision within the larger multimedia category to highlight images, sound, video, animation, vr and many others.


This website is a pathfinder in that it brings together web resources that deal with multimedia as it applies to instructional technologies. This is the concept of using technology to enhance the teaching environment. At http://www.mcli.dist.maricopa.edu/authoring/centers.html one can access this website from the search engine Alta Vista by using the search string “computers--multimedia--animation”. From Dreamworks to Cal Arts, there are sources here that feature artwork as well as sites that provide buying guides.

Animation Resources--Continued

Nerd World Media is a small search index devoted to multimedia and authoring and can be found at http://search.nerdworld.com. This index is helpful because it provides both commercial and non-commercial websites. From the home-page one can type "computer" and "animation" which will bring up an extensive list of all things pertaining to animation from how to's to galleries of artwork.


New York University's Tisch School of the Arts Animation Station at http://www.cat.nyu.edu/animation/station.html is a recommended site for well balanced exposure to the computer based animation community. Incorporating on-line as well as off-line print sources, this web site has an extensive annotated bibliography at http://www.xmission.com/~grue/animate/books.html. If you want to know about animation festivals, collectibles, organizations and clubs, as well as featured well-known computer animators then this web site is for you.

Animation Electronic Magazines and Newsgroups


Animation World Magazine at http://www.awn.com/mag/index.phtml is part of the larger and well regarded Animation World Network. This magazine features industry product reviews, tips, an archive of back issues. What ever is currently going on in the animation world, this magazine is covering it and reporting to the animation community. A valuable resource that can help in a variety of ways.

Animation Electronic Magazines and Newsgroups--Con't

New Media at http://www.newmedia.com/, another leading multimedia magazine and fully available in an electronic format, is an industry standard that features web issues like intellectual property, program features of latest versions of software and animation trade networks and tips for those who may or may not consider computer animation their profession.


comp.graphics.animation at news:comp.graphics.animation is a newsgroup devoted to all and any issues that might be about animation. Like most newsgroups it is not moderated though it tends to stay on the side of serious questions regarding animation. The web published version of the existing FAQ (frequently asked questions) of this newsgroup has a large amount of supplemental information with regard to animation and can be found at http://www.xmission.com/~gastown/animation/faq1a.html.


This could be a useful tool for a more general discussion about graphics. Furthermore, this site might facilitate ideas about artwork, not solely for animation purposes.


Rendering is a major component of 3-D computer animation and because of the variety of software devoted to this task this site could be useful for information regarding this fundamental aspect of computer animation.
How do I find instructional web sites about animation for...

the curious, the adventurous, the bold, and the soon to be hooked?

There is so much information on the Web about every topic that in order to begin a search one has to narrow down the subject. Thus, this sheet will begin the user of varying levels on the topic of computer animation.

**animation**--
simulation of movement created by displaying a series of pictures, or frames. Cartoons on television, for example, is one example of animation. Animation on computers is one of the chief ingredients of multimedia presentations. There are many software applications that enable you to create animations that you can display on a computer monitor.

taken from PC Webopedia http://www.sandybay.com/pcweb/animation.htm

**Animation Resources for Children**

Grace Sylvan’s Children’s Software and More at http://www.gamesdomain.com/tigger/sw-program.html is a comprehensive website that can be used with children or by children to learn and create multimedia. Almost all the programs on this website have a free-ware version which may or may not require payment after a certain period, thus most programs offer a free trial period. This site has been rated "Family-Approved" by The Dove Foundation, is a Safe Surf and Safe For Kids site, designed for all ages. Three web sites in particular feature animation. They are:

- MIT’s ftp site which features Logomotion ftp://cher.media.mit.edu/pub/logo/
- The Caliban Mindwaer Home Page http://www.CalibanMW.com/

**Animation Resources--Tutorials**

Webreference at http://webreference.com/3d/ is a great place to go for all types of web publishing. This particular link provides many tutorials to challenge the soon to be computer animator. Designed to be a self-teaching set of weekly courses one can find a comprehensive program to learn 3-D animation and should find beginning to fairly advanced lessons.

Creator Studio http://www.mediom.qc.ca/creator-studio/projects.html is a company that is dedicated to providing the computer animation community with tutorials and tips for leading multimedia computer programs. Providing both on-line and off line references, they include Animation Master and Lightwave two heavily used programs in this field.
So you may not be looking to make a short or movie. Want to learn how to do animated GIFs for your webpage? John C. Gilson's website at http://207.61.52.13/HTML/index.htm has a large selection of step by step tutorials on everything Web. Lesson 15 at http://207.61.52.13/HTML/Lesson15.htm is specific to animated GIFs, signs and banners. His website is recognized by PC Webopedia as an outstanding resource for web publishing as well as the fact that his credentials include teaching math, and writing computer programming books.

New York University's Tisch School of the Arts Animation Station at http://www.cat.nyu.edu/animation/station.html is a recommended site for well balanced exposure to the computer based animation community. Incorporating on-line as well as off-line print sources, this web site has an extensive annotated bibliography at http://www.xmission.com/~grue/animate/books.html. If you want to know about animation festivals, collectibles, organizations and clubs, as well as featured well-known computer animators then this web site is for you.

The Computer Animation Homepage at http://www.bergen.org/AAST/ComputerAnimation/ is part of the The Academy for the Advancement of Science and Technology which is a public magnet school for science and technology located in Bergen County, NJ. Everything from the history of animation to tips and helpful hints, this website also has links for learning the unlimited uses of computer animation and provides files to help get the budding animator on the way.

Animation Electronic Magazines and Newsgroups

Animation World Magazine at http://www.awn.com/mag/index.phtml is part of the larger and well regarded Animation World Network. This magazine features industry product reviews, tips, an archive of back issues. What ever is currently going on in the animation world, this magazine is covering it and reporting to the animation community. A valuable resource that can help in a variety of ways.

New Media at http://www.newmedia.com/, another leading multimedia magazine and fully available in an electronic format, is an industry standard that features web issues like intellectual property, program features of latest versions of software and animation trade networks and tips for those who may or may not consider computer animation their profession.

comp.graphics.animation at news:comp.graphics.animation is a newsgroup devoted to all and any issues that might be about animation. Like most newsgroups it is not moderated though it tends to stay on the side of serious questions regarding animation. The web published version of the existing FAQ (frequently asked questions) of this newsgroup has a large amount of supplemental information with regard to animation and can be found at http://www.xmission.com/~gastown/animation/faq1a.html.

