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ABSTRACT

This guide is a learning tool to help indigenous people use the Internet to become self-directed learners, join with other self-directed learners to build learning communities, and train others to become self-directed learners. After presenting basic information on how to get online, the guide is organized around four successive levels of self-empowerment. Level 1 describes how to become a self-directed learner, with activities on Web browsing and quick Web tours of fun sites and sites concerned with Native American resources, children, student research, preschool education, primary education, adult literacy, and education in general. Level 2 discusses the power of self-publishing on the Web, and describes how to how to create Web pages, the eight levels of Web-based self-expression, and where to access free Web tools and software. Level 3 discusses the power of building learning communities through Internet collaboration, mentoring, and teaching. Ten Internet collaborative tools are described; online courses are identified; and sites are given for Native American businesses, art, cultural survival, and global organizations supporting Indigenous connectivity. Level 4 covers the power of citizenship and enlightened expectations. Web tours are given that focus on learning communities, training resources for starting e-businesses, electronic democracy, Native American research and higher education, and grantwriting tips and funding sources. Since lifelong learning will supplant K-12 education, the concept of K-100 education is introduced, and resources are given for training trainers and curriculum development. (TD)

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Echoes in the Electronic Wind: A Native American Cross-cultural Internet Guide



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**Individual and Community
Self-publishing and Self-sufficiency**

RC 023107



Echoes in the Electronic Wind:

A Native American Cross-cultural Internet Guide



**Let us put our heads together
and see what life we will make for our children.
Tatanka lokanka (Sitting Bull)**

By Frank Odasz September 13, 2000

This entire guide is ONLINE! <http://lone-eagles.com/nativeguide.htm>

Use of This Guide for Trainers, and for Fund-raising

This guide is specifically intended to be used as a customizable resource for citizens helping citizens to understand how to realize their own full potential using Internet tools and resources. You're invited to customize any part of this guide, and the matching web pages, to make them more relevant for your local community and culture, ideally with URL's of local examples of web innovations and home-based Ecommerce businesses!

The entire 177 page word-processing file (WORD '97 format) of this guide is available for downloading from a link listed at the top of the online table of contents: <http://lone-eagles.com/nativeguide.htm> . You'll find it most convenient to click through the links while reading the online version.

Related resources, articles, grant templates, and online courses, including the "**Good Neighbor's Guide to Community Networking**," a report on **Native American Web Innovations, Spanish Language Educational Web Sites, and two online courses** are listed at <http://lone-eagles.com/teled.htm> and <http://lone-eagles.com> .

Distribution of this document as a fund-raising opportunity for non-profits, schools and community projects is specifically encouraged, though written permission is required for any for-profit use of this document. For example, this guide might be customized to be most appropriate for Native American self-empowerment training, and sold at the Taos Pueblo as the "**Taos Pueblo Self-Directed Learner's Internet Guide!**"

Professionally printed copies are available for \$10 each, plus \$2.00 shipping. Custom printings, to include title pages with your community, school, or project's name in the title, are available in batches of 100 copies or more, at no extra cost. Printed copies are less than 1/2 inch thick and are much easier to handle than 140 loose printed pages.

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To arrange technology training for your school, district, community, or organization, or to request copies, special printings, or reprint permission, contact Frank Odasz, frank@lone-eagles.com . The printing options, costs, and workshop information are detailed at <http://lone-eagles.com/services.htm> .

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About This Guide

CONTEXT: Unprecedented Self-empowerment Potential

This guide is a fast-track learning tool to help you use the Internet to learn whatever you need to know, on an ongoing basis. Your expectations of what you are capable of will grow best through direct hands-on learning, following those topics of greatest interest to you. Throughout human history, we've struggled with barriers to learning and sharing information. Today, suddenly, we have unprecedented power, which we've yet to recognize fully.

Using this guide, you'll learn to access specific information within seconds of having the need. You'll learn to create online learning experiences for others, to collaborate in many new and powerful ways, and to self-publish your own ideas using multimedia web pages.

As we first empower ourselves, and then our families, communities, and cultures, it will become overwhelming clear that there exists no upward limit to the number of people one individual can impact positively, worldwide. By sharing what we each learn, we'll all have access to all our joint knowledge. In an ideal world, we'd all save each other great amounts of time by broadly sharing the best of what we each learn.

Over the next fifteen years, many of the six billion people on the planet, represented by over 15,000 cultures, will receive the opportunity to access the Internet through new satellite and wireless technologies. What they will find, and whether it's supportive of their families and cultures, may ultimately be, in part, up to you.

Through the Internet, we're both learners and teachers, all the time. The interactive Internet offers everyone unlimited opportunity – unlike anything before in human history. We need to open ourselves to learning new ways of thinking in order to do what needs to be done for ourselves, our families, communities, and cultures.

As each of us learns to become a Lone Eagle - a **self-directed learner** - we'll be better able to join with other Lone Eagles to build learning communities in very powerful ways. However, there is a real responsibility that comes with this new power you'll find at your fingertips. You alone must decide what you believe about

TABLE OF CONTENTS

<http://lone-eagles.com/nativeguide.htm>

About This Guide	1
Unprecedented Self-empowerment Potential	1
Cross-Cultural Emphasis	3
Echoes in the Electronic Wind	3
Preparation for Getting Online	10
How to Get Your Own Home Computer or Laptop	10
How to Get Your Own Local Internet Access Account	10
Build on the Best Resources Available	11
The Special Mindset for Success!	11
Computer Literacy Primer	11
How Computers Can Help Build Community	12
Key Issues for Youth Using the Internet	14
Four Fundamental Historical Firsts	16
A Step-By-Step Guide to Self-Empowerment	16
The Four Levels (Winds) of Internet Self-Empowerment	17
LEVEL ONE:	
The Power of a Self-Directed Learner	18
Quickstart Web Browsing Awareness Activities	19
Gearing Up with Free Web Tools	20
Master Web-Browsing	21
Checklist Activity: Browsing and Cut and Paste Basics	22
Quick Web Tours	24
Must-See Fun Web Tour	24
Native American Best General Resource Sites	25
Exceptional Native American Sites Web Tour	26
Native American Educational Resources	27
Native American K-12 Innovative Projects	28
Native American Cultural Curriculum Projects/Resources	30
Native American Mentoring Programs and Resources	32
Native American K-12 Network Models	32
Indigenous Youth Projects	33

Native American Language Sites	33
Native American Personal + Family Health Care Web Tour	34
A General Family Health Care Web Tour	36
Parenting and Child Safety Web Tour	37
Kid's Web Tour	38
Student Research Tools Web Tour	40
Preschool and Primary Web Tour	42
Adult Literacy Web Tour	43
General Educational Web Tour	45
<u>Internet Searching Basics - Checklist Activity</u>	46
Creating Your Own Web Tours	48
Great Search Engines and Searching Tutorials	49
The Internet Style of Learning Essay	50
LEVEL TWO:	
<u>The Power of Self-Publishing, Globally</u>	51
Web Authoring Quickstart Awareness Activities	55
Creating a Web Page with Netscape Communicator	55
Creating a Resources Web Page with HTML	56
Easiest Web Page Authoring Resources	57
Advanced Web Page Authoring Resources	57
Instructional Web Authoring	60
HTML Web Authoring Tutorials	62
Free Web Collaboration Tools	63
Best Free Software Sites	64
Freebies Sites	65
<u>Eight Levels of Web-Based Self-Expression</u>	66
Text Files	66
Active Hyperlinks	66
Image Files	66
Audio Files	67
Video Files	68
Animation Files	68
Virtual Reality Markup Language (VRML) Files	69
CGI Data-handling programmed Files	69

LEVEL THREE:

The Power of Building Learning Communities

<u>Through Internet Collaboration, Mentoring, and Teaching</u>	70
Quickstart Awareness Activities	71
Distance Learning Key Issues	72
Online Mentorship Key Issues	72
Mentoring Models and Resources	73
K-12 Project Web Tour	73
Building Individual and Community Collaborative Capacity	77
Resources for Designing Collaborative Projects	81
<u>Building Cultural Learning Communities</u>	82
Culturally Appropriate Ecommerce	82
Cultural Entrepreneurship and Crafts Marketing	83
Native American Business Listings	84
Native American Ecommerce Sites	85
Native American Art Sites	85
Organizations Supporting Native American Businesses	86
Multi-cultural Resources and K-12 Projects	87
Cultural Survival Resources	89
Global Organizations Supporting Indigenous Connectivity	89
Global Development Resource Organizations	91
Alaskan Native Innovations Web Tour	92
<u>The Ten Top Internet Collaborative Tools</u>	93
1. Email	93
2. Listservs - Mailing Lists	94
3. Newsgroups	95
4. BBS's - Bulletin Board Systems	96
5. Web-conferencing	96
6. Internet Relay Chat (IRC) - Instant Messaging	96
7. MUDS/MOOS	97
8. Iphone and Internet Radio	98
9. Desktop Video Conferencing	98
10. VRML Chat Systems	99
<u>Online Courses and Learning Pathways</u>	100
Highly Recommended First Online Courses	100
Courses on Creating Your Own Online Courses	100

Culture Specific and Citizen-Created Courses	101
Online Course Sources for Professional Development	101
Distance Learning Clearinghouses and Virtual Universities	103

LEVEL FOUR:

The Power of Citizenship and Enlightened

Expectations - Public Problem-solving, Learning-to-Earn and

Electronic Democracy **104**

Quickstart Awareness Activities	107
Building Learning Communities Web Tour	108
Ebusiness Start-up Training Resources Web Tour	109
Community Network Planning Guides	112
Community Network Models	115
Electronic Democracy WebTour	115
Federal Government Resources	116
Government Sponsored Native American Agencies	117
Four Key Reports on Native Telecommunications	118
Native Technologies, Media, and Collaborative Networks	119
Community Technology Access Centers	120
Native American Research Sites	121
Native American Higher Education Sites	122
Community networking; Leveraging the Public Good Electronically	123
Innovation Diffusion -Looking at the Process of Change	128
Grantwriting Tips and Funding Sources	133

Train the Trainers Resources - Everyone a Teacher **138**

Use of This Guide for Trainers	138
Hosting An Ideal Community Workshop	138
Leading with Digital Art, Music and Photography to Promote Gender Equity and Broadest Interest	139
Workshop Presentation Tools and Resources	139
A Youth-Based Community Internet Awareness Workshop	139
Digital Storytelling to Raise Awareness	140
Internet Training Resources	143

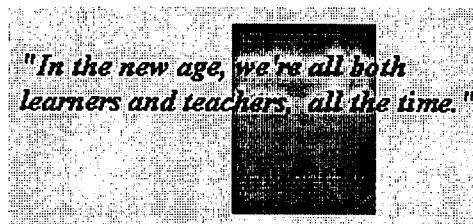
K-100 Essential Resources	145
School Technology Planning Guidelines	145
Media and Visual Literacy	147
Acceptable Use Policies	147
Copyright Guidelines	148
K-100 Topical Web Tours	149
Math Web Tour	149
Science Web Tour	150
English Web Tour	151
Arts Web Tour	152
Foreign Language Web Tour	153
Social Studies Web Tour	154
Internet History Web Tour	155
K-100 BEST Curriculum Resources	156
School and Community Internet Collaborative Services	160
Curriculum Integration Resources	161
State and Multi-state Curriculum Standards	161
Lesson Plans Archives	162
Online K-100 Courses	164
Home-schooling Resources	166

your responsibility to help others. There is great honor in helping others, and the temptation to put personal gain before this honor.

For any community, culture, or country, to reach its full potential, the full potential of each citizen must be realized. This guide is intended to be used as a “**train-the-trainers**” resource to help others learn to become self-directed learners, and then to build learning communities.

As citizens, teachers, and parents, we must learn to teach our youth to become self-sufficient learners...if they are to fly freely above the turmoil of the accelerating rate of change in our modern world. As we all learn to instruct others online, with measurable success, the door of unlimited global opportunities opens ever wider.

The specific goal of this guide is to allow you to leapfrog ahead to the best the Internet has to offer, with the least amount of time and effort. This guide presents hands-on exercises ranging from general overviews to in-depth exploration. As new, more powerful web tools evolve, this “online” guide will add them as simply and efficiently as possible.



This Guide is organized around four successive levels of self-empowerment

Level One: Becoming a Self-Directed Learner:

The reality of our fast-changing world requires that we all acquire “just-in-time” self-directed learning skills such that we can learn what we need, independently, whenever necessary.

Level Two: Self-Publishing Globally

If we all share what we learn, we'll all have access to all our joint knowledge.

"We're always ready to learn, never to be taught."

Winston Churchill;
Constructivist

Level Three: Building Learning Communities Through Mentoring

and Collaboration

Community is the sum of what we give to each other, and we now can teach anything to anyone, anywhere, anytime.

Level Four: Global Citizenship and Enlightened Expectations

Public problem-solving, learning-to-earn, and transnational activism hold our greatest individual and community benefits!

This entire guide can be found on the web at

<http://lone-eagles.com/nativeguide.htm>

Cross-cultural Emphasis of the Guide

The “cross-cultural” intent of this guide is to emphasize the potential individual and community benefits the Internet offers to all cultures. As expectations increase with experience, many will not understand what the Internet offers them until they establish their own hands-on experience and begin to see for themselves how they can benefit from the Internet’s unlimited potential.

This guide is written for all cultures in celebration of the cultural heritage of humankind. This shared heritage is no less than the story of the history of humankind’s search for self-identity and meaningful community. It is important that we all work together to preserve and document all world cultures, particularly the knowledge of our elders, before the opportunity is lost forever.

Echoes in the Electronic Wind

In the United States there are 481 federally recognized tribes, with over 300 non-federally recognized tribes. Throughout the long history of Native Americans new tribes have been created, as old tribes split apart for various reasons. Cultures change and evolve as conditions and ideas change, as they always have.

When the Spaniards brought the first iron knives and horses, life was improved for many tribes, and their cultures changed significantly. A century later, the Winchester rifle improved hunting and defense capabilities. Today, the hunt for that knowledge which can provide for tribal sustainability is discovering powerful new tools on the Internet. An electronic wind of new possibilities for self-empowerment has unexpectedly changed what Native Americans can do to support themselves and their tribes. **Look to the past, to see the future.**

Despite the powerful collaborative tools the Internet makes available, making money appears to dominate the Internet, not explorations on how to use these tools to build communities and

how best to support the social good. Leadership with vision is needed to demonstrate to the world's peoples how to make best use of these tools to build meaningful communities. Ethics and character are more important than ever as integral parts of this process.

Native Americans, despite widespread poverty and hardship, are among the first indigenous peoples in the world to explore the four winds of Internet empowerment as presented in this guide. The echoes of Native Americans' proud history needs to be heard globally through these electronic winds the Internet brings us as they have much wisdom to share.

Whereas many Native Americans do not yet have Internet access, most Native American Schools soon will have, and the costs are dropping while new satellite and wireless technologies are providing new affordable connectivity solutions.

The need exists for all Native Americans to identify the best practices for empowering family, community, and culture, if they indeed exist at all. A parallel need exists to assess the risks to traditional cultures represented by Internet access to unlimited information, both positive and negative, which no one can deny has the potential to change traditional cultures forever.

Whereas no one tribe can speak for all others, the opportunity exists to create a Native American Cross-cultural Internet Guide which highlights those Internet benefits, and risks, applicable to most tribes. This guide is intended as a first step model as to what could be created, and is intended to be further customized by individual tribes, perhaps even for international use by indigenous peoples worldwide. See the conditions for duplication at <http://lone-eagles.com/for-trainers.htm> or page two of this guide.

Native Americans are among the first indigenous peoples to explore both the positive and negative uses of the Internet, and have the opportunity to share what they learn with the billions of indigenous individuals who will experience the Internet in the coming years.

With the Internet as a self-publishing medium, Native Americans have the opportunity to inform peoples worldwide about their culture, their history, and their contemporary issues.

This is a time for exploring our joint full potential, and envisioning what could be, to the best each of us is able. This is a time for

mentoring those who don't know what they need to know, in order to prevent the unnecessary hardships that will result from people not understanding the opportunities at hand.

This guide includes many Native American innovations using Internet tools to support tribal needs. Adventurous spirits may ultimately bring the greatest strengths to their tribes for self-preservation.

Self-sufficiency today comes from the ability to use Internet tools for self-directed learning using resources from all over the world. In most tribes it is the youth who are the technology leaders, and key change agents. Many tribes have partnered their youth with their elders to jointly explore multi-media cultural self-expression, bringing a powerful new global voice to their tribes. We're limited only by our collective imaginations.

**Imagination is more important than knowledge
Albert Einstein**

Important Issues

Many resources in this guide directly address the important issues listed briefly below.

Privacy

Any communications on the Internet might be intercepted or accessed by someone without your permission. Information such as important tribal secrets should never be put online.

Electronic Privacy Information Center

<http://www.epic.org>

Technically oriented resources on issues and legislation regarding electronic privacy.

Safety

The Internet can bring exposure to those who would put you at risk. There are many guidelines available, particularly for youth, regarding Internet safety. (See the Parenting Web Tour on page 37.)

Cybernetiquette for kids!

<http://disney.go.com/cybersafety> **Educators' favorite.**

Federal Trade Commission

<http://ftc.gov>

Working for consumer protection and a competitive marketplace. Includes kids privacy and Internet safety resources.

Inappropriate Information

The availability of pornography, hate literature, bomb-making and drug-making information on the Internet is a real issue, counter-balanced by vast positive knowledge. Supervision of youth when using Internet and adhering to the morals and values of the tribe will be the challenges presented by the negative information on the Internet.

Child Monitoring Software

<http://www.bluewolfnet.com> Software to monitor Internet use by children.

Authenticity Issues

A Congressional Office of Technology Assessment study states - "Sensitive Native religious and spiritual information, if computerized, could more easily be accessed by unauthorized persons and used for inappropriate purposes." "Computer

networking makes it more difficult to verify the authenticity of users; some non-Indians have been using Indian names and computer addresses on the Internet. Native arts, crafts, and traditional practices are especially vulnerable to misuse and misrepresentation. Non-Natives may use or sell Native artwork electronically without authorization or fair compensation, or may advertise and sell non-Native art as Native. These kinds of activities are clear violations of privacy and intellectual property rights and also compromise Native cultural identity and self-determination."

No one from the "outside" of a cultural group can take responsibility for monitoring the authenticity and privacy issues as this is an essential role for the cultural group itself as a fundamental source of self-identity and purpose.

Evaluation Guidelines for Web Sites about American Indian Peoples <http://www.u.arizona.edu/~ecubbins/webcrit.html>
Maintained by Elaine Cubbins, these important guidelines address important issues such as authenticity, appropriateness, respect and assessing quality.

Information Age Carpetbaggers

Many Montanan tribes, through experience, would caution other Native groups "Beware white-men bearing grant proposals." It has been repeated many times that promises were made, equipment delivered, and no lasting benefit realized, while literally millions of dollars have been spent on grants funded specifically to benefit Montanan Native groups. The lesson learned is "Don't get involved with projects that did not involve you from the very start."

Most tribes find it offensive to have someone show up with a grant funded on their behalf, using their name and issues to get the money, but without their involvement. Often, most of the money goes for administration of the grant with only a token amount going to the tribe. Grant-writing tips and funding sources are included in this guide.

Electronic Democracy and Transnational Activism

While initially many indigenous persons may not understand why access to global information might be in their best interests, the greatest benefit we can hope they will be able to understand and realize is that of their participation in the global community. Modern communications is literally reducing the importance of nationalism and physical borders. As demonstrated for decades by

Amnesty International, those who share concern for a cause can collaborate effectively, and on an ongoing basis via email, without regard to physical location or time available.

As an example; Amnesty International sends out via email "urgent alerts" to its local groups and participating individuals and K-12 schools with details on human rights violations, requesting its members to write informed email and printed letters of protest to specific government officials in the offending governments. Hundreds of lives have been spared from wrongful incarceration due to these coordinated efforts. Children are thus able to learn at a young age the power of thoughtful Internet collaboration. Many resources on the Internet exist which teach activism skills and list global causes that are aggressively using Internet collaboration.

WebActive.com includes a searchable database of activist causes with web sites at <http://www.webactive.com>

NetAction has curriculum for virtual activists.
<http://www.netaction.org/training>

Native American Activist sites
<http://www.hanksville.org/NAresources/indices/NAactivist.html>
A great listings to see how others are using the Internet!

An "Electronic Democracy" Web Tour
<http://lone-eagles.com/democracy.htm>

Cultural Impacts and Cultural Survival Issues

"Information is power." The historical disadvantage Native Americans have suffered is primarily one of keeping informed, and having a voice, where federal decision-making is concerned. Using the Internet, Native Americans are learning how to keep up-to-date on important legislation, how to share information among themselves, and how to use the Internet to exert political pressure on decision-makers. Once indigenous peoples understand what's at stake, and how to use these information and collaborative tools, they quickly understand that they are essential to their survival and wellbeing.

Unlimited information access will inevitably change and evolve a culture. The realities for survival in the modern world preclude the luxury of being oblivious to outside forces.

All cultural groups are challenged with how best to deal with minimizing the potential cultural risks to their tradition of the potential impact of exposure to other worldviews, including

negative information via the Internet. **Each cultural group must be their own ultimate authority for learning how best to deal with these potential challenges to the strength, integrity and future of their own traditional culture.**

Citizenship - Local and Global

We're all learning that it is indeed possible to maintain one's own cultural traditions while becoming a true global citizen, skilled in information retrieval and tolerant of the diversity of all human cultures and beliefs. Cultures that survived have adjusted to new technologies. As already stated, with the power the Internet brings to your fingertips, perhaps comes also a responsibility to help others. **One cannot deny that the potential for any individual, or community, to impact vast numbers of people via the Internet is very, very, real.**

“Peace comes within the souls of men [and women] when they realize their relationship, their oneness, with the universe and all its powers, and realize that the center is really everywhere. It is within each of us.” **Black Elk**

For more about cultural empowerment, read Culture Club at <http://lone-eagles.com/cultureclub.htm> .

Acknowledgements: This guide reflects lessons learned directly from working with, and listening to, Alaskan Natives, Native Americans, Migrant educators, Hawaiians, Texans, and many other diverse citizens and communities. The goal of this guide is to teach how people can best support one another using these new technologies, **combining caring and connectivity with common sense.**

Inspiration for this guide comes from my parents, Frank and Joanne, who tirelessly encouraged learning and lovingly instilled the desire to help others as represented throughout this guide.

Author's background information - <http://lone-eagles.com/articles/frank.htm>

Preparation for Getting Online

How to Get Your Own Home Computer or Laptop

You need your own computer! The most convenient place to learn about computers and Internet is at home. Happily, you'll find prices are dropping steadily! Desktop computer prices start at around \$500. Laptop computer prices start at around \$900. Leasing options can help you get a computer, with unlimited Internet for most locations, for roughly twenty-five dollars a month, with the advantage of upgrading to a newer computer later at no extra charge. See PeoplePC <http://www.peoplepc.com> for \$24.95/month, Gateway <http://www.gateway.com> for \$29.95/month. Most people spend more than this \$1/day cost on junk food. You can team up with others to share a computer to lower the cost even further.

Computer recycling programs are growing rapidly due to the increasing surplus of used computers. Inquire locally. One federal computer recycling program is <http://computers.fed.gov>

A CD-ROM drive and fast modem are generally standard, and definitely recommended. Your own connection may be through a Tachyon satellite system at speeds much faster than any modem. This will allow access to even more resources than a connection through the telephone. Don't feel you need the fastest or most expensive computer. Software is often included as well, and free software is readily available via Internet. The investment will pay for itself many times over.

For you to develop Internet skills, hands-on "quiet" time and convenient Internet access are essential. Many people are learning to use the Internet to provide technical support, and encouragement, to one another. Watch for local mentoring opportunities.

How to Get Your Own Local Internet Account

If you already own a computer, for \$20 or less a month, you can enjoy unlimited hours on the Internet, your own email account, and you can even post your own web pages! Inquire at your local computer store as to your options for local Internet access, or go to: <http://www.thelist.com> . Free Internet access is becoming available in urban areas for those willing to endure multiple advertisements.

Generally, there is a small set-up fee which includes having someone install the necessary software on your computer and provide you with a hands-on lesson on how to use your browser and email software. Step-by-step easy tutorials are included with most software programs.

Build on the Best Resources Available

You'll be amazed at how easy this whole process of getting online has become. Using search engines and modern software, you'll be able to find the specific information you need. You can build on the extensive work of others to create your own original resources and lessons, incorporating exciting resources worldwide. You can learn new common sense methods to use your limited time more efficiently.

You'll also have the option of extending your impact on the world, as you'll see others are doing, when you follow the activities in this guide.

The Special Mindset for Success: Patience and Perseverance

Learning to experiment and 'play' is important, and is one reason youth are so far ahead of adults in their comfort level with computers. Adults need to learn to play and not to fear they will break the computer, or shame themselves forever, if they make a mistake. Mistakes are positive learning experiences, make lots of them!

Computers take patience and perseverance, and can often be extremely frustrating, particularly when one is just getting started and friendly help is not immediately available.

"We're all immigrants to a new age."

Margaret Mead

It is more important to maintain an accurate overview of the capabilities of computers and Internet than to feel one has to know "how to do" everything. Once you determine what capabilities you wish to acquire as skills, learning the "how-to" is generally a straight-forward step-by-step process, which is always made more enjoyable when you can learn with, or from, someone else.

A Computer Literacy Primer

The hardest part of learning to use computers and Internet is getting started! Most people feel threatened by all there is to learn, until they gain self-confidence from learning a few initial skills. Once you better understand the broad range of possibilities, you'll find that what you really need to learn is infinitely less than you probably thought at first.

When using computers, nearly everything you'll do involves files in some way. Files of different types contain different types of information: text, images, web pages, etc. You'll basically be creating, editing, moving, sending, or receiving files of one kind or another. Most software programs have similar menus, so once you learn to use files related to a specific program, such as a word-processor, you'll have already mastered the basics of most programs regardless of the different types of files they'll use.

Nearly everything with computers becomes much more fun once you get past the jittery basics. Patience and perseverance will see you through! Take lots of breaks, use the HELP buttons contained in most software programs as they offer step-by-step instructions for most everything you can think of. Talk to those who have been using computers for a while to benefit from their experience and advice.

Learn with others whenever possible and don't be hard on yourself when you get stuck. Problems are most always little things which are best resolved by asking questions and/or noodling around when you're fresh.

How Computers Can Help Build Community

We live today in a world where the rate of change is accelerating. Being unaware of the impact these changes will have on us and our communities will have increasingly serious risks. Lifelong learning, K-100, has become an essential skill, and never stops. Many would argue this is fast becoming an essential survival skill. Information overload creates new pressures to create new forms of knowledge sharing communities.

If we all share what we know, we'll all have access to all our knowledge. If we hoard knowledge and keep it from others for competitive advantage, we'll all have only what we ourselves have learned."

What connected computers do very well is match specific needs with specific resources. Through good heartedness, and

collaborative tools, we all will be better able to find, and share, that specific information which will make a positive difference in our own lives, and the lives of others, worldwide.

With the incredible power the Internet brings to individuals, comes perhaps the responsibility to use it wisely for the benefit of all. First, we need to gain the skills to serve our own personal learning needs, and then, ideally, we'll use our skills to benefit our families, communities, nations, cultures, and the world.

If we create self-directed learning opportunities for others on the web, we may benefit untold thousands of people looking to learn what they need to know to deal with the rapidly changing realities of our modern world. Building learning opportunities, and building learning communities, are arguably the most honorable purposes toward which you can apply your skills.

As an individual, you may wish to engage in aggressive independent learning in order to meet the needs of your family, community, and culture. The Internet provides you the opportunity to learn from the best resources and people, worldwide.

Growth Steps from Individual Learning to Building Learning Communities

- 1. Mastery of Individual Self-Directed Learning Skills**
- 2. Mentoring and teaching others to develop their skills and confidence to become Self-directed Learners**
- 3. Citizenship, Local and Global:
Taking Action for What You Believe In!**
- 4. Learning-to-Earn for Individual, Familial, Community,
and Cultural Sustainability**

Key Issues for Youth Using the Internet

Before engaging youth in “live” Internet activities you should be aware of a few key issues. The following issues are explained at length on many sites on the Internet, complete with many resources for dealing with these issues. A simple keyword search on the Internet regarding the following topics will produce many other quality sites on these important issues. Tips on learning to search the Internet are included in this guide.

Copyrights and Fair Use

Because all information on the Internet is digital, it can easily be saved and reused using computers. The issue of how best to deal with copyright issues and educational fair use of this information is vitally important. Because we all will soon be producers of multimedia content on the Internet, we need to understand our own intellectual property rights! We need to learn how to properly cite resources that we intend to use as part of our own work and we must learn to assess and question the authenticity of the information we acquire.

Inappropriate Material

Because the first amendment of the constitution guarantees rights for free speech, we have the problem of pornographic material on the Internet. Hate literature and all sorts of information and propaganda from extremist groups are accessible on the Internet. Strategies for dealing with these issues vary, but are well-documented in many locations. Many resources to help parents deal with this, and other issues, are on page 37 of this guide and at <http://lone-eagles.com/webtour3.htm> .

Youth use of email and posting their own web pages raises issues of child safety and privacy. Typically, simple supervision and candid discussion with youth regarding these issues will minimize the risk of difficulties.

For Kids Only

As a member of the first digital generation, your ability to use technology, and to imagine new uses, is much greater than that of most adults. Adults would greatly benefit from your help and patience.

With the power of unlimited access to information, you might consider what your responsibility might be to use this power wisely, and to support the social good.

During your life, you'll have the power to improve the lives of an unlimited number of people, worldwide. Already, many examples exist of Internet resources created by kids that have been used by millions of people! The Internet represents far greater possibilities than most people today can envision. How you spend your time will determine the impact your life will have made.

Use your precious time wisely, take the time to have fun, and remember you are part of the first generation in the history of humankind to receive this awesome gift of power.

For Parents Only

As the first teacher of your children, you'll find many K-12 resources listed in this guide. Adults have grown up spending more than six hours a day of passive viewing of television, but children will better benefit from using some of this time for interactive self-directed learning on the Internet.

Kids spend only 19% of their time attending school. The home is the real center of learning and what you do to foster the home as a genuine learning environment is extremely important. Use this guide to get **personally involved** in the learning process to show your kids that you value learning.

Kids today represent the first generation to have unlimited information access at their fingertips. It is unlikely you will ultimately be able to prohibit your kids from access to either the good, or the bad, information that's available. However, you have the very important opportunity to help them build the understanding between what's right and what's wrong in accordance with your beliefs and culture.

