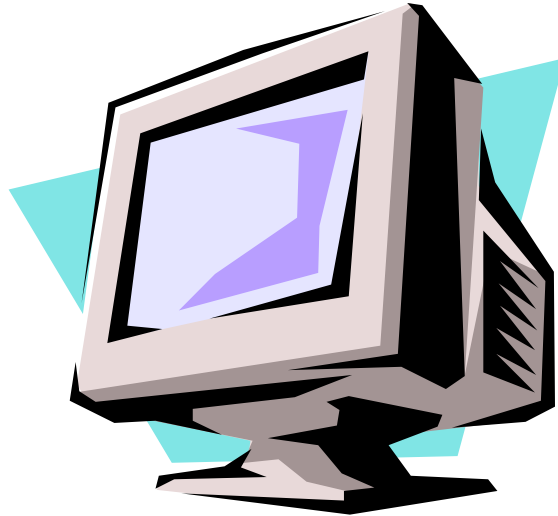


INFORMATIONAL TOOLS FOR SOCIAL WORKERS:
RESEARCH IN THE GLOBAL AGE



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INTRODUCTION

An almost dizzying array of informational resources exist to help development-oriented students and faculty understand the complexities of social work practice in a more interdependent world (Glister, 1994; Richards, 1995; Stout, 1996). These resources are especially rich for social workers engaged in international practice but also are of considerable use to social workers whose "domestic" clients are drawn from diverse cultural groups within their own country (Butterfield & Schoech, 1997; Schoech & Smith, 1996). Fortunately, the vast bulk of these resources now are available electronically and can be easily accessed from the global network of computers that make up the World Wide Web (WWW).

This chapter introduces readers to the breadth of international, cross-cultural, and comparative resources that are available to readers on the WWW. Thus, the chapter is organized in five parts: Part I briefly introduces the history of *The Electronic Revolution*, i.e., the various technological innovations that preceded the development of computers and modern information technology; Part II discusses *The Information Revolution* and its impact on individual privacy in society; Part III discusses *Social Work and the Information Revolution*; Part IV focuses on *Comparative Social Research and the Information Age*; and, the final section of the chapter, Part V, illustrates the application of modern electronic information technology to comparative social research through a discussion of the international content contained on the author's own homepage on the WWW--*PRAXIS: Resources for Social and Economic Development*. Part V also contains a variety of structured exercises that make use of *Praxis* and the WWW to help readers deepen their skill in using the WWW to answer questions of a cross-cultural or cross-national nature.

Part I THE ELECTRONIC REVOLUTION

Geiss and Viswanathan (1986:34-35) identify 1800 as the year in which the first steps in the contemporary information revolution were taken. For it was in 1800 that Alessandro Volta discovered the **chemical battery** and **direct electric current**. In doing so, Volta initiated a series of developments which, over time, would lead to: the creation of the first **mechanical calculator** by Charles Babbage in 1823; the invention of the **telephone** by Alexander Graham Bell in 1876; the first **vacuum tube** by Lee De Forest in 1907; the introduction of the first **teletype** service in 1931; and, in 1939, the development of the first prototype of a **digital computer** by Atanasoff and Berry. Only a few years later, in 1945, J. Presper Eckert and John W. Mauchly of the University of Pennsylvania built ENIAC (Electronic Numerical Integrator and Calculator), formerly believed to be the first **electronic digital computer**. The first nonmilitary computer (UNIVAC I) was delivered to the U.S. Census Bureau in 1951 and the first commercial computer was delivered by the Remington Rand Corporation to General Electric in 1954.

Today, of course, tens of millions of free standing computers exist all over the world. The computational power of even the most modest of modern computers far exceeds that of earlier generations of computers. And the data processing power of modern computers continue to expand exponentially, even as the cost of new computers declines sharply each year. The

newest generation of electronic computers now are able to perform a billion separate calculations every second!

And, of course, computers have become smaller and more portable as a result of the invention of transistorized circuit boards (1958), microchips (1970), and the continuous miniaturization of computers that both inventions have made possible.

Thus, the modern computer and the *information revolution* that followed its development did not just suddenly happen. Rather, humanity's move into the *Information Age* required many technological innovations and at least two centuries to accomplish. The contributions of thousands of persons also were needed to realize the potential of these technologies, past contributions that continue to be added to daily.

Part II **THE INFORMATION REVOLUTION**

The *Information Age* and the *Information Revolution* are the culmination of what futurologists Alvin and Heidi Toffler refer to as the *Third Wave*,¹ i.e., the third major technological revolution since humanity agreed to settle down and live together in communities (Toffler, 1970, 1980).

The emergence of the *Information Age* had been heralded by sociologist Daniel Bell in his highly influential 1973 volume on *The Coming of Post-Industrial Society: A Venture in Social Forecasting*. Bell, among many others, fully understood the impact that high-speed computers, fax machines, space satellites, and other technological innovations in the flow of information would have on social relations (Coates & Jarratt, 1989). The impact was to be nothing less than revolutionary. And, indeed, contemporary information technology is omnipresent and its impact on each of our lives is immediate, profound, long-lasting and, over time, can be expected to force us to reorganize critical social patterns (especially in the areas of work, communications, education, and so on). The information revolution almost certainly will impact even more the lives of future generations as the full potential of this revolution continues to mature.

Many critics of the information revolution exist, and justifiably so (Reamer, 1986; Stretch & Krueger, 1992; Talbott, 1995). High on the list of concerns of these social scientists is the uncanny ability of electronic machines to intrude, almost invisibly, into the private lives of individual citizens (Rothfeder, 1992). In doing so, critics of the new technology suggest that computers are destroying the possibility of individual privacy and, with it, the hard-won freedoms and individual liberties that are enshrined in the central political documents of most Western nations. Critics of information technology are especially concerned about the ability of computers to collect and disseminate large amount of highly sensitive information on individuals to groups and organizations that harbor little or no respect for the privacy of individuals--without regard to who those individuals may be (Rawlins, 1997).