...it seems like a newsgroup with its limitless possibilities for exchange within a community is a good place to leave you, the now hooked computer animator.

by Hope Kandel 10/97
Tips for Better Photography
A Pathfinder

"You don't take a photograph, you make it"
- Ansel Adams

University of Texas at Austin
Graduate School of Library and Information Science

LIS 382L.13
Dr. Loriene Roy

Prepared by: Jennifer Morley
October 14, 1997


Photographs capture and preserve precious memories to treasure for generations. There is a pleasure in sharing and reliving these past moments. Taking quality pictures is not just for professionals. By mastering just a few simple tips, such as proper exposure, lighting and film speed, uninteresting photos can be transformed into postcard quality.

The audience of this pathfinder are the students and teachers at Four Directions' participating schools. Four Directions is managed by the Laguna Department of Education which focuses on integrating Native American culture and technology into education so students can maintain and understand their heritage while taking full advantage of their future. The purpose of this pathfinder is to guide them in locating information on basic tips for photography using the sources of a public or small college library, directly or through interlibrary loan. Also included are a few Internet sites for those who have access. This pathfinder may be of use to amateurs interested in taking better quality photographs, not necessarily aspiring to become professional photographers. Some questions they would want to have answered such as composing an interesting picture, choosing the correct speed film and determining the appropriate lighting will be covered in these sources.

Criteria for sources include information that:

1. has been published after 1994.
2. has been published in the United States.
3. targets the novice photographer.
4. provides general tips for use with any kind of camera.
5. does not focus on a specific type of photography: outdoor, travel, action...
Methodology

I began my search using the online version of Books in Print. I used the keyword, "photography," to discover available titles, plus forthcoming titles to be published by April 1998. I then searched the Internet using keywords "photography and tips" in search engines Yahoo, Lycos and Excite. Since there was so much pertinent data associated with basic photography, I referred to Que's Mega Web Directory for guidance in choosing the best locations for photography sites on the Internet. Finally, I examined the periodical directory Magazines for Libraries to locate suitable titles for beginning photographers.
BIBLIOGRAPHY

DIRECTORIES

1. **Books in Print**. (CD-ROM). Ovid 7.0. 1995-.

Lists books currently available for purchase or about to be published, up to six months in advance. Each entry gives bibliographic information for purchase such as title, author, date, number of pages, publisher, price, and ISBN number. Subject terms are detailed and extensively cross-referenced. To find books relevant to the topic, type in keyword “photography.” This search can be limited to specific years. A great source to determine what books are currently available for purchase.


This is a directory that lists many web sites on the World Wide Web. It is arranged by subject, and gives the web address and a brief description about each site. The contents are arranged by subject, so look under “photography,” where you will locate over 400 web sites on this topic.

MONOGRAPHS


A photography guide by Kodak. This is a step-by-step introductory book to taking pictures. The first eight pages list the “Top Ten Techniques for Better Pictures.” If you read no further (than these techniques) following these ideas will improve your picture taking dramatically.
MONOGRAPHS (continued)


A thick, 568 page book on photography instruction. Few pictures are placed throughout the book. Instead of illustrations they use detailed descriptions to teach the basics of photography.


This introductory textbook covers the underlying principles of photographic practices. The author combines descriptions of equipment with techniques. He believes you need to understand how the equipment works as well as knowing techniques to take a professional looking photograph.


Steve Sint has been a professional photographer for 25 years. This book represents his ideas and thoughts over the years. He offers hints anywhere from actually taking pictures to tips on effective camera bag use.


Part of the “Complete Idiot’s Guide” series. Offers much basic advice and tips for beginning photographers. This series is fun to use, because it is written in a light and comical way. There is an entire section on basic tips, including a chapter on “25 Common Mistakes you can Avoid,” the first one being “remove your lens cap.”

INTERNET


A series of links with much useful information on basic photography. There are direct links to Kodak’s “Guide to Better Pictures,” which offers techniques and advise for better photos, and also “Graphique,” an electronic guide on photography that focuses on improving techniques, plus many other links. This site was found using Yahoo with keywords “photography and tips.”
INTERNET (continued)


This online magazine covers photography, video, and imaging. HyperZine was created exclusively for cyberspace allowing the information to be very current. Once you are in the site, click on photography, then click on tips, then photo, and it will bring up pointers on how to improve your photography and get the most from your photo equipment. This site was recommended in both Que’s Mega Web Directory and in Popular Photography magazine.


Provides many links to photography resources. This is the most comprehensive site I located on the Internet regarding photography. It includes a table of contents with 27 headings. This site found using Lycos with keywords “photography and tips.”


Includes an extensive collection of hand-picked Net links for exploring amateur photography. How-to's, tips, and technical information which include weekly lessons, tips, and other information to help you become a better photographer. This site found using Excite with keywords “photography and tips.”

BOOKLETS


Kodak has produced six booklets that deal with the basics of photography. The Consumer Imaging Division at Kodak will send out the packet of six publications for free. Call Kodak directly at 800-242-2424 and press extension 55. Five of the six booklets fit the criteria of this pathfinder. The titles of all of them are: “Picture Taking in Five Minutes,” “Hot Shots with any Camera,” “To Create a Photograph,” “Tips for Better Pictures,” “Take Pictures Further (A Kodak 35 mm film selector guide)” and “How to Make and use a Pinhole Camera.”
PERIODICALS

14. **Petersen’s Photographic.** Los Angeles: Peterson Publishing Co. 1972-.

Petersen’s has been characterized as a Popular Mechanics for the photographic hobbyist. Easily understood articles and directions enable the enthusiast to learn photographic processing techniques, build basic photographic apparatus, or assemble a darkroom.

15. **Popular Photography.** New York: Hachette Filipacchi Magazines. 1937-.

This is the oldest and largest selling American photographic magazine, appealing to amateurs with “how-to” articles, feature articles on photography and techniques, book and exhibition reviews and, its specialty, extended review/comparison articles on equipment, films and photographic papers. It is said that photographers turn to this periodical as consumers turn to Consumer Reports.

ARTICLES


Gary Bernstein is a professional photographer who specializes in advertising photography. He offers some tips on how to give the professional look you get in an advertisement to your own family snapshots. Tips are offered such as choosing the correct light level, exposure, camera angle and composition.


This is a feature article to improve your photography by simplifying the image. Carve away extraneous subject matter until all you see in the viewfinder are the essential elements of the picture. Considers lighting, angle, subject, depth of field, and details.