Four Fundamental Historical Firsts

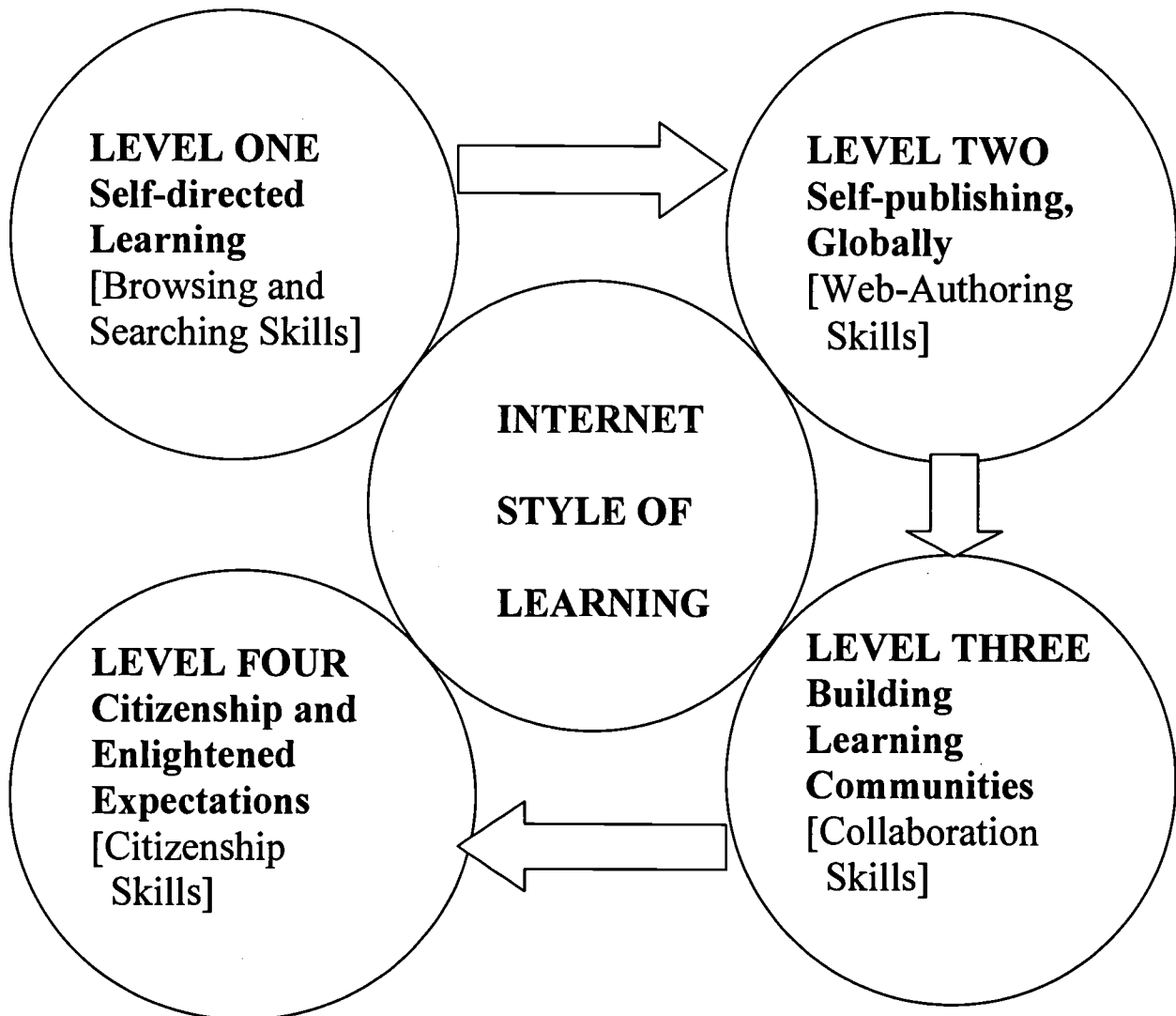
The Internet brings individuals and communities four indisputably important major historical firsts:

- 1. Fingertip access to the world's knowledge base;** the ability to find specific information within seconds from worldwide sources. **This allows self-empowerment through self-directed, just-in-time, inquiry-based learning.**
- 2. Inexpensive global self-publishing for both individuals and communities;** sharing creative works and resources with an authentic peer audience through the ability to self-publish globally using multimedia on a shoestring budget on equal par with the world's largest universities, corporations, and governments. **This allows for every story to be told and dramatically facilitates the sharing of information.**
- 3. The ability to collaborate with individuals without restraint due to distance or time,** either privately one-to-one or publicly involving whole communities, bringing people together around purposeful causes to take organized action. **The Internet increases the quantity and quality of human relationships.**
- 4. Youth often know more about computers and Internet than adults,** making them valuable mentoring and technical support resources. Youth typically outpace adults in their acquisition of new skills when they have the opportunity for Internet access at school, and particularly at home. Why? One reason is they often have the time adults often don't have!! This creates a potentially positive opportunity for adults to learn from youth and to reward youth with social recognition for sharing their skills with others.

A Step-By-Step Guide to Self-Empowerment

This guide is structured around **four successive empowerment levels for using the Internet, related to the four historical firsts**. This guide represents a **logical, practical, cross-cultural approach** supported by self-directed learning resources from a wide variety of Internet sources. We know we all learn best through direct hands-on exploration. **Have Fun!**

The Four Levels (Winds) of Internet Self-empowerment



Level One: The Power of a Self-directed Learner

CONTEXT: It is fast becoming an essential skill to be able to find information upon a topic, reliably, competently, and at a moment's notice. Never before in human history have learners had the fingertip access to the global knowledge that they have today. Software on the Internet generally referred to as 'search engines' can search millions of resources for very specific information in seconds and are very easy to learn and use.

Minutes spent learning search engines will save hours, even weeks, of time. Learning effective techniques for use of search engines is one of the most important skills we can learn.

All software today includes thorough help guides, and since software keeps changing and improving, the skill of being able to teach oneself new software using these help guides, on an ongoing basis, is vitally important! One can observe youth being very aware of the usefulness of these help guides, while many adults are often unaware of their usefulness.

"Knowledge is of two kinds: we know a subject ourselves, or we know where to find information upon it."

Samuel Johnson 1709-1784

Quickstart Web-Browsing Awareness Activities

Regardless of your current skill level with the Internet, you're likely to find the enclosed self-directed hands-on activities helpful.

ACTIVITY: Use the following **Browsing Basics Checklist** to master web browsing.

ACTIVITY: Explore “Gearing Up With Free Web Tools!” <http://lone-eagles.com/currtour.htm> and get your own free email account if you don't already have one!

ACTIVITY: Explore the enclosed hands-on “Quick Web Tours” <http://lone-eagles.com/webtours.htm> which interest you most, to get a taste of the best of the best!

ACTIVITY: Use the following **Searching Basics Checklist** to master Internet searching skills! <http://lone-eagles.com/search.htm>

ACTIVITY: Practice translating Web pages into different languages to see how easy it is! Details are in the **Searching Basics Checklist**!

ACTIVITY: Use the following tutorials to create your own web tours!

ACTIVITY: Read the **Internet Style of Learning Essay** <http://lone-eagles.com/islessay.htm>

Gearing Up With Free Web Tools

<http://lone-eagles.com/currtour.htm>

First there was free email (www.hotmail.com),

(All family members can have their own email account which can be accessed through any Internet connection. Dozens of similar sites now offer free email.)

then free animated musical greeting cards

(www.bluemountain.com),

(In only a couple minutes you can create a customized web page greeting card with animations and music. Then you can send the web address of your card via email to anyone you like! This is the quickest way to create your first web page.)

then free web page hosting (www.homepage.com, www.homestead.com)

(Fill in the blanks to create your own web page, add your own digital photos, return anytime to make changes, give your own web address to anyone you like. Easy and free.)

then free private group conferencing

(www.jointplanning.com for group planning,
www.ecircles.com for families)

(Web conferencing, photo and file sharing, event calendars, birthday reminders, chat, and more, which you control for your own private groups.)

then free online course authoring (www.blackboard.com),

(Anyone can teach anything to anyone, anywhere, anytime with the latest in online course authoring and course management tools.)

then free online business creation (www.bigstep.com),

(Free business web pages. Free services for receiving credit card payments through your web page are available.)

and now we're hearing about PC's that come with Internet included for \$24.95/month

(www.peoplepc.com.)

(Be sure you're in an area where local access to the Internet is available through this offer.)

What Next?!! Since many businesses have been successfully created by offering free services, and selling advertising banners based on the number of people visiting their sites, you can expect to see more free sites with increasing levels of usefulness! These businesses will be competing to see who can bring you the most benefit with the least effort and time on your part. Because of the volatility of the Internet startup companies, you may see these services merge and disappear, as other new ones begin. **A new freebies site is Freeshop.com, <http://freeshop.com>.**

How will you, and your community, stay on top of the continuing wave of new, self-empowering free services? The real question is; **“How will we all learn to use the best free web tools to produce the most tangible benefits, on an ongoing basis?!!”**

Linking to the best learning resources, created by potentially anyone, adds value to any individual’s web site. Such brokerage of resources is demonstrated in this guide, with sincere gratitude to those who shared their knowledge to help others win the freedom education offers. More free web tools are listed at <http://lone-eagles.com/webdev.htm> , also listed on page 56 of this guide.

Master Web Browsing

Learn the basics for using a web browser to access, print, and save web pages, using the Checklist Activity on the next page or by exploring the tutorials below.

1. From the Cyber Playground

<http://www.edu-cyberpg.com>

they offer a great browsing tutorial at

<http://www.edu-cyberpg.com/Read This First.html>

A great example of easy step-by-step instruction.

2. WebTeacher Tutorials:

<http://www.webteacher.org/>

A very complete collection of short tutorials.

3. Learn-the-Net tutorials

<http://www.learnthenet.com>

A complementary second collection of great, short tutorials.

4. Polaris Internet Tutorials

<http://www.provide.net/~bfield/polaris/index.html>

To be sure you find what you need, here’s one last collection.

Checklist Activity:

Web-Browsing and "Cut And Paste" Basics

The following browser basics are common to all browsers. Refer to the "HELP" buttons on your particular browser, or someone (perhaps a student) who is familiar with your browser. You may wish to utilize some of the tutorials on browsing listed in this handbook's hands-on resources.

_____ I CAN CONNECT TO ANY WEB ADDRESS

(Enter a web address to connect to a web site.)

Click on the long white bar nearest the top of the screen. If existing text in this bar becomes highlighted just type the web address for the site you want to visit and press the Enter or Return key. Otherwise, click on the white bar and notice the black vertical line (cursor) and delete the existing address, replacing it with the one you want. Press the return or enter key to connect to that web site. Most browsers have a little picture that spins or has comets flying, indicating you're connecting to a web site. If this movement stops, repeat the above and be careful not to give the computer more commands than it can handle at one time.

Anything you point to which changes the arrow cursor to a little hand with a pointing finger is called a hyperlink. Click to connect to the resource the hyperlink represents.

_____ I CAN GO BACK TO PREVIOUS PAGE

Click on the BACK button at the upper left of the screen to return to last page viewed.

_____ GO BACK TO VIEW WHERE YOU'VE BEEN

Point to the word "GO" at the top of the screen and hold down the left mouse button, (for Macs use the single button,) and drag down to the web location to which you'd like to return.

_____ I CAN SCROLL BOTH VERTICALLY AND HORIZONTALLY

Point to the vertical bar to the right of the web page and click on the little black vertical arrow at the top which points up, and then on the arrow at the bottom of the scroll bar which points down. The horizontal scroll bar at the bottom works the same way. If you click on the web page, you can also use the keyboard arrow keys.

I CAN PRINT ANY WEB PAGE

To print any web page click on the print button at the top of the screen or select the Print option from the "File" pull-down menu.

I CAN GET TO THE ONLINE HELP RESOURCES AND TUTORIALS

Click on the HELP button and experiment with both the Index and Contents options. Type "browsing" in the white bar of the Index option to see how easily it provides you with tips. Scan down the "Contents" listing to appreciate all the options available.

I CAN USE CUT AND PASTE WITH TEXT

Open a new document with any word-processing program and return to the browser. Hold the left or single mouse button down and drag it across text from any web page until the text is highlighted. From the "Edit" pull-down menu at the top of the screen select "COPY" (while the text is still highlighted.) Return to your word-processing document and select from the "Edit" menu the "PASTE" option. Repeat the process until you are comfortable with the steps.

I CAN SAVE ANY IMAGE OR WEB PAGE

Point to any image, or animation, on any web page and:

FOR PC'S: Hold down the RIGHT button, a menu will appear, select "Save Image As," and save this image wherever you like. You can then use the "Insert Image" of your word-processing or graphics programs to use the image with your own files. Be aware of copyright issues. To save a web page select File/Save, only the text will be saved.

FOR MAC'S: Hold down the single mouse button, a menu will appear, select "Save Image As," and save the image. Note you can "Copy this image" which allows you to "PASTE" it in any document. Be aware of copyright issues. To save a web page select File/Save, only the text will be saved.

Quick Web Tours

Spend just three minutes at each site to appreciate the volume and quality of what's available, and then return to your favorite sites later for more in-depth exploration. Here are 30 minute mini-tours of the best resources on key topics. The most exceptional links will be marked with a happy face bullet as shown below. You'll find these Web Tours at <http://lone-eagles.com/webtours.htm>

MUST-SEE FUN WEB TOUR

It is very important to learn to “play” online as this is the most effective way to learn Internet skills and gain confidence using the Internet!

- **MapQuest!** <http://www.mapquest.com>
Type in any address to see custom map and much more.
- **Animated Musical Greeting Cards** <http://www.bluemountain.com>
Send animated musical greeting cards via email!
- **Weather.com** <http://www.weather.com>
Extensive weather-related resources
- **Educational Cyber Playground**
<http://www.edu-cyberpg.com> Playing to Learn, easy beginners help.
- **About.com** <http://About.com>
Mentors hosting topical resource web sites.
- **Freeshop.com** <http://freeshop.com>
Free web tools and freebies of all kinds.
- **Addashop.com** <http://addashop.com>
Create your own Ebusiness site in five minutes.
- **Center for Digital Storytelling**
<http://www.storycenter.org/storyplace.html>
Resources for telling your community's story on the web .
- **Leonard's CAM WORLD**
<http://www.leonardsworlds.com/camera.html>
One of the best collections of Internet camera sites. Check it out!
- **Native American Artist's Web Sites**
<http://www.indianvillage.com>
Ecommerce sites for Native American artists at reasonable rates!
A great example of how easy it can be to get an Ecommerce site up and going!

Native American Best General Resource Sites

Many people have created comprehensive listings of all the good Native American resources web sites they could find. Here is a listing of the best of these "Meta-sites:"

- **University of Pittsburgh Listing of Native American Sites**
<http://www.pitt.edu/~lmitten/indians.html>
Lisa Mitten, self-described as a mixed-blood Mohawk urban Indian, and a librarian at the University of Pittsburgh, has created perhaps the best single Native American Web Resources site on the Internet. Great links to Native nations, businesses, culture, languages, and much more. Updated regularly.
- **Hanksville Index of Native American Internet Resources**
<http://www.hanksville.org/NAresources>
This site is constructed primarily to provide information resources to the Native American community. Maintained by Karen M. Strom, she has done an incredible job collecting resources. Contains listings of home pages of individual Native Americans. Updated regularly.
- **NativeWeb**
<http://www.nativeweb.org>
NativeWeb is an international, nonprofit, educational organization dedicated to using telecommunications including computer technology and the Internet to disseminate information from and about Native or Indigenous nations, peoples and organizations around the world. Contains a database of over 3,000 links including message boards and listservs. Their main resources page is <http://www.nativeweb.org/resources>
- **CowboyNet's Native American Links**
<http://www.cowboy.net>
A slick commercial "mall" site presenting a wide range of services. Their listing of Native American links has resource sections for tribes, organizations, education, government, art & culture.
<http://www.cowboy.net/native>
- **Wild Apache Native American Resources**
<http://www.wildapache.net/nativeamericanevents/pages/NAlinksN.shtml>
Arranged in 30 categories and updated often, this Clarksdale, Arizona, site has annotated links for health, education, gambling, culture, politics that lead to hundreds of other sites around the country.

- **Smithsonian National Museum of the American Indian (NMAI)**
<http://www.si.edu/nmai>
High quality resources from the Smithsonian. Review their Native American links listing, educational resources, and don't miss "**Conexus - A Virtual Tour of the NMAI**" created by Native American students.
- **National Native Information Center**
<http://nnic.com/pgs/NNICHome.html>
Links to other Native organizations across the country, from MIGIZI Communications is a non-profit organization providing services to the American Indian community. <http://migizi.org> .
They offer to design a web site for you for \$250.

Exceptional Native American Resources Web Tour

Spend at least a few minutes exploring each site to appreciate the diverse creative applications of web-based self-publishing!

- **Lisa Mitten's Native Cultural Expression links**
<http://www.pitt.edu/~lmitten/music.html>
Native music and arts organizations,(record labels and distributors, sources for Native music) and individual web pages (singers, drums, artists, performers, celebrities, actors, actresses, storytellers, authors and activists.)
- **Hanksville Native American Cultural sites**
<http://www.hanksville.org/NAresources/indices/NAculture.html>
Multi-cultural resources and hundreds of tribal web sites from the U.S., Canada, and Latin America..
- **Individual Native Nations**
<http://www.pitt.edu/~lmitten/nations.html>
Contains links to pages that have either been set up by the nations themselves, or are devoted to a particular nation, and are alphabetical by tribal name. Includes both federally recognized and unrecognized tribes. Images mark those sites maintained by the tribes themselves.
- **Genealogy Resources**
<http://www.hanksville.org/NAresources/indices/NAgenealogy.html>
Trace your roots with over 40 Native American genealogy resources.
- **Native American Activist sites**
<http://www.hanksville.org/NAresources/indices/NAactivist.html>
Over 60 web sites using the web for advocating Native American-related causes. Note the First People's Email Campaign.

See also: <http://lone-eagles.com/native.htm> and <http://lone-eagles.com/alaskan.htm>

Native American Educational Resources

The first three sites below have the most extensive listings to explore.

- **NativeWeb Educational resources**
<http://www.nativeweb.org/resources/education>
Nine educational categories. The K-12 listing includes a Navajo Classroom Grandmother program and a Four Winds program for students with disabilities.
- **Indian Education, Tribal Colleges and Native Studies Programs**
<http://www.pitt.edu/~lmitten/education.html>
Includes listings of over 100 Indian education resource sites, plus listings of Indian education organizations, Indian student organizations, K-12 schools and programs.
- **Index of Native American Indigenous Knowledge Resources on the Internet**
<http://www.hanksville.org/NAresources/indices/NAknowledge.html>
Includes sites for life sciences, astronomy, math and the physical sciences.
- **Useful Links for Tribal Librarians, by Elaine Cubbins**
<http://www.u.arizona.edu/~ecubbins/useful.html>
Includes funding sources for tribal libraries, training and tools, archives and bibliographies, and more. Elaine also maintains "**Techniques for Evaluating Native American Web Sites**"
<http://www.u.arizona.edu/~ecubbins/webcrit.html>
A very important resource.
- **Native American Home-school Association**
<http://expage.com/page/nahomeschool>
Saving Our Culture For Our Children Through Our Children
- **Native Child Pre-3 Curriculum**
<http://www.nativechild.com>
Curriculum Material for Preschools With a Focus on Native American Tribes Resources for the Classroom PreK-3. Designed for three-to five year old children in Native American Head Start Centers and Preschools, NativeChild's goal is to affirm the Indian child's culture and identity in a positive way through a curriculum that builds self confidence and a sense of belonging. The resources are also developed to help non- native childhood professionals promote multicultural understanding of Native Americans for both teachers and children.

- **ERIC Native Education Directory**
<http://www.ael.org/eric/ned.htm>
Organizations and Resources for Educators of Native Americans listed in five sections which include International, National, and Multistate Nongovernmental Organizations and Federal Programs. Section 1.1 offers "Advocacy, Networking, and Reform Resources" and Section 1.4 offers "Youth Leadership, Mentoring, and Service Resources".

Native American K-12 Innovative Projects

- **Thinkquest Pow-Wow Page:**
<http://tqd.advanced.org/3081>
Three high school kids (one Native) from New Mexico won second prize in the Social Studies category for this exemplary instructional web site which teaches about Pow-wows of the Southwest Native Americans! Includes sound files of singers and drummers!
- **Choctaw Cyberfair Community Project**
<http://cyberfair.gsn.org/pres/index.htm>
A winning entry in the International Cyberfair competition for elementary students! A nice example of a student-created community web page!
- **Taos Pueblo Day School**
<http://www.laplaza.org/edu/tds/index.html>
Creative works from youth at the Taos Pueblo Day School
See the student projects and online student newsletter!
Fifth-grade storytelling <http://www.laplaza.org/edu/tpds/stories>
- **I*EARN projects (International Education and Resource Network)**
<http://www.earn.org>
Thousands of schools from over 80 countries participating!
I*EARN Projects listing
<http://www.earn.org/projects/fp.html>
See the Indigenous Arts exchange and the First Peoples Project. Elementary indigenous students worldwide share their art work via fax technologies, supported by Email. Fifth graders at the Taos Pueblo Day school (above) participated with great excitement!
- **Alaska Native Art Virtual Museum**
http://www.asd.k12.ak.us/schools/William_Tyson/TysonHomePage.html
Select the Alaskan Native Art virtual Museum. Great work by elementary students. A winning entry in the International Cyberfair competition!

- **How Our Hawaiian Islands Were Formed**
<http://tjjunior.thinkquest.org/5410>
Elementary students National Thinkquest Junior Winning Entry! An inspiring example for elementary students everywhere on how they can use the web to tell THEIR story.
- **A Virtual Tour of the National Museum of the American Indian Exhibitions (Smithsonian)** <http://www.conexus.si.edu/VRTour>
Youth have created an exceptional Native American museum model using special imaging tools! This was part of the 4Directions challenge grant involving over 30 Native American schools.
<http://www.4directions.org>
- **Leo Ussak Elementary School**
<http://www.arctic.ca/LUS>
One of the most advanced Native School web sites out there! Note their community technology center, student projects, newsletter and more! Models a wide variety of wonderful ideas and capabilities and is an excellent model to inspire other schools! Well worth extensive study!
- **Mt. Edgecumbe Native Boarding School, Sitka, Alaska**
<http://www.mehs.educ.state.ak.us>
An exceptional model for electronic student portfolios and includes a student-written tutorial on how to create such portfolios. The school is expanding their entrepreneurship emphasis. The students creativity is inspiring!
- **Galena Charter School, Interior Distance Learning for Alaska (IDEA) and the Yukon-Koyukuk School District**
<http://www.galenaalaska.org>
The Native village of Galena created a distance learning project "Interior Distance Education of Alaska, (IDEA)" involving over 3,000 home schoolers Alaska-wide via Internet, to become the 7th largest school district in Alaska, 250 miles from the nearest road system with a local population of around 300. Ten Native villages received 2-way Internet satellite systems. Includes the technology intensive Project Education Native Charter School.
- **Pueblo Project; A Global Learning Collaboratory and A Virtual Learning Community**
<http://www.pc.maricopa.edu:/community/pueblo>
Funded by Xerox Parc in association with the University of Phoenix, this is an exceptionally significant project using new collaborative tools (MUDS and MOOS) with elementary Native American students.

Native American Cultural Curriculum Projects and Resources

- **Evaluation Guidelines for Web Sites about American Indian Peoples**
<http://www.u.arizona.edu/~ecubbins/webcrit.html>
Maintained by Elaine Cubbins, these important guidelines address important issues such as authenticity, appropriateness, respect and assessing quality. Required reading for anyone planning a Native American web site, or any web site!

- **Native American curriculum links**
<http://www.thePeoplesPaths.net/mainindex.html>
Bringing youth together with elders to create web-based curriculum
For youngers and elders
<http://www.thePeoplesPaths.net/YoungGen.html>
For elders and youngers
<http://www.thePeoplesPaths.net/favorite.html>

- **First People Web Sites in the Americas**
<http://www.nyu.edu/pages/ngc/millard/first.html>
Many links to U.S. and Canadian sites including Native K-12 curriculum resources and cultural centers..

- **The Native American History Archive (NAHA):**
<http://www.ilt.columbia.edu/k12/naha/index.html>
A New Center for Native American Studies in Internetnetworked Classrooms. NAHA's goal is to provide: easy access to Native American information and organizations, a forum for student discussions and publication of their project work, and tools for Native American research within the networked classroom. NAHA is designed for use by K-12 students using the Web for classroom projects and includes the **Native American Navigator:**
<http://www.ilt.columbia.edu/k12/naha/nanav.html> An inviting interface for geographical, historical, topical and keyword-based student inquiry. Clickable maps, an extensive timeline, a web of topics pages and a site & network-wide search page make the four corners of the Navigator's Medicine Wheel. **Also includes the Inquirer:** <http://www.ilt.columbia.edu/k12/naha/inquirer.html>
A model for collaborative group projects in history, offered as a starting point for teachers seeking authentic uses of the World Wide Web in their classrooms.

- **The Cradleboard Project**
<http://www.cradleboard.org>
Presenting a very important vision for Native American education, this is a project to watch closely. Math and Science emphasis, resource

CD-ROMs have been created. This project was created by Buffy St. Marie - the Cree singer! A great site to explore.

- **Alaskan Native Knowledge Network**
<http://www.ankn.uaf.edu>
A major project supported by the National Science Foundation and the Annenberg Rural Challenge to collect and disseminate indigenous curriculum. Combining the Native way of knowing with scientific method.
- **NITI (National Indian Telecommunications Institute)**
<http://numa.niti.org>
A major project funded by the National Science Foundation to produce Native math and science curriculum. Models for indigenous K12 curriculum have been developed and tested. Innovative ideas, but limited curriculum.
- **Young Cherokee**
<http://www.childrenstheatreplays.com/yc.htm>
Native American culture comes to life. A theatrical play for K-12 students. Includes links to children's theater resources and Native American curriculum!
- **Trail of Tears**
<http://www.childrenstheatreplays.com/tot.htm>
Another Native American theatrical play for K-12 students from the same site as the one above.
- **25 great research questions and resources for Native American kids**
<http://www.nueva.pvt.k12.ca.us/~debbie/library/cur/wk97.html>
An outstanding example of combining relevant issues to Native American youth with Internet research.
- **Arctic Celebration**
<http://www.nsbsd.k12.ak.us/PROJECTS/CELEBRAT/Celebrat.htm>
A web-based celebration of Alaskan family, culture and villages. A great example of a regional storytelling project.
- **Multicultural Pavilion**
<http://curry.edschool.Virginia.EDU/go/multicultural>
Perhaps the best listings of multicultural resources out there!
- **Multicultural Curriculum Resources: The Explorer Trail**
<http://ernie.wmht.org/trail/explor02.htm>
Outstanding links to multicultural sites of interest to elementary teachers and students.

Native American Mentoring Projects and Resources

- **4Directions Mentoring Project**
<http://www.tapr.org/4d>
A major Challenge Grant project involving many Native American schools.

- **Telementoring Institute from PSRTEC (Pacific Southwest Regional Technology in Education Consortium)**
<http://equity4.clmer.csulb.edu/netshare/cti/index.html>
Working with teachers to infuse technology into the curriculum and mentor other teachers. Their homepage is <http://psrtec.clmer.csulb.edu> with resources for minorities. See also their community technology guide "**Virtual Power: Technology, Education and Community**" a free 48-page resource publication designed for teachers working with diverse populations. The publication may be obtained by request or viewed and downloaded in PDF format from PSR*TEC Web site.
<http://psrtec.clmer.csulb.edu/virtualp/virtual.htm>

- **Native American Mentoring Project**
<http://www.minorities-jb.com/native.htm>
A job bank project with an interesting 'mentorship' approach.

- **Additional General Mentoring Models and Resources**
<http://lone-eagles.com/mentors.htm>

Native American K-12 Educational Network Models

- **Aboriginal Youth Network**
<http://www.ayn.ca>
The Aboriginal Youth Network is a website designed by and for Aboriginal youth in the efforts to create and maintain a unique online youth community nationwide. As more and more of our youth get online, the AYN is working to ensure there is a place in cyberspace where we can connect, make friends, access information, exchange ideas, ideals, values, beliefs and above all, our cultures and traditions.

- **Planet Youth**
<http://www.codetalk.fed.us/planet/planet.html>
Outstanding links to resources! A great place for kids of all ages to explore. Has excellent listing of Governmental sites for kids.

Indigenous Youth Projects

- **Futures for Children**
<http://www.futuresforchildren.org>
Futures for Children works to improve the well-being of American Indian children. We teach self-help skills and community development strategies in reservation communities, and help mentors from around the country encourage American Indian students to stay and succeed in school.
- **Junior Summit**
<http://www.jrsummit.net>
An important project designed to give laptops to 1000 indigenous children for one year and to bring them to a global conference to share what they've learned about applications of their computers and Internet connections.
- **To Be One**
<http://www.2b1.org>
There is a new force in the world: the growth of cyberspace. Inherent in this force is a breakdown in barriers of geography, age, economics, gender and culture. The first goal of 2B1 is to accentuate this phenomenon. Equally inherent in this new force is a potential to create in the digital age new barriers of unprecedented durability -- those of access, ownership, development and technology. The second goal of 2B1 is to block the formation of these barriers through philanthropic actions on a global scale.

Native American Language Sites

- **Lisa Mitten's Language links**
<http://www.pitt.edu/~lmitten/natlang.html>
Over 100 Native language sites listed.
- **Native Language Education Network**
<http://www.sedl.org/culture/native.html>
SW Educational Development Laboratory Native Education Program.
- **Database of Native Language Sites**
<http://bucknell.edu/~rbeard/diction2.html#indian>
Online dictionaries and international language models.
- **Hawaiian School Language site**
<http://www.olelo.hawaii.edu>
Innovative applications of technology to support indigenous languages. One project is an Internet audio database of 700 hours of Elders oral histories. See also - http://www.olelo.hawaii.edu/keola/lone_eagles.html

Native American Personal and Family Health Care Web Tour

Important trends are online medical diagnosis assistance services, online support groups, and discount drug purchasing.

Spend just three minutes at each site to appreciate the volume and quality of what's available, and then return to your favorite sites later for more in-depth exploration.

- **U. S. Indian Health Service**
<http://www.ihs.gov> Master listings of federal Indian health resources. Check out their resources
http://www.ihs.gov/misc/links_gateway/Links_Main.cfm
- **U.S. Indian Health Service Native Health Research Database**
<http://hsc.unm.edu/nhrd> from the Indian Health Service
Check out their 'other links' <http://hsc.unm.edu/nhrd/pglinks.html>
- **Association of American Indian Physicians**
<http://www.aaip.com>
Many good resources on Native American health! Traditional medicine resources and a new fitness and nutrition section!
- **American Indian/Alaska Native Health Resource Sampler**
<http://www.nlm.nih.gov/pnr/samplers/natamer.html>
Compiled by the National Network of Libraries of Medicine, Pacific Northwest staff, this site has excellent annotations for people seeking medical information (both traditional and western), as well as more general cultural links. Brief guides are available for using the databases that are listed.
- **National Library of Medicine Listing of Native American Health Resources**
<http://www.tribalconnections.org>
Tribal Connections in the Pacific Northwest: Connecting American Indian/Alaska Native Communities to Health Resources on the Internet. Grants and funding resources!
- **National Center for American Indian and Alaska Native Mental Health Research**
<http://www.uchsc.edu/sm/ncaianmhr>
Many great links, much more than just research. Training resources and links to key projects.

- **Native Elder Health Care Resource Center**
<http://www.uchsc.edu/sm/nehcrc>
Their gateway to more resources:
<http://www.uchsc.edu/sm/nehcrc/gateways.htm>
- **Healthy Nations Initiative**
<http://www.uchsc.edu/sm/hnp>
Reducing substance abuse, a special project offering resources.
- **Circles of Care Evaluation Technical Assistance Center (CoCETAC)**
<http://www.uchsc.edu/sm/coc>
An innovative project related to the three projects above.
- **Native American Medical Research Links**
<http://www.hslib.washington.edu/hsl/liaisons/howard/amerind.html>
Selected sources of health-related information for American Indian/Alaska Native researchers. Includes publications, databases, search engines and bibliographies.

A General Family Health Care Web Tour

- **MEDLINEplus**
<http://medlineplus.gov>
From the National Library of Medicine comes a superb health resource.
- **Medline Access and Search Techniques**
<http://www.library.sjsu.edu/staff/peterson/medline.htm>
A librarian's guide for searching the Medline database.
- **WebMD** <http://webMD.com>
Online medical consultation and much more.
An important model for a whole new array of medical services.
- **Dr. Koop Medical Resources**
www.drkoop.com
Though rich with health resources, this site is bankrupt and may merge with other health sites. Keep an eye on it.
- **Mayo Clinic Health Oasis**
<http://www.mayohealth.org>
Diverse health resources from the famous Mayo Clinic.
- **CNN's Health Site**
<http://cnn.com/HEALTH/>

Current topical health information and links to other resources.

- **Planet RX**
<http://planetrx.com>
Online discounted drug purchasing and drug information and comparison.
- **Pedinfo:** <http://www.uab.edu/pedinfo>
Index of the Pediatric Internet Searchable resources
- **Net Wellness**
<http://netwellness.org>
Consumer health information of the highest quality created and evaluated from the University of Cincinnati, Ohio State University, and Case Western Reserve University. Includes Ask an Expert and a **Minority Health Center**.
- **Healthfinder**
<http://www.healthfinder.gov>
A comprehensive Federal government database of health resources.
- **OnHealth** <http://onhealth.com>
Personal health tools, tips, online consultation and health products.

Suicide Counseling

**Thirty thousand people commit suicide every year in the U.S.
It is the third most frequent cause of death among young people.
Learn what you can do to give people the social and emotional
support they obviously need.**

- **American Foundation for Suicide Prevention**
<http://www.afsp.org>
An important organization with good resources related to suicide prevention.
- **Survivors of Suicide**
<http://www.main.org/sos/index.html>
A bereavement support group for those who have lost a loved one to suicide. Supportive readings, listservs, and web resources.
- **Webhealing**
www.webhealing.com
A site dedicated to emotional healing.
- **Growthhouse**
<http://www.growthhouse.org>
End-of-Life Care, Hospice, lots of resources for other purposes.
Explore!