Concerns regarding individual privacy in the *Information Age* are important and must be addressed not only by social workers but by all professionals who collect and disseminate sensitive information concerning individuals (Cwikel & Cnaan, 1991; Reamer, 1986; Stretch & Kreuger, 1992). The issues are especially daunting for the profession given the imperceptible nature of the new technology and its presence in virtually every aspect of our public and private lives (e.g., banking transactions, credit histories, leisure time activities and even our automobiles).

¹ The first two "technological waves" were the agricultural and industrial revolutions.

Part III
SOCIAL WORK AND THE INFORMATION REVOLUTION

Social work's formal entry into the *Information Age* began with the establishment of the *case registry* and *social survey* movements of the late 19th century. Both movements sought to bring together very detailed information concerning individual clients and the communities in which they lived. In the process, large amounts of socially-relevant information were collected and organized in ways that promoted either the establishment of new services or, when already in existence, client access to available services.

The overall thrust of both the *case registry* and *social survey* movements was to "rationalize" the human service system through the collection, organization, and sharing of meaningful case- and community-specific information. Over time, of course, telephones would be used to share information between social work professionals and others working in either the same or distant communities. The creation of state and national registries of persons with particular types of needs only amplified the information collection movements that had already begun at the community level.

Today, of course, social workers continue to collect vast amounts of socially-relevant information. This information is coded and organized into complex data sets and, as appropriate, is shared with others for purposes of social planning, coordination, cost-setting, research and evaluation. This information is shared not only by means of printed documents and the telephone but, more importantly today, by fax machines, diskettes, computer tapes, electronic transmissions, space satellites and, of course, the WWW. Advances in information technology, indeed, are adding much to the emergence of innovations in global social work as well.

Though issues of privacy and client confidentiality loom large in all of the profession's information collection and sharing processes, social workers, nonetheless, are obligated to provide detailed reports on their service activities to the many public and private organizations that finance the delivery of social services. The tensions that currently characterize service providers and funders (e.g., in managed care) are likely to persist well into the future, especially as the informational requirements of all three partners to the service relationship--clients, providers, and funders--continue to expand.

Part IV
COMPARATIVE SOCIAL RESEARCH AND THE INFORMATION REVOLUTION

Increasingly, social work and other scholars are creating electronic "homepages" as convenient tools for organizing their most important links to the internet. These homepages, referred to as "websites," usually consist of a large array of textual, statistical, graphical, and other materials related to the scholar's area(s) of research interest. Often, these websites also contain electronic "links" to the websites of other scholars and to those of scholarly organizations and institutions in whose work the developer of the "host" website is interested (Butterfield and Schoech, 1997; Richards, 1995).

Electronic websites also are serving as inexpensive outlets for the rapid dissemination of scholarly reports, analyses, and other publications. In a matter of minutes, for example, scholars now can "publish" the results of completed analysis on the internet. In doing so, they are able to

make the results of their research instantly available to thousands of scholars scattered everywhere across the planet. In effect, scholars now are able to reduce the length of time required to publish and disseminate a book length manuscript from two years to two minutes! All that is required of the reader to access these electronically-published reports is an inexpensive computer, a modem, access to the internet and, when necessary, a printer--equipment that is becoming ubiquitous in even the most modest university and public libraries.

Today, there are more than 10 million electronic websites throughout the world; their number continues to double every year (Stout, 1996). At the same time, some 2,000 scholarly journals covering virtually every area of human inquiry are now published exclusively on the internet. The number of scholarly books and other publications that are disseminated either entirely or partially over the internet also numbers in the millions. And their numbers continue to increase exponentially each year--especially as the cost of scholarly publications outstrip the capacity of students and scholars to purchase more conventional printed forms of such publications.

PART V

PRAXIS: RESOURCES FOR SOCIAL AND ECONOMIC DEVELOPMENT

The author's own website on the internet--*Praxis: Resources for Social and Economic Development*--will be used to illustrate the variety of informational and other resources that are now available to comparative social researchers over the internet.²

Created in March 1995, the purpose of *Praxis* is "to promote positive social change through informed action." In pursuit of this goal, *Praxis* was designed to meet the informational needs of two audiences: 1) social work educators and students with international interests; and, 2) other educators and students who require assistance in locating useful national and international resources on social and economic development. Since its creation *Praxis* has been "visited" by hundreds of thousands of users from all around the world. A "work in progress," the electronic links that form *Praxis* are being continuously expanded and enriched.

As presently designed, *Praxis* is divided into 13 major sections or "directories" each of which contains hundreds of electronic links to other websites (Chart 1). These directories serve as convenient locations for placing websites that contain related information, i.e., in much the same way that chapters of a large reference book conceptually organize and present related materials in discrete chapters.

The remainder of this chapter is devoted to a discussion of the contents of each of the 13 directories that form *Praxis*. Various exercises are included in the discussion in order to illustrate the rich array of electronic data and other resources that now are available to investigators undertaking international and comparative studies.³ The exercises also should help readers deepen their skills in using the WWW to access other types of data of more specialized interest.

² The URL address for *Praxis* is: <http://caster.ssw.upenn.edu/~restes/caster.html>.

³ These exercises do require at least a beginning understanding of the structure of the World Wide Web and the various tools that are available for "navigating the web." Readers not familiar with these tools will want to consult the following internet reference volumes: Butterfield & Schoech (1997); Glistler (1994); Richards (1995); Schoech & Smith (1996); and Stout (1996).