This is included in the annual “How to” edition of this magazine. There are a total of twenty “How to” articles. Includes tips on lighting, angles, flash, focus point and framing the subject. These simple tips will improve your shots dramatically.
ARTICLES (continued)


Feature article offering twenty-five tips from the editors. They offer "tricks of the trade" to produce professional looking photographs.


Feature article presents twenty-five tips for taking better pictures in a variety of situations. These are signed tips by the contributors of the magazine.
Tips for Better Photography

Photographs capture and preserve precious memories to treasure for generations. Many people are not exceptional photographers. Developing just a few simple tips, uninteresting photos can be transformed into postcard quality.

Start with BOOKS, for a basic overview of photography:
Check the catalog under keywords “photography--handbooks, manuals”. Since there are an abundance of books for the novice photographer, it is also appropriate to browse the bookshelves under TR146, if your library uses the Library of Congress classification system, and 770, if it uses the Dewey Decimal classification system. Some suitable titles are:


The INTERNET is packed with sites offering tips for the novice photographer:
By using search engines such as Yahoo, Lycos and Excite with keywords “photography and tips” many sites can be found. A couple of useful sites are:


Links to Photography Resources. Online. Internet. 10 Oct. 1997. URL:
http://www.freenet.hamilton.on.ca/~ai730/pholinks.htm
Provides many links to photography sites.

Includes an extensive collection of hand-picked Net links for exploring amateur photography.

Ordering free BOOKLETS from Kodak’s Information Center will enable you to acquire tips on photography from the experts:
Contact Kodak directly at 800-242-2424 and dial extension 55. They will send you six free booklets, of which five fit the criteria of this pathfinder. All six titles are listed:


Current PERIODICALS can keep you up-to-date on the latest techniques in photography:
Check under the subject “photography” in Readers’ Guide to Periodical Literature for additional articles as they are published. Magazines for Libraries listed Popular Photography and Petersen’s Photographic Magazine as the best periodicals for novice photographers. Some appropriate articles from those publications are:


Burden, Russell. “5 Tips on Simplifying Photography.” Petersen’s Photography Magazine Feb. 1996: 26. This feature articles describes how to carve away extraneous subject matter until all you see in the viewfinder are the essential elements of the picture.


Need more information? Ask a librarian for assistance.
ORAL HISTORY:
RESOURCES FOR TEACHERS

Michelle Beattie
LIS 382L.3
Dr. Loriene Roy
8 October 1997
Pathfinder I
Introduction

Students often view history as a collection of facts and dates to be memorized. Oral history, defined as “the interpretation of the recollections and reminiscences of living people about their past,” is a method of studying and “doing” history that combats this model. By personalizing and emphasizing the impact historical events have on students’ family and culture, oral history acts as an effective method of teaching young historians the meaning of history.

The disciplines of History and English or Writing can be incorporate oral history into the curriculum at all learning levels and ages. Examples of oral history projects include biographies, community studies, and family histories by interviewing and collecting data from family members, local figures, or community members. Oral history projects teach skills such as interviewing, transcribing, organizing, writing, and inquiring into historical ethically.

Native American students may find oral history especially useful as it allows them a role in recording and preserving the history of their own culture. On the whole, too little is written and published about native cultures, especially with respect to recent history. The material that finds its way into print often comes from a non-native perspective.

This pathfinder is intended for use by the participants of the Four Directions program and specifically designed for the Fond du Lac Education Division that includes the Fond du Lac Ojibwe School (grades 6-12) and Little Black Bear Elementary School. The client has asked that all information sources come from the Internet. In this environment, teachers who want to incorporate oral history projects into the curriculum
will most likely seek sources that give background knowledge of the processes involved in doing oral history as well as lesson plans that can be used as models. This pathfinder has three categories of sources—manuals and primers on doing oral history, lesson plans that incorporate oral history, and an example of a successful oral history project.

The sources were selected based on their potential value as tools for teaching in the client's environment. Sources that incorporated Native American history were given higher priority. Sites that addressed teaching oral history at the college level were deselected as well as those that would not be applicable in the client's classroom such as military oral history. Sites that sold oral history materials, such as taped interviews, were not included. Specifically, I looked for sites from recognized institutions and authors and lesson plans that were likely to be easily implemented.

I began my search for Internet resources by exploring the index Yahoo² and looking under the Humanities: History: Oral History section as well as by entering the search terms "oral history" in quotation marks to search the entire index as a phrase. Most of the Web sites were discovered by using collections of sites at institutions of higher learning such as the Utah State Oral History Program³ and Tennessee Technological University⁴. Sites of oral history associations such as the New England Association of Oral History⁵ and the Oral History Association⁶ also provided assistance in connecting to valuable sites. Internet search engines such as AltaVista and HotBot were not effective in searching because the term "oral history" is used in many contexts. I found several lesson plans browsing through ERIC resources. The citation format comes from the *MLA Handbook for Writers of Research Papers*.⁷
Annotated Bibliography

Manuals and Primers on Doing Oral History


The Prince of Wales Northern Heritage Centre is dedicated to preserving the heritage and culture of the native peoples of the Northwest Territories in Canada by operating a museum, archives, and this web site. This comprehensive oral traditions manual offers a description of the value of oral traditions and their preservation and a step-by-step process of creating an oral history from setting goals, preparing for interviews, processing information to following up. Hart emphasizes ethical principles and includes an extensive bibliography.


The Oral History Evaluation Guidelines published by the Oral History Association, the main organization for the promotion of oral history in the United States, acts as a professional standard for oral historians. This most recent version attempts to address the concerns and problems of unaffiliated historians and teachers and students. The guidelines stress ethical behavior in the treatment of interviewees and outline project goals and procedures in checklist form. Teachers should definitely include this source in their background research.

3) “Utah State University Oral History Program.” Utah State University.


Utah State University offers a helpful web site describing their oral history program and including several education resources (the index of educational resources can be found at http://www.usu.edu/~oralhist/edu.html). The article by David Sidwell on “The
Significance of Oral History” (http://www.usu.edu/~oralhist/ohsignif.html) speaks to the importance of preserving culture through recorded oral history and includes a short bibliography. A second article by Sidwell on “How to Collect Oral Histories” (http://www.usu.edu/~oralhist/oh_howto.html) provides guidelines and project ideas.