Parenting, Family, and Child Safety Web Tour

- **ICONNECT: Family Resources from American Library Association**
<http://www.ala.org/ICONN/familiesconnect.html>
One of the very best sources for parental help with Internet issues.
- **American Library Association's Top 50 Sites for Kids and Parents**
<http://www.ala.org/parentspage/greatsites/50.html>
50 fun educational sites for kids and parents to explore together.
- **Parents' Guide to the Internet**
<http://www.ed.gov/pubs/parents/internet>
High quality support resources from the U.S. Dept. of Education.
- **Family Education Network**
<http://familyeducation.com>
Perhaps the best overall site for free collaborative tools and free web sites.
- **Children's Partnership**
<http://www.childrenpartnership.org>
A foundation providing high level resources to help parents and others protect children regarding Internet issues and much more.
- **Family Guidebook**
<http://www.familyguidebook.com>
A comprehensive guide for families with tips on dealing with key issues.
- **ParentSoup**
<http://www.parentsoup.com/edcentral/alu/facts.html>
One of the more popular sites for parents, fun and also useful.
- **Sesame Street Workshop**
<http://ctw.org>
Includes a parent's toolbox and family learning fun.
- **Single Parents**
<http://www.makinglemonade.com>
Specifically for single parents to help them deal with their special issues.
- **Women's Network**
<http://iVillage.com>
A new site for women only, exciting range of new services with opportunities to engage with other women in online discussions.

- **For Women, By Women**
<http://oxygen.com>
Oprah's new site for women, designed to be a very different type of site.
- **ParentsPlace.Com**
<http://www.parentsplace.com>
Articles on pregnancy, breast feeding, baby, adolescence, and parenting.
- **Fathers' Rights & Equality Exchange**
<http://www.vix.com/free>
Resources specifically for fathers with emphasis on legal help.
- **National Parent Information Network**
<http://www.npin.org>
Provides information and communications capabilities to parents and those who work with parents.
- **Netparents**
<http://www.netparents.org>
Resources for becoming a netparent - dealing with Internet and Youth.
- **Cyber Patrol**
<http://www.cyberpatrol.com>
Cyber Patrol is an Internet access management utility that helps parents and teachers control children's access to the Internet.
- **Child Safety on the Information Highway**
<http://www.police.guelph.on.ca/chldsfty.html>
Here's a starter listing of child protection software.

Kid's Web Tour

- **Top Fifty Extraordinary Experiences for Internet Kids**
<http://www.netmom.com>
Jean Armour Polly's Top Fifty Extraordinary Experiences for Internet Kids.
- **Government Sites for kids**
<http://www.codetalk.fed.us/planet/government.html>
A listing of the kid's resources sites created by many governmental agencies.
- **Too Cool For Grown-ups**
<http://www.tcfg.com>
Diverse resources presented in a humorous manner for kids of all ages.

- **Kids.com**
<http://www.kidscom.com/>
A Communications Playground for kids ages 4 to 15.
- **CyberKids**
<http://www.cyberkids.com>
CyberKids is published by Mountain Lake Software, Inc. Stories, art, and other creations kids like are available at this site.
- **CyberTeens**
<http://www.cyberteens.com>
An online community for young people from all over the world to share their thoughts and ideas with each other.
- **Safe Teens**
<http://www.safeteens.com>
Internet safety and much more, for teens.
- **GirlSite - For Girls ONLY!**
<http://girlsite.org>
Likely to be the best, "for girls only" site on the web.
- **4Kids**
<http://www.4kids.org>
The Quickest Shot to the Coolest Spots on the Internet--
in the Newspaper and on the Web!
- **Kids on the Web**
<http://www.zen.org/~brendan/kids.html> A listing of dozens of kids sites.
- **Bonus.com**
<http://bonus.com> A large site with lots of interactive opportunities.
- **Berit's Best Sites for Children**
<http://www.beritsbest.com>
Extensive listing of good and safe sites to visit.
- **MidLink Magazine**
<http://longwood.cs.ucf.edu:80/~MidLink>
Middle School Magazine for kids, by kids. Exceptional!
- **Kids Domain**
<http://www.kidsdomain.com>
A wacky playplace for kids explore.

Search Engines for Kids

Each of these is safe for kids!

- **Ask Jeeves for Kids**
<http://www.ajkids.com> Just type in a question to find resources.
- **Yahooligans!**
<http://www.yahooligans.com/> Safe exploring for elementary kids.
- **Disney's Go Search Engine**
<http://www.go.com> Disney's safe searching site for educational fun.
- **Searchopolis**
<http://www.searchopolis.com> Many robust educational resource tools.
- **Super-Kids**
<http://www.super-kids.com> A super-guide to finding stuff on the web.
- **AOL Netfind for Kids**
<http://www.aol.com/netfind/kids/home.html>
America Online's contribution to safe searching for kids.

Student Research Tools Web Tour

- **IPL Citing Electronic Resources**
<http://www.ipl.org/ref/QUE/FARQ/netciteFARQ.html>
A useful listing from the Internet Public Library.
- **Technology Learning Magazines Student Homework Hotlist**
http://www.techlearning.com/hotlist_stud.shtml From the International Society for Technology in Education, here are many quality resources.
- **My Virtual Reference Desk**
<http://www.refdesk.com>
One of the very best reference resources integrating many research tools.
- **WWW Virtual Library**
<http://vlib.stanford.edu/Overview.html>
From Stanford University, this is an extensive resource for student research.
- **StudyWEB** <http://www.studyweb.com>
Includes a search engine, topical directory, and a teacher's guide.
- **Research-It!** <http://www.itools.com/research-it/>
More than 15 useful research tools all at one site, plus language translators.

- **Virtual Reference Desk**
<http://www.vrd.org> Extensive high quality resources.
- **Library of Congress** <http://lcweb.loc.gov/>
Perhaps THE biggest resource library in the world.
- **Biography.com** <http://www.biography.com>
Extensive biographical resources.
- **CNN Interactive** <http://www.cnn.com>
Current news information and many other services.
- **KidsSource Online Homework Helper Sites**
<http://www.kidsource.com/kidsource/pages/education.homework.html>
Over a dozen additional homework sites to explore.
- **Homework Central**
<http://www.homeworkheaven.com>
Select from three grade ranges for homework research readability.
- **Homework Sites Listing**
<http://www.zen.org:80/~brendan/kids-homework.html>
Kids on the web – homework tools. A master listing of homework sites.
- **Homework Wizard**
<http://www.tcfg.com/sept98/homewiz.html> Sponsored by Apple computer, this site contains many links specifically for student homework research.
- **Encyclopedia Britannica**
<http://www.eb.com> The famous encyclopedia is now searchable online.
- **Roget's Thesaurus**
<http://www.thesaurus.com> Find antonyms and synonyms fast and easy.
- **World Facts Book from the Central Intelligence Agency (CIA)**
<http://www.odci.gov/cia/publications/factbook/index.html>
Fast facts on countries around the world.
- **Bartlett's Familiar Quotations**
<http://www.columbia.edu/acis/bartleby/bartlett>
Searchable by author, topic, or partial quotes.
- **Elements of Style**
<http://www.columbia.edu/acis/bartleby/strunk> Writing instruction and tips.
- **Researchpaper.com**
<http://www.researchpaper.com> A new comprehensive research resource.

Preschool and Primary Resources

- **PBS Preschool Resources**
www.pbs.org/kids/preschool
PBS has created "TeacherSource" with 1,000 lessonplans.
- **KidsSource: Homework Helper**
<http://www.kidsource.com/kidsource/pages/education.homework.html>
See their preschool section among their many homework site listings.
- **A Homework Site for Elementary Students**
<http://homeworkcentraljr.com> Select "Kids" for elementary searching.
- **The Educational CyberPlayGround**
<http://www.edu-cyberpg.com>
A fun place to learn with simplified tutorials and resources.
- **Sesame Street Workshop**
<http://ctw.org>
Includes a parent's toolbox and family learning fun.
- **The Crayola Crayon Site**
<http://www.crayola.com/educators/index.cfm>
Helps young children preK-2 learn to manipulate the mouse on a computer through online drawing and coloring webpages.
- **Kids Create Music Online with Other Kids!**
<http://www.kidlink.org/KIDPROJ/Midi/index.html>
- **Web Guide to Children's Literature**
www.acs.ucalgary.ca/~dkbrown
Internet resources related to books for children and young adults.
- **ProTeacher**
<http://www.proteacher.com>
An educational Yahoo-style directory of resources for all ages.
- **Kid's Vista**
<http://www.kidsvista.com>
The Original Kids Web. A comprehensive digital learning resource library.
- **Zoom School**
<http://www.zoomschool.com/subjects>
An on-line elementary school classroom with lessons in geography, biology, language arts, and early childhood activities.

NOTE: Most K-12 web sites have sections for preschool and primary.

Adult Literacy Resources

- **Elearners.com**
<http://elearners.com>
Extensive links to hundreds of free tutorials and courses.
Elearners Directory of online courses
<http://elearners.com/gna/courses.htm>
Elearners Online Course Demos
http://elearners.com/links/free_demos.asp

- **Thirddage**
<http://www.thirddage.com>
Specifically for seniors, formerly known as Seniornet, offers free online courses. Wonderful resources!

- **Learn2**
<http://learn2.com> Free and commercial learning resources for everyday life as well as business elearning solutions.

- **Tipworld**
<http://www.tipworld.com>
TipWorld's team of experts will deliver free newsletters to your in-box. Just select the tips (listservs) you want.

- **Cyber Playground's Literacy Resources**
http://www.edu-cyberpg.com/Literacy/Home_Literacy.html
Exceptional quality with a touch of humor. Play to learn.

- **Ehow.com**
<http://www.ehow.com>
Topical directory for how-to information, a classic resource for finding car insurance, real estate, and much more.

- **How Stuff Works**
<http://www.howstuffworks.com>
Another topical directory for how-to information.

- **Free-Ed.Net**
<http://Free-Ed.Net/catalog.htm>
Dozens of free courses.

- **Freeskills.com**
<http://Freeskills.com>
A large selection of free online technical training courses

- **Help2Go.com**
<http://Help2Go.com>
Free computer advice and tutorials.
- **FreeTutorials.com**
<http://freetutorials.com>
Free tutorials in seven major categories from applications to web skills.
- **ZDNet.com**
<http://zdnet.com>
Shopping, investments, topical resources with general technical orientation.
Here's their links to How-To and Expert help resources.
<http://www.zdnet.com/zdhelp>
- **Expertcity**
<http://expertcity.com>
A human behind every click, browse experts by topic.
- **Rhode Island Literacy Resources**
http://www.brown.edu/Departments/Sweaver_Center/Literacy_Resources
Click on "Links/Resources" for an exceptional listing of literacy resources.
- **Adult Literacy Resource Institute**
<http://www2.wgbh.org/mbcweis/lrc/alri/websites.html>
Extensive resource listings from David J. Rosen, Director of the Adult Literacy Resource Institute in Greater Boston.
- **Western/Pacific Literacy Network LINCS**
<http://literacynet.org/lincs>
This adult literacy resource site provides an interactive structure for communication, educational materials, and sharing of literacy information.
- **Literacy Link**
<http://www.pbs.org/literacy> A major resource from the folks at PBS.
- **The National Adult Literacy Database Inc.(NALD)** from Canada
<http://www.nald.ca> An intriguing database "borrowed" from the north.
- **DIAL: Distance Instruction for Adult Learners**
<http://dialnsa.edu/home.html>
The New School's Distance Instruction for Adult Learners (DIAL) program.
- **Federal Office of Vocational and Adult Education**
<http://www.ed.gov/offices/OVAE>
Funding for Community Technology Centers

General Educational Web Tour

- **Kathy Schrock's Guide for Educators**
<http://discoveryschool.com/schrockguide/>
Testimony to what one teacher can do to support other educators.
- **American Library Association's ICONNECT Topical Favorites**
<http://www.ala.org/ICONN/kcfavorites.html>
Exceptional in the range and quality of educational resources.
- **Blue Web'n** <http://www.kn.pacbell.com/wired/bluewebn>
Pacific Bell's high quality educational resources.
- **Heritage Online's Listing of the Best K12 Resources**
http://www.hol.edu/main/edu_ref.htm
Over a hundred high quality education links.
- **Teachers Helping Teachers**
<http://www.pacificnet.net/~mandel/>
Practical Help and lessonplans from peers.
- **Thinkquest Subject Guide:**
<http://thinkquest.org/library/> *See also* <http://www.thinkquest.org>
Over 1000 Student-created instructional websites listed by topic.
- **Internet Public Library** <http://www.ipl.org/ref/>
Librarians have created an amazing resource.
- **Web66** <http://web66.coled.umn.edu>
A great place to start. Find how to connect to other K12 classrooms.
- **Internet for Educators from US West**
<http://www.uswestwow.org/nwow/neducation> - Tutorials for Educators.
- **Classroom Connect** <http://www.classroom.com>
Resources and products for integrating Internet into the K12 classroom.
- **Special Education Web Tour** <http://lone-eagles.com/virginia.htm>
- **Character Education Web tour** <http://lone-eagles.com/chared.htm>
- **Two new educational sites** growing rapidly are <http://bigchalk.com>
and <http://lightspan.com> Both host extensive resources for free collaborative
tools, course and curriculum authoring as well as fee-based services.

Checklist Activity: Internet Searching Basics

You might like to use the searching tutorials given at the end of this activity page, those listed in the enclosed resources, or use this easy one from US WEST:

<http://www.uswestwow.org/nwow/neducation/nsearch>

___ I CAN USE MY BROWSER'S SEARCH BUTTON

Click on the SEARCH or Netsearch button at the top of your browser. Review the entire web page noting multiple search engines are listed in addition to the one which presents a white bar for entering your keywords related to your search topic.

___ I CAN GO TO SPECIFIC SEARCH ENGINES

In the white bar of your browser, (not the bar of any search engine,) enter <http://www.altavista.digital.com> and press Enter or Return. You should see Altavista's search engine appear on the screen. Don't be fooled by advertising banners with white bars attempting to mimic search engines.

___ I CAN SEARCH USING SINGLE KEYWORDS

In the Altavista white bar near the middle of your screen enter a single word on a topic of interest to you, such as "dinosaurs" and either click the "Search" button to the right of, or below the white bar, or just press "Enter/Return" key. Within a few seconds the results of your search will appear, but you may not see them until you scroll down past the top portion of the page.

I CAN SEARCH USING MULTIPLE KEYWORDS

Click the BACK button to return to your original search screen. Change your search to "dinosaurs AND birds" and search again. Notice the number of pages retrieved is less. The more key words you use, the more specific resources you'll retrieve. On the other hand, using 'dinosaurs OR birds' will retrieve many MORE pages than using dinosaurs alone. (Memory trick: "OR IS MORE.")

I KNOW WHERE TO FIND TIPS ON EFFECTIVE SEARCH METHODS

Examine the main search engine screen for buttons labeled "HELP" "TIPS" or "Advanced Search" and you'll find short, helpful suggestions on how to conduct more targeted searches. Tutorials on searching are available at <http://www.searchenginewatch.com> (Select Web Searching Tips!)

I UNDERSTAND THE DIFFERENCE BETWEEN SEARCH DIRECTORIES AND SEARCH ENGINES

Read about the differences at:

<http://discoveryschool.com/schrockguide/mystery/mystery1.html>

I CAN TRANSLATE ANY ENGLISH LANGUAGE WEB PAGE INTO FIVE DIFFERENT LANGUAGES

Go to <http://babelfish.altavista.digital.com> and enter a web address for the web page to be translated into the white box. Select the language desired. Click on the help button for more tips. NOTE: Any search performed at <http://altavista.digital.com> will have a translate hotlink at the end of each retrieved resource which will produce the same translation box as above.

For more language translation resources search for "language translation" as many new resources are appearing regularly!!! Many translation sites are listed in the Foreign Language Web Tour of this guide on page 127.

Creating Your Own Web Tours

It is easy to create your own Web Tours on any topic using search engines. Here's how. Since most word processors allow you to save any page as a web page, you just need to type in a list of web addresses and save the list "as html" to create a web page!

You'd first go to good search engine like <http://askjeeves.com> and would enter the words for whatever you're seeking like "Native American." If you include the quotes it will retrieve only web sites with the exact phrase "Native American." Without the quotes, all pages with the word "Native" and all pages with the word "American," will also be retrieved, which is not what you want. The more specific the phrases you put in quotes, the more specific your results will be! If you add "AND storytelling" you'll get Native American storytelling resources, and if you add "AND coyote" you'll get a listing of coyote stories! Try it!

Let's say you want to create a listing of tutorials on learning search engines. If you want search engine tutorials you can enter "search engine AND tutorial*" " to your search phrase you'll get a listing of only search engine tutorials. The * at the end of the word "tutorial" means it will retrieve pages with any letters attached to the word "tutorial," such as "tutorials". Many similar, and easy, ways of making your searches more specific are found by clicking on the HELP buttons present in all search engines. Take a few minutes to learn them by experimenting, and you'll save hours of time! Use this method to find tutorials on **anything** you want to learn. **Be sure to try this!**

One Big Secret for Saving Lots of Time!

Once you find a site which matches the topic of your search, one of the first things to check out is the listing of "**other links.**" You'll find that the better sites list dozens of similar sites which will save you lots of time by allowing you to collect these listings rather than wasting time attempting to collect individual links.

Use "**cut and paste**" to copy the web addresses of these listings quickly to your own documents or web pages. Sites that collect the best links on a specific topic are often called "**portals**". If you create a list of topic-specific portal sites you'll save yourself, and others, great amounts of time finding the best of the best. Many portal sites keep their listings current, so you won't have to! You'll find that the best portal sites are usually the most frequently listed sites in most listings of "other links."

At <http://www.tramline.com> you can fill in the blanks to create your own web tour which will be **instantly posted on the web for you!**

Great Searching Tutorials

- **Search Engine Watch**
<http://www.searchenginewatch.com>
The best source for learning about searching. Select Web Searching Tips.
- **Understanding and Comparing Web Search Tools**
<http://www.hamline.edu/library/bush/handouts/comparisons.html>
A nice collection of articles and guides for beginners.
- **The Difference Between Search Engines and Search Directories**
<http://discoveryschool.com/schrockguide/mystery/mystery1.html>
Here's something you need to learn.

Great Search Engines to Explore

- **Ask Jeeves**
www.askjeeves.com
Just type in a question and it does the rest.
- **Dogpile.com**
www.dogpile.com
A strong favorite of educators, searches many search engines at once.
- **Metacrawler**
www.metacrawler.com
Searches many at once, one of the first meta-search engines.
- **Northernlight.com**
www.northernlight.com
Unique organizing features to simplify your searching.
- **Google.com**
www.google.com
This search engine is fast, free of ads, and lists the most popular hits at the top.
- **AltaVista**
<http://www.altavista.digital.com> For TRANSLATION TO/FROM FIVE LANGUAGES click on the translate button found at the end of each retrieved resources or SEE: <http://babelfish.altavista.digital.com> and select the help button for easy instructions!
- **Beaucoup.com**
<http://beaucoup.com>
2,200+ search engines to choose from.

The Internet Style of Learning

By Robert Sibley (sibley@advanced.org) and Frank Odasz

Getting a handle on what the Internet Style of learning (ISL) entails is a more difficult task than it might at first appear. This is because it is such a new and dynamic phenomenon. Students and teachers are literally redefining ISL every day as they explore new technologies and new ways to use and combine technological and pedagogical approaches. One way to understand the Internet Style of Learning is to examine the new resources and capabilities that the Internet provides and then to explore how these capabilities are and might be used to change the way we 'do' teaching and learning.

Capabilities

1. Access to Vast Information Resources

The most widely known fact about the Internet is that through it you have access to all kinds of information, from up to the minute weather reports to copies of the Dead Sea Scrolls. If it exists, you can probably find something about it on the Internet, and you may find it fast.

2. Technology-based Information Processing

That's a mouthful, but think of it as taking word processing and expanding it to all forms of information from numbers to images, to sounds to every conceivable combination of these, and from a single file located on your hard drive or floppy to all the information in every computer that can be connected to the internet anywhere in the world. With all that information out there, you need powerful tools to help you find and make use of the small fraction that interests you. Luckily, the technology is doing a fine job of keeping pace. Web based search engines and directories help you find your needle in that very big haystack. Once you find what you are looking for, your Web browser goes to the electronic address and brings it to your computer and displays it for you. If the information is what you want, you can copy it and paste it into another software application on your computer, like a word processor, spreadsheet or database, and analyze and manipulate it there in many ways. For example, if you have imported columns of data into a spread sheet, you can compare it with other data and create a chart to visualize it graphically. You can import large amounts of text into a word processor and search through it electronically for a word or phrase, and find and export to another document those few sections that are relevant to your interest. Image, sound, and video processing software provide equally as powerful tools in those media. And the power and ease of use of these technologies increase constantly.

3. Collaboration

Internet Email may be the most underrated communication and collaboration tool in history. It is easy to use, extremely powerful, available world wide and usually very inexpensive. Information and documents can be transferred, commented on, edited, analyzed, manipulated etc., by one or any number of people, any number of times, in truly global collaboration. And Email is just the beginning.

4. Internet Publishing

The ease, both in terms of work and of cost, with which information can be published, in a growing number of formats and media over the Internet, especially the WWW, is astonishing. What is less well understood, is the publishers' ability to target his or her audience. A publisher (any one who can create a Web page and access a computer to 'host' it) has the ability to broadcast the address (url) of his or her site by registering it with all the search engines and promoting it on or off the Net, or he or she can distribute it to a selected audience, perhaps another school or class, or just one other person. In addition, the growing interactive nature of many sites means that the "audience" can also be "participants". Put in an historical perspective, these are awesome publishing powers, and they are the same for text, images, sound, animation, video and any combination of these. And, at the current rate of change, who knows what additional capabilities we will see next week or next month.

5. Realities and Possibilities

It is the process of using and combining these capabilities in powerful and innovative ways, that makes Internet style learning so exciting, for educators and students alike. This is still largely uncharted territory. It is what students and teachers do with these capabilities, not software companies or curriculum designers or boards of education, that will determine the ultimate success of ISL in our schools and lives. While the technology is exciting, and a strong motivating force for students, the fundamental characteristic of internet style learning is that the technology does the grunt work, it provides the capabilities for learners to cut to the chase and engage in high level, intellectually challenging learning. What follows is a very short list of some of the ways that students and teachers are using these capabilities to transform the very nature of teaching and learning. But I must stress that we have only scratched the surface of ISL potential.

6. Inquired-based, Global Research

Internet search engines allow students the ability to perform research using global resources. A teacher can solicit topics of interest for students to research and helps students develop successful search strategies by giving examples and focusing on

two or three different search tools.

7. Resource-Sharing and Collaboration

The Internet allows students many options to access expertise and to collaborate with peers. For example, single classroom or multi-classroom collaborative projects can be text-based (non-web such as email and listservs) OR web-based such as hypernews and web-conferencing. Web pages can be edited or contributed to as text documents or CGI's etc. and uploaded from almost anywhere. Email, Listservs, Newsgroups, etc. also allow access to experts and expertise in almost any field. In addition, individuals and small groups can combine and leverage the knowledge and skills of each member to create deeper and richer understandings and works. ThinkQuest Entries (see page 78) are prime models of this kind of collaboration.

8. Teacher as facilitator

Because the Internet can provide students with unlimited amounts of highly specific information, the role of the teacher shifts from being the primary content provider to that of facilitator of the process by which students access and build their own knowledge. It quickly becomes apparent that students will soon collect specific knowledge beyond the expertise of the teacher, which is a truly wonderful outcome. What teacher doesn't dream of a class in which students become experts and teach each other.

9. Student: from consumer to producer

Students are lead change agents these days due to their attraction to, and proficiency with, information technology. Since students, particularly those with home Internet access, have far more time for exploring the Internet than teachers do, individualizing their self-directed learning activities makes good sense. As students build their own knowledge, particularly with others in small groups, they can learn how to share it by posting resources on their own content related web pages and through a growing number of interactive and collaborative software tools and multimedia options.

10. Taking learning beyond the classroom

Distance learning and home-based learning are both alternatives and additions to classroom learning. In Internet style learning the walls of the classroom expand to encompass the world in every imaginable way. Information, experts, collaborators, and teachers are available to you from wherever you are, and vice versa. This encourages students to become self sufficient and self directed learners, to recognize and create value from raw information, to develop collaborative, time management, and project management skills (to name just a few) that will prepare them for the great challenges of adult life in the 21st Century.

LEVEL TWO: The Power of Self-publishing, Globally

CONTEXT: Never before in history has it been possible for any individual, group, or community, to self-publish worldwide on par with the world's greatest governments, universities, and corporations. The ease of authoring web pages, and the increasing variety of multimedia capabilities, creates the opportunity for anyone, of any age, to make a worldwide impact through sharing their accumulated knowledge.

By following simple instructions and literally filling in the blanks, many web sites let you create and post your own personal web pages, online courses, online businesses, and much more.

You should be aware that the number of free web-authoring sites is increasing, with innovative new capabilities which make it easier and easier for you to create more and more powerful web sites with less and less time and effort. The activities presented below begin with very easy first experiences create fun web pages and offer you opportunities to build your skills, one step at a time.

Quickstart Awareness Activities

ACTIVITY: Explore the **easiest self-authoring feature on the web: animated musical greeting cards** you can send via email: <http://www.bluemountain.com>

ACTIVITY: **Create your own web page** at <http://www.homepage.com> and/or <http://www.homestead.com> to see how **anyone can get a free web page created and posted on the web in minutes!** Or choose from dozens of similar sites at <http://personalweb.about.com/internet/personalweb>

ACTIVITY: Use the following worksheets to **create web pages using both HTML and non-HTML methods.**

ACTIVITY: **Explore the following web development resources** for both beginning and advanced web authoring, also at <http://lone-eagles.com/webdev.htm>.

ACTIVITY: Explore the following tutorials for the eight levels of web multimedia at <http://lone-eagles.com/media.htm>

ACTIVITY: Explore the curriculum authoring tools at <http://lone-eagles.com/currtour.htm> and at <http://lone-eagles.com/webdev.htm>

ACTIVITY: Explore the 1000+ student-created web sites created for the International Thinkquest competition: <http://www.thinkquest.org> The 1000 sites are at: <http://www.thinkquest.org/library>

Request the free CD-ROM which includes tutorials and many software programs for Mac and PC's: <http://www.thinkquest.org/request/index.shtml> includes tutorials on project-based learning.

ACTIVITY: Explore the 8 categories of student entries in the Cyberfair competition showcasing school and community synergies. Cyberfair Winners <http://www.gsn.org/cf97/cb97winners.html>
<http://www.gsn.org/cf/cbwinners98.html>

ACTIVITY: Explore the electronic student portfolios and student-created tutorials on how to create electronic portfolios at the Mt. Edgecumbe Native Boarding School in Sitka, Alaska. <http://www.mehs.educ.state.ak.us>
(Select Student Portfolios)

ACTIVITY: Explore the Web Design Tutorial sites listed at the end of <http://lone-eagles.com/webdev.htm> and on page 46.

ACTIVITY: Explore how easy it is to create an online course at <http://blackboard.com>

ACTIVITY: Learn to download a free software program and review the incredible free software resources at <http://www.tucows.com>

ACTIVITY: Take five minutes to create your own free Ecommerce site at <http://addashop.com>

Creating A Web Page Using Netscape Communicator

The following activity is written specifically for Netscape Communicator. Be sure to click on the Netscape HELP button and locate the "Composing and Editing Web Pages Tutorial."

1. **Start Netscape Communicator** and from the "File" pull-down menu select "NEW" and from the menu box that appears to the right select "Blank Page." A white blank web page will appear.
2. **ENTERING TEXT:** Enter "This is Your Name's Web Page." Highlight this text by holding down the mouse button and dragging the cursor across it. Change the size of this text by pointing to the black arrow to the right of the number 12 just above your text. Select the highest number available. Your text should appear much larger.
3. **CHANGE TEXT COLOR, FONT, AND STYLE:** Highlight your text again and from the "Format" pull-down menu select "Color." Click on a color you like. Your text should turn to that color once you've clicked off the text to remove the highlighting. From this same menu you can experiment with the Font and Style options for further changes in the appearance of the text.
4. **INSERT A HYPERLINK:** Position your cursor at the end of this line and press return twice to position the cursor below the text. Click on the "LINK" button which looks like a piece of chain located at the upper middle of the screen. Note pointing to a button and waiting 3 seconds will cause a label to appear revealing that button's function.

In the white bar at the top of the grey box that appears enter "click here for the NBA" or any url. This text will appear underlined in blue as a hyperlink. Next, click on the second white bar just below the top one and enter the web address this hyperlink should connect to "http://www.nba.com" Click on the "OK" button at the bottom of the screen.

5. **INSERT AN IMAGE:** If you've saved an image or have one you'd like to insert, click on the button that displays "Insert Image" when you point to it. It's white with three colored dots in it. Click on the "Browse" button to the upper right of the white bar and select the image you want. Click on the "OK" button at the bottom. Congrats on your first web page!

Creating a Resources Web Page Using HTML

Check out the many easy tutorials listed on the enclosed Web Page Authoring Resources page at <http://lone-eagles.com/webdev.htm> or try this simple activity.

Here's a short introduction to the HTML method of creating a web page. This can be a great way to use any wordprocessor to allow your students to create working web pages with full student control for entering text, hyperlinks to any web resources, and display of any ".gif" and/or ".jpg" image files. The recommended first activity would be for students to create a page of resource links for a topic they are studying.

To create your first web page enter the following using any wordprocessor and save your web page as a text file only, using the extension: ".htm" Example: "myfile.htm" Be sure to select "Text only" when saving.

To view your web page using any browser, select "File/Open" in your web browser's "File" menu to see the file as a finished web page.

For the MYPIC.GIF image to display, you must first save an image to the same location you're saving your web page, with this same name, in order for it to display on your browser. To save any image or animation from any web page simply point to it with the cursor and hold down the RIGHT mouse button (single button for Macs) and select "Save Image As". Click "Save" to save the image in the exact same location you'll be saving the following web page.

You can link additional web pages to this first web page by adding hyperlinks with a filename only, instead of a web address as shown below, as long as the additional web pages are saved in the same location as your first page. Try it!

```
<HTML>

<CENTER><H1>YOUR NAME'S FIRST WEB PAGE!!!
</H1></CENTER>

<H3>This is where you can tell your story to the
world!</H3>

<IMG SRC="MYPIC.GIF">

<a href="http://www.gsn.org">Click here for the Global
SchoolNet</a><br> This is where you describe the
contents of the site you're linking to!<br><p>

</HTML>
```

Easiest Web Page Authoring Resources

- **Listings of free web page authoring sites**
<http://personalweb.about.com/internet/personalweb>
- **Homestead.com**
<http://homestead.com>
A great site for easily creating your own home page.
- **Homepage.com**
<http://homepage.com>
Another good site for fast, easy web pages.
- **Highwired.net**
<http://www.highwired.com>
Free web sites for schools, school newspapers, and more.
- **Web66: A K12 World Wide Web Project**
<http://web66.coled.umn.edu>
Helping K12 educators learn how to set up their own school sites.
- **School Life**
<http://community.bigchalk.com>
Free web pages, online forums, chat rooms, feedback forms, and interactive calendars specifically for schools.
- **Geocities - Free Web Pages for any purpose.**
<http://www.geocities.com>
Take the Geotour to see what's offered. You can return to edit your free web page, anytime. Tutorials available. Ad banners will appear on all free web pages.
- **Wego.com**
<http://wego.com>
Free portal web sites, affinity groups, and web conferencing
- **US West's Tutorial using Netscape Composer**
<http://www.uswf.org/academy/acad>
Select "Resources."

Advanced Web Authoring Resources

- **Bravenet.com** <http://www.bravenet.com>
Top-rated free web tools for webmasters.

- **The Web Developer's Virtual Library**
<http://www.stars.com>
FANTASTIC!! Introduction to Adobe Photoshop and Paintshop Pro. A resource center for web developers.
- **Broadcast.com** <http://broadcast.com>
Excellent resources for web multimedia, from Yahoo.
- **CNET's Web Builder Site** <http://builder.com>
Lots of great web page building tools.
- **Freeshop.com** <http://freeshop.com>
Select "computers and electronics" for many great free web-building resources! Many other freebies to explore.
- **Tripod.com** <http://tripod.com>
Free ecommerce sites and web authoring tools sponsored by Lycos.
- **Server.com** <http://www.server.com>
Another robust collection of great web tools.
- **Freedback** <http://www.freedback.com>
An incredibly easy service to create custom data entry forms for your web pages.
- **Liveuniverse.com** <http://liveuniverse.com> More Free web tools.