Chart 1
 Directory Structure of
Praxis: Resources for Social and Economic Development

Section 1:	The Social and Economic Development Reference Room
Section 2:	Development Assistance Agencies, Organizations, and Policies
Section 3:	Levels of Social Development Practice
Section 4:	Development Studies Home Pages
Section 5:	Sectoral Resources for Social and Economic Development
Section 6:	Resources on Historically Disadvantaged Population Groups
Section 7:	Country Resources
Section 8:	Regional Resources
Section 9:	Major Reports of International and Comparative Social Research
Section 10:	Funding Resources for Comparative Social Research
Section 11:	Internationalizing Social Work Education
Section 12:	Careers in Social and Economic Development
Section 13:	International Travel

Section I. The Social and Economic Development (SED) Reference Room

The purpose of the *SED Reference Room* is much like that of the reference room of any university or public library, i.e., to assure predictable access to statistical, archival, and other types of information of general interest to a large community of users. Thus, the *SED Reference Room* links users to a broad range of frequently used **electronic** reference materials of general interest to students of international development.

More specifically, the *SED Reference Room* is divided into six areas or "spaces": *Views of Planet Earth; Country Flags, Constitutions, and Socio-Political Information; Reference Desks; Social Science WWW Links; Expertise and Address Locators; and WWW Search Engines.*

The *Reference Desk* illustrates the range of electronic resources that may be accessed once the user enters the *SED Reference Room*. The *Reference Desk* contains, for example, links to a continuously updated world-wide *Yellow Pages*, biographies of world leaders (*Biography Online*), a *CyberAtlas*, a collection of world maps (*MapQuest*), a person and address locator (*Four11*), as well as descriptive and other information concerning nearly all of the world's major cities (*CityNet* and *CitySearch*). Both *City Search* and *CityNet* provide "hot links" to websites located in cities included in their listings--including to major businesses, governmental agencies, tourist sites, and the like. From within these websites users also can send electronic messages to local organizations and individuals of particular interest to the user.

The *Reference Desk* also links users to more specialized collections of development-related resources. The most valuable of these collections are the *CIA World Factbook* and the *Virtual Library on International Development* organized by the Canadian International Development Agency (CIDA). Both resources provide continuously updated, and comprehensive, information concerning the social, political, and economic situations of individual countries. Using the CIDA collection, users can also obtain comparable information concerning major world regions and for the world-as-a-whole. The CIDA collection also links users to the electronic libraries of other national and international development assistance organizations including to many hundreds of technical reports prepared by these organizations on a broad range of development-related issues and projects.

The *SED Reference Room* also contains links to four universities with extraordinarily rich electronic reference collections: the University of Michigan, the University of Pennsylvania, Purdue University, and the University of Texas. In addition to the electronic collections of these universities, the very comprehensive New York University-based collection of *WWW Resources For Social Workers* also may be accessed through the *SED Reference Desk*.

Exercise 1a

**The SED Reference Room:
Basic Reference Sources**

1. Open *Praxis* and point your browser to the *SED Reference Room*.
2. Explore and become familiar with the contents of each of the major directories that make up the Reference Room, i.e., *Views of Planet Earth*; *Country Flags, Constitutions, and Socio-Political Information*; *Reference Desks*; *Social Science WWW Links*; *Expertise and Address Locators*; and *WWW Search Engines*.
3. Enter the *SED Reference Desk*.
4. Explore the *Biography Online* website by attempting to locate the biography of a person of historical importance to international development, e.g., Jane Addams, Martin Luther King, Mahatma Gandhi, Mother Teresa, etc.
5. Point your browser to *CityNet* and, within *CityNet*, "travel" to a world city of particular interest to you. Once "in" the city, try to locate a street map of the city, the city's most important tourist sites, the city's major governmental bodies and agencies, as possible, information concerning local hotels and local transportation network (e.g., buses, subways, etc).
6. Send an electronic message requesting travel information to the local tourist board.
7. Attempt to locate your regular and electronic mailing addresses from *Four11*.
8. Explore the range of resources available on the *WWW Resources for Social Workers* website.
9. Returning back to the *PRAXIS* homepage, explore the many bibliographic and other electronic resources available listed under the *Social Science WWW Links* directory, especially *the Social Science Information Gateway*, *the Scholarly Electronic Forums*, and *the Subject-Oriented Internet Resource Guides*.

Exercise 1b
The SED Reference Desk:
CIA World Factbook

1. Open *Praxis* and point your browser to the *SED Reference Room*.
2. Point your browser to the *Virtual Library on International Development* and fully explore the range of SED resource available at this site.
3. Enter the *CIA World Factbook*. Explore the contents and general organization of the *CIA World Factbook*.
4. Identify one country of special interest to you listed in the *CIA World Factbook* and print out the description pages for that country.
5. Examine your printout so that you can get a fuller appreciation for the historical and contemporary social, political, and economic data contained in the *CIA World Factbook* for each country.

Exercise 1c
The SED Reference Desk:
WWW Search Engines

1. In the Praxis Reference Room, point your browser to the "*WWW Search Engines*" directory. (These "search engines" will enable you to conduct an electronic search of websites that contain highly specialized information of interest to you).
2. Using the "*Lycos*" or "*Yahoo*" search engines, type in the word "poverty."
3. Explore at least 10 of the websites produced by this search.
4. Using the same search engine, refine your search by typing in the phrase "poverty in America."
5. Again, explore at least 10 of the links produced by this search.
6. Repeat the above two searches but, this time, use either the "*Alta Vista*" or "*InfoSearch*" or "*Excite*" search engines.
7. Pursue at least 10 of the links identified in these searches and, where appropriate, make "bookmarks" to those websites that appear to be of particular value or interest to you.
8. Repeat these exercises using another search term or phrase of particular interest to you.