The “Oral History Primer” defines oral history and gives guidelines for conducting and taping oral history interviews. Specific advice, such as “make eye contact” and “ask open-ended questions,” makes this source especially valuable for students interviewing for the first time. The article also discusses ethical considerations and post-interview activities such as establishing an archive for tapes.


The main purpose of the Bancroft Library web site is to make available the oral histories it publishes, but this site also includes two concise articles on conducting oral histories. “Tips for Interviewers” (http://www.lib.berkeley.edu/BANC/ROHO/rohotips.html) offers several suggestions for the interview such as “don’t let periods of silence fluster you, let the interviewer think” and “don’t interrupt.” “The One Minute Guide on Conducting Oral History” (http://www.lib.berkeley.edu/BANC/ROHO/1minute.html) is an abbreviated helpful short checklist for students.


This invaluable compilation of Internet sites covers all aspects of teaching history from levels K-12 to graduate school. It includes links to many oral history projects currently in progress throughout the United States, links to resources for teachers, and reference tools for students. Browsing through the web sites presented here is time well spent.

This short page written by Donald Ritchie, the Historian at the United States Senate Office, and Anne Ritchie, the Historian at the National Gallery of Art outlines ten tips for conducting an oral history interview. These include “be prepared to stray away from your prepared questions” and “set the stage with general questions and move to more specific ones.”

Lesson Plans that Incorporate Oral History

This guide was prepared for the Discovery Channel Home School to encourage teachers to use oral history as a teaching tool. He outlines the four major cognitive skills taught through oral history projects and sets up a detailed model for guiding students through the oral history experience in a carefully written article. This site connects to Lanman’s “Sixteen steps in Creating an Oral History” described below.

9) Lanman, Barry. “Sixteen steps in Creating an Oral History.”

Lanman describes concrete steps that student should take to successfully complete an oral history project—from identifying a topic to writing a thank you note to the interviewee. This concise checklist would be a valuable site for students to explore.

This article by Irma Olmedo, Assistant Professor at the University of Chicago, explains the value of oral history as an educational tool and includes sample interviews, a bibliography, and steps for getting started. Oral history gives students a clearer perspective on history and allows them to better understand their culture and the place of their culture in history. Though this article is intended for educators of students who speak English as a second language, it has value for all students, especially those from non-mainstream cultures.


This article found in the ERIC Digests discusses the value of using oral history projects as a teaching tool and the instructional goals accomplished with these projects. Siler presents an ambitious project and creates a timeline of one year from the beginning to the delivery of the manuscript to the binder. Included is an extensive bibliography of ERIC documents that discuss oral history. Teachers can find helpful information at the ERIC Clearinghouse for Social Studies/Social Science Education (ERIC/ChESS) (at http://www.indiana.edu/~ssdc/eric_chess.htm).


http://ericir.syr.edu/Virtual/Lessons/Social_St/History/soc060.html. (8 October 1997).

Teachers at the Columbia Education Center’s Summer Workshop designed this lesson plan as an interdisciplinary approach (involving English and History) to oral history. The short lesson plan describes goals, objectives, materials, and procedures. The askERIC lesson plans (http://ericir.syr.edu) are an invaluable resource for teachers.


Morgan’s lesson plan personalizes history for students by asking them to explore family or local history in this “mini” lesson plan. It can be used in State History, US History, or World History. The plan outlines the purpose, objective, and activities in this project.


To find this short lesson plan, scroll about halfway down the list of social studies lesson plans. It is intended for grades 4-12 and is highly adaptable. Monroe focuses on discussing and understanding the way history is recorded, from newspapers to Native American oral traditions and asks students to keep alive their family’s oral traditions by sharing one with the class.

Example of Students’ Oral History Project


“An Oral History of Rhode Island Women during World War II” is an example of an oral history project done by the Honors English Program at South Kingstown High School residing on a site sponsored by a grant from the Rhode Island Committee for the Humanities. This site includes articles that illustrate the value of teaching English with oral history, a glossary of terms, a bibliography, the actual interviews, and a form to obtain the printed copy of the completed project. This site, well-constructed, clear, and impressive gives teachers a goal for their own class’s oral history projects.
ORAL HISTORY: RESOURCES FOR TEACHERS

Oral History is “the interpretation of the recollections and reminiscences of living people about their past.” Incorporating oral history projects into the curriculum is an effective method of teaching History and English while involving students in preserving their cultural heritage.

Manuals and Primers on Doing Oral History
An extensive manual and guide to beginning an oral history project that discusses the value of oral traditions and gives a step-by-step procedure.

The guidelines for professional historians that also addresses the concerns of teachers and students.

Includes one helpful article on the significance of oral history and another on guidelines and project ideas.

Defines oral history, discusses ethical considerations, and gives specific advice on conducting interviews.

More clues to managing interviews and “The One Minute Guide to Conducting an Oral History.”

Invaluable compilation of Internet sites for history teachers from kindergarten to graduate school.

Ten tips for conducting an interview from the Historian at the United States Senate Office and the Historian at the National Gallery of Art.
Lesson Plans that Incorporate Oral History

A combination of an article explaining the skills taught through oral history projects and lesson plan from a site sponsored by the Discovery Channel.

Lanman's concrete steps to the successful completion of an oral history project.

An article describing the value of oral history projects to ESL students and lesson plan.

Another article that illustrates the instructional goals taught with oral history and ambitious lesson plan for a year long project.

A lesson plan designed by the teachers at Columbia Education Center's Summer Workshop for grades 8-10.

"Mini" lesson plan that asks students to explore family or local history for grades 9-12.

Scroll halfway down the page to find this adaptable lesson plan intended for grades 4-12 that asks students to explore their family's oral traditions.

Example of Students' Oral History Project

This site details the model project, "An Oral History of Rhode Island Women during World War II," completed by the Honors English Program at South Kingstown High School.


"Starting On Your Ojibwe Family History: 
Internet Resources"

Candice Weaver
Information Resources in the Social Sciences
LIS 382L.3
8 October 1997
Preface

This pathfinder is designed to help children, youth, their teachers, family, and community members get started on Ojibwe genealogical research using Internet resources. The client is the Fond du Lac Education Division near Cloquet, Minnesota, a K-12 school for Ojibwe students. The Internet is important for this client since local access to genealogy materials is limited.

In compiling this pathfinder, I briefly examined print materials to develop a research process for beginning Native American genealogists. First, the most important information for genealogy research is personal information. Before using secondary sources, either print or online, the researcher should question every family member possible, and ask about personal items which could provide information. From there, local records and organizations are the next step, followed by state, regional, and national level research. Federal records are especially important for Native American genealogical research, but are the most complicated to search. Data gathered in the earlier stages of research save the time and effort of the researcher later.