Interesting Related Free Services

- **GuestGear**
<http://www.lpage.com>
Free guestbooks and many add-ons for your site.
- **Personal Address calendar**
<http://planetall.com>
- **Free Web Site Traffic Monitoring**
<http://www.websitetrafficreport.com>
These folks will tell you how many people visit your site.
- **Free Online File Storage "A Virtual Floppy"**
<http://imacfloppy.com>
You can store your files online for free. Not just for Imacs.

- **Driveway.com**
<http://www.driveway.com>
Another place you can store files online for free.
- **Cozone.com** <http://cozone.com>
Resources for making equipment purchase decisions.
- **FreePolls** <http://freepolls.com>
Free voting features and more.

Free Ecommerce Web Sites

- **Add-A-Shop**
<http://addashop.com>
Your own Ebusiness site in five minutes.
- **Young Biz**
<http://youngbiz.com>
Free youth entrepreneurship sites and training.
- **Bigstep.com**
<http://bigstep.com>
- **Many more sites** at <http://lone-eagles.com/entrelinks.htm>
See page 107 of this guide.

Graphics Libraries

- **GettyOne**
<http://www.gettyone.com>
Images database from the world's largest arts foundation containing both copyrighted, and public domain images.
- **Page Sage Web Resources and Tools!**
<http://www.pagesage.com>
Thousands of animations copyright free! Go to this site and 1. Select Links, 2. Web Tools 3. Select "Animations" To find similar animation collections, search for "animation directories."
- **Library of Congress Web Development Resources**
<http://lcweb.loc.gov/global/html.html>
A Library of Congress Internet Resource Page, extensive.
- **Ipix.com**
<http://ipix.com>
A new site with extensive resources.

- **Clip Art Collections**
<http://www.ist.net/clipart>
Thousands of free images to choose from.
- **Graphics for Your HTML Pages**
<http://www.tic.com/gifs/index.html>
Arrows, lines, paragraph dividers, icons etc.

Instructional Web Authoring

A new type of educational site has emerged which walks anyone through the steps for creating curriculum web pages without requiring web authoring skills or web-authoring software. These sites automatically post created pages on the web for future use without requiring a web site account or knowledge of how to upload web pages. You'll be seeing lots more like these! Easy, time-saving, and productive.

- **Filamentality - Easy Curriculum authoring**
<http://www.kn.pacbell.com/wired/fil/formats.html#Sampler>
Five types of curriculum you can create online in minutes: Hotlists, Multimedia Gallery, Scavenger Hunt, Sampler, Webquests.
- **Web and Flow - Many curriculum authoring alternatives!**
<http://www.web-and-flow.com>
A new service evolved from Filamentality with more features, but requires a nominal annual fee. Free trials available. Strongly recommended.
- **Tramline.com**
<http://www.tramline.com>
Make your own web tours. Free web posting.
- **TrackStar**
<http://scrtec.org/track/>
An on-line interface that helps instructors organize and annotate Web sites (URLs) into lessons. The list of resources acts like a table of contents and remains visible throughout the lesson allowing the user/student to easily browse through the lesson and stay on track.

Project-based Learning Activity Authoring Sites

- **Webquest Templates - Project-based learning activities**
<http://edweb.sdsu.edu/webquest/LessonTemplate.html>

Profoundly important model. Easy to create your own wequests.

- **Webquest homepage:**
<http://edweb.sdsu.edu/webquest/webquest.html>

Quiz Authoring Sites

- **Funbrain.com**
<http://funbrain.com>
An educators' favorite. Must See.
- **QuizCenter**
<http://www.motted.hawaii.edu>
Create online Quizzes in multiple formats.
- **Puzzlemaker**
<http://www.puzzlemaker.com>
Enter vocabulary words and receive many puzzle formats.
- **Quia! Create online Quizzes.**
<http://www.quia.com>

Online Course Authoring Sites

- **Blackboard.com**
<http://www.blackboard.com>
Create an online course with the best course management tools, to be posted free. The best such resource available.
- **Ecollege.com**
<http://www.ecollege.com>
Create an online course with excellent course management tools, to be posted free. Excellent!
Here's a demo course from Ecollege.com:
<http://umtonline.net/Demo/index.real>
- **Syllaweb**
<http://syllaweb.com>
Simple Online Course Syllabus Templates for all grade levels.
- **Other course authoring sites at:**
<http://lone-eagles.com/self.htm>

*Check out what the Mat-Su K-12 district in Wasilla, Alaska has done with Ecollege: <http://seeuonline.org>

HTML Web Authoring Tutorials (Code-based Method)

- **Al Roger's Project-based Learning and K12 web authoring tutorials**
<http://www.gsn.org/web>
Select “**Harnessing the power of the Web**” for a well done collection of tutorials, examples of webbed projects and much more...specifically for K-12.
- **Pacbell's Knowledge Network's Friendly HTML Tutorial**
<http://www.kn.pacbell.com/wired/beyond>
One of the better easy HTML tutorials.
- **Excellent Introduction to HTML**
<http://www.cwru.edu/help/introHTML/toc.html>
HTML tutorials and cover forms.
- **Writing HTML for Teachers; SPANISH Version, too!**
<http://hakatai.mcli.dist.maricopa.edu/tut>
An excellent tutorial for creating WWW pages. Maricopa Center for Learning and Instruction.
- **HTML Writer's Guild Website**
<http://www.hwg.org>
Making information easy to navigate and browse. Mindspring Enterprises, Atlanta, GA. Great Site!
- **Advanced Information on HTML**
<http://www.w3.org/pub/WWW/MarkUp/MarkUp.html>
Many links to HTML resources and references from the Laboratory of Computer Science at MIT.
- **World Wide Web and HTML Tools**
<http://www.w3.org/pub/WWW/Tools/Overview.html>
CGI server extension scripts, HTML editing and authoring. Laboratory of Computer Science at MIT
- **Beginner's Guide to HTML**
<http://www.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimer.html>
Primer for producing HTML documents. National Center for Supercomputing Applications.
- **Design of HTML for those with Disabilities**
<http://www.trace.wisc.edu/world>
Design of HTML pages to increase their accessibility to users with disabilities. University of Wisconsin/Madison.

Free Web Collaboration Tools

- **David Woolley's Web conferencing clearinghouse site!**
<http://thinkofit.com/webconf>
Includes a guide to selecting web conferencing software.
- **Forumone.com**
<http://www.forumone.com>
A comprehensive clearinghouse for web conferencing software. Both free and commercial products are listed at <http://www.forumone.com/products.htm>
- **Ecircles**
<http://ecircles.com>
Specifically for families, offering free, private, group conferencing, chat, filesharing, photo sharing, and more, that you control. The perfect set of tools for online projects, discussions, family gatherings, and organizational planning.
- **Joint Planning**
<http://jointplanning.com>
Free private collaborative tools for your organizing team!
- **Egroups.com**
<http://www.egroups.com>
Many free collaborative tools. Listservs, web conferencing, and much more. Exceptional.
- **Dejanews**
<http://www.dejanews.com>
Free newsgroup discussion forums.
- **Tapped In – Collaboration for Educators**
<http://www.tappedin.org>
Sun Systems Collaborative Tools and K-12 features.

Free Chat for your Web Site

- **MultiChat** <http://www.multicity.com>
- **ParaChat** <http://www.parachat.com>
- **Beseen.com** <http://beseen.com>

Instant Messenger and Chat Messenger

- ICQ <http://www.icq.com>
- AOL Instant Messenger <http://www.aol.com>
- PeopleLink <http://www.peoplelink.com>

Web Design Tutorial Sites

- Killer Web Sites <http://www.killersites.com>
- The Web Design Resource <http://www.pageresource.com>
- What Makes a Good Website?
<http://webreference.com/greatsite.html>

Best Free Software Sites

Thousands of very high quality multimedia authoring programs are available at the software downloading sites listed below, complete with instructions on downloading. For example, to find software for animations: Go to <http://www.tucows.com> and search for "animation." Once you learn to download and install one program (it's easy) you're on your way to unlimited fun and excitement! Downloading instructions are offered at the sites!

Tucow's Ultimate Collection

<http://www.tucows.com>

One of the best collections of Internet tools for Macs and PCs.

Download.com

<http://www.download.com>

Winfiles.com

<http://www.winfiles.com>

Free Software

<http://www.shareware.com>

Search for, browse, and download the best software -- including freeware, shareware, demos, fixes, patches, upgrades -- from the best managed software archives and computer vendor sites.

Freebies!

- **Freeshop.com**
<http://freeshop.com>
An amazing offering of free web tools and freebies of all kinds.
- **The Free Site**
<http://thefreesite.com>
Yahoo-style directory of freebies with listserv for updates.
- **Want Free**
<http://wantfree.com>
6,200 links to freebies.
- **Just Free Stuff**
<http://justfreestuff.com>
Over 50 categories of free stuff.
- **A listing of 15 additional freebie sites -**
[http://www.thefreesite.com/Other Freebie Sites](http://www.thefreesite.com/Other%20Freebie%20Sites)
- **Freebies for Teachers**
<http://freebies.miningco.com/library/weekly/aa090197.htm>
- **Free Educational Resources**
<http://www.all-4-free.com/educational.html>
- **Free-Ed.Net**
<http://Free-Ed.Net/catalog.htm>
Dozens of free courses.
- **Freeskills.com**
<http://Freeskills.com>
A large selection of free online technical training courses
- **FreeTutorials.com**
<http://freetutorials.com>
Free tutorials in seven major categories from applications to web skills.
- **Federal Resources for Educational Excellence**
<http://www.ed.gov/free>
Call 800-USA-LEARN for packets. Many free resources from the federal government.

Note: See the Adult Literacy Web Tour for more free learning sites on page 43.

The Eight Levels of Web-Based Self-Expression

1. Text Files
2. Active Hyperlinks
3. Image Files
4. Audio Files
5. Video Files
6. Animation Files
7. Virtual Reality Markup Language (VRML) Files
8. CGI Data-Handling Programmed Files

IMPORTANT NOTE: The first three web features listed above can be easily learned within a single hour, the others will take more time to explore and learn. It is strongly recommended you ask those more advanced than yourself for help to learn the additional features. The social incentives for youth to show off what they can learn themselves from the straightforward tutorials listed below will prove to be self-motivating. As a busy adult, you're not likely to have the time or tenacity youth may have for learning the more advanced features.

1. TEXT FILES :

Most modern wordprocessors allow saving desktop-published documents as web pages (Requires use of any word processor.)

2. ACTIVE HYPERLINKS to global resources (Requires use of any word processor.)

3. IMAGE FILES; including digital photos and original artwork. (Digital cameras and/or scanners helpful, but not essential. Creation of 360 degree panorama image files and 3D rotational image files will be included. Many images are available via the Internet.

Panorama/3D image tutorial/software:

Pictureworks

<http://www.pictureworks.com>

Live Picture

<http://www.livepicture.com>

For Macs (FREE Software!): <http://www.apple.com/quicktime/>

Quicktime video tutorials/software:

<http://www.apple.com/quicktime/>

Samples:

<http://www.apple.com/quicktime>

Image manipulation:

LViewPro 2.0 Image Processor: <http://www.lview.com>

PC Animation Software:

Gif Construction Set:

<http://www.mindworkshop.com/alchemy/gifcon.html> Great for photo manipulation and file conversion!

PC Art software:

Paintshop Pro 5.0 The best choice for image and photo manipulation! Tutorials available!

<http://psptips.com>

<http://www.jasc.com>

4. AUDIO FILES; including sound files of all types, including CD quality music files. (Requires any of the many free software programs available via Internet.) Filetypes include; .mid .avi .wav

MP3 <http://www.mp3.com> Almost CD quality music available online. Free music player software available. Really neat!

WinJammer MIDI Sequencer for Win95:

<http://www.winjammer.com/winjammer/wjsw.htm>

RealAudio and Real Video:

<http://real.com>

<http://www.realaudio.com> More and more sites require you have the near essential free **Realplayer** "plug-in" to hear web-based audio links and view web-based video links.

Tutorials

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

MIDI (Music):

<http://www.headspace.com>

<http://www.rocketnetwork.com>

<http://www.mediabuilder.com>

<http://www.midi.org>

Virtual Concert Project

<http://virtualconcert.org>

Cakewalk Musical Composition Software

<http://www.cakewalk.com>

Creates sheet music while you play and can auto-transpose.

Band in the Box Music Software

<http://www.pgmusic.com>

For \$70 you can have 5 part accompaniment with auto-harmony features!

*search for MIDI+tutorial**

5. VIDEO FILES AND DESKTOP VIDEO

CONFERENCING; created with common video cameras or PC-mounted cameras starting at \$59 for color cameras. Regular video cameras will work on most computers, too.

CU-SEE-ME, QuicktimeVR Tutorials:

MediaBuilder Tutorials:

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

Global SchoolNet's CU-SEE-ME guide:

<http://www.gsn.org>

Select "Communications" then Classroom Conferencing

Leonard's Cam World

<http://www.leonardsworlds.com/camera.html>

Top 25 Internet Camera Sites

<http://earthcam/top25>

Apple Quicktime Video

<http://www.apple.com/quicktime/>

Resource Sites:

<http://www.ou.edu/research/electron/internet/#video>

Scroll down to the video section.

*For more information search for
desktop video conferencing+tutorial**

6. ANIMATION FILES including Java animations

Go to <http://www.tucows.com> and search for 'animation'

*For additional tutorials search for animation+tutorial**

For sources of animations search for animation+directories

7. VIRTUAL REALITY MARKUP LANGUAGE

(VRML) FILES (Three dimensional environments that allow navigation using your mouse. An advanced feature, often with the option to communicate with other figures you "meet" while exploring. A free demo is available from <http://www.worlds.net>)

Tutorials:

MediaBuilder Tutorials:

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

Master listing:

<http://lone-eagles.com/webdev.htm>

*For additional tutorials search for VRML+tutorial**

8. CGI DATA-HANDLING PROGRAMMED FILES;

CGI and Java scripts allow others to interact and contribute data to web sites. It is easier than you may believe; you can cut and paste existing HTML code blocks into your web page for sophisticated features without programming! Applications include: BBSes and web conferencing, forms to add information of any type to web sites, data-entry with customized outputs, etc. (Many free "plug and play" programmed modules are available via Internet.)

Software: CGI Free - <http://www.cgi-free.com/>

Server.com <http://www.server.com>
Lots of great web tools! Outstanding!

Feedback <http://www.freedback.com>
An incredible service to easily create custom data entry forms.

Bravenet.com <http://www.bravenet.com>
Many great web applications you can easily add to your web site!

You must have access to CGI on a server if you do not have your own server. At CGI Free you can use their server and their CGI programs after you fill out a little form.

*For additional information search for cgi+tutorial**

LEVEL THREE:

The Power of Building Learning Communities Through Internet Collaboration, Mentoring and Teaching

CONTEXT: Communities can be defined as those people to which we give our time and talent. Communities are the sum of what we give to each other. There are givers and takers in all communities. Givers are those who give their precious time to build community and supportive relationships as a direct result of their actions. Sharing, with a balance of giving and taking, is a fundamental component of healthy communities.

“Communities of interest” can use the Internet to work closely together regardless of where the members live. The Internet brings new, convenient ways to contribute to others through mentoring, sharing, and teaching, all from the social safety of one’s own home. There is no upward limit to how much help you can provide to others.

By posting resources to save others the time finding them, and posting self-directed learning opportunities to guide others to new skills and resources, potentially great numbers of people can benefit, all thanks to you.

There are over ten different collaborative tools on the Internet, with more being invented all the time. We are all challenged with learning how to make the best use of these collaborative tools to building learning communities.

Project-based learning (PBL) is an instructional model that relates directly to the use of collaborative tools for real-world problem-solving. A key trend in K-12 education is collaborative learning with a real-world problem-solving emphasis related to issues facing the local community.

Success in the information age will depend on a individual's character, values, and ability to work with others both face-to-face, and when necessary, using collaborative Internet tools.

The work model of the future is individuals working as “Lone Eagles” along with others on multiple short-term projects requiring highly developed group-work skills. Knowledge of which collaborative tools are best used for specific purposes is vitally important and can best be learned through direct hands-on

experience. We all need to learn how to plan, implement, and evaluate projects that involve others and that depend upon the manipulation of digital information. **We need to learn how best to solve real world problems using the best tools at our fingertips.**

Quickstart Awareness Activities

ACTIVITY: Read the following essay on building individual and community collaborative capacity at <http://lone-eagles.com/capacity.htm>

ACTIVITY: Explore the tutorials for the ten top collaborative Internet tools, <http://lone-eagles.com/collab.htm>. Read the article on educational uses of the ten collaborative tools; <http://lone-eagles.com/articles/tencollab.htm>, noting that the first two, email and listservs, are the primary ones most people use.

ACTIVITY: Get connected with your peers; Join a Listserv; explore the discussion groups at: <http://www.liszt.com>
Note: There are quality, easy-to-read, instructions at this site for those new to listservs, (also called mailing lists.)

ACTIVITY: Check out the Project-based learning tutorials which include guides for project-based learning activities and planning and implementing web projects!
Global Schoolhouse Tutorial – Harnessing the Power of the Web <http://www.gsn.org/web/>

Autodesk Project-based Learning Tutorial
<http://www.autodesk.com/foundation/pbl/workbook>

ACTIVITY: Explore the K-12 project directories and programs at http://lone-eagles.com/projects_tour.htm to appreciate the quality and diversity of “ready-to-go” collaborative activities!

ACTIVITY: Explore the following cultural resources and innovations, and the online course resources, in consideration of what you might teach online!

Distance Learning Key Issues

While the 10 dominant Internet collaborative tools have great potential for providing distance learning services with great scalability and economy, these tools are so new that the general understanding of most people regarding the most effective teaching methods for each respective technology option is usually minimal. As a rule, if an individual is motivated to learn, and the instructional content is available in a self-directed format, great numbers of people can learn with minimal interaction with an instructor. This "self-directed learning" model demonstrates the greatest overall economies and scalability.

Individuals requiring an instructor to motivate and monitor their online learning will be faced with the very new experience of creating and sustaining a relationship through Internet collaborative tools. Measurement of the effectiveness of creating, sustaining, and growing a meaningful mentor-mentee, or citizen-to-citizen, relationship is still a largely unexplored frontier, as the quality of a distance learning experience can depend heavily on the level of trust, and meaningfulness, of this very human relationship.

Online Mentorship Key Issues

If instructional content is provided in a self-directed format, and an individual needs someone to motivate and monitor the instruction, this role does not necessarily have to be performed by an expert in the content area. An online mentor's role is primarily to encourage, motivate, and monitor the individual's learning, and can be performed adequately by a peer or someone without previous expertise in the content area.

There is no upward limitation of the degree of benefit a person can receive from a mentor who has Internet access and information retrieval skills. Mentors for the MECHA (U.S. Dept. of Ed. Office of Migrant Education grantee) migrant technology project's migrant students, for example, can potentially provide the student's entire family with assistance identifying available medical and social services programs, psychological counseling, and much more.

Research into just what online mentoring is, and can become, is a rapidly evolving area of interest, upon which the future of effective distance learning depends. Building learning communities around the theme of ongoing lifelong learning requires an approach more familial and social than the traditional disciplinarian approach. In today's world, we can't afford to let anyone fail due to lack of mentoring assistance, most certainly not in our own families! From a cultural standpoint, whom we support in this way defines who we are and what we believe in. Online support can indeed be warm, personal, and ongoing in ways many of us have never experienced, but will, and soon!

An online course titled "**Mentoring Online**" at <http://www.learner.org/courses/rfts/> (select "Lessons") along with two other courses titled "Beginning Internet" and "Creating Collaborative Multi-classroom Projects," demonstrate a dual format for online courses allowing for both self-directed and mentored use of these courses.

Mentoring Models and Resources

- **Ask A+**
<http://www.vrd.org/locator/alphalist.html>
An **outstanding resource** from the U.S. Dept. of Education. Dozens of sites welcoming emailed questions from teachers! **MUST SEE!!**
- **About.com**
<http://about.com>
A commercial service offering free human mentors by topic. Extensive!
- **Electronic Emissary**
<http://www.tapr.org/emissary>
Linking students with experts! Includes articles on successful mentoring. Created by Dr. Judi Harris; jbharris@tenet.edu
- **Ask an Expert**
<http://www.askanexpert.com>
- **Emath mentoring program**
<http://www.ed.gov/pubs/emath>
Includes listing of other mentoring programs.
- **Ask Dr. Math**
<http://forum.swarthmore.edu/dr.math/dr-math.html>
- **Mentoring Course: Collaborative Learning Environments**
<http://www.edb.utexas.edu/ez/cscl/>
An exceptional listing of readings and resources on mentoring indigenous students, by Paul Resta, a notable figure in this emerging field, from the University of Austin.
- **A Course from 4Directions Project on teaching indigenous youth**
<http://www.edb.utexas.edu/projects/allen/welcome.html>
- **Testbed for Telecollaboration**
<http://teaparty.terc.edu>
- **CLEO: Collaborative Learning Environment Online**
<http://cleo.terc.edu/cleo/cleo-home.cfm>
- **CoVis Project - Online Mentoring for Math/Science**
<http://www.covis.nwu.edu>
A major national mentoring project for math and science!

- **International Tutoring Foundation**
<http://edie.cprost.sfu.ca:80/~it>
The International Tutoring (IT) Foundation is a non-profit, charitable organization which provides global tutoring for pre-school, primary, secondary, post-secondary, and continuing education students worldwide.
- **Educational Use of MUDS/MOOS**
<http://tecfa.unige.ch/edu-comp/WWW-VL/eduVR-page.html>
Exceptional listing of resources relating to educational use of collaborative MUDS/MOOS text-based environments.
- **TECFA - University of Geneva "Training Technologies and Learning" Resources** <http://tecfa.unige.ch/>
French and English. Great resources!
- **Educational Development Corporation**
<http://www.edc.org>
Many mentoring programs and collaborative research initiatives.
- **Guide to online mentoring and federal computer recycling program**
<http://computers.fed.gov>
- **Concord Consortium**
<http://www.concord.org>
Free netcourse for math/science teachers. Mentoring models.
- **Kansas Collaborative Research Center Network**
<http://kancrn.org>
See their great listing of mentoring literature at <http://kancrn.org/mentors/>
- **Native American Mentoring Project**
<http://www.minorities-jb.com/native.htm>
- The **MECHA** migrant technology project offers a Mentoring Guidelines Handbook at <http://mecha.barry.edu/staff/mentor.html>
- The **CompuMentor** program offers a mentoring handbook with emphasis on technical support through developing volunteerism programs. CompuMentor focuses on providing technical support to non-profits and schools that can't afford to pay for such services. <http://www.compumentor.org>
- **Tipworld** <http://tipworld.com> Expert advice and learning via Email
- **Tutornet.com** <http://tutornet.com> Commercial service with real teachers.
See also <http://www.toptutors.com>

K-12 Projects Web Tour

Click through the following sites, and view each briefly, to appreciate the broad variety of real world problem-solving project models, which also build Internet collaborative skills. Many include online experts and mentors!

- ☺ **ATT Learning Network K12 Projects Listing**
<http://www.att.com/edresources/projects.html>
A very complete listing of major K12 project sites.
They have an Ask LN service where real people will respond to any questions you might have.
- ☺ **Global Schoolhouse Projects Directory**
<http://www.gsn.org/project/index.html>
The Global Schoolhouse offers extensive online resources for educators, including the Internet Project Registry, a resource of projects focused on "life-long learning" via the Internet.
- ☺ **Houghton Mifflin Project Watch**
<http://eduplace.com/projects/index.html>
- ☺ **KIDLINK Special Projects**
<http://www.kidlink.org/KIDPROJ/projects.html>
- ☺ **MidLink Mag Projects**
<http://longwood.cs.ucf.edu/~MidLink/>
Resources for middle school students specifically.
- ☺ **U.S. Government Kid's Projects Sites**
<http://www.codetalk.fed.us/planet/government.html>
Wow! Must SEE! Many government K-12 projects and resources.
- ☺ **The Learning Space**
http://learningspace.org/global_conn/list/projects.html
- ☺ **NASA K-12 Internet Initiative**
<http://quest.arc.nasa.gov>
Wonderful Space resources
- ☺ **Teams K12 Professional Development Resources**
<http://teams.lacoe.edu>
Resources by topic, specifically for K12 teachers.

➤ **Pitsco Project Listings**

<http://www.pitsco.com/p/Respages/collab.html>

Another great listing.

➤ **Journey North Animal Migrations.**

<http://www.learner.org/jnorth>

Announcing Journey North, an annual Internet-based learning adventure that engages students in a global study of wildlife migration and seasonal change. Beginning on Groundhog's Day (Feb. 2nd) students will travel northward with spring as it sweeps across the continent of North America. With global classmates and state-of-the-art computer technology, they'll predict the arrival of spring from half a world away.

➤ **Sites Alive!**

<http://www.sitesalive.com>

Exceptional K12 projects. Must See!

➤ **Epals**

<http://www.epals.com>

Connecting students for educational exchange projects.

➤ **Participatory Design**

<http://quest.arc.nasa.gov/misc/ipct.html>

Here's an article on the Use of Participatory Design in the Implementation of Internet-based Collaborative Learning Activities in K-12 Classrooms

➤ **Learning Resource Center**

<http://lrs.ed.uiuc.edu/lrs>

Welcome to the Univ. of Illinois' Learning Resource Server (LRS). Online Colleges courses available. This is a "hot spot" for quality resources, webbed courses, and articles from Dr. Judi Harris and other leaders in online education. The LRS provides you with a "knowledge space" that links you to some of the most exciting uses of technologies for learning on the Internet.

➤ **Global Online Adventure Learning**

<http://www.globalearn.com>

Caribou migration monitoring, sailing ships and structured K-12 projects.

➤ **Global Online Adventure Learning (2nd site)**

<http://www.goals.com>

Building Individual and Community Collaborative Capacity – A Web Tour

"Life" is life's own purpose, to grow, to aspire to a greater level of organization and understanding, empirically the same for a blade of grass or a human being.

Growing Capacity for New Ideas

When we're born, the cells in our brains have weak interconnections, but as we're stimulated through our senses by the world around us the interconnections between individual brain cells are strengthened and create meaning as we learn to interact with the world around us. As we grow and gain more experience, we become capable of greater and more complex ideas, and expand the variety of ways we can interact with the world around us.

As citizens within a community, we're like cells in a brain; as we exercise our ability to interact, share information, and create new ideas with those around us, we become progressively more capable to create even greater ideas.

Growing Individual and Community Collaborative Capacity

Assessing one's own individual collaborative capacity, outside the use of technology, might include a review of one's ability to create positive interactions with others, the ability to teach and motivate others, and the ability to coordinate purposeful action-oriented activities. Just how we might use the Internet to expand and empower our abilities to help, and work with, others is a combination of availability of the tools, the knowledge of how to apply them effectively, and an understanding of how to motivate others.

Using Internet search engines and existing self-directed Internet learning resources can allow an individual to learn anything, at anytime. This capability has never existed before.

A community's collaborative capacity might be measured by the collective understanding of the processes by which members can work together effectively. A commonality of language, understanding, goals, and appropriate methods would all be factors to consider. If a community shares a clear understanding of what needs to happen, and exactly how to go about making it happen, the hardest part is over and everyone can get to work. An ideal situation would be for a community to learn together the most effective collaborative uses of the Internet collaborative tools and to put them to use without delay. Such is our joint challenge!

Today, many communities consist of members who have moved in from diverse cultures and locations, thus creating the need to establish a common ground of

understanding before members can work together effectively to achieve common goals. New skills must be learned to create the social info-structure with the intelligence to make good things happen on behalf of the community.

For additional ideas on building collaborative capacity, you're invited to read the article, "**Building Learning Communities Through School, Library, and Community Technology Centers,**" at <http://lone-eagles.com/articles/build.htm>

Youth-Based Community Problem-Solving Models

Youth today are key change agents and technology leaders in most communities and cultures. An Internet search for "youth and entrepreneurship" will result in long listings of programs leveraging the skills of youth on behalf of their communities. Junior Achievement, www.ja.org, and 4-H programs, www.4-H.org, have been dramatically empowered by the informational and collaborative resources the Internet provides. Viable, home-based businesses are booming as a result of the Internet and web-based marketing.

Youth literally embody the future of their communities. Accordingly, they must be part of inventing the means by which they will be able to remain as contributing citizens in their communities.

Many K-12 classrooms are now learning these new skills through participating in project-based learning Internet activities. **Project-based Learning (PBL)** has emerged as a structured collaborative activity model to teach collaborative skills by creating action-oriented problem-solving group-learning activities. Many of these activities intentionally involve the community and community issues because the role of schools is to grow good citizens.

Three great, short, tutorials on project-based learning (PBL) are available along with PBL models (Webquests, Thinkquest, and Cyberfair.)

1. Autodesk's GREAT Project-Based Learning Tutorial:

<http://www.autodesk.com/foundation/pbl/workbook>

2. Global SchoolNet Harnessing the Web Tutorial:

<http://www.gsn.org/web>

3. WORLD NetPBL Tutorials

<http://www.worldbank.org/worldlinks/english/training/world/pbl/whatis.htm>

These are also listed at <http://lone-eagles.com/alaskan.htm> along with many examples of Native Alaskan Internet innovations and collaborative applications.

Three of the most significant PBL models will be described briefly, followed by discussion on what an ideal project might look like incorporating the best of all three models.

Webquests

A wonderful model for developing your own project-based learning activities:

<http://school.discovery.com/schrockguide/webquest/webquest.html>

Read about why teachers love WebQuests! Select the slide show!

In a typical webquest activity, students would use the Internet to access specific information on a defined topic, researching first as an individual, and then engaging with others in a defined small group activity to share their research results and integrate them with those of others. The activity ends with a group presentation and often creation of a web page with the research findings. Linking such activities to real world problems and issues makes this model extremely important and relevant as a necessary trend in education. Duration of a Webquest activity can be from 2-3 class periods up to several months.

The Official Webquest homepage,

<http://edweb.sdsu.edu/webquest/webquest.html> offers teachers a highly customizable format for creating their own online projects. Online recertification courses for teachers are available during which they will create their own webquests and then post them on the Internet. Rich collections of teacher-created webquests are available via web pages created as a result of these previous classes, giving teachers a model for sharing their creative lessonplans with other teachers.

Example Webquests From Inservice Courses (Teacher-created)

<http://edweb.sdsu.edu/webquest/matrix.html>

Dozens of "ready-to-go" collaborative classroom activities for all ages listed by grade level and topic!

One unique feature is that in addition to extensive training materials and examples, template outlines are available allowing teachers to quickly author original webquests with minimal time and effort.

Teachers can use template web pages to easily design their own projects.

Tutorial on designing WebQuests

<http://edweb.sdsu.edu/webquest/materials.htm>

Teachers' WebQuest template

<http://edweb.sdsu.edu/webquest/LessonTemplate.html>

Just edit this template web page to create your own WebQuest in minutes!

Thinkquest

Thinkquest is one such PBL activity, where teams of three students, from 4th grade and up, collaborate via Internet to create instructional web pages to help other kids worldwide learn. Over 1000 high quality web sites are posted for your review, along with an offer for free CD-ROM's with software and tutorials with which you, too, can learn to create quality instructional web sites!

There are now over 1000 quality instructional web sites created by students posted at the Thinkquest web site: <http://thinkquest.org/library/> Listed by subject area, this resource is exciting for teachers in that the resources are ready to use. Students are especially motivated when they learn the web sites are student-created. The Thinkquest main web page is <http://www.thinkquest.org>

Free CD-ROM from Thinkquest:

<http://www.thinkquest.org/request/index.shtml>

Just fill in the online form and they'll send you a free CD-ROM that includes dozens of software programs and Internet tutorials showing how to create web pages and use search engines.

Cyberfair

Cyberfair <http://www.gsn.org/cf/index.html> is a project-based competition for students of all ages, sponsored by MCI and Cisco Systems, that offers a structured opportunity for students to create web pages showcasing school and community synergies among eight categories. Many Elementary school entries of extraordinary quality make the point that even very young students can participate. The students literally feel they are championing the cause of their cultures and develop great pride in their multimedia depictions of their local community and culture. It is strongly recommended that you review examples of each of the following categories in the winners listings!