Section II. Development Assistance Agencies, Organizations, and Policies

The *Encyclopedia of Associations* (Gale Publishers, 1996) identifies some 22,000 nonprofit organizations worldwide that promote national or international social development. These organizations include **governmental** (e.g., the international development assistance organizations of national governments), **non-governmental** organizations (e.g., Save the Children Fund), as well as **quasi-governmental** bodies (e.g., the United Nations, the World Bank, the International Monetary Fund, etc.). All three types of organizations exist in every country of the world and, through a complex network of international organizations, are linked to sister organizations located in other countries and world regions of the world (e.g., local affiliates of the International Red Cross and Red Crescent Societies). The vast majority of these 22,000 organizations maintain websites on the internet.

Praxis contains linkages to many of the most important national and international development and development assistance organizations. Section II of *Praxis*, for example, groups international development assistance organizations into seven large categories: *Directory of International Organizations and Groups*; *Multinational Aid and Mutual Cooperation Agencies, Organizations, and Policies*; *Aid Agencies and Organizations of National Governments*; *Regional Development Banks*; *Non-Governmental Agencies and Organizations*; and *Development-Related Scholarly Societies and Associations*.

While not exhaustive, the organizations grouped under the preceding subdirectories do reflect the spectrum of international development organizations. The following exercises are designed to familiarize readers with the websites of several international development organizations and with the electronic resources that can be accessed from these sites.

Exercise 2a

Development Assistance Organizations: Development Resources of National Governments

1. Open *Praxis*, and point your browser to the directory entitled *Aid Agencies of National Governments*.
2. Explore each of the directories contained in this section.
3. Explore the sectoral and other resources listed for the *United States Agency for International Development* (USAID). Look particularly for recent reports of USAID initiatives in countries or world regions of particular interest to you.
4. Repeat the above exercise for the *Japanese International Cooperation Agency* (JICA).
5. Repeat the above exercise for the *Danish International Development Agency* (DANIDA).

Exercise 2b
Development Assistance Organizations:
United Nations Resources

1. Open *Praxis*, and point your browser to the *Development Assistance Agencies, Organizations and Policies* directory.
2. Explore each of the subdirectories contained in this directory.
3. Open the *Multinational Aid & Mutual Cooperation Agencies, Organizations, and Policies* directory.
4. Briefly explore the electronic resources listed under each of the subdirectory's major headings, i.e., those listed under the *United Nations, the World Bank, the International Monetary Fund, the Organization for Economic Cooperation and Development*, etc.
5. Open the link to the "*United Nations*" homepage and explore each of the major sections contained the UN homepage.
6. Repeat the exercise for one of the United Nation's specialized agencies, e.g., the *United Nation's Development Programme* (UNDP), the *World Health Organization* (WHO), etc. Note the quantity and richness of the electronic resources available from each of these sites.
7. Return to the United Nations homepage and, from there, explore the documentary resources listed under *United Nations Documents*. Carefully review the types of documents that are available from the *Economic and Social Council* (ECOSOC).
8. Within the ECOSOC subdirectory, pursue the types of documents that are of particular interest to you (e.g., on issues dealing with women, racial or ethnic minorities, refugees, etc.)
9. Repeat this exercise for each of the major sections listed on the UN homepage, e.g., *Peace and Security, Human Rights, Humanitarian Affairs*, and so on.
10. Explore the electronic documents available at this site associated with one or more recent world conferences and summits sponsored by the United Nations, including any Declarations, Agreements, and Covenants that have been adopted by these conferences.
11. Make bookmarks to those subdirectories and other documents of particular relevance to your research project or term paper.

Exercise 2c
**Development Assistance Organizations:
Private and Other Nongovernmental Organizations**

1. Reopen *Praxis*, and point your browser to the section entitled *Development Assistance Agencies, Organizations and Policies*.
2. Open the directory entitled *Non-Governmental Agencies and Organizations*.
3. Open the link to *The Contact Center*.
4. Identify a sector of human services or social development in which you have a particular interest (e.g., child welfare, disaster relief, income security, etc.).
5. Using the resources of the *Contact Center*, identify the network of social agencies in the United States and worldwide that engage in work related to your area(s) of interest.
6. Using the links to their homepages, identify the unique contributions that each of four organizations listed by *The Contact Center* makes to local, national, and international development. As possible, using electronic resources that appear on each organization's homepage document the nature of each organization's contribution to international development.
7. Repeat the preceding exercise for a group of public interest or advocacy organizations listed under the *InterAction* subdirectory.
8. Repeat the preceding exercise for a group of public interest or advocacy organizations listed under the *Public Interest and Advocacy Groups* subdirectory.
9. Identify how you would use the information and other resources of these organizations to advance your own development-oriented practice at the local, regional, or international levels.

Section III. Levels of Social Development Practice

The social work profession has a distinguished history of professional service in international development (Estes, 1992, 1995, 1997b; Healy, 1992; Hokenstad, Khinduka, Midgley, 1992; Lowe, 1995; Lynch, 1989; Mary, 1997; Midgley, 1995, 1997; Sanders, 1982; Van Soest, 1992). Indeed, Estes (1993, 1997a) suggests that, after more than 100 years of international practice, development-oriented social work now consists of seven discrete types--more properly "levels"--of professional intervention. Each of these seven levels of international social work practice is identified in Chart 2. The chart also identifies the unique goals and processes associated with each level of intervention.

Chart 2
Levels and Strategies of Development-Oriented Social Work Practice

Levels of Development-Oriented Social Work Practice	Major Purposes, Outcomes, or Processes Associated With Levels of Development-Oriented Practice
Individual and Group Empowerment	Through "conscientization," the process whereby individuals learn how to perceive and <u>act upon</u> the contradictions that exist in the social, political, and economic structures intrinsic to all societies.
Conflict Resolution	Efforts directed at reducing: (1) grievances between persons or groups; or, (2) asymmetric power relationships between members of more powerful and less powerful groups.
Community-Building	Through increased participation and "social animation" of the populace, the process through which community's realize the fullness of their social, political, and economic potential; the process through which communities respond more equitably to the social and material needs of their populations.
Institution-Building	Refers both to the process of "humanizing" existing social institutions and that of establishing new institutions that respond more effectively to new or emerging social needs.
Nation-Building	The process of working toward the integration of a nation's social, economic, and cultural institutions at all levels of political organization.
Region-Building	The process of working toward the integration of a region's social, economic, cultural institutions at all levels of political organization.
World-Building	The process of working toward the establishment of a new system of international social, political, economic, and ecological relationships guided by the quest for world peace, increased social justice, the universal satisfaction of basic human needs, and for the protection of the planet's fragile environmental systems.