I searched the Internet by systematically exploring links on the Yahoo! Genealogy page. I also used HotBot for full-text searching, with similar results. In evaluating sources, I chose to use well-established, institutional sources where available; personal Web pages tend to be less stable, and several of the sites I initially examined were no longer in existence when I did more thorough research.

I divided sources into three parts, moving from broad to narrow. The first consists of general genealogy resources, including "how-to" help for beginners. Since genealogy research is closely tied to location, the next part includes Minnesota-related sources. Finally, Native American resources comprise the third part.
A successful pathfinder for this topic should lead the user towards guides to doing genealogy research and supplementary resources, while making clear the limits of Internet resources in genealogical research. Very few genealogy research materials are on the Internet. Some indexes and catalogs of massive sources like census records are available, but the records themselves are found online only if an individual transcribes them. When this happens it is generally only for a specific county or family. The print or microfilm materials must be found in vital records centers, National Archives regional offices, or in specific libraries.

Another consideration for this pathfinder in particular is that there are numerous forms of the name of the Ojibwe. I searched the OCLC Authority File, and found that "Ojibwa" is the approved form for library cataloging, but it was followed by a long list of other forms, including "Ojibwe," "Chippewa," "Anishinabe," "Ojibway," and "Saulteaux." Since the use of a different term can in some instances be related to geographic location, this leads to another problem: the focus of geographic sources. Ojibwe bands are located in Minnesota, Michigan, Wisconsin, North Dakota, and Ontario. Ojibwe in Canada would in particular be interested in a different set of government-related resources. I chose to include Minnesota resources for the client; access to other state and local sources is available through the sites I have chosen.
Sources


   This is one of two introductory articles located on the Everton's Genealogical Helper Web site. Although Everton's is a subscription site linked to a print journal, it contains a series of free research tutorials which are helpful for the beginning genealogist. "Get Started Right" is a simple guide to the basic concepts of genealogy, emphasizing the importance of primary sources, notetaking, and creating charts and data sheets. Unfortunately, examples of the forms are not provided free of charge; Everton Publishers provides purchase information for its starter kits. These types of forms are also readily available for copying in general-interest genealogy materials.


   The second introductory article on Everton's site is an index to short essays on topics such as the ROOTS-L discussion list, the Family History Library in Salt Lake City, and avoiding genealogical scams. Most of these citations are links to other pages, minimizing the user's exposure to advertising. This page, like other indexes, gives the user a range of options with which to begin his or her research.


   This page lists a series of steps in the process of genealogical research. It recommends starting with personal knowledge, and working towards secondary sources. This NGS page also provides a bibliography of print materials for genealogical research, most of which are standard introductory sources.


One of the first comprehensive online genealogy sources, this site contains research how-to guides, library directories, information on newsgroups and mailing lists, and indexes to print and Internet genealogy resources. It also provides access to an FTP site containing genealogy software and text files on various genealogy-related subjects.


"Yahoo! Genealogy" lists sites alphabetically by title, as well as by subject area. These include beginners' guides, regional and ethnic resources (further subdivided by state and region), lineages and surnames, and organizations. Because individuals can submit their Web pages to Yahoo!, more personal Web pages are listed here than in other genealogy indexes. The representation of special interests within genealogy is limited to what users submit, and occasionally unique and useful sites can be found, but trial-and-error searching is required.


This page details the online genealogy courses offered by the Carl Sandburg College in Gatesburg, Illinois. This community college offers three interactive courses through its distance education program: "Genealogy on the Internet," "Beginning Genealogy," and "Intermediate Genealogy." Contact information and course schedule is available. This program would be useful for researchers who have more than a recreational interest in genealogy.

“Genealogy Toolbox” is an index to online genealogical sources. What makes it unique is its structure; links are grouped in terms of traditional print reference materials. The links in “Genealogy Atlas” are listed geographically, “Genealogy White Pages” is divided by surname, and “Genealogy Yellow Pages” contains subject categories. Each category is carefully defined on the index page, and the site also includes a help page. This structure is ideal for the beginning researcher who may not be familiar with the various types of genealogy resources.


This journal is a monthly Web publication that address issues in online genealogical research. It includes site reviews, interviews, and how-to articles, as well as links to genealogy sources and the journal’s own archive. This publication helps the novice researcher grasp the concepts of online research and how it is different from searching traditional print materials.


The National Archives contain census data and other records for all of the United States. Much of their collection is available on microfilm, and many public genealogical libraries own copies of NARA census records. Because of the its vast amount of holdings, NARA states in “The Genealogy Page” of this Web site that only a small fraction of government records are available online, but there are many indexes, databases, and guides to the collections of the National Archives. Once the researcher knows what is available, he or she can take the appropriate steps to find
locally-accessible copies. It is interesting to examine the NARA site, but usually other avenues of genealogical research should be explored before seriously searching the Archives; proper preparation can save the user a great deal of effort.


ROOTS-L is an Internet mailing list and archive. Its state-specific pages are useful for researching a particular location. One can search for surnames in the Minnesota files using the ROOTS-L search engine. This site also provides a list of books in the Library of Congress online catalog which have "Minnesota -- Genealogy" as a subject heading. ROOTS-L also has various links to Minnesota libraries, local history, maps, historical societies, and photograph Web sites.


Minnesota GenWeb is a subdivision of the USGenWeb Project. Its resources emphasize county-level research, though the index page has extensive links to both Minnesota genealogical sources and various divisions of USGenWeb, such as the Military Records Project. A map is available at the county level, as well as census data, county cemeteries, and city Web sites. Most vital records information is held by counties, and this site is helpful in pinpointing how to access these records.


Vital records are an important tool in family history research. This page provides information about Minnesota state and county records offices, including type of records and years available, and fees for obtaining copies. As an additional
aid, Orsay provides a set of Minnesota genealogy links. The larger site has information on all states and counties.


Along with a list of general-interest sites, NativeWeb provides subscription information to the Indian-Roots listserv. There is also a 1994 list of federally recognized tribes on this site. Of specific interest to Ojibwe researchers is mention of a Usenet newsgroup, soc.genealogy.french, which may aid those searching for French-Métis information.