- * **Local Leaders**
- * **Community Groups and Special Populations**
- * **Business and Community Organizations**
- * **Local Specialties**
- * **Local Attractions (Natural and Man-Made)**
- * **Historical Landmarks**
- * **Environmental Awareness**
- * **Local Music and Art Forms**

Envisioning the Ultimate Community Development Youth Project

The best elements of Thinkquest, Webquest, and Cyberfair suggest an emerging model for the future.

Consider taking Thinkquest's **CD-ROM model** of providing a robust and complete collection of software and tutorials, and combining it with the **step-by-step training and template model** of Webquest, and then combine with these the **'real world problem-solving' community-based model** of Cyberfair. We'd have a community collaborative capacity-building model which combines a comprehensible structure with the best resources to engage a broad cross-section of local citizens.

Youth today represent the first generation to grow up with computers. Youth are the key change agents and technology leaders in most homes, communities, and cultures, worldwide. "**Culture Club**" is a concept paper which articulates a methodology of involving youth and community members of all ages in creating mentoring opportunities and instructional resources tailored for local citizens. <http://lone-eagles.com/cultureclub.htm>

Resources for Designing Collaborative Projects

- **Virtual Architecture: Designing and Directing Curriculum-Based Telecomputing** <http://ccwf.cc.utexas.edu/~jbharris/Virtual-Architecture/index.html> by Dr. Judi Harris. Simply the best resource out there. Used as textbook for the online class "**Designing Internet Instruction for K-12**" <http://lone-eagles.com/currmain1.htm>
- **Dr. Judi Harris' Great "Mining the Internet" Articles:** <http://lrs.ed.uiuc.edu/Mining> Exceptional articles.
- **World Links for Development Program (WorLD) Training Materials** <http://www.worldbank.org/worldlinks/english/training/world/index.html> Outstanding resources.
- **Global Schoolhouse Archives, including How to Design a Successful Online Project:** <http://www.gsn.org>
Select Professional Development, then Collaborative Projects!

Building Cultural Learning Communities

It is becoming economically and technically feasible that much of the global population, representing 15,000 cultures, could receive the opportunity for Internet access within fifteen years. In a world where half the population has yet to make a first phone call, new satellite and wireless technologies are bringing unlimited access to information and many other opportunities... and risks. No traditional cultural will be well-served by denying the reality of our fast changing world, or the value of more accessible knowledge and education.

How traditional cultures will learn to deal with the risks of new knowledge and ideas, the risks of access to negative information, and how they will learn to benefit from the best knowledge available, may increasingly depend on the kind and quality of advice and support the first cultural groups on the web provide to assist the cultures yet to come.

To become a true global citizen is to celebrate the diversity of humankind while retaining the personal right to celebrate our own traditional cultural heritage. The Internet puts the potential power for positive change at our fingertips.

Cultures have always changed in order to survive. Cultures adapt and are formed around shared values and ideas. The Internet presents unlimited opportunities for positive change, if used wisely. We must all learn together how to assure that this power is not misused. How we do this will reflect the beliefs and values of our individual cultures. How we each take up this challenge will soon become a fact of history. **For many of us, we need to look to our past to see our future.**

Many cultures do not attribute honor to those focused on personal gain, but only to those who act to support everyone's benefit. The kind of world we'll build together, hopefully will be built on this honor that comes from the giving of ourselves by helping others, and not from seeking personal gain, only.

Culturally Appropriate Ecommerce

Cultural authenticity adds value to cultural products. Marketing cultural crafts and products, growing one's reputation for quality, can produce an income while enhancing one's cultural identity. Cultural marketing offers opportunities to villages and reservations to retain their youth rather than lose them to the competing dominant culture.

At issue is a new electronic wind of possibilities. We share the challenge for each of us to show our true selves and to build valued relationships through sharing, mentoring, and teaching others. **This is a time to learn to protect what we cherish.**

Today we have new tools for preserving our cultural knowledge, particularly that of our elders, while they are still with us. The sum of this cultural knowledge is humankind's joint heritage, which literally tells our shared story and is of immeasurable value. We must use the tools available for such honorable purposes, or suffer the unnecessary loss of our shared cultural knowledge.

Since it is now easy for anyone to create online learning pathways and courses for others, the opportunity exists for the world's cultures to teach about themselves, in their own way, perhaps also as a culturally supportive business such that the value of such instruction increases with one's cultural authenticity.

There is a Native American prophecy that the seventh generation (since the white-man arrived,) will lead a new day of Native American sovereignty. Perhaps that day has come as we all come to recognize that we all share humankind's history of cultural evolution.

Cultural Entrepreneurship and Crafts Marketing

➤ **Peoplink**

www.peoplink.org

Benefiting grassroots artisans and their communities worldwide with a door to Ecommerce opportunities for marketing local arts and crafts. A good model to consider for intertribal marketing.

➤ **Ebay**

<http://www.ebay.com>

A successful online auction house where anyone can post anything for buyers to bid for, driving prices higher and higher! Offering a global marketing solution for indigenous peoples worldwide. There is a book "Ebay for Dummies" available through at Amazon.com <http://amazon.com> Peoplink has a Ebay page! <http://members.ebay.com/aboutme/peoplink>

➤ **World2Market**

www.world2market.com

A new resource connecting to authentic artisan communities worldwide! Resources for global marketing of arts and crafts.

➤ **International Federation for Alternative Trade**

www.ifat.org

Focused on helping market cultural arts and crafts.

➤ **Fair Trade Federation**

www.fairtradefederation.com

The global network for fair trade - offering marketing expertise.

- **Greenstar**
www.greenstar.org
Solar-powered Internet connections for remote villages in Jamaica are used to market local digital music, art, crafts and more.
- **The Cultural Survival Quarterly has an online crafts market;**
<http://www.cs.org/CraftsMarket/CScrafts.html> Many tribal groups have web pages with photographs of their artwork and native crafts as an economical means of global marketing.
- **Native Tech**
<http://www.nativetech.org>
Types of craft specialization are influenced by the different environments people live in, and by trade and information networks -- these technologies are the product of thousands of years of expertise, oral traditions and continuity. Many links to crafts instructional web sites.

Native American Business Listings

These four sites have extensive business listings to explore.

- **A Major Listing of Native American Products**
<http://allnative.com>
Review the many great products and business models. AllNative.com is a Native American e-commerce site. Our mission is to be the site to purchase authentic Native American products. Our products vary from traditional Native American goods to modern consumer products made by Tribally owned or Native American owned businesses. AllNative.com is majority owned and operated by the Winnebago Tribe of Nebraska. AllNative.com has recently merged with Indianz.com. Indianz.com provides original Native content and links to articles of interest from other sites. The combination of Indianz.com with AllNative allows us to be a one-stop shop for all your Native needs.
- **Lisa Mitten's Outstanding Listing of Native American Businesses**
<http://www.pitt.edu/~lmitten/businesses.html>
An exceptional listing to review to get ideas for your own online business!
- **Native American Business Index**
<http://www.hanksville.org/NAresources/indices/NAcommercial.html>
Another exceptional listing of Native American Ecommerce sites.
- **NativeWeb's Native Businesses listing**
http://www.nativeweb.org/resources/business_economy/native_owned_businesses
Over 80 Native businesses listed.

Native American Ecommerce Web Sites

- **Native American Artist's Web Sites**
<http://www.indianvillage.com>
Ecommerce sites for Native American artists at reasonable rates!
A great example of how easy it can be to get an Ecommerce site up and going!
The Indian Arts and Crafts Association is a co-sponsor.
<http://www.iaca.com>
- **Native Shop**
<http://www.nativeshop.org>
Native Shop is a project of the Native American Women's Health Education Resource Center. "We are marketing products as an economic development project to raise funds for the resource center's programs."
- **Free Ecommerce Sites and Business Start-up Training Resources**
<http://lone-eagles.com/entrelinks.htm>
Anyone can have a free Ecommerce site in a hurry!

Native American Art Web Sites

- **Powersource Art Gallery**
<http://www.powersource.com/gallery>
"Welcome to the Powersource Gallery, a collection of Native American artistic symbols portraying powerful people, powerful places and powerful objects." **Their great listing of Native American artist's sites -**
<http://www.powersource.com/gallery/nalinks.htm>
- **Native American Artists**
<http://www.artnatam.com>
Only Native American Artists are presented at this site. This is a juried collection of works. Good references to the Indian Arts and Crafts Act of 1990 and related issues. See the extensive Native American artist listings -
<http://www.artnatam.com/links.html>
- **Taos Drums-Native American Drums**
<http://www.webwest.com/taosdrum/index.html>
A great model for an online store!! Fill your shopping basket!
- **Blue Rain Gallery of Native American Art**
<http://www.blueraingallery.com>
Located in Taos, New Mexico, the Blue Rain Gallery promotes the work of young Native American artists who represent their Native American culture. Includes Artist profiles, galleries. a printshop, and an online auction house.

- **Intertribal Art Gallery**
<http://www.indart.com/gallery/gallery.htm>
Pottery, beadwork, sculpture, basketry, rugs and more from 12 Oklahoma tribes. A good model for Intertribal marketing of Native American art. Includes links to other Native American art sites.

Organizations Supporting Native American Businesses

- **National Center for American Indian Enterprise**
<http://www.ncaied.org>
A online database of hundreds of Native American businesses. Includes consulting services and software for creating business plans.
- **Native American Business Alliance**
<http://www.native-american-bus.org>
Consulting services dedicated to filling the need to assist Native American companies in becoming part of the supply base to corporate America. Over 200 Native American companies are members.
- **Native American Business Connection**
<http://www.datacor.com/~nabc>
Join and get a web site for \$5/month. Sponsored by the Northwest Regional American Indian Chamber of Commerce.
- **Native American Trademark Issues and Information:**
<http://www.indiantrademark.com>
If it says "Indian" it should BE "Indian." Good related links to Indian Law resources and more!
- **Native American Association of Germany (NAAoG)**
http://www.naaog.de/englisch/index_engl.html
A likely partner for marketing your products in Europe? Their goal is to share, the richness of Native American cultures with the non-Native public and with other Native nations; To provide information, programs, and projects by means of dances, seminars, lectures, and educational materials to any interested people and groups for educational purposes; To provide the public in Germany with first-hand contact(s) to Native Americans from the United States and Canada to experience the unique cultures of Native nations; And to provide for the members of the association the benefits of working hand in hand with each other and with the Native guests to learn and to understand the values of different cultures.

Multi-cultural Resources and K-12 Project Sites

- **Native American/Alaskan/Hawaiian K12 Innovations Report and Clearinghouse**
<http://lone-eagles.com/native.htm>
Extensive listing of Native cultural resources and curriculum.
- **Spanish Language Educational Resources**
<http://lone-eagles.com/migrant.htm>
Resources from the U.S., Mexico, Central, and South America
- **The 4Directions Project**
"Internet Strategies for Empowering Indigenous Communities in Teaching and Learning" is funded by the Technology Literacy Challenge grant program from the U.S. Dept. of Education.
<http://www.4directions.org> One very interesting component is their work on "Developing Virtual Museums in Native American Schools"
<http://www.conexus.si.edu/VRTour> The 4Directions multicultural curriculum for K12 at "The Explorer Trail;"
<http://ernie.wmht.org/trail/explor02.htm>
- **The Cultural Survival Quarterly** <http://www.cs.org>
This unique journal has recently published a special issue on "The Internet and Indigenous Groups" which is of exceptional quality and presents many significant case studies worldwide. The entire issue is online at <http://www.cs.org/CSQ/csqinternet.html> The significance of this particular issue is the diversity of benefits very different cultural groups have demonstrated. See www also "Reclaiming Native Education: Activism, Teaching and Leadership" at <http://www.cs.org/CSQ/csqtblcont.html>
- **Wireless Village Projects** and other exciting project reports from the **National Science Foundation Wireless Testbed** project are listed at: <http://wireless.oldcolo.com/reports.htm> Toksook is a Canadian Arctic Eskimo village which has found an affordable solution bringing Internet to village homes using new wireless technologies.
(<http://wireless.oldcolo.com/toksook.txt>) See also how the **Ute Tribe** has benefited from Wireless; <http://wireless.oldcolo.com/ute.txt> Dave Hughes is the leader of the Wireless Testbed and his Web site is <http://wireless.oldcolo.com> His email address is dave@oldcolo.com
- **Diversity University Collaboratory Listserv**
<http://www.edu-cyberpg.com/diversity.html>
From the Educational Cyber-Playground, a great place for newcomers to the Internet.

- **Center for Multicultural Education**
<http://depts.washington.edu/~centerme/home.htm>
The Center for Multicultural Education at the University of Washington, Seattle WA, focuses on research projects and activities designed to improve practice related to equity issues, intergroup relations, and the achievement of students of color.
- **Center for Research on Education, Diversity and Excellence**
<http://www.crede.ucsc.edu>
The CREDE mission is to assist the nation's diverse students at risk of educational failure to achieve academic excellence.
- **Clearinghouse of Immigrant Education**
<http://www.ncas1.org/chime.htm>
A national organization sharing resources on English as a second language.
- **Alaskan Cultural Curriculum**
<http://www.ankn.uaf.edu:591>
A significant collection, developed by the Alaska Native Knowledge Network project.
Alaska Standards for Culturally Responsive Schools
<http://www.ankn.uaf.edu/standards>
Very unique standards applicable worldwide.
- **National Association for Multicultural Education**
<http://www.inform.umd.edu/NAME>
A national organization offering conferences, listservs and resources on multicultural education.
- **Teachers of English to Speakers of other languages**
<http://www.tesol.edu>
TESOL's mission is to develop the expertise of its members and others involved in teaching English to speakers of other languages to help them foster effective communication in diverse settings while respecting individuals' language rights.
- **Center for Digital Storytelling**
<http://www.storycenter.org/storyplace.html> **Must See!**
And Other Digital Storytelling Sites
<http://www.dstory.com> <http://www.digiclub.org>
- **Putumayo World Music Multicultural Curriculum**
<http://www.putumayo.com>
Putumayo publishes indigenous music from around the world.

- **Cultural Resources for Educators**
<http://www.worldspeople.com>
Unique Resource Collections for the K-12 classroom consisting of craft objects, hundreds of images, related literature and background information. Visit their new web tour of teachers' resources.

Cultural Survival Resources

- **Cultural Survival Journal Special Issue on Indigenous Use of Internet**
<http://www.cs.org/CSQ/csqinternet.html>
This link is to a special issue of case studies for Indigenous use of Internet. MUST-READ! EXCELLENT!
- **Cultural Survival Journal**
<http://www.cs.org/index.html>
An exceptional resource with increasing emphasis on use of Internet by indigenous peoples.
- **Council on Spiritual Practices**
<http://www.csp.org>
Outstanding resources on spiritual practices and related issues.
- **US Cultural Protection Legislation**
<http://www.lib.uconn.edu/ArchNet/Topical/CRM/crmusdoc.html>
- **Indigenous peoples of Mexico, Central and South America!**
Available in Spanish.
<http://www.nativeweb.org/abyayala>
- **American Studies Web on Race and Ethnicity**
<http://www.georgetown.edu/crossroads/asw/race.html>
Comprehensive resources on many races.

Global Organizations and Programs for Indigenous Connectivity

- **Center for World Indigenous Studies**
<http://www.cwis.org>
The Underlying Principle Guiding CWIS is: Access to knowledge and peoples' ideas reduces the possibility of conflict and increases the possibility of cooperation between peoples on the basis of mutual consent. By democratizing relations between peoples, between nations and states, the diversity of nations and their cultures will continue to enrich the world. **Sponsor for the Fourth World Documentation project.**

- **Fourth World Documentation Project**
<http://www.halcyon.com/FWDP/fwdp.html>
A major global project providing Indigenous peoples' Information for the Online Community.

- **4Directions Project; An Indigenous Model of Education**
<http://www.4directions.org>
The 4Directions Project "**Internet Strategies for Empowering Indigenous Communities in Teaching and Learning**" is funded by the Technology Literacy Challenge grant program from the U.S. Dept. of Education. Twenty-four Native American schools from eight states participating.

- **USAID Learnlink Project**
<http://www.aed.org/learnlink>
Thirty-three countries involved in educational and community networking, including indigenous peoples in South America and elsewhere. The Academy for Educational Development is the prime contractor. **USAID LearnLink Project and Teachers' Resources**
<http://www.aed.org/learnlink/resource.html>

- **Institute for Global Communications**
<http://www.igc.org/igc>
Connecting People Who Are Changing the World. Host for many global projects such as PeaceNet, Womensnet, Anti-RacismNet and EcoNet.

- **Global Development Learning Network**
<http://www.worldbank.org/distancelearning/gdln>
The GDLN is a telecommunications network that connects distance learning centers (DLC) in cities across the globe. * It harnesses the latest learning tools -- interactive video, electronic classrooms, satellite communications and the Internet - to help break down the digital divide.

- **Global Community Center**
<http://www.globaldevelopment.org>
Welcome to our "global community center on the Internet", a project of the non-profit Global Development Center. We operate with a philosophy, "Service is the rent we pay for being. It is the very purpose of life, and not something you do in your spare time."

Global Development Resource Organizations

- **WorLD**
<http://www.worldbank.org/worldlinks>
World links for development, opening a world of learning.
World Links for Development Program (WorLD)
Internet Training Materials
<http://www.worldbank.org/worldlinks/english/training/world/index.html>

- **Global Knowledge**
<http://www.globalknowledge.org>
Partners in knowledge for development, improving lives, reducing poverty, empowering people.

- **Alliance for Global Learning**
<http://www.global-learning.org>
The Alliance for Global Learning is a strategic partnership between Schools Online, World Links for Development (WorLD), and the International Education and Resource Network (I*EARN)

- **United Nations Development Program**
<http://www.undp.org>
Diverse resources for sustainable human development.

- **Schoolsonline**
<http://www.schoolsonline.org>
Their mission is to help ensure that all schools have effective access to the communication and information resources of the Internet. The organization donates Internet equipment to schools and facilitates teacher training and support. Since its founding in 1996, Schools Online has been a catalyst, helping more than 5,400 schools gain online access.

- **International Institute for Communications and Development**
<http://www.iicd.org>
The International Institute for Communication and Development (IICD) assists developing countries to utilize the opportunities offered by information and communication technologies (ICTs) to realize sustainable development.

- **The Hunger Site**
<http://www.thehungersite.com>
Visiting this site donates food to hungry people. A great example of how the web can support a cause. For more like this see the database of at <http://webactive.com>

Alaskan Native Innovations Web Tour

The following is a model “culture-specific” web tour suggesting a simple format for all cultures to share their best innovations among themselves, and with the world. This is a shortened version, for the full tour go to: <http://lone-eagles.com/alaskan.htm>.

- **Mt. Edgecumbe Native Boarding School, Sitka, Alaska**
<http://www.mehs.educ.state.ak.us>
An exceptional model for electronic student portfolios and includes a student-written tutorial on how to create such portfolios. The school is expanding their entrepreneurship emphasis.
- **Larry Louck’s Tutorial on Building Dog Sleds**
<http://www.aesd.schoolzone.net/aesd/nlg.school/sldhme.html#anchor864510>
A great example of innovative teaching from the remotest of locations.
- **Alaskan Native Knowledge Network**
<http://www.ankn.uaf.edu>
A major project based at the University of Alaska/Fairbanks Campus, supported by the National Science Foundation and the Annenberg Rural Challenge to collect and disseminate indigenous curriculum.
- **Native Alaskan Crafts**
<http://members.aol.com/glincoln45/Kipusvik.htm>
Toksook Native Alaskan Crafts marketed worldwide.

Three Alaskan Elementary School Cyberfair Winners

- **Alaska Native Art Virtual Museum**
http://www.asd.k12.ak.us/schools/William_Tyson/TysonHomePage.html
Select the Alaskan Native Art Virtual Museum. Great work by elementary students. A winning entry in the International Cyberfair competition.
- **The Magnificent Moose Project**
<http://www2.northstar.k12.ak.us/schools/awe/moose/narrate.html>
An outstanding winning entry in the International Cyberfair competition.
- **Hunter Hornet’s Cyberquilting Bee**
<http://www2.northstar.k12.ak.us/schools/htr/cyber/narrate.html>
Elementary students have created this winning entry for the International Cyberfair competition.
- **Women in the History of Alaska**
<http://library.advanced.org/11313>
A winning entry in the High School Thinkquest student competition, 1997, from four talented girls in Chugiak, Alaska. Fine work!

The Ten Top Internet Collaborative Tools

The first two below, email and listservs, are by far the most commonly used, but the remaining options have unique benefits and are enjoying increased use as more people begin to understand what they offer! An article describing these is at <http://lone-eagles.com/articles/tencollab.htm> Note that search terms are given for each section which will give you listings of additional tutorials!

1. Email
2. Listservs
3. Newsgroups
4. BBSes
5. Web-Conferencing
6. Internet Relay Chat (IRC)/Instant Messaging (ICQ)
7. Muds/Moos
8. iPhone and Internet Radio
9. Desktop Video Conferencing
10. VRML Chat Systems

1. EMAIL - One-to-one private interaction

Tutorials:

WebTeacher

<http://www.webteacher.org/index.html>

One of the best collections of Internet tutorials.

Polaris Tutorials

<http://www.provide.net/~bfield/polaris/index.html>

Another good collection of tutorials

Reach for the Sky

<http://www.learner.org/courses/rfts/b3web.htm>

An online lesson about email basics.

Free Email accounts available at dozens of sites including:

<http://www.hotmail.com>

<http://www.juno.com>

Netiquette Guidelines:

Cybernetiquette for kids!

<http://disney.go.com/cybersafety> Educators' favorite.

Good Summary from University College/Dublin:

<http://midir.ucd.ie/~cconaty/struct1.html>

From the National Supercomputer Center: The K12 Incomplete Guide to the Internet

<http://www.ncsa.uiuc.edu/Edu/ICG>

*For additional information search for netiquette or email+tutorial**

2. LISTSERVS - one-to-many public interaction

Tutorial with database of 84,000+ listservs:

<http://www.liszt.com> Select "Education."

<http://tile.net/lists/> Easiest is <http://www.topica.com>

<http://www.makelist.com>

(Create your own Free Listservs!)

OneList <http://www.onelist.com>

Free listservs and more from Egroups.com

ListBot <http://www.listbot.com/free.html> More free listservs

Workplace to Workspace; Using Email Lists to work together online <http://www.idrc.ca/books/848.html>

Take a look at this whole book online about using emails listservs!
(Buy the book and support the generous author!)

Reach for the Sky

<http://www.learner.org/courses/rfts/b4web.htm>

*For additional information search for listservs+tutorial**

Listservs, also known as Mailing Lists

Although not all mailing lists are the same, they are similar enough to consider one set of instructions for joining them.

1. From the databases of thousands of mailing lists below, select one that you would like to join.

<http://alabanza.com/kabacoff/Inter-Links/listserv.html>

<http://catalog.com/vivian/interest-group-search.html>

<http://www.liszt.com> See also: <http://www.liszt.com/select/Education>

2. After you have selected a list, find out the following two things about the list. One, the e-mail address of the mailing list, and two, the formal name of the mailing list
3. Address an e-mail message to the electronic address of the mailing list. Leave the subject of the message blank or put some "x"s in it.
4. In the body of the message, type:
Subscribe [listname] [your first name] [your last name]
If your name is Jane Doe, and you are subscribing to a mailing list called ElemTcher, then you would type:
Subscribe ElemTcher Jane Doe
5. Send the message. After a moment (or perhaps longer) you will receive a message from the list manager computer. The message will welcoming you to the list, describing the types of discussions that take place on the list, and how you should participate. This message will also describe how to unsubscribe from the list if you should decide to leave it. **Be sure you keep this information so you can unsubscribe when you want to!**

Three Great Mailing Lists

1. Formal Name: **Hilites**

Send the message "sub hilites your name" to majordomo@gsn.org
Collection of high-quality classroom-based collaborative learning projects.

2. Formal Name: **Nethappenings** - keeps you up on new happenings

Send the message "sub NET-HAPPENINGS your name" to
listserv@lists.internic.net

3. World Wide Web in Education: **WWWEDU** has over 1600 members from 35 countries.

Formal Name: **WWWEDU**

Send the message "sub WWWEDU your name" to listproc@ready.cpb.org

3. NEWSGROUPS - Site-based one-to-many small group and/or public interaction

Tutorial:

Reach for the Sky

<http://www.learner.org/courses/rfts/b5web.htm>

Deja News

<http://www.deja.com> Create your own free newsgroup!

*For additional information search for newsgroups+tutorial**

4. BBSES - Site-based one-to-one private and one-to-many small group and/or public interaction

Recommended tutorial:

<http://www.geocities.com>

Take the GeoTour.

The Ultimate Bulletin Board

<http://ultimatebb.com>

The Discovery Channel!

<http://school.discovery.com>

News, magazines online, bulletin boards and lots more! Select "Connections; Feed your Head" from the first screen and then "Bulletin Boards." Check out the Knapsack feature for something unusually neat.

Time/Warner's Pathfinder BBS

<http://pathfinder.com>

News, magazines online, bulletin boards and lots more! Select Bulletin Board from the first screen and jump in!

*For additional information search for BBSES+tutorial**

5. Web-Conferencing (Multiple formats) - Graphical Collaborative Environments. Including co-browsers with group chat features.

Tutorial:

David Woolley's Guides and Clearinghouse:

<http://www.thinkofit.com/webconf/>

See also <http://forumone.com> *and*

<http://forumone.com/products.htm>

Create your own Free web forum!

*For additional information search for web+conferencing+tutorial**

6. Internet Relay Chat (IRC) - "Live" public one-to-one and one-to-many interaction

Tutorial: Search for IRC+tutorials

Free Chat for your Web Site

MultiChat <http://www.multicity.com>

ParaChat <http://www.parachat.com>

Beseen.com <http://beseen.com>

Instant Messenger and Chat Messenger Software

ICQ <http://www.icq.com>

AOL Instant Messenger <http://www.aol.com>

PeopleLink <http://www.peoplelink.com>

*Sample Sites: Search for "IRC" OR search for
Internet+Relay+Chat*

7. MUDS/MOOS - Similar to Chat, but featuring enhanced control and object-oriented features.

Interactive fiction and online role-playing/theater capabilities.

Tutorials:

<http://www.musenet.org/bkort/WCE> by Barry Kort!

Educational Use of MUDS/MOOS

<http://tecfa.unige.ch/edu-comp/WWW-VL/eduVR-page.html>

Model Sample Application: The Pueblo Project

<http://www.pc.maricopa.edu/community/pueblo>

Native American Elementary student project.

Frequently Asked Questions:

<http://www.lysator.liu.se/mud/faq/faq1.html>

Hands-on examples: <http://angalon.tamu.edu/>

*For additional information search for MUDS+tutorials or
MOOS+tutorials*

8. IPHONE and Internet Radio - Internet telephone and audio-conferencing; one-to-one or one-to-many. Also, Internet Radio capabilities.

Resources and Hands-on examples:

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

Audio Sites with Free Software and Tutorials:

International Radio Stations

<http://goan.com/radio.html>

Phone Free

<http://phonefree.com>

Free software for free long distance calling over the Internet!

Centranow

<http://www.centranow.com>

Commercial service offering voice over Internet services. Free demo conference calls available. Suitable for "live" teaching.

Hearme

<http://hear.me>

Audio over Internet software and services.

Real Audio's Homepage

<http://www.realaudio.com>

[http://www.nexus.org/Internet Radio/](http://www.nexus.org/Internet%20Radio/) More and more sites require you have the near essential free **Realplayer** "plug-in" to hear web-based audio links and view web-based video links.

Sample:

<http://www.gogaga.com>

For additional information search for Iphone or Internet+radio

9. Desktop Video Conferencing - "Live" one-to-one or one-to-several video interaction

PC and Mac Software and tutorials for CU-SEE-ME:

<http://www.gsn.org> Select "Communications" then "Classroom conferencing!"

Broadcast.com <http://broadcast.com>

Quicktime video tutorials/software:

<http://www.apple.com/quicktime>

Top 25 Internet Camera Sites

<http://earthcam.com/top25>

Leonard's CAM World

<http://www.leonardsworlds.com/camera.html>

Look out of Internet cameras worldwide!

*For additional information search for
desktop video conferencing+tutorial**

10. VRML Chat Systems - Using three dimensional 'avatars' for one-to-one "live" chat using animated 3 dimensional characters.

Tutorials: <http://www.mediabuilder.com/tutorials.html>

Sample Site: **Worlds.Net A VRML Chat site**

<http://www.worlds.net/>

Download the great free demo software!

*For additional information search for VRML+tutorial**

- **NCSA's VRML Tutorial**
<http://bach.ncsa.uiuc.edu/VRML>
A class summary you're likely to find useful!
- **Worldnet and AlphaWorld 3D chat "worlds."**
<http://www.worlds.net>
Free demo software available!
- **Onlive's 3D chat "worlds."**
<http://www.onlive.com>
Another 3D chat world to explore
- **The VRML Repository**
<http://www.sdsc.edu/vrml>
The VRML Repository is an impartial, comprehensive, community resource for the dissemination of information relating to VRML.
- **The Ultimate VRML Resource!**
<http://hiwaay.net/~crispen/vrml>
- **The VRML Consortium** <http://www.vrml.org>

Online Courses and Learning Pathways

Highly Recommended First Courses

- **“Making the Best Use of Internet for K12 Instruction”**
<http://lone-eagles.com/spu1.htm>
A five quarter credit self-directed post-graduate course from Seattle Pacific University, based on this guide.

Also available as a 3 semester credit self-directed post-graduate course from Alaska Pacific University and based on this guide, both courses taught by Frank Odasz.
<http://lone-eagles.com/asdn1.htm>

- **Webwhacker; offline browsing and Internet research free courses:** <http://www.bluesquirrel.com> Learn how timesaving an offline browser can be for teachers and presenters!

Courses on Creating Online Courses

- **Designing Internet Instruction for K-12**
<http://lone-eagles.com/currmain1.htm>
A hands-on course on how to easily create Internet hotlists, web-tours, lessonplans, project-based learning activities (Webquest, Cyberfair, Thinkquest) and complete online courses using online web tools. Instructor is Frank Odasz
- **Creating your first cybercourse**
<http://www.cyberschool.k12.or.us/~layton/cyfc2>
Excellent work by Tom Layton. From the **Eugene Cyberschool**
<http://www.cyberschool.k12.or.us>
- **Reach For The Sky**
<http://www.learner.org/courses/rfts>
Select "Lessons" for three full online courses for educators!
- **Creating Online Courses**
<http://www.blackboard.com/courses/2277>

Culture Specific and Citizen-Created Courses

While there may be few examples today, we can soon expect to see a virtual explosion of courses created by citizens for specific cultures and purposes.

- **Genealogy Resources! Madrid Family Home Page**
<http://spot.Colorado.EDU/~madridt/Home.html>
Fantastic example of a family working together to create a resource for other families. Create your own family Genealogy web page! Research YOUR family history.
- **Saxakali.com** <http://saxakali.com/coloru>
Free courses for, and by, colored folks, from Africa.
- **Agricultural and Family Support web-based courses**
<http://classes.aces.uiuc.edu>
- **Thirddage.com** <http://www.thirddage.com>
Courses for, and by, seniors.
- **Alaska Native Knowledge Network**
<http://www.ankn.uaf.edu>
A ten million dollar project combining scientific method with the Native Way of Knowing. Archived newsletters include articles on school reform, language preservation, and the balance of local and dominant culture in learning environments. **Warrants considerable exploration.**
Alaskan Cultural Curriculum
<http://www.ankn.uaf.edu:591>
A significant collection, developed by the Alaska Native Knowledge Network project.
Alaska Standards for Culturally Responsive Schools
<http://www.ankn.uaf.edu/standards>
Very unique standards applicable worldwide, available in booklet and poster formats.

Online Course Sources for Professional Development

- **AT&T Virtual Academy**
<http://www.att.com/learningnetwork/virtualacademy/premierinteg.html> A listing of the best online courses for educators, and much more.