Source: Estes, Richard J. (1993; 1997a).

The nature of social work practice at each level of development-oriented intervention is illustrated under Section III of *Praxis*, i.e., *Levels of Social Development Practice*.

Exercise 3
Levels of SED Practice

1. Within *Praxis*, explore each of the directories and subdirectories contained under *Levels of Social Development Practice*.
2. Using the links contained in the "*Community-Building*" directory, identify internet and other electronic informational resources that exist in your own community. Make bookmarks to those sites that are of particular interest to you.
3. Use the "*Community-Building*" directory to identify internet resources that exist in another community, preferably in another country, of relevance to your class project.
4. Using the "send mail" or "e-mail" features of your browser, send a message to one of the persons identified with the internet resource identified in the other community or country. Be sure to ask them to respond to a particular question of relevance to your project (e.g., descriptive information of the existence of service "x" or program "y" in that community or country).
5. Explore the electronic resources linked under the *Individual and Group Empowerment* and *Institution-Building* subdirectories. Pursue those links of most relevance to your semester-long project or paper.
6. Repeat the preceding exercise with appropriate link(s) listed under the *Nation-Building*, and *Region-Building* subdirectories.
7. Repeat the above exercise with links under the *World-Building* subdirectory. In particular, explore the *Global Ideas Bank* website for possible solutions to some issue or recurrent social problem of special interest to you.

Section IV. Development Studies Home Pages

A variety of leading American and foreign universities offer advanced degrees in social and economic development, including in international development. Section IV of *Praxis* identifies graduate-level social development programs in Britain. In addition to providing users access to their own archives, the websites of most of these programs also contain links to development studies programs in other countries.

Section V. Sectoral Resources for Social and Economic Development

Elsewhere I have suggested that development-oriented social work practice occurs in more than 30 "sectors" of organized human activity (Estes, 1993, 1997a). Section V of *Praxis* identifies 25 of the most prominent sectors of social development activity and, in turn, these sectors contain electronic link to many of the each sector's most important websites . Links to various "cross-sectoral" websites also are made in this directory. In all cases, though, the electronic linkages listed in these subdirectories represent only a small fraction of the many thousands of websites and other electronic "gateways" that could be appropriately linked.

Exercise 5 Sectoral Resources

The "*Sectoral Resources*" section of *Praxis* contains hundreds of links to major national and international organizations engaged in specialized development-oriented work.

1. Open your browser to the *Income Security* subdirectory.
2. Review the types and range of organizations that are listed in this subdirectory.
3. Open one of the sites dealing with "welfare reform" in the United States.
4. Identify reports and other publications listed on the homepages of several *Welfare Reform* organizations that are of particular interest to you. As appropriate, make bookmarks to those sites to which you would like to return at a future date.
5. Repeat the above exercise with one or more sites listed under *Corporate Welfare*.
6. Open the *Office of International Policy* (of the U.S. Social Security Administration) and that of the *International Social Security Association*. Identify reports and other publications listed on the homepages of these organizations that are of particular interest to you. As appropriate, make bookmarks to those materials which you would like to revisit.
7. Repeat the exercise for resources listed under the *Communications* subdirectory which contains links to more than 5,000 national and international newspapers, magazines, wire services, and television and radio networks.
8. Repeat the above exercise for websites identified in the *Health, Housing, Human Rights, and Social Services* subdirectories.
9. Using your "send mail" or "e-mail" function, send a request to the site's "webmaster" for additional information of interest to you. Please, though, be as clear as possible concerning the types of materials you would like for the organization to supply (e.g., names of publications, dates, page numbers, etc.).

Section VI. Resources on Historically Disadvantaged Population Groups

The United Nations classifies as "historically disadvantaged population groups" all those persons and groups who, for whatever reason, are not able to participate fully in the social, political, or economic life of their nation. In general, these population groups include women, children, the aged, persons with disabilities, the poor, and others who are discriminated against on the basis of age, gender, sexual orientation, religious belief, or national origin. More than two-thirds of the population of many countries qualify as being "historically disadvantaged" under the United Nation's broad definition, i.e., girls and women alone account for at least half the population of most countries.

Praxis contains links to many websites that seek to provide accurate and timely information concerning the causes of social inequality among historically disadvantaged population groups. The majority of these sites are maintained by representatives of "socially excluded" groups and, in the main, their sites are characterized by both a strong community-building and advocacy orientation. In addition, the vast majority of these sites contain considerable information of great value to students of international development--including copies of treaties, covenants, and declarations (and detailed histories of their abrogation).

Section VI of *Praxis* contains the bulk of websites concerned with the special development needs of historically disadvantaged population groups. The directory is organized into nine broad subdirectories, not all of which are mutually exclusive from one another: "*first peoples*," *the aged*, *children and youth*, *the poor and poverty*, *minorities*, *migrants and refugees*, *women*, and "*extra-terrestrials*" (sic).