This page is a list of Native American tribes and community groups located in Minnesota. Each entry includes address, phone, and other contact information, including links to Web sites and e-mail, where available. A researcher interested in Ojibwe genealogy can contact any or all of the bands in Minnesota, including those not federally recognized (such as the Sandy Lake Band.) From this page, one can also see contact information for Native American groups in other states and in Canada.


This index page consists of an alphabetical list of links to various Native American resources in the United States and Canada. Some are tribe-, town-, or state-specific, but many are general sites which may have content relevant to genealogy, such as Native Peoples Magazine and both the Bureau of Indian Affairs
and the Indian Health Service (which might be useful in locating vital records.)


This site is an ambitious project by Lee Sultzman to document 240 tribal histories from the continental United States, Canada, and Mexico. Although not entirely authoritative, the histories are under review and corrected by both researchers and the groups discussed in the histories. The Ojibwe history may be useful in genealogical research in that it identifies the patterns of movement of the Ojibwe beginning in approximately 1400. The accounts of interaction with other native groups may provide further avenues of research for the genealogist.
We can chart our future clearly and wisely only when we know the path which has led to the present.
-Adlai Stevenson

Genealogy is an exciting field of research. Almost everyone is curious about their family’s history. But genealogical research has a pattern to follow which may be different than other research you have done. Genealogy is about human interaction, and talking to people in your family should be your first step. The Internet can help you fill in the gaps that are left. But whether you are talking to relatives or searching online, it is important to keep track of your findings. Here are two Internet sites which explain the process of family history research, and discuss the types of sources you will be using:

**Everton’s Genealogical Helper: Get Started Right**
http://www.everton.com/introl.htm

**National Genealogical Society: Suggestions for Beginners**
http://www.genealogy.org/-ngs/sugbeg.html

You will be able to find out more about your family history if you are familiar with the methods of genealogical research on the Internet. These are discussed in:

**Journal of Online Genealogy**
http://www.onlinegenealogy.com/

You may also want to look at sites with links to many types of genealogy resources:

**Yahoo! Genealogy**
http://www.yahoo.com/Arts/Humanities/History/Genealogy

**The Genealogy Home Page**
http://www.genhomepage.com/

**Genealogy Toolbox**
http://genealogy.tbox.com/
Genealogy is closely tied to geography. At some point in your research, you may use official records to fill in the gaps. Start with local institutions and work upwards through county, state, and federal sources. These two sites have links to state and county records, including census data, county cemeteries, and vital records:

**Minnesota Genealogy: The Minnesota GenWeb Project**
http://www.rootsweb.com/~mngenweb/

**Minnesota Vital Records Information**

You can find out if other people are researching branches of your family tree or places where your ancestors have lived through the ROOTS-L archive. You can search the files for Minnesota (or any other state) by surname. ROOTS-L also has links to libraries, historical societies, and photographs from your state:

**ROOTS-L Minnesota Resources**
http://www.rootsweb.com/roots-l/USA/mn.html

The most important resource for federal records is the National Archives. The majority of its census records and other data are not online, although the NARA site has indexes and searchable databases which can help you narrow your search and determine which libraries near you might have microfilm copies of the information you need. Look at “The Genealogy Page” link on the NARA Web site:

**National Archives**
http://www.nara.gov/

There is some Native American genealogical information online. “Tribal Voice” is a site that maintains a list of links to various resources in the United States and Canada:

**Tribal Voice: Native American Resources**
http://www.tribal.com/RESOUR.HTM

Another index page for Native American information online is “NativeWeb.” If you have access to e-mail, this page has subscription information for a mailing list called Indian-Roots. There are also general hints for Native American genealogical research on:

**Native Web: Tracing Your Roots**
http://www.nativeweb.org/pages/roots.phtml

Tracking down your family history is easier if you know what sources are available and how to use them. Use these Internet resources as a starting point, and don’t be afraid to explore!

Candice Weaver 10/97
The Impact of Technology on Indigenous Cultures

A Pathfinder

Gina Leiss

Bibliographic Instruction LIS 382L.13

Dr. Loreine Roy

October 14, 1997
Introduction

Nature of the topic

When most people think of indigenous cultures, they picture uneducated people living primitive lifestyles far removed from the modern world. This image is far from the truth, however, as can be seen by the growing number of technological products produced by and for native peoples. Technology is being embraced as a way to further goals of native populations, mainly, to increase sovereignty, improve education and living conditions, educate the public, and to preserve traditional languages, arts and history. In the article, "New technologies, ancient cultures", George Baldwin says, "There is a pan-Indian movement going on now in which a growing number of Indian people are uniting across tribal lines to work toward a common social and political good for all--and the links are the new communication technologies."

Audience, Scope, and Potential Information Needs

The intended audience for this pathfinder is users of the Four Directions website, mainly Native American high school students and educators. Keeping this in mind, the scope for the pathfinder includes sources of varying levels, from the journalistic to the scholarly; includes all indigenous cultures but focuses on Native Americans; and makes use of mainly electronic resources. Users of this pathfinder may be wanting information on technologically-oriented programs involving Native Americans, examples of how indigenous cultures are using the World Wide Web, or the effects of technology on Native American education and cultural preservation.

Inclusion Criteria

As this is a new area of research and endeavor and few publications exist on the topic, I had to be fairly unrestrictive while formulating my inclusion criteria. As technology is a constantly changing field, I wanted no sources published before 1995. This was not a problem, however, as most of my resources are electronic and updated on a regular basis.
evaluating websites, I chose those containing mostly original material over those consisting of mostly links, and authoritative sites (meaning produced by a verifiable organization or credentialed individual) over personal pages. Databases were included if a search strategy including words such as native, Indian, indigenous, technology and computers returned more than 20 (or so) relevant hits.

Chronology of Search

As this pathfinder is intended to be used as an HTML document, I decided to look for Internet resources first. Using the keywords mentioned above, I first used Yahoo (www.yahoo.com) and found quite a few interesting websites. I noted URL's of sites I found particularly helpful, and noted where and how many times they were linked to other pages.

Feeling a bit overwhelmed by all the websites relating to indigenous cultures, I decided to look for books. I checked UTCAT and OCLC (again, using the aforementioned search terms) and found only one relevant monograph.

Next I turned to electronic databases, hoping to find some articles that point me in a more focused direction. I skimmed through a few I found on ERIC and Expanded Academic ASAP and noted any new websites or technology-based organizations. I then took this new list and returned to Yahoo, and also used Altavista (www.digital.altavista.com). I then pared my list down to the most relevant and well-organized materials, and created my bibliography and pathfinder.