- **Heritage Online**
<http://www.hol.edu>
Courses and resources for teachers
- **OnlineLearning.net**
<http://www.onlinelearning.net>
- **The Training Registry**
<http://www.tregistry.com>
Online courses listed by topic.
- **Association for Supervision and Curriculum Development Courses**
<http://www.ascd.org/pdi/pd.html>
- **New Promise Courses**
<http://www.newpromise.com>
Listings of 3700 courses from 100 accredited schools
- **Masie Center for Technology and Learning**
<http://www.masie.com>
- **Polaris Tutorials**
<http://www.provide.net/~bfield/polaris/index.html>
- **Ziff-Davis Publishing Tutorials**
<http://www.learnitonline.com>
45 classes, 39 tutorials for a flat fee of \$7.95/month
- **PBS's Beginner's Guide to the Internet!**
<http://www.pbs.org/uti/begin.html>
- **Concord Consortium**
<http://www.concord.org>
Free Netcourse for Math/Science Teachers
- **Reach For The Sky**
<http://www.learner.org/courses/rfts>
Select "Lessons" for three full online courses for educators!
- **Odyssey Courses**
<http://www.mindspring.com/~oliver/courses.html>
- **Mentoring Course: Learning Environments**
<http://www.edb.utexas.edu/ez/cscl>
An exceptional listing of readings and resources on mentoring indigenous students, by Paul Resta, a notable figure in this

emerging field, from the University of Austin.

- **A Course from 4Directions Project on teaching indigenous youth**
<http://www.edb.utexas.edu/projects/allen/welcome.html>
- **John December's Master List**
<http://www.december.com/cmc/info>
An extensive listing of quality Internet training resources.
- **Univ. of Illinois web-based courses for K12 teachers.**
<http://www.ed.uiuc.edu/courses>
High Quality! Secondary Math/Science Methods courses, too.
- **Texas Online Course List World Lecture Hall**
<http://www.utexas.edu/world/lecture>
College Courses Online! The World Lecture Hall (WLH) contains links to pages created by faculty worldwide who are using the Web to deliver class materials. For example, you will find course syllabi, assignments, lecture notes, exams, class calendars, multimedia textbooks, etc.
- **Sloan Center for Asynchronous Learning!**
<http://www.aln.org>
15 web-based courses and software for creating web-based instruction.

Professional Development Resources for Teachers

Here are three of the best collections of Internet tutorials for teachers, from which you'll find links to other similar tutorial collections.

- **WebTeacher Tutorials**
<http://www.webteacher.org>
An excellent set of over 50 beginning Internet tutorials associated with the Tech Corps program. Available in Spanish.
- **US West's Educators' tutorials**
<http://www.uswestwow.org/nwow/education>
Effective and entertaining tutorials with links to training resources from the US West Teacher Internet Academies.
- **American Library Association's Training Resources**
<http://www.ala.org/ICONN/index.html>
A very complete collection of training resources with links to many, many similar resources.

Distance Learning Clearinghouses and Virtual Universities

- **Academy for Educational Development**
<http://www.aed.org/ndl/disted/disted.html>
An extensive listing of distance learning resources and organizations for perhaps the largest such organization in the world.
- **University of Phoenix**
<http://www.uophx.edu> Many online courses and aggressive worldwide marketing of online courses. One university to watch closely.
- **Spectrum Virtual University**
<http://www.vu.org>
Spectrum Universal has been proposing and exploring alternative education channels for more than twenty years. Today, thanks to technological breakthroughs that have brought about fast modems and the growth of the World Wide Web, Spectrum is carrying on its mission of sharing knowledge and education for the betterment of all!
- **PBS's 'Going the Distance' Consortium**
<http://www.pbs.org/insidepbs/news/gtd.html>
Thirty-three colleges and growing. Impressive.
- **Open University**
<http://www.open.ac.uk>
World's Largest Online Course Provider! The Open University is Britain's largest and most innovative university. Founded by Royal Charter in 1969, it has grown rapidly both in student numbers and range of courses.
- **ADEC Distance Learning Consortium**
<http://www.adec.edu>
Initially a state and land grant institutions consortium for agriculturally related satellite courses, ADEC is now adding online courses and broadening its focus. NCSA and the Western Governors' Virtual University are partners.
- **University of Wisconsin Distance Education Clearinghouse**
<http://www.uwex.edu/disted/home.html>
University of Wisconsin's Distance Education is defined as a planned teaching/learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification of learning.

- **Mind Extension University, Jones International, "Knowledge Online"**
<http://www.meu.edu>
Mind Extension University (ME/U) offers college credit courses to your home or business. Several college degree programs are available.
- **Distance Education General Resources**
<http://nova.umuc.edu/~erubin/de-gen.html> Good listing.
- **Another Great Canadian Distance Learning Resources Page** <http://direwolf.teleeducation.nb.ca/distanceed/default.cfm>
- **International University**
<http://www.international.edu>
Offers online courses for teachers on how to create online courses.
- **Peterson's Distance Learning Database**
<http://www.petersons.com/dlearn>
Searchable by institution, keyword, or degree program.
- **DIAL: Distance Instruction for Adult Learners**
<http://dialnsa.edu/home.html>
The New School's Distance Instruction for Adult Learners (DIAL) program provides an opportunity for students to take New School courses at their own convenience.
- **Learner's Corner, Office of Learning Technologies**
<http://olt-bta.hrdc-drhc.gc.ca/learning/index.html>
Excellent Canadian distance learning resources.
- **Knowledge Connections Corporation and Products**
<http://www.kcc.ca/project/library/p1003s.html>
- **Collaborative Tools For Distance Education**
http://www.gse.uci.edu/CCRE/knowledge_building/tools.html
- **TECFA - University of Geneva "Training Technologies and Learning" Resources** <http://tecfa.unige.ch/>
French and English. Great resources.
- **Digital Diploma Mills: A Four Part Series**
<http://communication.ucsd.edu/dl>
A Negative View Of Online Learning. David Noble's scathing essays with too many good points to not include in this listing. Well worth reading to keep us all thinking hard about quality in online learning.

LEVEL FOUR:

The Power of Citizenship and Enlightened Expectations

Public Problem-Solving, Learning-to-Earn, and Electronic Democracy

CONTEXT: This level of “**Citizenship and Enlightened Expectations**” presents the highest level of benefits, but is also the most difficult to understand, particularly without the direct hands-on experience of the previous levels.

Expectations increase with experience. As you gain experience using Internet collaborative tools, it soon becomes clear that there is incredible untapped potential for working together with others as a good citizen, both locally and globally.

We’re seeing many organizations using the web for advocacy for their cause and for activism to take organized action toward specific goals. A course in **virtual activism** is found at <http://www.netaction.org/training> and a database of **activism websites** is found at <http://www.webactive.com> . It is a fact, that transnational activism, working with others online globally to advocate a cause, such as human rights, is dramatically on the rise!

Involvement in the process of identifying emerging needs, and meeting those needs with genuine value and services, can be taught through a project-based approach to real community issues and problems. Due to the Internet’s increasing efficiency and popularization, new opportunities, with a global significance and reach, are being continually created. One only has to look at those who are successfully providing services and products via the Internet to see why home-based businesses are flourishing.

With the very nature of work changing, as youth grow up, they will need to identify new processes for identifying emerging work opportunities in their communities. The jobs they will likely perform in the future may not exist today.

We’re already seeing many online businesses realizing the value of online collaboration and they are inventing new collaborative capabilities to enhance their web sites. Free Ebusiness web sites are now available to anyone! (Listed at <http://lone-eagles.com/webdev.htm> and <http://lone-eagles.com/entrelinks.htm>)

While the Internet itself can indeed be a window of unlimited opportunity, one must develop the capacity for envisioning that which is yet to come. These emerging trends are typically based on common sense application of the new capabilities to meet existing needs as the Internet evolves.

Quickstart Awareness Activities

ACTIVITY: Explore the following ‘Building Learning Communities’ Web Tour resources, also at <http://lone-eagles.com/teled.htm>

ACTIVITY: Explore the following E-business Start-Up Training Resources Web Tour and perform an Internet search using the following terms: "youth+entrepreneurship" See <http://lone-eagles.com/entrelinks.htm>

ACTIVITY: Explore the following Community Networking Clearinghouse at <http://lone-eagles.com/community.html> and the Community Network Planning Guides at <http://lone-eagles.com/chap11.htm> to get ideas for what your community can do for itself.

ACTIVITY: Explore the Electronic Democracy Web Tour at <http://lone-eagles.com/democracy.htm> to appreciate existing resources for citizen activism, home businesses/telecommuting and community networking!

ACTIVITY: Explore how various causes and organizations are empowering themselves using the Internet at <http://www.webactive.com>
<http://www.netaction.org>

Think about the implications for your own impact on the world via Internet during your lifetime!

ACTIVITY: Read the Good Neighbor’s Guide to Community Networking <http://lone-eagles.com/cnguide.htm> .

Building Learning Communities Web Tour

<http://lone-eagles.com/teled.htm>

- **The New Gold Rush: Mining Raw Human Potential Using Free Web Tools**
<http://lone-eagles.com/goldrush.htm>
- **Building Learning Communities through Community Technology Centers**
<http://lone-eagles.com/articles/build.htm>
An introduction to the self-empowerment opportunities the Internet offers anyone with Internet access.
- **Lone Eagles Learn to "Teach From Any Beach "**
<http://lone-eagles.com/articles/eagle.htm>
Learning to teach online; anyone, anywhere, anytime.
- **The Good Neighbor's Guide to Community Networking**
<http://lone-eagles.com/cnguide.htm>
Ebusiness, youth-based community development, and a bibliography listing the best community networking guides and resources. Eleven easy-reading chapters.
- **Culture Club: A Cultural and Community Survival Concept Paper**
<http://lone-eagles.com/articles/cultureclub.htm> A Youth-Based Community and Cultural Survival Strategy. See also <http://lone-eagles.com/youth.htm>
- **Center for Digital Storytelling**
<http://www.storycenter.org/storyplace.html>
Important models and resources for telling your community's story online.
- **Community Networking Primer**
<http://lone-eagles.com/articles/networking.htm>
A good first article on the practical function of community networks.
- **A Free Web Tools Web Tour**
<http://lone-eagles.com/currtour.htm>
Free tools for collaboration, Ebusiness, and authoring instructional materials
- **Community Network Funding Sources and Grantwriting Tips**
<http://lone-eagles.com/granhelp.htm>
- **The Ten Internet Collaborative Tools**
<http://lone-eagles.com/articles/tencollab.htm>
Published in ISTE's Leading and Learning with Technology Magazine Dec/Jan 1999 <http://www.iste.org>
- **Additional Readings from Lone Eagle Consulting's**
<http://lone-eagles.com/articles/articles.htm>
See also <http://lone-eagles.com/community.html> for community resources.

E-commerce Start-Up Training Resources Web Tour

Information condenses to knowledge, which condenses to wisdom,
and *value* is created in an information economy.

Learning To Create A Business

- **Cisco Systems, Inc. and the U.S. Small Business Association** have teamed to offer six free Ecommerce courses covering the basics for planning, marketing and more. <http://www.sba.gov/classroom>
- **Small Business Knowledge Base**
<http://www.bizmove.com>
Teach yourself how to start a business, marketing, financial management and international trade!
- **Entrepreneur's Edge**
<http://edge.love.org>
Learn how to be a successful Entrepreneur.
- **Business@ Home**
<http://www.gohome.com>
Making a life while making a living.
- **Home Office Association of America**
<http://www.hoaa.com>
SoHo (Small Office/Home Office Resources;) Excellent. See their resource links.
- **Two Magazines on Ebusiness: Business 2.0** <http://www.business2.com>
and **Fast Company** <http://www.fastcompany.com>

Free Ecommerce Sites and Services

- **Freemerchant**
<http://freemerchant.com>
Free Ecommerce merchant accounts and much more for Ebusiness startups.
- **Bigstep.com** <http://bigstep.com>
Free services for creating your own E-business.
- **OLB.com** <http://olb.com>
Another free service for creating your own E-business.
- **Add-a-Shop** <http://addashop.com> Your own Ebusiness site in 5 minutes.

- **Amazon.com's zshops**
<http://amazon.com>
Free Ecommerce sites and a Merchant's Resource Center.

Youth Entrepreneurship

- **YoungBiz.com** <http://youngbiz.com>
Free Ebusiness sites and training for youth.
- **EBusiness for Teens**
<http://library.advanced.org/28188>
A Thinkquest entry from Jamaica with lots of Ebusiness resources for teens.
- **Hotlist of Student Entrepreneurial Resources:**
<http://lone-eagles.com/entrelinks2.htm>
Wonderful listing of dozens of important resources for student entrepreneurship, home-based businesses, community service, and more.
- **Youth World Trade Training**
<http://www.wbe.net> Sponsored by the Reis Foundation
<http://www.reisfoundation.org> Youth entrepreneurship focus
- **Adult and Youth Entrepreneurship Training Resources**
<http://www.emkf.org/>
The Kauffman Foundation has a billion dollar endowment for funding youth and entrepreneurship programs. To review their free training resources, select Entrepreneurship, then Entrepreneurship resources. Also hosting <http://www.entreworld.org>, listing extensive resources for entrepreneurs.

Career and Job Marketing Sites

- **Freeagent**
<http://freeagent.com>
Tutorials for becoming a free agent information technology professional.
- **Guru.com**
<http://guru.com>
Resources for marketing your services and finding work contracts.
- **Monster.com**
<http://content.monster.com>
A Career Center that allows you to market your skills. Free resume posting, services for researching companies, job seeker information and has a great section on community business.

Unique Ecommerce Services

- **Talkcity.com**
<http://business.talkcity.com>
Building communities for businesses online. Tutorials and tools available.
- **Wholetree Ecommerce Language Translation**
<http://wholetree.com>
Services for going global.
- **Ebay** <http://www.ebay.com>
An auction site which has provided sustainable businesses for many home-based businesses in very rural locations.
- **Colorado's AERIE**
<http://bcn.boulder.co.us/aerie>
Exceptional resources for RURAL economic development.
- **Netpreneur.org**
<http://netpreneur.org>
From Washington DC, the most electronically wired, educated, wealthy, and politically charged community in the world; here are sophisticated resources for learning how to grow an online business.
- **Telecommuting Jobs Listing and How-To-Telecommute Handbook**
<http://www.tjobs.com>
Interesting focus for a home business; to teach others telecommuting skills.
- **Mining Company Telecommuting Resources**
<http://telecommuting.miningco.com>
- **BizRate** <http://bizrate.com>
Evaluations, and listings, of popular Ebusiness sites.
- **Electron Economy**
<http://electroneconomy.com>
Services for businesses going online.
- **Buzzcompany**
<http://www.buzzcompany.com>
Learn how to create online business communities.
- **Centranew**
<http://www.centranow.com>
Internet-based voice-based services, conference calls, and more. Free Trials.
- **Interland** <http://interland.com>
Interland provides small- and medium-sized businesses secure and reliable e-commerce solutions for building a Web business. Free consulting offered.

Community Network Planning Guides

- **Missouri Express Project** <http://outreach.missouri.edu/moexpress>
The state of Missouri provided \$6 million for a three year project to establish as many as 80 community information networks in Missouri. It includes @Community Missouri, an electronic magazine, a tour of successful community networks, and an excellent resource guide Missouri organized at the state level in 1998 when The Missouri Association for Community Information Networks was formed. – Steve Cisler.
- **Missouri Express Resource Guides**
<http://outreach.missouri.edu/moexpress/guides/index.html>
This is the most complete set of guides to establishing a community network that exists online. There are 28 chapters on subjects such as developing an action plan, education and training, sustainability, providing dialup access, and evaluation. These are topics that are important in any country, even if this manual is aimed at the rural USA. Excellent resource.-Steve Cisler.
- **Community Networks and community development (50 kb)**
<http://www.ssu.missouri.edu/faculty/kpigg/IACD99.html>
Dr. Kenneth Pigg is a professor of rural sociology at the University of Missouri who has evaluated the \$6 million, state-supported effort to establish 22 community networks in rural areas. Though he is critical, he hopes that this study will help community networks attain their oft-stated goals. – Steve Cisler.
- **The Good Neighbor's Guide to Community Networking**
<http://lone-eagles.com/cnguide.htm>
A work in progress; 11 chapters with links to many resources.
- **Community Network Briefing Book from the Blacksburg Electronic Village**
http://www.bev.net/form/bev_book_request.html
Printed copies sent free, on request.
- **CTCNET Startup Guide**
<http://www.ctcnet.org/toc.htm>
A guide to starting a community technology center, from the national organization of over 400+ CTC members.
- **Smart Communities Online Guides**
<http://www.smartcommunities.org>
Two thick guides and many resources.

- **Getting Online – A guide to the Internet for Small Town Leaders** <http://natat.org/ncsc>
A very basic guide from the National Center for Small Communities.
- **University of Kansas Community Tool Box** <http://ctb.lsi.ukans.edu/tools/tb-tocl.html>
Includes a "troubleshooting guide" to improve effectiveness in community action:
<http://ctb.lsi.ukans.edu/assistance/MegaTools/Trouble>
- **Computer Lab Guidelines from the RECA Foundation** <http://www.tcfn.org/labguide/index.htm>
- **Heartland Center for Leadership Development** www.4w.com/heartland
From the heartland in Lincoln, Nebraska. Many resources, programs, and studies related to rural communities.
- **MIRA Trainers Roster** <http://www.4w.com/heartland/mira.ihtml>
A roster of the best community trainers, by topic, with evaluations.
- **Virtual Power – Technology Education and Community** <http://psrtec.clmer.csulb.edu>
Select "Virtual Power" to download as a PDF file. Multicultural community emphasis, global learning networks, training strategies.
- **"Electronic Collaboration: A Practical Guide for Educators"** http://www.lab.brown.edu/public/ocsc/collaboration_guide
A good guide from the U.S. Dept. of Education
- **Citizen's Planning Resources** <http://www.webcom.com/pcj/tour/apa98.html>
A Dozen key sites for citizen civic planners.
- **Community learning network resources from Canada** <http://www.cln.org> Includes an extensive report on models and case studies for Canadian community learning networks <http://olt-bta.hrhc-drhc.gc.ca/CLN/pubs.html> Canada funded over 15,000 CLNs.
- **AT&T's New Community Guide** <http://www.att.com/communityguide>
Sent to 1000 community technology centers June 2000. Contains 84 pages of THIS guide as well as a robust listing of
Diversity Resources
<http://www.att.com/learningnetwork/diversity.html>

Community Networking Associations

- **Association for Community Networking**
<http://www.afcn.net>
A new organization created by many of the original pioneers.
- **CTCnet** <http://www.ctcnet.org>
National organization supporting Community Technology Center's.
Includes a guide for creating CTCs.
- **Texas Community Networking Initiative**
<http://www.txtele.com>
One BIG project to watch closely.
- **Community Development Society**
<http://comm-dev.org>
Chaired by Dr. Ken Pigg, evaluator of Missouri Express.
PiggK@missouri.edu

Community Networking Directories and Resources

- **Tachyon Community Network Database**
<http://www.tachyon.net/cnet/> By Steve Cisler and Jean "NetMom" Polly. Tachyon offers state-of-the-art two-way Internet satellite systems. Very possibly the most current community networking directory on the Internet.
- **Community Networking Clearinghouse**
<http://lone-eagles.com/community.html>
Borrow the best ideas and resources from hundreds of other community networks and related organizations. Build on the best.
- **University of Michigan Community Connector Resource**
<http://www.si.umich.edu/Community>
Joan Durrance and her graduate students have created a fine resource.
- **Morino Institute's Public Access Networks Directory**
<http://www.clir.org/pand/pandhome.html>
Outdated, but once the most complete national directory, last updated July '95. Opening doors of opportunity - economic, civic, health, and education - to improve lives and communities.
- **Community learning network resources from Canada**
<http://www.cln.org> Many community education resources including: CLN Documents on Models and case studies for Canadian community learning networks <http://olt-bta.hrdc-drhc.gc.ca/CLN/pubs.html>
Includes an extensive report on models and case studies of community learning networks in Canada. Canada funded over 15,000 CLNs.

Community Networking Models

- **Metropolitan Austin Information Network (MAIN)**
<http://www.main.org>
A successful large urban community network.
- **Prairienet**
<http://www.prairienet.org>
700 local businesses and organizations have web sites posted.
Includes text-based conferencing in a web-accessible format.
Source of many innovations, such as their new asset mapping project led by Ann P. Bishop:
<http://www.prairienet.org/membercenter/ipservices/cl/assets>
- **La Plaza Telecommunity**
<http://www.laplaza.org>
A rural tri-cultural community network which was the first to use a graphical interface.

Electronic Democracy Web Tour

<http://lone-eagles.com/democracy.htm>

Citizenship is the American Ideal. There may be an army of actualities opposed to that ideal, but there is no ideal opposed to that ideal.

G.K. Chesterson

- **Liberty Net** <http://www.libertynet.org/~edcivic/iscvhome.html>
Institute for the Study of Civic Values--Help strengthen America's commitment to our historic civic ideals. Many resources for citizens to build a true, informed, proactive democracy.
- **Neighborhoods Online: National**
<http://www.libertynet.org/community/phila/natl.html> A key component of LibertyNet; helping neighborhood activists and organizations gain information and resources of use in solving community problems; online resource center.
- **Netaction.org**
<http://www.netaction.org>
A clearinghouse for cause-related web collaborative activities. Select the Virtual Activist training course. <http://www.netaction.org/training>
- **WebActive.com: Activist Group Directory**
<http://www.webactive.com>
Here's a great searchable directory of "communities of interest;" citizens with a mission.

- **Votelink-the voice of the 'Net**
<http://votelink.com>
Free on-line voting and discussions; See Teen Voting and discussions.
- **Civicnet: Civic Dialog and Citizen Participation Resources**
<http://civic.net/civic.html>
Resources from The Center for Civic Networking and The Innovation Groups.
- **An Electronic Civil Liberties Library**
<http://www.eff.org/archives.html>
From the Electronic Frontier Foundation: Select Netculture and Online community, and Cyberanthropology.
- **Minnesota E-Democracy Initiative**
<http://www.e-democracy.org>
An exceptionally vigorous state initiative. Good source of links to similarly minded folks.
- **National School Network Testbed**
<http://nsn.bbn.com>
Good source of research on school and community networks, telem mentoring, etc. Federal Government Resources and Contacts

Federal Government Important Resources

- **Thomas Jefferson Government Resources** <http://thomas.loc.gov>
Direct from the Library of Congress, here are extensive resources on current congressional activity
- **FedWorld** <http://www.fedworld.gov>
Providing a comprehensive central access point for locating and acquiring government information. The new federal system will be <http://firstgov.gov> and will be available Fall 2000.
- **Office of Vocational and Adult Education**
<http://www.ed.gov/offices/OVAE>
Funding for Community Technology Centers
- **Federal Technology Opportunities Program**
<http://www.ntia.doc.gov>
Funding for Community Technology Projects

Government Sponsored Native American Sites and Programs

- **Native American Federal Resources**
<http://www.hud.gov/native.html>
HUD's good listing of Native American Federal Resources.
HUD is funding community technology centers, too.
- **Code Talk**
<http://www.codetalk.fed.us>
A federal inter-agency Native American website that provides information for Native American communities. Code Talk is hosted by the U.S. Department of Housing and Urban Development, Office of Native American Programs. Native American and Alaskan Native links -
[http://www.codetalk.fed.us/AI AN links.html](http://www.codetalk.fed.us/AI_AN_links.html)
Many outdated links.
- **Indian Health Service**
<http://www.ihs.gov>
Their resources database is
http://www.ihs.gov/misc/links_gateway/Links_Main.cfm
An exceptional listing of governmental agencies supporting Native Americans.
- **Bureau of Indian Affairs**
<http://www.doi.gov/bureau-indian-affairs.html>
Includes listings of hot issues, topics of interest, offices and bureaus.
- **U. S. Department of Agriculture Native American Links**
<http://www.nal.usda.gov/ric/ruralres/nativeam.htm>
Includes resources for funding and program assistance and governmental agencies involved with supporting Native Americans.
- **Native American Government links**
<http://www.hanksville.org/NAresources/indices/NAgov.html>
Over 100 governmental links.
- **Native American Organizations**
<http://www.hanksville.org/NAresources/indices/NAorg.html>
Comprehensive listing of Native American organizations.
- **Native American Organizations and Urban Centers**
<http://www.pitt.edu/~lmitten/organizations.html>
A second great listing of Native American organizations.

- **Native American Rights Fund**
<http://www.narf.org>
Resources on Native American rights.
- **Indian Law Web Site**
<http://www.cookiecount.com>
Excellent resources on Indian Law.
- **Federal Communications Commission Native Resources**
<http://www.fcc.gov/indians/>
The Indian Telecom Training Initiative
<http://www.fcc.gov/indians/training.html> will provide information to help tribal governments make decisions about telecommunications services for tribal residents and to increase their options for finding telecommunications service solutions
- **Federal Government Guide to Online Federal Services**
<http://www.firstgov.gov>
New service to be available Fall 2000 offering the complete listing of all online federal services.

Four Key Reports on Native Telecommunications

- **Native American/Alaskan/Hawaiian K-12 Computer and Internet Innovations - A Report for the U.S. Agency for International Development**
<http://lone-eagles.com/usaid.htm> (Web Version)
To download the complete document in WORD 97 format –
<http://lone-eagles.com/luisrpt.doc>
- **Telecommunications Technology and Native Americans; Opportunities and Challenges**
<http://www.ota.nap.edu/pdf/data/1995/9542.PDF>
Here's the first and last study on this topic by the Federal govt. This seminal report was created by talented people at former Congressional Office of Technology Assessment and is a 3 megabyte PDF file which requires the Adobe Acrobat Reader to view. If you click on this link it will begin downloading.
- **Native Networking: Telecommunications and Information Technology in Indian Country**
<http://www.benton.org/Library/Native>
A 1999 report from the Benton Foundation
- **Assessment of Technology Infrastructure in Native Communities -- Final Report, July 6, 1999**
<http://alpha.nmsu.edu/~tech>
From New Mexico State University.

Native Technologies, Media, and Collaborative Networks

- **Hanksville Listing of Native American Media**
<http://www.hanksville.org/NAresources/indices/NAmedia.html>
A comprehensive listing of Native media sites of every description.
- **Lisa Mitten's Listing of Native American Media**
<http://www.pitt.edu/~lmitten/media.html>
A second comprehensive listing of Native media sites.
- **Nativenet**
<http://niikaan.fdl.cc.mn.us/natnet>
A collection of discussion listservs on Native issues.
- **Native American Public Telecommunications**
<http://nativetelecom.org>
Focused primarily on public television and radio applications. New low power FM is here, a significant new development for Indian radio. Internet radio is an important new development, click on <http://www.airos.org> to listen to Internet radio. Requires the free downloadable RealPlayer software.
- **Web boards and Listservs**
<http://www.hanksville.org/NAresources/indices/NAother.html#boards> A dozen links to Native networks, but review the rest of this great "other links" list. You're likely to find many nice surprises.
- **Listings of Native Networks**
<http://www.oise.utoronto.ca/~jisekebarnes/aboriginal/othersites.html> A short listings, but with important links to major Canadian networking resources as well as U.S. networks. From the exceptional listings of "Aboriginal Educational Resources on the Internet"
<http://www.oise.utoronto.ca/~jisekebarnes/aboriginal/index.html>
- **Tribal Voice**
<http://www.tribal.com>
Unusual site offering a Pow-wow browser tool that allows group browsing remotely. Not a Native American site as far as I can tell looks like a great tool for distance learning applications.
- **IndianNet: Service to help tribes get web pages on the Internet** <http://indiannet.indian.com>
A good place to start if you're a newcomer to the web.

Community Technology Access Centers

- **Igalaaq (The Rankin Inlet Community Access Centre)**
<http://www.idrc.ca/acacia/nordicit/profiles/igalaaq.htm>
Thanks to the support of the people of Rankin Inlet, Nunavut and Industry Canada's Community Access Program (CAP - <http://cap.ic.gc.ca/>) we had great success in establishing the very first Community Access Centre in Canada's Arctic <http://www.arctic.ca/LUS/CAC.html> at the Leo Ussak Elementary School <http://www.arctic.ca/LUS> . It is known as "Igalaaq", Inuktitut, the Inuit language, for window. In its first year of operation alone, Igalaaq hosted over 3,000 visits and helped to establish e-mail accounts who over 20% of Rankin Inlet's population of approx. 2,000 souls on the West coast of Hudson Bay. All of this in a community which is 85% Inuit and where many families still have members who were born on the land in skin tents and igloos.

You can find more info. about this story at <http://www.arctic.ca/LUS/CAC.html> where you can download a copy of the Igalaaq story in Adobe Acrobat PDF format.

- **Community learning network resources from Canada**
<http://www.cln.org>
Many community education resources including: CLN Documents on Models and case studies for Canadian community learning networks <http://olt-bta.hrdc-drhc.gc.ca/CLN/pubs.html> Includes an extensive report on models and case studies of community learning networks in Canada. Over 15,000 community learning networks have been funded over the past decade.

Two sample grants you can use to begin your grant proposal

- **Seventh Generation Community Initiative**
<http://lone-eagles.com/articles/7gc.htm>
A concept paper offered as ideas you can use for your own grantwriting. You're invited to use the text of this document as a start on your own grant proposal.
- **Community Bootstrap Project:**
Learning to Do for Ourselves; Together!
<http://lone-eagles.com/articles/boot2.htm>
Please feel free to use in your grants: without restriction.
Boilerplate text for YOUR community networking grant..

Native American Research Sites

- **University of Michigan Gateway to Native American Resources**
<http://www.si.umich.edu/CHICO/gateway/frametable.html>
Hundreds of resources listed in table format by category, but without live hyperlinks. Includes bibliographies, law, education, government, history, languages, indexes and more.
- **Native American Bibliographies and General Resources**
<http://falcon.jmu.edu/~ramseyil/native.htm>
You will find bibliographies, directories to pages of individual tribes, history and historical documents, periodicals and general links. Site Administrator: Inez Ramsey, James Madison University
- **American Indian History and Related Issues**
<http://www.csulb.edu/projects/ais>
With well over 100 links, this site by Professor Troy Johnson is dedicated to the presentation of unique artwork, photographs, video and sound recordings which accurately reflect the history, culture and richness of the Native American experience in North America and has been expanded to include Indian people of Central America and Mexico.
- **Native American Research Resources**
<http://maple.lemoyne.edu/~bucko/indian.html>
While not extensive, this site sponsored by Rev. Bucko from the Jesuit College of Central New York holds many good resource links.

Native American Higher Education

- **American Indian Higher Education Consortium**
<http://www.aihec.org>
Master listing of U.S. Tribal Colleges
- **AISES (American Indian Science and Engineering Society)**
<http://www.aises.org>
Their Multicultural Educational Reform Resources
<http://spot.colorado.edu/~aises/aises.html>
- **Alaskan Native Knowledge Network**
<http://www.ankn.uaf.edu>
A major project supported by the National Science Foundation and the Annenberg Rural Challenge to collect and disseminate indigenous curriculum. Combining the Native way of knowing with scientific method.

Community Networking: Leveraging the Public Good Electronically

<http://lone-eagles.com/articles/networking.htm>

Community networking is an idea that has caught the global imagination. Communities worldwide are creating telecottages, televillages, teleservice centers, community technology skills centers, and more. In the US alone, there are more than 150 community networks and nearly 3,000 community web sites. And the numbers are increasing every day.

What is a Community Network?

It's people coming together electronically to make good things happen!

Community networking is fundamentally about people applying technology to serve the public good. It is about caring about the needs of others, and the giving of ourselves to support our local communities.

The National Information Infrastructure's purpose is to link people together to empower them on many levels. The former Congressional Office of Technology Assessment reports, "The diversity of innovative applications required to create a successful NII can only come from the citizens themselves."

A true sense of community is now, as it always has been, the sum of what we give to each other in time, consideration, service, and good humor. Community networking in the past has involved face-to-face meetings, chance encounters, and various technologies that aided our sharing: the newspaper, radio, TV, and the telephone. Today, additional means of sharing, in the form of modern telecommunications technology, help us continue to build our communities in even more powerful ways.

Community Networking Models

A community World Wide Web homepage on the Internet allows current information to become easily available from the home with no more than the pointing and clicking of a mouse. The same information can be as easily available worldwide, too!

Text-based electronic bulletin boards have been available for a decade, allowing convenient ongoing discussions online. Such systems may be accessible only to registered community members locally, or open to anyone via the Internet. Such systems may be dedicated to a geographical community, or to a "community of interest" such as students studying Shakespeare. New forms of community networks are continually evolving.

Web-based online discussions allow combining the interactivity of electronic bulletin boards with the image-based easy interface of the World Wide Web. Web systems that are accessible only by the community are called Intranets, similar in concept to non-Internet electronic bulletin boards.

These types of "Inner-Net" community networks bring neighbors closer together electronically to engage in public problem solving and other community support activities. Connecting multiple community networks together through the Internet allows the sharing of the best ideas and information, literally creating an online "community of communities."