Exercise 6

Historically Disadvantaged Population Groups

1. Open *Praxis* to the *First Peoples* subdirectory.
2. Explore the contents of this directory and, then, focus your attention on links to international websites concerned with the status of Australia's and New Zealand's aboriginal people.
3. Repeat the exercise for websites that focus on social, political, and economic issues of concern to *Native Americans*.
4. Repeat the exercise for sites that document the social situation of *Brazil's Native American* populations.
5. Open the *Minorities* subdirectory and explore the websites linked under *Sexual Minorities*. Repeat the preceding exercises in your exploration of electronic data sources pertaining to the socio-legal status of sexual minorities in various regions of the world.
6. Contrast the types of information relating to gay, lesbian, and bi-sexual persons available from American vs. European vs. Asian websites.
7. Repeat the above exercise for websites listed in the *Persons With Disabilities* subdirectory.
8. Repeat the above exercise for websites listed in the *Women*, *Migrants and Refugees*, and *The Poor and Poverty* subdirectories.

Section VII. Country Resources

Almost all of the major directories used to create *Praxis* contain links to country-specific websites. However, the richest and deepest sources of country-specific information are to be found in Section VII of *Praxis* which provides the most direct links to homepages developed by universities, businesses, and nonprofit organizations located in individual countries. The depth, breadth, and reliability of individual websites varies enormously. Many have been created in languages other than English, albeit many have parallel English "pages" for international visitors to their sites. Nearly all of these country-specific websites contain valuable information including links to other sites that may be of even greater value to individual researchers.

Exercise 7 Country-Specific Resources

1. Open *Praxis* to the *Country Resources* directory and explore each of the major subdirectories.
2. Point your browser to the *World Communities* subdirectory. Select two countries of particular interest to you--preferably countries located on different continents.
3. Open the subdirectory for the first country you selected. Explore 8-10 of the electronic links contained on the country page. If possible, try to locate reliable sources for the following types of data/information:
 - a country *map*
 - a short *political history* of the country
 - a listing of the country's *current leaders*
 - the country's current *demographic trends*
 - information concerning the country's major *economic products*
 - information concerning the country's *racial/ethnic/cultural mix*
 - information concerning the country's major *social challenges*
 - *other information* of special interest to you
4. Repeat the above exercise for the second country you selected. Contrast the different types of information you find for each country.
5. Using the *Search Engines* contained the *Praxis Reference Room* search for even more detailed country-specific information on a topic of special interest to you.

Section VIII. Regional Resources

In addition to providing linkages to a rich array of country-specific websites, *Praxis* also offers links to websites that focus on the development needs of entire world "regions," i.e., countries that either are physically situated close to one another (e.g., Europe) or are "linked by some other characteristic (e.g., religion, ethnic identification, economic development level, etc.). Section VIII of *Praxis* contains electronic links to the largest and most resource rich websites of regional organizations.

Exercise 8 **Regional Resources**

1. Open *Praxis* to the *Regional Resources* directory and explore each of the major subdirectories.
2. Point your browser to the *EuroLink* subdirectory. Select two European countries of particular interest to you--preferably countries with contrasting political and economic histories.
3. Open the subdirectory for the first European country you selected. Explore each of the websites listed on the country page. If possible, try to locate sources for the following types of data/information:
 - a country *map*
 - a shortened *political history* of the country
 - a listing of the country's *current leaders*
 - information concerning the country's major *economic products*
 - information concerning the country's *racial/ethnic/cultural mix*
 - information concerning the country's major *social challenges*
 - *other information* of special interest to you
4. Repeat the above exercise for the second country you selected for analysis.
5. Point your browser to the *European Union* website. Search the site for information pertaining to the Treaty of Maastricht and the Treaty of Amsterdam. Familiarize yourself with both the general organization and content of both of these treaties.
6. Use the European Union website to link to other sites that deal with Europe-as-a-region. Explore these sites for the types of information that may be obtained for the European continent-as-a-region.
7. Repeat all of the above exercises the *ASEAN* site listed under the *Asia and Pacific* subdirectory.
8. Using the *Search Engines* contained the *Praxis Reference Room* search for even more detailed region-specific information on a topic of special interest to you.

Section IX. Major Reports of International and Comparative Social Research

Many of the most important reports of major international organizations are now being published regularly on the internet. These reports often are quite rich in both textual analysis and statistical detail. Many contain invaluable charts, tables, and graphs that are not available from other sources. Virtually all of the content of these reports can now be downloaded onto a user's own computer for future use, including secondary data analysis.

Readers are encouraged to explore the major international social reports listed under Section IX of *Praxis*. Other reports will be found on the homepages of major international non-governmental (e.g., Freedom House and Amnesty International in the *human rights* sector) and quasi-governmental organizations (including thousands of reports available for the United Nations and its specialized agencies, the World Bank, the OECD, etc.).

Section X. Funding Resources for Research on Comparative Social Development

Comparative social research, like all other research, requires substantial levels of financial support. Both public and private funding sources are available to assist investigators in financing their studies. Most, though, require considerable skill to access--often in the form of a competitive research proposal.

Section X of *Praxis* identifies dozens of public and private websites that can be of assistance to comparative investigators in helping to identify potential sources of funding for their comparative research projects. Each site must be searched carefully, however, inasmuch as proposals directed to inappropriate funding sources automatically will be rejected. Fortunately, many of the websites listed in *Praxis* have electronic search mechanisms to help users narrow their potential pool of funding sources to the most appropriate foundations, governmental agencies, and other research funding organizations.

Section XI. Internationalizing Social Work Education

Praxis was initially developed to assist social work faculty members in identifying comparative international teaching materials that could be appropriately included in social work curricula. Thus, Section XI of *Praxis* contains a variety of conceptual discussions, teaching modules, bibliographies, and other teaching materials of interest to social work faculty members with international interests. In fact, Section XI of *Praxis* has served as a valuable resource guide for educators and students in all areas of the social sciences.

Readers are encouraged to explore the extraordinarily rich contents found in each of the six directories that make up Section XI: *Internationalizing Social Work Education*; *Bibliography on Social and Economic Development*; *Policy Analysis in Social and Economic Development*; *International Affairs and Curriculum Development Network*; *Social Work Educational Programs*; and *Internationalization Efforts of the University of Pennsylvania*.