Annotated Bibliography

General Overview


An excellent introduction to the topic covering the role of telecommunications technology in native cultures and communities. Individual types of technology such as radio, television, film, computers and the Internet are covered as well as these technologies' roles in native education, health care, economic development, environmental protection, and cultural preservation. Also included are federal and tribal policies for telecommunications use and promotion. Some information is slightly dated but this is still the best and most comprehensive source available on the subject.

Databases


An archive of over 500 documents generated by, for, or about "Fourth World" nations. Types of documents include resolutions, position papers, essays, treaties, speeches, declarations and UN documents, which can be accessed by type or geographically (the Americas, Europe and Asia, Africa, and the Pacific). The site features a search engine, but it was not operational the several times I attempted to use it. This would be a good place to look for policy statements or essays regarding the use or impact of technology on various indigenous populations, though probably not as fruitful as ERIC or Academic ASAP.


This database is widely known as the most extensive resource for literature on educational subjects. Cited above is a World Wide Web interface, though it is also available in print and on CD-ROM. Subject terms I used while searching the electronic version were: technology, telecommunications, computers, native americans, indigenous, and indians.


Though not available to the general public, many schools and libraries offer access to this or its pared down sibling, *Academic ASAP*. It is especially useful for this topic as it is multidisciplinary, covering humanities and social sciences as well as science and technology. It is also uniquely helpful in that it covers both news-oriented or general interest periodicals as well as scholarly publications. Appropriate search terms would be the same as for ERIC (see above).
Journals


Selected articles and subscription information available at http://nativeamericas.aip.cornell.edu/. *Native Americas* features mostly journalistic articles on a variety of current topics, which would be helpful to a researcher of technology. Articles are fairly easy reading appropriate for high school students and above.

   http://flamestrike.hacks.arizona.edu/~twohorse/index.html.

Due to be published in November, 1997. Mission statement mentions encouraging the use of the World Wide Web, so this might be a good place to look for scholarly articles on the use of technology by Native Americans.


Programs and Associations

8. *Electronic Pathways*, 3215 Marine Street, CU Campus Box 456, Boulder, CO 80309
   email: elpath@stripe.colorado.edu, http://hanksville.phast.umass.edu/defs/independent/ElecPath/elecpath.html

Funded by a grant from the National Science Foundation, Electronic Pathways is a nonprofit organization whose mission is providing access to technological advances for "underrepresented and underserved" (including Native American) populations. Their focus is on assisting communities, schools and individuals in acquiring technological training and access through the development of various programs. This organization would be good source for finding information on current projects involving native communities or schools and technological development.

NAPT works to bring Native Americans together and to the public through the creation of public and educational videos, radio and television programs, films and computer technologies. They also provide training in the use of these technologies and support the creation of networks between tribes and other organizations. Their website outlines each of their major efforts and gives extensive contact information. This organization would be particularly helpful for the researcher looking for information on projects involving many types of communication technologies.


OIEP, part of the Bureau of Indian Affairs in the U.S. Department of the Interior, is responsible for all BIA education functions, such as supervision of programs, allocation of funds, and policy and procedure formation. The OIEP has divisions concerned with elementary through post-secondary education, as well as exceptional student and staff training programs. Their website is well-organized and would be an excellent source of information on any educational technology-based programs within the BIA. Included on the site are newsletters, directory information, division descriptions and related links.

11. **Students and Native American Partnerships (SNAP)**, Vanderbilt University, Box 3061, Station B, Nashville, TN 37235, email: snap@vanderbilt.edu, http://www.vanderbilt.edu/snap/snap1.htm

A terrific example of a project involving Native Americans and technology. Students from Vanderbilt University have designed a program in which they teach students and teachers in Native American schools how to use the Internet, email, and videoconferencing technology. The program started in 1997 thus it may be interesting and relevant for a researcher of this topic to follow its progress in the coming years.

**Other Electronic Resources**


Probably the most attractively and efficiently organized comprehensive website concerning a wide variety of native and indigenous peoples. The resource center includes documents from many websites and is indexed by subject, geographical nations/peoples, and location and also features a search engine. When searching, the user may wish to use terms such as an individual tribe name and "computers" or "internet." A list of linked websites will then be returned.
Similar to the listservs mentioned above, these two newsgroups allow for bulletin board-style communication on a variety of topics. The newsgroups can be accessed by typing them exactly as they appear above in a World Wide Web browser window (in Netscape, the "Go To" window, in Microsoft Explorer, the "address" window). Messages can also be sorted by date, subject or author, but unlike listservs, a user can post a message without subscribing to the group or having access to email. Topics on the newsgroups are fairly general but may be relevant to a technological search topic.

For the researcher looking for a specific example of Native Americans' use of technology, NativeTech is excellent. The site features web documents on many kinds of Native American arts and traditional technologies, such as beadwork and pottery, as well as essays, poetry, stories, and an electronic message board. Topics are accessed by subject menus, and many of these include bibliographies.

www.fdl.cc.mn.us/natnet/mlist.html
A listing of six Native American listservs on subjects ranging from general chat to language and education. Included also are links to the listservs's archives which can be sorted by date, subject, or author. NATIVE-L would be particularly useful for a researcher, either by looking through the archives or by posting a question directly to the list. Subscription information is included on the site.

Style Manuals


Impact of Technology on Indigenous Peoples

A Pathfinder by Gina Leiss

Technology affects everyone's lives in different ways. For indigenous peoples, technology is becoming a way to record history, preserve and publicize language and cultural traditions, communicate with each other, and improve economies and governmental structure. (Most of these resources concern Native Americans specifically, but indication is given where many indigenous cultures are represented) Though many nations and peoples are embracing technological advancements, resources for finding information about the impact of such activities are scattered and few. With the ideas presented here, though, you should be able to locate what you need. Good Luck!

★★ A good place to start an Internet search would be a general source:
Probably the most attractively and efficiently organized comprehensive website concerning a wide variety of native and indigenous peoples. The resource center includes documents from many websites and is indexed by subject, geographical nations/peoples, and location and also features a search engine. When searching, you may wish to use terms such as an individual tribe name and "computers" or "internet." A list of linked websites will then be returned.

★★ Browsing through a journal may also help:
Selected articles and subscription information available at http://nativeamericas.aip.cornell.edu/. Native Americas features mostly journalistic articles on a variety of current topics, which would be helpful to a researcher of technology. Articles are fairly easy reading appropriate for high school students and above.