Before long, we're likely to have wall-sized touch screens that will allow us to "be anywhere visually and virtually." New methods of connecting people will be lead by the innovations of citizens, in partnership with corporations and governments, in ways we can't yet even imagine.

"Value-Pull," Not "Tech-Push."

Our common sense will determine what works best for the good of our families and our communities. We need to gather the best information possible for solving our local problems. A wide array of resources need to be matched with unmet needs. Via the Internet, we can have a direct tap on the world's knowledge base and the innovations of others.

Putting People before Technology

One growing problem we all face is the lack of time to meet face-to-face. We need new ways of keeping in touch, conveniently. Internet electronic mail and electronic community networks allow us greater flexibility and convenience in keeping in touch and finding the information we need. One-by-one, we're showing each other how to use these new community-building tools. It has always been through the trust in another that we're able to build friendships, the building blocks of any strong community.

The one-to-one relationship is the basis of community building.

Community networking allows sharing ideas anytime, anywhere. Communities will need to work together on an ongoing basis to continue to develop a joint vision for the optimal effectiveness of networking as the technologies continue to improve. Our shared vision of the benefits of community networking will grow as we each gain more personal hands-on experience.

Will Rogers once said: "We're all ignorant, only on different topics." Each of us can now be both learner and teacher all the time; learning from the world's resources and reflecting globally the best of ourselves. Our

individual abilities to become all we can be has been increased dramatically by the availability of self-directed learning opportunities via the Internet. We also find we now can help others learn anywhere, anytime; by combining our caring with our connectivity.

K-100 Lifelong Learning

Lifelong learning is an essential survival skill for the 1990s and beyond. Ongoing learning from the home greatly extends the learning opportunities for kids as well as adults. School networking and community networking are merging around the theme of K-100 lifelong learning, but in a more enjoyable familial context than the traditional educational system. Since students spend only 19 percent of their time in school, this opens up 81 percent more potential time for learning. Many students find the self-directed interactive features of telecomputing more motivating than passively watching television!

Community empowerment starts with individual empowerment.

Personal satisfaction from extending your positive impact on your family's future, as well as your community's future, is inherent in the new technologies. But it will take time for many of us to become comfortable with these new ways of leveraging the public good electronically. In addition to being strapped for time, we are already suffering from information overload.

When technology doesn't work right, we need to get help quickly. We need new ways of learning how to keep up. We are finding new reasons to need each other; to support each other's continuous learning, and to make it an enjoyable, exciting community-oriented process.

Citizen Roles

A community depends on citizens contributing on their individual strengths to achieve common goals. Community networks give individuals increased ability to help others in the following ways:

Infoscout

Bringing the world's best knowledge home to post for easy community access.

Telementor

Helping citizens with online learning with the convenience of home access.

Reference Cybrarian

Guiding citizens in finding specific information from the global Internet.

Town Crier

Communicating to citizens the information they need to know.

Discussion Leaders

Leading online public problem solving discussions.

Think Globally, Act Locally

Though community networking is primarily about local communications, the global Internet can play an important role. Our challenge is how to balance our time between the global possibilities for information access, sharing and collaboration with a local commitment to realizing local benefits utilizing these global resources.

The World Wide Web (WWW)

The WWW provides any individual, business, or organization the ability to self-publish worldwide, and to gather the best information from other sites for reposting locally. The diversity of citizen-created innovations is already testimony to the citizen empowerment potential of the web. With the ability of citizens to learn from each others' innovations, we all grow stronger, together!

New Information Searching Capabilities

The Internet allows easy access to vast amounts of highly specific information, with as little effort as typing in a few words related to the information you seek. These new "search engines" are as powerful as they are easy-to-use!

Internet Electronic Mail

E-mail provides near instant delivery of text correspondence worldwide. Groupwork in a distributed, connected, knowledge economy will require that we know how to work with others online efficiently.

Reuniting the Generations

Because of the increasing and accelerating change and innovation, we need to learn to strengthen our ability to imagine new ways of doing things; better ways. Young people today are comfortable with the latest technology; perhaps because it allows them to learn without limitations and provides a new means of exercising their imaginations.

Young people are invaluable as community trainers and technical support resources, not only because of their technical talents and imaginations, but

because they have the time, which is in short supply these days. Our youth are a perfect match with the wisdom of the older generations. Older people have an enormous contribution to make, particularly in partnership with our youth!

Schools are finding networking allows students to use the community and community members as learning resources, and communities are finding that schools can provide training and expertise, and will often open up their computer labs for community members during the evenings.

Community networking, creating a new venue for family home learning and home-based businesses, is allowing us to return to a homelife and community lifestyle similar to the agricultural age where communities once worked and learned together. What can you do to help, you ask?

Support Your Local Champions!

If your community doesn't yet have a community network, or a community training center, here's a story with some tips on planning one:

Ken and Nellie Bandelier, both retired teachers, have a vision for their community: Dillon, Montana, population 4,000. After being diagnosed with prostate cancer, Ken joined an Internet support group for cancer patients. When he went in for surgery, he had 70 letters of support and encouragement from new friends found through networking. Ken's doing fine now, and he and Nellie have developed a vision for creating a Dillon-Net community network to allow Dillonites to support and encourage each other, much as Ken and Nellie experienced. www.dillon-net.org

Nellie's Internet Notes

Ken and Nellie have convened a Dillon-Net planning committee. To share their vision, Nellie writes a weekly column for the Dillon Tribune called "Nellie's Internet Notes." They received a computer and modem donated by United Way, and a donated office through a local business. Five days a week Ken and Nellie offer free hands-on Internet-awareness training for the community. They are both instrumental in the new "Beaverhead (County) Computer Users Group," or "BUG" for short. Monthly demonstrations showcase the benefits of computers and networking for the community.

Their greatest challenge is raising community awareness regarding the benefits of community networking to secure the financial support for Dillon-Net. "Public Interest Networking" is not yet a familiar concept. Local leaders are focused on budget problems, not technology. Ken and Nellie make a point of regularly meeting with local leaders to discuss the viability of community networking.

Expectations rise with experience, and Ken and Nellie hope to help community leaders gain hands-on experience with what other communities have found to work. Since many leaders are intimidated by computers, patience and perseverance are required. Videos, articles, and exploring other community networks are additional ways to build a vision of local "real benefits for real people."

The competitiveness required for success in the industrial age is being replaced by the ability to collaborate online as the key for success in the information age.

We're ultimately one human family, joined in a battle against ignorance. This battle will be fought with gentle spirits teaching a better way; moms, dads and kids, working with our electronic elders, sharing encouragement in support of the ongoing learning and empowerment of each other, as we all come to recognize we need to work together to "do what needs to be done." Are you prepared to do your part?

Citizens, through use of these new community-building tools, can be effective global philanthropists, generously sharing their time and knowledge. Caring and connectivity must come together if we're to meet today's great challenges.

Individually, we each share the challenge of helping our communities create grand collaborations of purpose and passion, and we're limited only by our imaginations.

Make the Choice to Take Action

Take the time to develop your own leadership potential.

Find someone to help you get started, and then find someone you can help begin...their own empowerment.

As we each learn to empower ourselves with collaborative skills, may we empower others. As we learn to be all we can be, may we bring people together to make good things happen for the people in our communities.

Innovation Diffusion - Looking at the Process of Change

Imagination is more important than knowledge.
- Albert Einstein

Inner-Directedness VS Outer-Directedness

An estimated 10-20% of American society are naturally curious, self-motivated, "early adopters". Such persons seek new experiences and like to explore. An early adopter is inner-directed; motivated by an innate curiosity, and is likely to be among the first to try anything new, often for the fun of it.

The majority of our society, however, is outer-directed; motivated primarily through the direction of others. These folks generally wait to try something new until they've seen others do something for long enough they feel its safe, and accepted, for them to try it too. These are "middle and late adopters" and represent 80% of society and will tell you "playing it safe" is just common sense, and they would be correct.

While early adopters will learn and explore on their own, middle and late adopters will wait until they receive clues that the social majority is supportive of such activity. Advocating change in the behavior status quo is typically met with resistance, something early adopters are very familiar with.

Another way to look at any society facing change is by looking at three distinct personalities. There are **drivers** (early adopters), who drive new innovations and thinking. There are the **riders** (middle adopters) who will eventually ride along with new trends. And there are always the **draggers** (late adopters) who are still grouching about using wordprocessing and the fax machine.

Together, these three main groups create a bell curve of innovation diffusion. The amount of time it takes for an innovation to diffuse across society can vary based on many factors. Widespread use of the telephone took 25 years, fifteen years for personal computers, seven years for widespread use of the fax machine, and five years for widespread use of the World Wide Web.

The most effective means of motivating other-directed personalities (middle to late adopters) to accept new thinking and change is by "Tom Sawyerism," demonstrating satisfaction from tangible benefits without direct advocacy.

You might know the story, by Mark Twain, where Tom is whitewashing a fence and specifically avoids asking his friends for help while making it look like he's having a great time. Eventually his friends convince him to accept items in trade in return for his letting them in on the fun. Tom knew better than to be direct, he instead showcased the benefits for all to see.

While in this case Tom was really trying to get out of the work of whitewashing the fence, and succeeded in enticing his friends to do his work for him, the point here is that often indirect advocacy through showcasing the benefits is more effective than preaching about the benefits. Also, the difference between work and play can often be one of perception, only. **Strategies will be required, not to tell folks what they should be doing, but to unobtrusively lead them to the discovery of what they can do for themselves.**

Despite all the reasons one might give for not using Internet, it is common for a complete shift of perception to occur once direct hands-on benefits have been realized. The pattern for this dramatic attitude shift comes when something of person value or interest is obtained via Internet that would not have otherwise been available. One elderly citizen absolutely refused to have anything to do with computers and the Internet, until someone showed him all the stock car information available. Well, stock cars were a personal hobby, and it wasn't long before the Internet was A-OK, as a resource for stock car information, anyway. We each need to take it one-step-at-a-time!

Below are four stages of internalization which fit the pattern of acceptance of any innovation. These stages can be helpful in understanding the behavior of others, particularly when comparing the attitudes of adults vs youth when faced with the limitless potential of computers and Internet.

Four Stages of Internalization of Innovation

Dealing with diversity of cultural and technical backgrounds can make Internet acceptance more challenging.

Consider these four identifiable stages specifically regarding internalizing the potential of Internet use and collaboration:

- * **Awareness/Uncertainty**
- * **Insight/Adoption**
- * **Internalization/Adaptation**
- * **Enlightened Expectations**

1. Awareness/Uncertainty

At this first stage people often experience acute self-doubt and self-deprecation as to whether they will be able to master the basic computer, Internet, typing, and written skills. A very shallow understanding of the potential benefits is common at this stage, though there is the general impression that there are advantages.

For the individual at the "uncertainty" stage, it is important to keep the instructional tasks very simple with short step-by-step, mastery learning format such that there is no failure, only success. Easily obtainable objectives are necessary to build confidence, as well as encouraging messages whenever possible. Technofear, and related ego-protecting excuses, are strongest at this stage. Upon proving to themselves they CAN communicate online, there is often a surge of optimism and confidence.

2. Insight/Adoption

At the "insight" phase people accept that telecommunications skills are not beyond reach and begin to see an increasing number of ways to benefit. They "adopt" use of the Internet and begin to gain a broader idea of what it has to offer them. Self-confidence begins to build through hands-on experience.

3. Internalization/Adaptation

The "internalization" stage is achieved through regular use when people begin to view the online skills as merely an extension of one's self. Use of Internet begins to be adapted to meet personal needs in an increasing number of ways. At this point "being online" is no more threatening than making a voice telephone call. Usage falls into a pattern of purposeful use and becomes "transparent."

4. Enlightened Expectations

The fourth stage, "enlightened expectations," begins after people internalize the online experience and become regular, even casual users. There is a growing acceptance that the Internet has even greater potential benefits. At this stage excitement begins to generate as the real potential of Internet use begins to percolate deep down in the person's consciousness and serious questions as to what else might be possible begin to arise.

At this stage people begin to make an internal commitment to pursue their full potential for new uses of the Internet. This may be a year or

more after initially going online. Willingness to serve as an online resource person, to tutor others online, or even to teach others online, are indications one has arrived at this "enlightened" stage. Imagining new original uses begins to occur.

Youth today are the key change agents and technology leaders

Computers and Internet appear to be significantly more motivating to youth than for adults. While most adults will tend to resist learning new things about computers and Internet, the opposite appears to be true with youth. While adults are often intimidated and feel stupid when frustrated with computers, youth tend to love to have the control to explore and learn new things. Adults need to relearn how "playing to learn" is as important as it is fun.

With most leadership positions held by adults, many of whom actively resist learning to use computers and Internet, early adopters, both young and old, are faced in considerable challenges when they attempt to "lend their wings to others." This type of tension will be part of any community network initiative.

Common Sense and the Process of Innovation Diffusion Retaining the best of the old and the new.

Traditional education has been historically slow to change, as have rural communities. In the past, many have taken pride in their dedication to traditional ways of doing things, but today, this attitude can bear an unwelcome heavy price. It's a fact, that with technology changing with accelerating speed, our society is changing faster all the time as a direct result.

Learning new things is now a necessary survival skill. Using Internet, self-directed learners have obtained a level of self-control and self-motivation that allows them to move forward, where others fear to tread. At issue in our communities, faced with accelerating change, is how can we best teach Self-Directed-Learning (SDL) as an increasingly essential skill, and how can we best model it in our own lives?

Internet and SDL hold the potential to deliver the best instruction, in content and context, to the most people possible, at the least cost. However, if those at the other end lack the intrinsic motivation to utilize such resources for their own benefit, or for the benefit of their families or cultures, then what can be done? Various forms of mentorship, and role models, will likely be needed to provide the motivation required when it is lacking.

Family-based mastery learning makes sense as we can't afford to leave anyone behind.

A lecture on the benefits of email is not as effective as receiving a first email response from a message sent to a family member. A lecture on Internet search engines is not as effective as a first successful search and printed resource, particularly concerning specific helpful information regarding family health or genealogy.

A constructivist approach in creating self-discovery opportunities that increase self-motivation, which in turn leads to becoming a self-directed learner, led by one's own natural interests and curiosity, is today considered superior teaching.

For more articulation of these themes go to <http://lone-eagles.com/articles/build.htm> and page 106 of this guide.

Grantwriting Tips

Writing grant proposals to get money to make your project happen is becoming more and more common. Here are tips and resources for writing your first grant!

1. **Find out which foundations have given grants in your region** similar to your planned proposal! Talk to those who got funded and ask for advice and ideally copies of their successful grants.
2. **Read the current guidelines** for those foundations on what they will fund and when the grants are due. If a foundation says they won't fund equipment, don't ask them for equipment (unless it's a necessary component of the part of the grant they said they'd fund!) For example: A programmatic grant could ask for \$50,000 in support equipment, but would not be considered if they called themselves a technology project. Semantics do matter a great deal!

If they say they'll fund up to \$15,000, don't ask them for \$50,000. Foundations often shift their focus, and timing can be very important. Watch for timing-sensitive opportunities. Do your homework! Grant reviewers appreciate those who paid attention to their RFP's (Requests for Proposals.) Too few do!

3. **Collect sample successful grants** to use as boilerplate models. Many foundations will send you, on request, proposals from past funded projects, or at least will give you the addresses of past grant recipients, so you can ask them directly for copies of successful proposals. The more good proposals you read, the more you'll understand how clear writing and following guidelines leads to funding.
4. **Use the same terms in your proposal** that the foundation used to describe what they want to fund. Buzz phrases push important buttons. If they tell you what to tell them: listen, and be convincing as to how your project dovetails with their posted guidelines. If an RFP says they don't fund technology grants, don't use the word technology. Find other words to express your project, ideally taken directly from the RFP guidelines.
5. **Get to know individuals** who have worked with the foundations to which you're applying. Talk to foundation personnel as much as is politely possible. Typically, little suggestions, and hints, you'll pick up, even from a phone conversation, will make major differences in the final form and focus of your proposal. The more personal contacts you make, the better for you. Foundations appreciate those who take the time to gather all the facts, and they

might even recognize your name when your proposal comes up for review. Pay careful attention on what to emphasize and what to tone down.

6. **Less is More!** Reviewing stacks of proposals is a difficult job. Grant reviewers quickly learn to scan text, particularly proposal abstracts, in an attempt to get a quick overview of exactly what you expect to do, with whom, when, how, and toward what measurable outcome. If you are short and to the point, and you've answered the key questions, your grant will be viewed as comprehensible and fundable. If you bog down the reviewer with too much ambling detail they'll have a hard time understanding your proposal and it is likely to end up in the "NO" pile. **Good proposals are easy to understand.**
7. **A catchy name**, like "Reach for the Sky" which is also descriptive of the project, can make a big difference. First impressions and a memorable theme and name are important! Remember they will want to promote your project proudly as one of **their** great projects.
8. **Good writing should be easy to read**, understand, and should present your ideas in an exciting, yet specific manner. The abstract of your proposal is the single most important paragraph of your proposal. You should know exactly what you're planning to do with their money, and express it in elegant simplicity. If the grant reviewer has a good idea of the direction of your proposal from reading the abstract, it creates an important first impression that you do indeed know what you want accomplish, with whom, at what cost, and specifically how.

In reading an exciting, well-written proposal, one idea follows naturally to the next. One disjointed or boring sentence can kill the mounting enthusiasm of a tired grant reader. Maintain a tempo of easy to understand sentences that build on one another in a crescendo fashion.

9. **Show in your proposal that you're aware** of who has done similar projects, and that you've partnered with appropriate entities to assure your project will have enough support to make it through to completion. Big Sky Telegraph, BST, (my former 10-year project) has helped many people get grants because it was widely known we'd been around long enough that most funders assume we won't disappear overnight. Affiliating with BST gave the impression that the grantees will have technical telecommunications support to assure their grant's success.

10. **Sustainability is a big issue.** Too many grant projects disappear after the funding is gone. How can you assure ongoing benefits once the funding runs out is one of the biggest questions in the mind of the grant reviewer.
11. **Measurable outcomes.** Once the grant is over, exactly what was produced, how will it be disseminated and exactly how many people will have benefited? How do you intend to measure tangible outcomes to prove the projected benefit actually occurred?
12. **In the passion of writing a grant it is easy to get too ambitious.** A major red flag for grant reviewers is the indication you've planned to accomplish more than your budget makes realistically attainable. It is better to limit your proposal to less, more assuredly attainable goals, than to promise more than you can deliver. Most projects find they badly underestimated funding for staff and particularly technology support. Be realistic and conservative.
13. **Tie yourself to a major regional, or national, issue** and position your proposal as a model to be replicated once you've proved your idea works. Make it clear you're not just benefiting ten people in Two-Dot, Montana, but that you're solving a problem shared by all rural schools and are creating a replicable national model. A specific strategy for broadly sharing your solution should be specifically part of your proposal plan.
14. **Choose your partners wisely.** The more partners you have to deal with, the harder it is to keep everyone happy, particularly where control of large sums of money is the issue. If you plan to be working with your grant partners for years, you'd better be sure you know who you can trust and work with. Many projects end up with internal in-fighting that takes the fun out of getting funded. Money changes friendships. Tread cautiously.

Consider whom you may have to work with if you get funded and whether you should include them for a share of the funding to avoid future resistance to your project. Grant reviewers look closely to see who is flying solo, and who works well with the other girls and boys. The better partners you have, the safer their money is when invested in your project.

15. **Even if your first grant-writing effort doesn't get funded,** the planning and writing process still allows you to resubmit your idea elsewhere. Often project partners get so committed to a good idea, even if funding isn't won, that the means for moving forward on a project can still be a possibility. Boilerplate paragraphs from old grants are typically recycled. Seasoned grantwriters are skilled

recyclers, reusing paragraphs from successful grants.

16. **Make it fun!** If you get funded, you'd better enjoy working hard to make your dream happen. Be careful what you ask for, because you just might get it! Once a grant ends, what will you have built for the future? Will you be right back where you started having to write another grant? Plan accordingly.
17. **Many web sites exist to support grant-writers**, even specifically educational technology grant-writers. Knowing this, find them and use them! Search the Web for "educational technology grants" and/or "grant-writing." Below are a sampling of the best grant-writing and funding sources web sites.
18. **Evaluations are the means by which you prove your success** at the end of the grant period and are often the key to winning your next grant. Be tangible and realistic in what you set out to achieve, and in how you'll know whether you've achieved it after the money is spent.
19. **While it is considered to be inappropriate to submit the same grant to multiple funders** at the same time, one option is to change the grant slightly so multiple funded grants would actually dovetail together instead of creating duplication.

Grantwriting and Funding Sources

- **GrantGetter's Guide to the Internet**
<http://web.calstatela.edu/academic/orsp/grantguide.html>
The best single source for a beginning grant writer.
- **A Short course on proposal writing**
<http://fdncenter.org/onlib/shortcourse/prop1.html>
Well worth your time to read this entire document.
- **The Foundation center**
<http://fdncenter.org>
Searchable database with most foundations listed.
- **Philanthropy Journal**
<http://philanthropy-journal.org>
A key resource for keeping current on trends in philanthropy.
- **Rural and Community Networking Funding Sources**
<http://www.aspeninstitute.org>
Great listings of funding sources for rural community networking.

- **Markle Foundation** <http://markle.org>
Watch for community development grants programs.
- **Morino Institute** <http://morino.org>
Social Ventures Report just out with current listing of new "Social Entrepreneurship" venture capitalists. Many are the "new philanthropists" from Silicon Valley.
- **Office of Vocational and Adult Education**
<http://www.ed.gov/offices/OVAE>
45 Million in Funding for Community Technology Centers
- **Federal Technology Opportunities Program (TOPS Program)**
<http://www.ntia.doc.gov>
Funding for Community Technology Projects \$12 million this year.
- **Educational Technology Grants and Grant Writing**
<http://www.netc.org/grants/index.html>
- **WestEd's Grant Resources**
<http://www.wested.org/tie/grant.html>
- **Grantsmanship Center**
<http://www.tgci.com> **The world's leader in grantsmanship training.**
Includes federal register announcements
- **Grants and Funding for K12 Educational Technology**
<http://www.lwc.edu/administrative/library/Edtech.htm>
- **The U.S. Department of Education Grant Site**
<http://gcs.ed.gov>
Note that the "Federal Register" is the master listing for all new Federal funding opportunities.
- **The National Science Foundation Grant Site**
<http://www.nsf.gov/home/grants.htm>
Recent funding trends include 'collaborative' community emphasis.
- **Kathy Schrock's Grant Listing**
<http://school.discovery.com/schrockguide/business/grants.html>
- **Univ. of Tennessee Educational Technology Grant Sources**
<http://www.utc.edu/Teaching-Resource-Center/grants.html>
- **Grant Sources for K-12 Schools** <http://www.schoolgrants.org>
A treasure of a site, offering a Bring Home the Bacon Listserv.

Train the Trainers Resources – Everyone a Teacher

Use of This Guide for Trainers, and for Fund-raising

This guide is specifically intended to be used as a customizable resource for citizens helping citizens to understand their own full potential using Internet tools and resources. You're invited to customize any part of this guide, and the matching web pages, to make them more relevant for your local community and culture. The entire 146 page word-processing downloadable WORD '97 formatted file is listed at the top of the online table of contents at:

<http://lone-eagles.com/nativeguide.htm>

For-profit redistribution must be by written permission only. However, this is specifically encouraged as a fund-raising opportunity for non-profits, schools and community projects! For example, this guide could be sold at the Taos Pueblo as the "Taos Pueblo Self-Directed Learner's Guide!"

Hosting an Ideal Community Workshop

The type of workshop that would generate the greatest general interest in any community would demonstrate how anyone can use a digital camera to take their own pictures for their own web page using the Sony Mavica, <http://www.sony.com>, which saves images to floppy disks. Each workshop participant would enjoy the hands-on experience of taking their own pictures and leaves with a disk of images and perhaps also their first web page incorporating these images!

Beginning with demonstrating various ways of digital storytelling, and demonstrating how easy it is for anyone to create their own web page is a good way to begin. A digital art tablet should be demonstrated to show how anyone can easily create amazing digital art using the computer's ability for special effects, regardless of one's art talent or training. Wacom ArtzII art tablet from <http://www.wacom.com> and Painter 5 software from <http://www.metacreations.com>.

A \$99 MIDI musical keyboard (Yamaha PSR 140 from <http://musiciansfriend.com>) would demonstrate the amazingly affordable musical capabilities now available and how music can be added to web pages, and/or self-published through the Internet, even for beginners.

Leading with Digital Art, Music, and Photography to Promote Gender Equity

Digital art and music applications are likely to attract a broader segment of their communities than would be attracted to computers and Internet alone. This will increase gender equity and emphasize the full spectrum of individual and cultural self-expression options.

Digital art skills are now at the top of the list of employability skills. Digital music skills relate directly to multimedia use of audio in multiple formats, including Internet streaming audio and video. Via Internet, youth can now host their own radio stations and/or video broadcasts. Aside from these obvious and necessary technical benefits, digital art and musical applications are inherently motivating and represent the best of Internet for humanistic expression!

Workshop Presentation Tools and Resources

Presentation software, such as Microsoft's PowerPoint, allows for attractive display of multimedia pages and speaking points.

PowerPoint Tutorial <http://www.actden.com/pp>

An offline browser such as Webwhacker, <http://bluesquirrel.com> allows for convenient display of web pages and web sites. This is a tool designed to reduce the user's dependency on an Internet connection. Webwhacker downloads ("Whacks") single Web pages, groups of pages, or entire Web sites, including text (HTML) and images, and stores them on the local desktop. You're able to browse these pages offline with instant display capability, ideal for presentations without worrying about the "World WideWait." It is easy to learn and use, too!

The Sony Mavica digital cameras can create mini-movies saved automatically on a floppy with a web page (<http://www.sony.com>) and the software that comes with the camera has a slideshow feature as a digital storytelling tool.

A Youth-based Community Internet Awareness Workshop Model

Background

Today's communities, and their diverse cultures, are faced with the urgent challenge to adopt Internet use for cultural and economic survival. Youth are the key change agents and technology leaders in all cultures and communities. Youth literally embody the future of their cultures and communities.

The missing component of most digital divide "solutions" is bottom-up validation by members of their respective communities, and cultural groups, as to the "real benefits for real people" from their own people. Digital divide populations need a

process by which they assess and disseminate the best resources, training materials, tools, and practices, themselves.

It is now possible for those populations at the lowest levels of Internet literacy to leapfrog ahead by receiving, on an ongoing basis, the best, free online tools, self-directed learning resources, and practices, for collaboration, teaching others, storytelling, cultural expression, and Ecommerce.

This workshop model will demonstrate how youth mentoring skills, online and face-to-face, can become an immediate community resource, and can evolve into a genuine vocational opportunity, allowing youth to work locally to build a future for their communities and cultural groups.

Youth will host multimedia presentations for their communities and cultural groups showing those Internet applications which produce “Universal Social Benefits” to allow their people to protect and empower one another.

Examples of how local individuals are helping each other, and supporting their families, communities, and cultures, will be celebrated and made accessible via Web Tours which youth will maintain as ‘living’ documentation of Internet applications for self-empowerment and mutual support.

Youth from multiple cultures and communities will share the goal of simultaneously creating global resources for youth in the 15,000 cultures worldwide which will be receiving Internet access within the next 10-20 years in a world where today less than half the world’s population has made a first phone call.

Digital Storytelling to Raise Awareness

A youth-based “train-the-trainers” program would kick-off with a one-day workshop demonstrating how local youth can integrate public web-based storytelling with community Internet training while raising awareness of successful, replicable, home-based E-business models by showcasing local examples, along with their own skills for creating additional successes.

Youth would partner with local elders to create multimedia presentations including original digital photos and web pages representing local needs, and web-based applications aimed at meeting those needs. Where possible, digital art, music, and photographic applications will be highlighted as these are the most motivational applications for the most people.

The goal will be to generate community awareness, excitement, and the motivation to innovate locally using newly available tools and capabilities. These community multimedia presentations could be shared with other community teams via Internet as files, or as “live” webcasts. Digital Storytelling
<http://www.storycenter.org/storyplace.html>

Citizen Engagement, Training, and Community Publishing

Local youth teams would establish basic community web sites and maintain hot-lists of the best training resources, and local E-business successes. Included would be a community talent database as a topical listing of those with local expertise who have expressed a willingness to mentor others online, and/or offline.

A simple, replicable “community talent database” model is available at “Ask A+” <http://www.vrd.org/locator/alphalist.html> Following this model, youth would assist citizens to develop their first personal resource web sites, to include digital photos, to allow them to share their knowledge and willingness to mentor others on specific topics.

About.com, <http://about.com> , is a commercial model where human mentors are available free along with their topical resource collections!

A social recognition program for celebrating achievement of those successive empowering skill milestones that allow local people to empower themselves, and others, will be created with emphasis on active mentoring relationships.

Summative listings of the best sites for community education, including family, parenting, and kids resources, will be made conveniently available on the community web site with the explicit invitation to link to citizen’s personal or topical web sites.

Youth teams would be provided with a robust “starter-set” of customizable community training materials, (as represented by this guide and the associated hyperlinks to additional resources;) resource web pages, grant templates, a community network plan, and related planning resources.

Social recognition for those who contribute their time, knowledge, and skills for the good of the community could be a key means of documenting the level of success of this project; measured by the number of people involved in sharing a measured number of specific skills, with an emphasis on viewable web-based results and resources.

Minimal Equipment Needs to be provided by local Sponsors

Loan of 1 laptop, multimedia projector, Sony Mavica Digital Camera, and appropriate software (roughly \$800) in return for which youth-led teams will host a recommended minimum of six two-hour community presentations, over a six-month period. Presentations would be conducted in as many different community gathering places as possible, raising awareness and demonstrating the potential for local youth to serve as community trainers helping others replicate successful web uses and businesses.

An ideal model would be for a bank, or local business, to sponsor loan of the equipment to be used by a minimum of three youth teams:

- ***One team** to learn and demonstrate digital photography and video technologies, (Use of digital cameras, digital video cameras, and Adobe Photoshop)
- ***A second team** to learn and demonstrate use of digital art tablets and web-based audio and musical applications, (Painter 5, MP3, MIDI applications)
- ***And a third team** to demonstrate presentation software incorporating the above multimedia technologies, such as PowerPoint (presentation software,) WebWhacker (offline browsers for web presentations,) and ClarisWorks (or similar web authoring software.)

The Key Objectives of this program are to:

- **Demonstrate how youth can help their communities** learn to benefit through creating their own “learning communities” to keep pace with their opportunities, and challenges, related to accelerating change.
- **Demonstrate how to retain youth as a community resource** by identifying culturally supportive Ecommerce opportunities
- **Identify and disseminate examples of both benefits, and risks,** of Internet use, and Internet Ecommerce, for communities and cultures.
- **Create a showcase of web-based examples** of individual, familial, cultural, and community empowerment and expression successes, supported by self-directed instructional materials and a youth-driven, mentorship service, offered in both a culture-specific format, and a cross-cultural format.
- **Provide a model of global citizenship** within the context of preserving communities and cultural identity.
- **Customize the provided online self-directed curriculum** for cultural expression and empowerment for their cultural group with local web sites.
- **Demonstrate the effectiveness of cross-cultural youth-to-youth teaching** of Internet collaborative skills, as well as within the same culture.
- **Create a showcase website of Ecommerce successes,** supported by self-directed instructional materials and a youth-driven mentorship service.
- **Create original online Ecommerce curriculum** to support dissemination of Ecommerce concepts, models, and skills appropriate to their communities.

* **For the full text see Culture Club** <http://lone-eagles.com/cultureclub.htm>

Internet Training Resources

- **Unganisha Internet Training Resource Directories and Courses**
<http://unganisha.idrc.ca/itrain/links.html>
A large international clearinghouse. An incredible place to start!
- **World Links for Development Program (WorLD) Internet Training Materials**
<http://www.worldbank.org/worldlinks/english/training/world/index.html>
Another outstanding international clearinghouse for Internet training.
- **Basic Internet Tutorials** <http://www.albany.edu/library/internet>
Basic Internet tutorials from the Univ. of Albany
- **PBS Guide to Understanding and Using the Internet.**
<http://www.pbs.org/uti/begin.html>
A well organized beginner's guide to the Internet.
- **Learn The Net**
<http://learthenet.com>
A broad range of self-teaching Internet tutorials in five languages.
- **American Library Association Basic Internet Skills Courses**
<http://www.ala.org/ICONN/onlineco.html> ICONNect offers a variety of free online courses designed for different levels of ability in using the Internet.
- **Pitsco Technology Education Web Site**
<http://www.pitsco.com>
Providing help with the latest products in technology education. Includes a helpful list of plug-in's (helper applications) at <http://www.pbs.org/uti/helperapps.html>
- **Internet 101 Tutorials**
<http://www.school.com/on-line/in101>
Tutorials for 1.Technology 2.Connectivity 3. Applications and 4. Strategies
- **Glossary of Internet Terms**
<http://www.matisse.net/files/glossary.html>
Here's a comprehensive list of the Internet Literacy Consultant's best Internet terms. Take time to learn the lingo of the Internet here.
- **Yahoo Internet Guides**
<http://www.yahoo.com/Computers/Internet/Information and Documentation> Here is Yahoo's List of Internet training resources.