Exercise 11
Internationalizing Social Work Education

1. Open Praxis to the *Bibliography on Social and Economic Development* subdirectory.
2. Briefly examine the contents of the three parts of the Bibliography.
3. Open Part III.
4. Using the search icon located on the tool bar of your browser (the binoculars on Netscape) search for all of the references contained in Part III of the Bibliography that contain the word "children."
5. Repeat the above exercise using the word "India."
6. Now combine both search terms to search for all references in Part III which the two words appear.

Section XII. Careers in Social and Economic Development

Every development-oriented social work educator is repeatedly asked by students for advice in how to begin a career in international social work or international social development. Section XII of *Praxis* was designed to help students and professors alike respond to the most frequently asked questions concerning how one initiates an international social work career.

The three directories that form Section XII contain links to the following types of websites: *Planning a Career in Social and Economic Opportunity*; *Social and Economic Development Employment Opportunities*; and *Scholarships, Fellowships, and International Exchanges*. The materials contained on these websites are updated continuously and, overall, they provide an excellent starting point for the majority of social work professionals who wish to embark on an international career.

Section XIII. International Travel

Certainly one of the most interesting, often enjoyable, aspects of a career in international social work is the opportunity to visit countries and people that one otherwise would not encounter. Such travel, though, tends to be frightfully expensive—even for persons with secure and steady employment. For students, the cost of international travel alone serves as a disincentive to an international career. Thus, international social workers, like most other groups of professionals with international commitments, must identify a variety of flexible approaches to meeting their international travel needs.

Section XIII of *Praxis* was designed to help user's identify safe, reliable, and convenient forms of transportation to international destinations. Section XIII also contains links to hotels, residences, and other forms of housing that may better suit the needs of individual travelers.

Section XIII of *Praxis* introduces readers to a broad range of travel and other matters associated with building a career in international social work: *Air Transportation and Hotels*; *Surface Transportation*; *News, Weather, and Travel Advisories*; *Scholarly Conferences and Meetings*; *Money Matters*; *Communications Information*; *Museums and Other Tourist Attractions*; and *World Museums*. The exercise that follows will help users become familiar with the varied resources contained in Section XIII.

Exercise 13
International Travel

1. Open *Praxis* to *International Travel* directory. Briefly explore each of the subdirectories located in this directory, e.g., *Air Transportation*, *Surface Transportation*, *Scholarly Conferences and Meetings*, etc.
2. Within the *Scholarly Conferences and Meetings* subdirectory, identify an international conference or other meeting that you would like to attend. Make a note of city in which the meeting will be held, the dates for the meetings and its venue (e.g., conference center or hotel).
3. Return to the *Air Transportation and Hotels* subdirectory.
4. Register as a "visitor only" to the Travelocity website and identify the estimated cost and availability of air service to the conference city.
5. Using the *Federal Per Diem Rates--International* website located under the *Money Matters* subdirectory, identify the expected per diem (hotel and meals) associated with participating in the conference.
6. Using the *Currency Converter* website also listed in the *Money Matters* subdirectory convert an appropriate amount of your national currency into the local currency of the country in which the conference will be held.
7. Using the *Air Transportation and Hotels* subdirectory, attempt to locate appropriate hotels, housing, or other accommodations at or near the conference venue.
8. Open the *Museums and Other Tourist Attractions* subdirectory to identify sights that may be of interest for you to visit when you are not attending conference meetings.

CONCLUSIONS

Social work has entered the *Information Age*. The profession took its initial steps into this *Age* early in the century and, since then, has embraced the most important advances made in information technology.⁴ Today, thousands of human service agencies and organizations across the world are linked to one another by the World Wide Web (WWW). These linkages, in turn, are bringing about unparalleled levels of inter-professional and inter-organizational cooperation. They also are contributing to international communication and understanding. In virtually every human service agency today, modern information technology now is being used to promote intra-organizational communication and improved service effectiveness and efficiency. Even more benefits are expected to accrue to human service organizations as the modern "information revolution" continues to unfold.

Advances in information technology also are having a profound impact on the nature of comparative social research, including comparative social work research. Studies that were considered all but impossible a few years ago, now, are not only possible, but can be pursued with excellence across a wide range of research sites. Similarly, much of the isolation experienced by social researchers in the past has been relieved by advances in telecommunications, electronic mail, and the ubiquitous fax machine.

Satellites in space have facilitated communication among scholars, especially through "face-to-face" teleconferencing across great distances. Some 10,000 electronic discussion groups, covering an almost equal number of topics, can now be found on the internet and have contributed much to the sense of "public ownership" of the internet and WWW. Satellites, too, have made possible the almost instantaneous sharing of late breaking news to people all over the world--all at the same time. And, as illustrated in this chapter, scholarly websites now dominate large areas of the internet. These sites contain large amounts of valuable new information that was previously unavailable to social researchers.

Thus, recent advances in information technology have created new and important data gathering, analytical and reporting tools. This technology also has made possible the rapid dissemination of the analyses that result from the use of these tools. The impact of these innovations are far-reaching and they will be long-lasting. And the information revolution has only just begun! No doubt even more powerful and flexible research tools will emerge as the revolution in information technology continues.

And, yet, as further innovations in information technology continue to occur social workers will need to remain vigilant to the potential misuses to which such powerful tools may be put (Stretch & Krueger, 1992; Rothfeder, 1992). In particular, we need to be sensitive to the almost invisible ways in new technologies can intrude into the private lives of individual people, especially into the lives of poor and other marginalized peoples (Geiss Viswanathan, 1986). History has taught us new technologies have not always served the needs of the poor well; too often, technological innovations have served as additional instruments of social control rather than liberation. Thus, even as this author and others applaud the possibilities that the new information technologies are contributing toward innovations in global social work practice, always, we must be alert to potential social costs that past technological innovations have imposed on others.