Sample issues, selected articles, and subscription information available at http://bioc09.uthscsa.edu/winds/index.html. Put out by the American Indian Science and Engineering Society, Winds of Change covers educational, career, and technological trends affecting Native American cultures. A range of audiences is addressed by the inclusion of both scholarly and journalistic articles.

★★ Or, if your looking for articles, try a database:
This database is widely known as the most extensive resource for literature on educational subjects. Cited above is a World Wide Web interface, though it is also available in print and on CD-ROM. Subject terms you might use while searching the electronic version are: technology, telecommunications, computers, native americans, indigenous, and indians.

Expanded Academic ASAP. Foster City, CA: Information Access Company, 1993-
Though not available to the general public, many schools and libraries offer access to this or its pared down sibling, Academic ASAP. It is especially useful for this topic as it is multidisciplinary, covering humanities and social sciences as well as science and technology. It is also uniquely helpful in that it covers both news-oriented or general interest periodicals as well as scholarly publications. Appropriate search terms would be the same as for ERIC (see above).
If you are interested in specific projects concerning technology, try investigating or contacting a related organization or association:
Electronic Pathways, 3215 Marine Street, CU Campus Box 456, Boulder, CO 80309
email: elpath@stripe.colorado.edu.
http://hanksville.phast.umass.edu/defs/independent/ElecPath/elecpath.html
Funded by a grant from the National Science Foundation, Electronic Pathways is a nonprofit organization whose mission is providing access to technological advances for "underrepresented and underserved" (including Native American) populations. Their focus is on assisting communities, schools and individuals in acquiring technological training and access through the development of various programs. This organization would be good source for finding information on current projects involving native communities or schools and technological development.

Native American Public Telecommunications, P.O. Box 83111, Lincoln, NE 68501, phone: 402-472-3522, fax: 402-472-8675 email: INET@uniinfo.unl.edu, http://indian.monterey.edu/napt
NAPT works to bring Native Americans together and to the public through the creation of public and educational videos, radio and television programs, films and computer technologies. They also provide training in the use of these technologies and support the creation of networks between tribes and other organizations. Their website outlines each of their major efforts and gives extensive contact information. This organization would be particularly helpful for you if you're looking for information on projects involving many types of communication technologies.

Office of Indian Education Programs, 1849 C Street, MS-3512-MIB, Washington, D.C. 20240,
http://shaman.unm.edu/oiep/home.htm.
OIEP, part of the Bureau of Indian Affairs in the U.S. Department of the Interior, is responsible for all BIA education functions, such as supervision of programs, allocation of funds, and policy and procedure formation. The OIEP has divisions concerned with elementary through post-secondary education, as well as exceptional student and staff training programs. Their website is well-organized and would be an excellent source of information on any educational technology-based programs within the BIA. Included on the site are newsletters, directory information, division descriptions and related links.

Looking at an example of indigenous peoples' use of technology might help...
For the researcher looking for a specific example of Native Americans' use of technology, NativeTech is excellent. The site features web documents on many kinds of Native American arts and traditional technologies, such as beadwork and pottery, as well as essays, poetry, stories, and an electronic message board. Topics are accessed by subject menus, and many of these include bibliographies.

Or, if all else fails, ask somebody who knows!
Similar to the listservs mentioned above, these two newsgroups allow for bulletin board-style communication on a variety of topics. The newsgroups can be accessed by typing them exactly as they appear above in a World Wide Web browser window (in Netscape, the "Go To" window, in Microsoft Explorer, the "address" widow). Messages can also be sorted by date, subject or author, but unlike listservs, you can post a message without subscribing to the group or having access to email. Topics on the newsgroups are fairly general but may be relevant to a technological search topic.

A listing of six Native American listservs on subjects ranging from general chat to language and education. Included also are links to the listservs's archives which can be sorted by date, subject, or author. NATIVE-L would be particularly useful for you, either by looking through the archives or by posting a question directly to the list. Subscription information is included on the site.
To: loriene2ute.co.utexes.rou
Subject: Pathfinders for FOUC Directions

Dear Lortene Roy:

The original document attached to this letter is a reproduction of a publication that was released by ERIC/CRESS. As I was preparing the document for processing, I noticed that you had returned an outdated reproduction release. This is particularly important because you checked level 2, and on the new release form, Level 2 has been split into Levels 2a and 2b.

Level 2a permits reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only. Level 2b permits reproduction and dissemination in microfiche only.

I am attaching an electronic version of the new release form to this letter. Please check Level 2a or 2b, sign the release, and return it to us by fax or mail.

Thank you for your cooperation. If you have any questions, call me at 1-800-224-0120.

Susan Voelkel
Processing Coordinator
ERIC/CRESS
P.O. Box 1308
Charleston, WV 25324
(304) 348-0120

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
ERIC REPRODUCTION RELEASE

I. Document Identification:
Title: Pathfinders for FOUC Directions: An Indigenous Educational Model
Author: Lortene Roy, editor
Corporate Source: 
Publication Date: 1998

II. Reproduction Release: (check one)
In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents abstracted in the monthly abstract journal of the ERIC system, Research in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document.

If permission is granted to reproduce and disseminate the identified document, please check one of the following options and sign the release form:

Level 1 allows reproduction and dissemination in paper copy and other ERIC archival media (e.g., microfiche) and in electronic media for ERIC archival, collection subscribers only.

Level 2a requires reproduction in paper copy and other ERIC archival media (e.g., microfiche) and in electronic media for ERIC archival, collection subscribers only.

Level 2b permits reproduction and dissemination in microfiche only.

Sign Here: I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exceptions are made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: Lortene Roy
Printed Name: Lortene Roy
Address: 528.564
AUSTIN, TEXAS 78712-1271
Date: 11 September 1998

III. Availability Information (from Non-ERIC Sources):
Complete if permission to reproduce is not granted to ERIE, or if you want ERIC to cite availability of this document from another source.

IV. Referral of ERIE to Copyright/Reproduction Rights Holder:
If the right to grant reproduction release is held by someone other than the address, please complete the following:

Name: 
Address: 

V. Attach this form to the document being submitted and send both to:
ERIC Clearinghouse on Rural Education and Small Schools
P.O. Box 1308
1011 Quartier Street
Charleston, WV 25324-1308

Phone and electronic mail numbers:
(304) 348-1308 (Clearinghouse toll-free number)
(304) 348-0437 (Clearinghouse direct number)
svoelkel@wvu.edu (Susan Voelkel at the Internet)