- **Teaching Teleapprenticeship Project**
<http://www.ed.uiuc.edu/TTA>
The Teaching Teleapprenticeship Project, from the U. of Illinois, is developing and evaluating innovative teacher education models. These models extend the traditional face-to-face apprenticeships currently used in student teaching
- **Polaris Tutorials**
<http://www.provide.net/~bfield/polaris/index.html>
A good collection of beginning Internet tutorials.
- **TECFA - University of Geneva "Training Technologies and Learning Resources"** <http://tecfa.unige.ch/>
French and English. Great resources.
- **US West's Colorado Teacher Training Tutorials**
<http://www.uswestwow.org/nwow/neducation>
Very neat and to the point tutorials.
- **SNOW: Special Needs Opportunity Windows**
<http://snow.utoronto.ca/courses.html>
Adaptive Technology, Learning Styles, and Classroom Management Skills online courses.
- **Online Innovations Institute**
<http://oii.org>
The Online Innovations Institute (OII) is a collaborative project between Internet using educators, proponents of systemic reform, content area experts, and teachers desiring professional growth. Includes the four directions of lifelong learning.
- **Computer-Mediated-Communications Information Resources for Educators**
<http://www.december.com/cmc/info/index.html>
The purpose of this site is to collect, organize, and present information describing the Internet and computer-mediated communication technologies, applications, culture, discussion forums, and bibliographies.
- **Web Teacher** <http://www.webteacher.org>
A quality collection of beginning to advanced Internet tutorials association with the national Tech Corps initiative.
- **Learning Resource Center**
<http://lrs.ed.uiuc.edu/lrs> Welcome to the Univ. of Illinois' Learning Resource Server (LRS). Online Colleges courses available.

K-100 Essential Resources

**No longer will a K-12 education be all the education we'll need.
K-Grey - lifelong learning - will now be part of all our lives.
Consider all references to K-12 education to be K-100.**

School Technology Planning Guidelines

- **National Center for School Technology Planning**
<http://www.nctp.com>
Visit this site for outstanding resources for developing a technology plan for your institution!
- **New Times Demand New Ways of Learning**
<http://www.nsba.org/itte>
The Institute for the Transfer of Technology to Education (ITTE) is a program of the National School Boards Association designed to help advance the wise use of technology in public education. Here's an example of their work.
- **California Instructional Technology Clearinghouse**
<http://clearinghouse.k12.ca.us>
Good resources for school technology planning!
- **Educators' Web for Information Technology**
<http://www.edc.org/EWIT>
From EDC, this is a robust resource!
- **Technology Planning for Library and Internet Toolkit**
<http://www.ala.org/internettoolkit/indix.html>
Very comprehensive resources, from the thorough people at the American Library Association!
- **Hilary Naylor's School Technology Planning Links**
<http://www.well.com/user/hilnay>
Very good school technology planning listings!
- **Northcentral Regional Technology Laboratory**
<http://www.ncrel.org>
Good resources from the folks at NCREL!
- **California Department of Education**
<http://goldmine.cde.ca.gov>
California Department of Education (CDE), Goldmine is part of the National School Network Testbed Project for Bolt, Baranak and Newman, Inc.

- **Web 66**
<http://web66.coled.umn.edu>
Just as U.S. Highway Route 66 was a catalyst for Americana, this site serves as a catalyst that will integrate the Internet into K-12 school curricula.

- **Getting US Teachers Online**
<http://quest.arc.nasa.gov/online/table.html>
Here's a list of Internet Access Options for K-12 Teachers put out by the fine people at NASA!

- **International Society for Technology in Education**
<http://www.iste.org>
A lead organization for many years and host of the TELED annual conference. Many publications available. Look for their Learning and Leading Magazine!

- **Queens-Bell Instructional Technology Update:**
<http://bellproject.educ.queensu.ca/main.html>
Your Monthly Guide to the BEST Recent Developments in Instructional Technology (Canadian)

- **Wireless Web Site**
<http://wireless.oldcolo.com>
Browse a World Wide Web site that is connected to the Internet wirelessly. Dave Hughes is working on a NSF Wireless Testbed project has lots of exciting connectivity options to share!

- **Local Infrastructures for School Networking: Current Models and Prospects**
http://ralphbunche.rbs.edu/WWW/PROF/infra_paper_92/Infrastructures.html
A paper about retooling schools with a local technical infrastructure to give teachers and students immediate access to communication systems and information resources.

- **Stages of Internet Connectivity for School Networking**
<http://info.ckp.edu/publications/articles/stages/stages.html>
Developed by Robert D. Carlitz of the Common Knowledge project.

Media and Visual Literacy

- **Technology Learning Magazine**
<http://www.techlearning.com>
A good resource for staying current on educational technology!
- **New Mexico Media Literacy Project**
<http://www.nmmlp.org>
An interesting project with good resources to share.
- **Visual Literacy Project**
<http://www.pomona.edu/visual-lit/intro/intro.html>
Another interesting project with resources.
- **Media City**
<http://www.MediaCity.com>
A good starting point for getting involved with multimedia.
- **Devmedia.com**
<http://www.devmedia.com>
An interesting site for those developing multimedia applications
- **Media Builder**
<http://www.mediabuilder.com>
Many tutorials on the various multimedia mediums and lots of great resources!

Acceptable Use Policies (AUPs)

- **Amardillo's AUP and other great listings**
<http://www.rice.edu/armadillo/acceptable.html>
Don Perkins and the Armadillo do good work!
- **Internet 101 Tutorials and Resources**
<http://horizon.nmsu.edu/101>
AUPs, Tutorials and more good resources from New Mexico State Univ.
- **Technology Planning for Library and Internet Toolkit**
<http://www.ala.org/internettoolkit/index.html>
American Library Association safety resources and AUPS

Copyright Guidelines

- **Stanford University Copyright Fair Use Site**
<http://fairuse.stanford.edu>
Current quality information on fair use for education!
- **U.S. Copyright Office**
<http://lcweb.loc.gov/copyright>
Visit the Copyright Office to learn how "To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."
- **The Copyright Web site**
<http://www.benedict.com>
This site endeavors to provide real world, practical and relevant copyright information of interest. This site seeks to encourage discourse and invite solutions to the myriad of copyright tangles that currently permeate the Web.
- **The FindLaw Copyright Site**
<http://www.findlaw.com>
A good site for law-related information of all types; searchable.
- **Plagiarism.org**
<http://plagiarism.org>
Will search all cheating web sites for all lines in your student's paper, returning specifics on text that was plagiarized. Amazing service from Univ. of Berkley Supercomputer Center!
- **Fighting back against online plagiarism**
http://www.edu-cyberpg.com/Teachers/Home_Teachers.html
- **Technology Planning for Library and Internet Toolkit**
<http://www.ala.org/internettoolkit/indix.html>
American Library Association safety resources and AUPS
- **Educators' Web for Information Technology**
<http://www.edc.org/EWIT>
From EDC, this is a robust resource!
- **Internet Public Library**
<http://www.ipl.org/ref>
Exceptionally diverse quality resources on copyright issues and much more.

K-100 Topical Web Tours

<http://lone-eagles.com/webtours.htm>

Math Web Tour

- **SAMI Math Links** <http://www.learner.org/sami>
Perhaps the most comprehensive listing of math resources on the Internet!
- **Eisenhower Clearinghouse for Math and Science** <http://www.enc.org/>
An extensive database of quality math and science resources. Must see!
- **Cornell Math/Science Gateway**
<http://www.tc.cornell.edu/Edu/MathSciGateway/index.html>
- **Mega Mathematics** <http://www.c3.lanl.gov/mega-math/>
Los Alamos National Labs Middle school math.
- **Geometry Center** <http://www.geom.umn.edu>
Interactive Geometry
- **Geometry Math Forum** <http://forum.swarthmore.edu/>
Perhaps the best geometry site on the web!
- **Ask Dr. Math** <http://forum.swarthmore.edu/dr.math/dr-math.html>
Students can ask questions and get help!
- **Math Resources on the Web**
<http://www.math.ufl.edu/math/math-web.html>
Many great links!
- **Sprott's Fractal Gallery** <http://sprott.physics.wisc.edu/fractals.htm>
Beautiful graphics while learning physics and chaos theory
- **Annenberg/CPB Guide to Math and Science Resources**
<http://www.learner.org/theguide/theguide.html>
- **Calculators online Center**
<http://www-sci.lib.uci.edu/HSG/RefCalculators.html>
- **Math Teachers Link "NetMath"**
<http://cm.math.uiuc.edu>
- **Explorer Database for Math and Science**
<http://unite.ukans.edu>

Science Web Tour

- **SAMI Math and Science Links** <http://www.learner.org/sami>
Perhaps the most comprehensive listing of science and math resources on the Internet!
- **Eisenhower Clearinghouse for Math and Science** <http://www.enc.org/>
An extensive database of quality math and science resources. Must see!
- **Cornell Math/Science Gateway**
<http://www.tc.cornell.edu/Edu/MathSciGateway/index.html>
- **NASA K-12 Internet Initiative** <http://quest.arc.nasa.gov>
Wonderful Space resources
- **Biology.com** <http://www.biology.com>
A MUST SEE biology site.
- **High School Chemistry 250+ links** <http://home.ptd.net/~swenger>
- **Nine Planets Tour** <http://seds.lpl.arizona.edu/billa/tnp/>
An exceptional site on the planets!
- **Hands-On Science Centers Worldwide** <http://www.cs.cmu.edu/~mwm/sci.html>
- **Franklin Institute Science Museum** <http://www.fi.edu>
Always new K12 activities popping up here!
- **Science Learning Network** <http://www.sln.org>
- **Annenberg/CPB Guide to Math and Science Resources**
<http://www.learner.org/theguide/theguide.html>
Includes a guide to many projects and resources
- **The Environmental Education Network**
<http://envirolink.org/enviroed>
- **K-12 Science**
<http://www.scicentral.com/K-12>
- **SciEd: Science and Mathematics Education Resources**
<http://hermes.astro.washington.edu:80/scied>
- **The Science Page**
<http://www.techplus.com/scipage>

English Web Tour

- **Amazon.com** <http://www.amazon.com>
World's largest online bookstore. Searchable, with 40% discounts!
- **Inkspot: The Young Writer's Resource** <http://www.inkspot.com>
Writing resources for students
- **Project Bartelby: Bartlett's Familiar Quotations and more!**
<http://www.columbia.edu/acis/bartleby/bartlett>
Project Bartelby; authors listings and much more!
- **Children's Literature Web Guide** <http://www.ucalgary.ca/~dkbrown/index.html>
- **Literature Resources for High School** <http://www.teleport.com/~mgroves/>
- **Poetry Index of Canonical Verse** <http://english-www.hss.cmu.edu/poetry>
Carnegie Mellon's poetry index
- **ERIC Clearinghouse on Reading, English, and Communication**
http://www.indiana.edu/~eric_rec/
Providing educational materials, services, and course work to parents, educators, students, and others interested in the language arts.
- **Vocabulary.Com** <http://www.vocabulary.com>
- **Words of Humankind** <http://www.landmark-project.com/words.html>
- **Cyberguides**
<http://www.sdcoe.k12.ca.us/score/cyberguide.html>
- **Shakespeare's Complete Works** <http://the-tech.mit.edu/Shakespeare.html>
- **The on-line Books Page** <http://www.cs.cmu.edu/books.html>
- **Links to Educational Resources—for teaching writing**
<http://www.writeenvironment.com/linksto.html>
- **Strunk's Elements of Style**
<http://www.columbia.edu/acis/bartleby/strunk>
- **The English Teachers' Web Site**
<http://www.mlckew.edu.au/english>

Arts Web Tour

- **Heritage Online Arts Hotlist**
http://www.hol.edu/main/The_Arts.htm
Includes dance, music, and puppetry. Great listing!
- **The Getty Art Databases** <http://www.getty.edu>
The world's largest arts foundation has new art databases!
- **ArtsEdge** <http://artsedge.kennedy-center.org>
A major arts resource from the Kennedy Center.
- **Art Galleries** <http://www.comlab.ox.ac.uk/archive/other/museums/galleries.html>
Museums around the world.
- **K-12 Resources for Music Educators**
<http://www.isd77.k12.mn.us/resources/staffpages/shirk/k12.music.html>
- **The Art Teacher Connection** <http://www.primenet.com/~arted/>
- **Drama, Storytelling, Reader's Theater for K12**
<http://falcon.jmu.edu/~ramseyil/drama.htm>
- **KinderArt (All Grades)** <http://www.bconnex.net/~jarea/lessons.htm>
- **Museums Index for World Wide Arts Resources**
<http://wwar.com/museums.html>
950 arts museums worldwide.
- **Cornell University Art Resources:**
<http://www.tc.cornell.edu/Edu/ArtSocGateway>
- **ArtsEdNet** <http://www.artsednet.getty.edu>
- **The Puppetry Home Page**
<http://www.sagecraft.com/puppetry>
- **Sapphire Swan Dance Directory**
<http://www.SapphireSwan.com/dance>
Extensive Dance Resources!
- **Children's Music**
<http://www.childrensmusic.org>
- **Getty Art Database**
<http://gettyone.com>

Foreign Language Web Tour

Machine translations are not 100% accurate and depend upon the complexity of the text, number of idiomatic terms, and other factors. Knowing this, one can usually pull the basic meaning from translated text. A useful tool for learning languages.

- **Human Languages Page** <http://www.june29.com/HLP/>
Links to many, many language pages. Overall best site by a long shot!!!
- **Translate any web page to/from five languages with Altavista!**
<http://www.altavista.digital.com>
Conduct a topical search and click on the “translate” button to pick which language you prefer! A great tool for language instruction! Or go to <http://babelfish.altavista.digital.com> for direct access to translation features. Select the help button for a quick tutorial on translation!
- **K-12 Online Curriculum in Spanish** <http://lone-eagles.com/migrant.htm>
Includes a short tutorial on use of Altavista’s language translation features!
- **Cataloging resources for Librarians Great links!**
<http://www.usit.com/cbertel/catalog.html>
- **Foreign Languages for Travelers**
<http://www.travlang.com/languages/index.html>
- **Virtual Tourist** <http://wings.buffalo.edu/world/>
- **French emphasis, with many other good language links**
http://www.sjsu.edu/depts/French_Media/links.html
- **Native Languages Page** <http://www.pitt.edu/~lmitten/natlang.html>
Native American Languages links.
- **Online dictionaries for many languages, including many Native languages!!**
<http://www.bucknell.edu/~rbeard/diction2.html>

Language Translation Sites

- **Babylon** <http://www.babylon.com> 10 languages
- **E-lingo** <http://www.e-lingo.com>
- **FreeTranslation.com** <http://www.freetranslation.com>
- **InterTran** <http://www.tranexp.com:2000/InternTran> 351 languages!
- **Systran** <http://www.systranet.com> The Mother of all web translation applications.

Social Studies Web Tour

- **American Memory Project** <http://rs6.loc.gov/amhome.html>
American History resources and lessonplans
- **Thomas - Congressional Information** <http://thomas.loc.gov/home/thomas2.html>
Full text of latest federal legislation, bill summaries/status, and congressional records and more!
- **Fedworld** <http://www.fedworld.gov>
The best single site for U.S. Govt. info!
- **Government Sites for kids**
<http://www.codetalk.fed.us/planet/government.html>
A listing of the kid's resources sites created by many governmental agencies!
- **National Council for the Social Studies (NCSS)** <http://www.ncss.org/home.html>
- **Congress.org** <http://congress.org>
Access current information about congresspersons.
- **Social Studies School Service**
<http://www.socialstudies.com>
- **Electronic Democracy WebTour**
<http://lone-eagles.com/democracy.htm>
Citizen Activism, telecommuting, and more.
- **Community Networking Clearinghouse**
<http://lone-eagles.com/community.html>
Diverse resources related to community networking; adoption of a new social communications behavior.
- **USA CityLink** <http://banzai.neosoft.com/citylink/>
Extensive resources on U.S. cities.
- **Virtual Tourist** <http://wings.buffalo.edu/world/>
Clickable map of cities around the world with extensive research information.
- **City.Net** http://www.city.net/countries/united_states
Extensive resources on U.S. Cities.
- **Landmark Project's Social Studies Resources**
<http://www.landmark-project.com/world.html>

Internet and Computer History Web Tour

- **Internet Society Historical Resources**
<http://www.isoc.org/internet/history>
- **History of Computers and the Information Age; from the Smithsonian** <http://www.si.edu/resource/tours/comphist/computer.htm>
Includes audio and video interviews from key personalities, plus a slide show of the Information age!
- **CyberStats** <http://www.fas.org/cp/netstats.htm>
Collection of statistics about the Internet
- **History of the Internet** <http://www.pbs.org/internet/history/>
From the PBS series "Life on the Internet."
- **"Hobbes Internet Timeline"**
<http://info.isoc.org/guest/zakon/Internet/History/HIT.html>
A Must-see list of Internet historical dates and events
- **"The Roads and Crossroads of Internet's History"**
<http://www.internetvalley.com/intval.html>
- **Triumph of the Nerds** <http://www.pbs.org/nerds/>
Personalities behind the computer/Internet revolution

K-100 BEST Curriculum Resources

These sites are some of the best general K-100 resources sites that list most of the rest of the top sites! These are in addition to those listed in the **General Education Resources Webtour** <http://lone-eagles.com/webtours.htm>

- **AT&T Learning Network**
<http://www.att.com/learningnetwork>
Building on a legacy of more than \$500 million in support of education since 1984, the AT&T Learning Network represents the single largest commitment AT&T has made to education.
- **IConnect K12 Resources**
<http://www.ala.org/ICONN/index.html>
American Library Associations extensive K12 resources; courses, lessons, and links to quality resources.
- **Heritage Online Topical Links**
<http://www.hol.edu/main/resource.htm>
Extensive resources!
- **Kathy Schrock's Guide for Educators**
<http://discoveryschool.com/schrockguide>
One women's AMAZING contribution to education!! A++
- **Internet Public Library**
<http://www.ipl.org/ref>
- **IConnect Topical Favorites**
<http://www.ala.org/ICONN/kcfavorites.html>
- **Blue Web'n**
<http://www.kn.pacbell.com/wired/bluewebn>
- **Web Sites and Resources for Teachers**
<http://www.csun.edu/~vceed009>
- **Busy Teachers' WebSite**
<http://www.ceismc.gatech.edu/busyt>
- **Education World**
<http://www.education-world.com>
"Where Educators go to learn." Includes search engine and topical listings.

- **Teacher Quest**
<http://www.useekufind.com/teacheri.htm>
Educational search engine.
- **Cisco's Virtual Schoolhouse**
<http://sunsite.unc.edu/cisco/schoolhouse>
- **Classroom Connect's Topical Resources by Grade Level**
<http://www.classroom.net/Grades>
- **Blue Web'n Categories**
<http://www.kn.pacbell.com/wired/bluewebn/categories.html>
- **Computer Curriculum Corporation's CCCNet**
<http://www.cccnet.com>
- **Houghton-Mifflin Education Place**
<http://www.eduplace.com>
- **McGraw-Hill School Division Resource Village**
<http://www.mmhschool.com>
- **IBM K-12 Education**
<http://www.solutions.ibm.com/k12>
- **Pierian Spring Web Site**
<http://www.netschools.com>
- **School.Net**
<http://www.school.net>
- **Lane's Homepage**
<http://www.ebicom.net/~lane>
- **Integrating the Internet**
<http://www.indirect.com/www/dhixson>
- **Curriculum Web**
<http://www.curriculumweb.org>
- **The Library in the Sky for Teachers**
<http://www.nwrel.org/sky/teacher.html>
- **Tapped In Teacher Professional Development Institute**
<http://www.tappedin.org>

- **PBS Teachersource**
<http://www.pbs.org/teachersource>
Lots of lessonplans, particularly good preschool resources!
- **Lightspan** <http://lightspan.com>
Recently incorporated the Global Schoolhouse Network and will be adding new resources at a rapid rate!
- **Online Class Curriculum Integration Resources**
www.onlineclass.com
- **Scholastic**
<http://scholastic.com>
No longer requires paid subscriptions. Great Resources!
- **Janice's K12 Outpost**
http://k12.cnidr.org/janice_k12
Lots of good K12 resources here!
- **Apple Learning Interchange NEW!**
<http://ali.apple.com>
Lessonplans, 10,000 teachers, searchable! See also
<http://www.apple.com/education>
- **Classroom Corporate Connection**
<http://www.thechalkboard.com>
Great resources, many links to corporate connections and grantwriting.
- **Jwalker's Canadian Site**
<http://www.networx.on.ca/~jwalker/educat.htm>
Lots of quality resources to explore, from Canada! 3400 educational links in 180 menus!
- **Syllabus Magazine's Top 20 K-12 Sites**
<http://www.syllabus.com/toptwenty.html>
A list of useful sites compiled by the editors of Syllabus magazine. These sites were chosen based on their comprehensiveness as well as their relevance to educators in high schools, colleges and universities.
- **The Explorer Database for Math and Science**
<http://unite.ukans.edu>
Use Explorer to browse for ideas on coursework for the classroom!

- **Classroom Connect Magazine**
<http://www.classroom.net>
Welcome to Classroom Connect's home on the Internet.
- **Science/Math National Resources**
<http://www.learner.org/sami>
John Speckien has created the best sci/math resource listing there is. Over 4000 resources!
- **JDL's K12 WORLD!**
<http://www.k-12world.com>
Visit K-12 WORLD's Cyber Subjects, Virtual Library and more to find the cutting edge of technology in K-12 applications!
- **WestEd**
<http://www.wested.org/wested/resources.html>
<http://www.wested.org/wested/pubs/reflink.html>
Great listings of resources.
- **Canada's Best K12 Sites**
<http://bellproject.educ.queensu.ca/k-12.html>
Here's a compilation of Canada's greatest K-12 resources!
- **Discovery Channel School**
<http://school.discovery.com>
Lots of good resources; particularly teacher guides for using television programs with students
- **Pro-Teacher**
<http://www.proteacher.com>
- **TeachWeb**
<http://www.teachweb.net>
- **British Broadcasting Corporation**
http://www.bbc.co.uk/plsql/education/webguide/pkg_main.p_home
3000 learning resources
- **US Dept. of Education**
<http://www.ed.gov>
<http://www.ed.gov/Technology>
<http://www.ed.gov/pubs/TeachersGuide>
This site provides useful and timely information about programs, policies, people, and practices that exist at the Department and projects they fund.

School and Community Internet Collaboration Services

A major trend is for companies to offer schools and communities sophisticated collaborative tools and services at no cost. Another trend is for people to have a personal portal page linking them automatically to the best of these free tools and services. See first link below. The Internet is now one big local area network (LAN).

- **Kuglin's Personal Portal Page**
<http://www.kuglin.com/slides/id179.htm>
An example of an educator's personal web portal page.
From <http://www.kuglin.com> Many high level resources.
- **Bigchalk** <http://bigchalk.com>
Includes resources second in volume only to the Library of Congress! Community-building tools and resources.
- **School Life**
<http://community.bigchalk.com>
Free web pages, online forums, chat rooms, feedback forms, and interactive calendars specifically for schools.
- **Powerschool** <http://www.powerschool.com> Web-based student information system for partners, educators, etc.
- **Nschool** <http://nschool.com> Free web-based educational system for communication between parents, educators, students and administrators!
- **My School Online**
<http://myschoolonline.com>
Free web services for schools, sponsored by the Family Education Network.
- **K-12 Nation**
<http://k12nation.net> Allowing educators, parents and students to communicate online.
- **Highwired.net**
<http://www.highwired.com>
Free web sites for schools, school newspapers, and more!
- **Web66: A K12 World Wide Web Project**
<http://web66.coled.umn.edu> Helping K12 educators learn how to set up their own school sites

Curriculum Integration Resources

- **Guidelines for Educational Uses of Networks**
<http://lrs.ed.uiuc.edu/Guidelines/guidelines.html>
- **Techlearning Magazine** <http://www.techlearning.com>
An exceptional listing of technology in education resources!
- **U.S. Dept. of Education Teachers' Guide**
<http://www.ed.gov/pubs/TeachersGuide>
- **StudyWeb**
<http://www.studyweb.com>
Tips on Curriculum Integration plus research tools for students.
- **Classroom Connect**
<http://www.classroom.com>
Curriculum Integration Resources and Products
- **Best Practices in Education in Europe**
www.bestpraceduc.org
- **Educators' Web for Information Technology**
<http://www.edc.org/EWIT>
From EDC, this is a robust resource!

State Curriculum Standards and Multi-state Standards

- **Alaska Standards for Culturally Responsive Schools**
Alaskan Cultural Curriculum
<http://www.ankn.uaf.edu:591>
A significant collection, developed by the Alaska Native Knowledge Network project.
Alaska Standards for Culturally Responsive Schools
<http://www.ankn.uaf.edu/standards>
Very unique standards applicable worldwide.
Most advanced such work in the world. Handy booklet available as well as great wall posters.
- **Multi-state Standards Database**
<http://achieve.org>
The best multi-state standards coordination effort out there.
- **State Standards** <http://www.edc.org/EWIT/resource.htm>

Lesson Plans Archives

These sites have easy-to-search databases; just enter topic, and grade level! You must try them to believe it!

- **ICONNECT American Library Assoc. Resources**
<http://www.ala.org/ICONN/kidsconn.html>
Extremely complete resource listings. Kids can ask questions online from responsive librarians!
- **The Lesson Plans Page:**
<http://www.LessonPlansPage.com> 550 lessonplans
- **Eduhound Lessonplans**
http://www.eduhound.com/lessonplan_links.cfm
- **Gleason's Lessonplans Hotlist**
<http://rrnet.com/~gleason/lesson.html>
- **Gateway to Educational Materials (GEM) Lessonplan Database**
<http://www.thegateway.org>
An OERI project; lessonplan database released Jan. 1998.
Expect this resource to grow and improve regularly.
- **Filamentality! Turn Web Resources into Classroom Online Activities; EASILY**
<http://www.kn.pacbell.com/wired/fil>
Too good to be true. An automated system for created web-based units! Fun place to get started!
- **New York Times Daily Lessonplans by a Dozen Topics!**
<http://www.nytimes.com/learning>
Must see to believe! Dozens of new lessonplans posted daily, linked to daily events.
- **Ask Eric**
<http://ericir.syr.edu>
Here's education with a personal touch! Serious resource links with the option to ask specific questions of the AskEric folks!
- **AskERIC Lesson Plans (gopher or www)**
<http://ericir.syr.edu/Virtual/Lessons>
Extensive listings of lessonplans.

- **Discovery Channel School**
<http://discoveryschool.com>
Lessonplans and much more.

- **Mega Mathematics Homepage**
<http://www.cs.uidaho.edu/~casey931/mega-math>
If you are a math teacher, you need to check out this site!

- Sea World**
<http://www.seaworld.org>
Here is Sea World's Animal Information Database.

- **The Nine Planets**
<http://seds.lpl.arizona.edu/nineplanets/nineplanets/nineplanets.html>
This is an essay about our solar system with text, pictures, sounds, and an occasional movie. Each of the planets and major moons in our solar system is briefly described and illustrated with pictures from NASA spacecraft. With a few clicks, you can see images that only a few decades ago could only be dreamed of.

- **Collaborative Lessons Archive**
<http://faldo.atmos.uiuc.edu/CLA>

- **Encarta Schoolhouse Lessons Collection**
<http://encarta.msn.com/schoolhouse/default.asp>

- **Tom Snyder Productions Online Classroom**
<http://www.teachtsp.com/classroom/classroom.html>
For the one computer classroom- references to commercial product free trials.

- **Education World Lesson Planning**
http://www.education-world.com/a_lesson

- **Education Resources Lessonplans and Activities**
<http://www.mcrel.org/resources/links/lesson.asp>

- **Columbia Education Center Lessonplans**
<http://www.col-ed.org/cur>
One of the better collections!

- **TeachWeb Lessons**
<http://www.teachweb.net>
Select "lessons" for 18 lessonplans sites!

Online K-12 Courses

- **K12 Online Courses Directory**
<http://www.fwl.org/edtech/k12courses.html>
You knew they had to exist somewhere, didn't you!!! More here than you'd believe.
- **AT&T's New Virtual Academy Directory of K12 Courses**
<http://www.att.com/learningnetwork/virtualacademy>
A good place to start your search for K12 online courses!
- **ICONNECT Courses**
<http://www.ala.org/ICONN/index.html>
High quality listings!
- **PASS Program; High School Diplomas Online**
<http://www.cyberhigh.fcoe.k12.ca.us>
- **HS Diplomas Online: Mindquest**
<http://www.mindquest.org>
- **Cyberhigh, Edmonton, Alberta**
<http://www.cyberhigh.org>
A peek into the future of K12 education. Courses available!
- **Contact North**
<http://www.cnorth.edu.on.ca>
Secondary School distance learning resources developed over the last ten years!
- **Virtual High School of the Concord Consortium**
<http://vhs.concord.org>
Math and Science emphasis.
- **Laurel Springs Online Learning Program**
<http://www.laurelsprings.com>
- **Cyberschool**
<http://www.cyberschool.k12.or.us>
- **Calvert School**
<http://www.calvertschool.org>
- **North Dakota Division of Independent Study**
<http://www.dis.dpi.state.nd.us>

5,800 students from 50 states and 35 countries have used their online courses!

- **Elearners.com**
<http://elearners.com/gna/courses.htm> Hundreds of courses!
- **University of Nebraska-Lincoln CLASS Project**
<http://www.class.com>
Claims to have the most online courses of anyone!
- **Brigham Young University Independent Study Program**
<http://coned.byu.edu/is>
With over 40,000 enrollments each year BYU Independent Study is a recognized leader in distance education. We offer approximately 350 university courses and 170 high school courses.
- **Blackboard.com**
<http://blackboard.com>
Create your own using free web tools or choose from rapidly growing listings of the work of others!
- **Esubjects**
<http://esubjects.com>
- **Bigchalk**
<http://bigchalk.com>
New and rapidly growing!
- **WebEd**
<http://www.webed.com>
- **ChildU**
<http://www.childu.com>
K-6 online curriculum and courses.
- **Concord Consortium**
<http://www.concord.org> Outstanding!
- **Telecampus**
<http://telecampus.edu>
Here's their database with thousands of online courses listed by topic! <http://apsis.telecampus.edu/index.cgi>

Home-schooling Resources

- **Native American Home-school Association**
<http://expage.com/page/nahomeschool>
Saving Our Culture For Our Children Through Our Children.
- **Home-schooling Resources on the Web**
<http://www.mint.net/~caronfam/links.htm>
- **K12 Online Courses Directory and Home-schooling Resources**
<http://www.fwl.org/edtech/k12courses.html>
- **The High School Home-school Page**
<http://www.cis.upenn.edu/~brada/homeschooling.html>
- **Home's Cool Home-school and Family Site**
<http://www.homes-cool.com> Lots of resources.
- **Unschooling.com**
<http://www.unschooling.com>
- **Home Education Magazine**
<http://www.home-ed-magazine.com>
- **National Home Education Network**
<http://www.nhen.org>
- **Home-schooling Life**
<http://www.life.ca/hs/index.html>
Great collection of resources.
- **Home-schooling Resources**
<http://www.useekufind.com/pschoolw.htm#pswhsqstn> Great!
- **IDEA – Interior Distance Education for Alaska**
<http://galenaalaska.org>
A Native Alaskan village is now the seventh largest school district in Alaska due to an innovative K-12 Internet correspondence program.
- **Digital Classrooms** <http://digitalclassrooms.com>
Online courses and instruction for home-schooling families from certified teachers.
- **The (former) Home-school resource page**
<http://www.xmission.com/~thayne/hs.html> Good resources.



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Office of Educational Research and Improvement (OERI)
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Educational Resources Information Center (ERIC)



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