⁴ For an overview of the profession's earliest steps into the information age see: Geiss and Viswanathan (1986); Butterfield & Shoech, 1997.

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*Appendix A***PRAXIS:****RESOURCES FOR SOCIAL AND ECONOMIC DEVELOPMENT**

Welcome to PRAXIS, the international development homepage of Prof. Richard J. Estes of the University of Pennsylvania. PRAXIS provides access to a vast array of archival resources on international and comparative social development. The intellectual commitment of PRAXIS is to the promotion of positive social change through informed action. Thus, *PRAXIS* has been designed to meet the informational needs of two audiences:

1. social work educators and students with international interests; and,
2. other educators and students who require assistance in locating useful national and international resources on social and economic development.

Please send suggestions for improving *PRAXIS* to Dr. Estes at the following address (restes@caster.ssw.upenn.edu).

I. THE SOCIAL AND ECONOMIC DEVELOPMENT REFERENCE ROOM

- * Views of Planet Earth
- * Country Flags, Constitutions, and Socio-Political Information
- * Reference Desks
- * Social Science WWW Links
- * Expertise and Address Locators
- * WWW Search Engines

II. DEVELOPMENT ASSISTANCE AGENCIES, ORGANIZATIONS, & POLICIES

- * Directory of International Organizations & Groups (CIA)
- * Multinational Aid & Mutual Cooperation Agencies, Organizations, and Policies
- * Aid Agencies and Organizations of National Governments
- * Regional Development Banks
- * Non-Governmental Agencies and Organizations (NGOs/PVOs)
- * Social Work and Social Welfare Organizations
- * Development-Related Scholarly Societies and Associations

III. LEVELS OF SOCIAL DEVELOPMENT PRACTICE

- * Level I: Individual and Group Empowerment
- * Level II: Conflict Resolution
- * Level III: Institution-Building
- * Level IV: Community-Building
- * Level V: Nation-Building
- * Level VI: Region-Building
- * Level VII: World-Building

Sustainable Development Links

- * United Nations Dept. of Policy Coordination and Sustainable Development
- * International Institute for Sustainable Development (IISD Net)
- * Sustainable Development (Yahoo)
- * Sustainable Economic and Education Development Society (SEEDS)
- * Sustainable Development (EcoNet)
- * Compendium of Sustainable Development Indicators (IISD)

IV. DEVELOPMENT STUDIES HOME PAGES AND NEWS SERVICES

- * Development Studies Home Pages
- * Development News and News Services

V. SECTORAL RESOURCES FOR SOCIAL AND ECONOMIC DEVELOPMENT

- * Cross-Sectoral Links
- * Arts & Culture
- * Agriculture
- * Communications
- * Defense and Military
- * Disaster Relief
- * Economics and Economic Development
- * Education
- * Employment
- * Energy
- * Environment
- * Food and Hunger
- * Health
- * Housing
- * Human Rights
- * Income Security
- * Justice (Juvenile and Adult)
- * Peace and Peace Studies
- * Population
- * Religion and Religious Organizations
- * Rural Development
- * Social Services
- * Sports & Recreation
- * Technology
- * Transportation
- * Urban Development

VI. RESOURCES ON HISTORICALLY DISADVANTAGED POPULATION GROUPS

- * First Peoples
- * Aged
- * Children and Youth
- * Persons with Disabilities
- * The Poor and Poverty
- * Minorities
- * Migrants and Refugees
- * Women
- * Extraterrestrials (?)

VII. COUNTRY RESOURCES

- * World Communities
- * Country Specific Information (Yahoo)
- * Country Specific Information (USC)
- * Selected Countries
- * National Governments Homepages
- * Electronic Embassy

VIII. REGIONAL RESOURCES

- * World Area Studies Internet Resources (All Regions)
- * Development Information: Geographic Archive (All Regions)
- * Africa
- * Asia

- * Central Europe and Commonwealth of Independent States (CIS)
- * Central and South America
- * Europe
- * Middle East
- * North America
- * Pacific
- * Russia

Trans-Regional Web Sites

- o Gateway to Antarctica
- o Arctic Circle (Connecticut)
- o Fourth World Documentation Project Home Page
- o International & Areas Studies
- o Polar Regions Homepage

IX. MAJOR REPORTS OF INTERNATIONAL AND COMPARATIVE SOCIAL RESEARCH

- * The World Social Situation, 1970-1995 (Estes, 1997)
- * Topics in Development (World Bank)
- * The Progress of Nations (UN, 1997)
- * Office of International Policy (U.S. Social Security Administration)
- * World Resources, 1996-97
- * Socioeconomic Data and Application Center

X. FUNDING RESOURCES FOR RESEARCH ON COMPARATIVE SOCIAL DEVELOPMENT

- * Public and Private Funding Resources
- * Private Support Sources
- * Public Support Sources
- * Office of the Vice Provost for Research (Penn)
- * Research Activities of the Penn School of Social Work

XI. INTERNATIONALIZING SOCIAL WORK EDUCATION

- * Internationalizing Social Work Education (Estes, 1992)
- * Bibliography on Social and Economic Development (Estes, 1997)
- * Policy Analysis in Social and Economic Development (SW735)
- * International Affairs and Curriculum Development Network (Pitt)
- * Social Work Educational Programs
- * Internationalization Efforts at the University of Pennsylvania

XII. CAREERS IN SOCIAL AND ECONOMIC DEVELOPMENT

- * Planning a Career in Social and Economic Development
- * Employment Opportunities
- * Scholarships, Fellowships, and International Exchanges

XIII. INTERNATIONAL TRAVEL

- * Air Transportation and Hotels
- * Surface Transportation
- * News, Weather, and Travel Advisories
- * Scholarly Conferences and Meetings
- * Money Matters
- * Communications Information
- * Museums and Other Tourist Attractions
- * World Museums