SOCIAL INDICATORS OF CHILD WELL - BEING AND THE WORLD WIDE WEB: CONSIDERING YOUTH AS USERS

Brett V. Brown PhD
Child Trends, Inc., Washington, D.C., U.S.A.

Efforts to comprehensively monitor the well-being of children and youth have been expanding rapidly during the 1990s in the United States and Worldwide. These social indicators of child and youth well-being are becoming indispensable tools of social policy for planning, identifying and pursuing social goals, and for holding governments and the larger society accountable for improving the well-being of children and youth.

The broad dissemination of this information to the public has been an important goal of both public and private producers of the data. The internet is fast becoming the preferred medium for these efforts. In the last two to three years, there has been an explosion of social indicator data on children and youth available through the Internet. This trend is certain to continue for years to come and is likely to accelerate.

An important task for the next several years is to organize access to this explosion of data, making data more easily accessible to users, and connecting the data to specific user groups who are active on the internet. These users include: administrators and policy-makers at all levels of government; the research community; journalists; nonprofit advocacy groups; private organizations that work with youth; and citizens.

A potentially important user group that is rarely considered when designing reports or planning dissemination strategies is the children and youth themselves. This group is among the most sophisticated in using the internet to collect information, and has a large presence there. As adult producers of social indicator data on children and youth make plans for disseminating and organizing this information generally over the internet, it is important that they give some thought to children and youth as potential consumers of this information.

In this paper I briefly describe the growing importance of social indicators of child and youth well-being in the United States and internationally and the expanding role of the internet as the medium for dissemination of this information. I then discuss a modest effort by Child Trends, Inc. to improve access to this information through the design of a Web site that organizes links to the many

Funding for this paper was provided by the NICHD Family and Child Research Network.

internet sites containing social indicator data on children and youth, primarily in the U.S. I then present strategies for site design and outreach that will make these data more accessible to youth, and finish by discussing some implications for research.

Social Indicators of Child and Youth Well-Being: Their Growing Importance

What are Social Indicators? Social indicators are defined in this paper as measures of well-being that can be tracked so that trends over time can be monitored. They may include both direct measures of well-being (e.g., the percent of children with chronic health problems), and indirect measures of the social and ecological environments affecting children and youth (e.g., children in poor families, or youth living in dangerous neighborhoods). A comprehensive set of indicators would certainly include measures of health, social development, academic capacities and achievement, economic security, and so on.

How are Social Indicators Used? Social indicators of child and youth well-being are used for a variety of purposes both scientific and political. Common uses include¹:

- description, for the sake of knowledge;
- monitoring, to inform policy formation and social program design;
- goals-setting and tracking, to focus government and private activities towards a common set of social goals (e.g., to reduce infant mortality to 6 per 100,000 births by the year 2000);
- accountability, to hold agencies, governments, and the larger society responsible for improving the well-being of children and youth; and, in limited circumstances,
- evaluation, to identify programs and policies that positively (or negatively) affect the well-being of children and youth.

Social Indicators in the United States. During the 1990s there has been a substantial increase in the use of social indicators of child and youth well-being at all levels of U.S. government: national, state, and local. These programs include comprehensive initiatives to improve all aspects of child well-being; more focussed efforts to improve health or educational outcomes; the expansion of existing social monitoring activities; and programs to hold governments accountable for improving child well-being. The programs have resulted in increased amounts of data on children being gathered, and a growing number of publications that report trends in the well-being of children and youth on a regular basis.

At the national level, a consortium of 17 federal agencies² recently-produced the first edition of an annual report to the President titled "America's Children: Key National Indicators of well-being." The report contains trend data on 25 indicators of child and youth well-being. It is designed for a popular audience, and is intended to focus the nation on a limited set of measures covering key

aspects of well-being. A second, more comprehensive and detailed report of over 90 indicators is produced by the U.S. Department of Health and Human Services on an annual basis³. In addition, these agencies produce their own reports that focus on particular aspects of child well-being, or which include child data as part of more comprehensive reports on the population⁴.

States and local communities in the U.S. have also been very active in the production and dissemination of social indicator data on their children. This is in part the result of a broad movement in the U.S. to devolve power over the design and execution of social programs away from the federal government to the state and local levels. This "devolution" has increased the need for good state and local data on which to base policy design and planning. A number of states have embarked on comprehensive planning efforts in which social indicators reflecting the well-being of the entire population play an important part. Others have focused particularly on children and youth, though they look at all aspects of well-being. Most states have programs in particular areas such as health and education in which social indicators are important tools for monitoring, goals-setting, and so on⁵.

In addition, the Annie E. Casey Foundation has funded Kids Count organizations in each of the 50 states to produce annual reports on the well-being of the children and youth in their state. Data are reported for the state and for each country within the state. Some state organizations have been producing these reports for over six years. The reports are intended to focus the public on children's issues within the state and within their own communities.

International Social Indicators. Social indicators of child and youth well-being have become more available and more important internationally in recent years. The International Convention on the Rights of the Child, a document that has been signed by nearly every country in the world⁶, calls for all signatory nations to develop the means to track progress in the areas covered by the Convention, and to report results to the UN on a regular basis. Childwatch International, a global network for child research, is working with a number of countries to develop data systems to track the well-being of their children and youth.

For the last fifteen or more years UNICEF has produced their annual "State of the World's Children" report which focuses primarily on basic survival-related measures of well-being across many countries. This report has documented substantial improvements in child morbidity and mortality in many countries over that period of time, due in part to UN programs that assist countries in the development of effective national programs.

Efforts to collect and report data on children and youth that are comparable across nations have also increased substantially in the last decade. A recent review identified nine surveys that provide comparable data on many dimensions

of well-being, many of which are fielded on a regular basis. Examples of such data sources include the UN sponsored Healthy Behavior of School-Aged Children survey and the Third International Math and Science Survey, which provide data on youth in over 25 countries⁷.

The Growing Role of the Internet as Dissemination Media for Social Indicators

In the last several years the role of the internet in disseminating information of all sorts has grown dramatically, and data on children and youth are no exception. All of the 17 U.S. federal agencies in the Interagency Forum on Child and Family Statistics have their own web sites, and most or all distribute reports on the Web. Increasingly they are offering online access to whole surveys. Over the next couple of years many agencies plan to make the internet the primary medium through which reports and data are distributed. Both of the major reports on child and youth well-being mentioned above are already available on the internet for downloading and simple online browsing. Hundreds of individual reports that feature or include data on children are also available from the Web sites of individual agencies. The Census Bureau is intending to put the entire year 2000 Census up online with a user friendly interface that will allow anyone to develop their own custom reports on any topic covered by the Census, for any geographic unit down to the neighborhood level.

The same thing is happening within the states. The form in which the data are available varies and can include: reports which can be downloaded; tables and graphics that can be browsed online; and Geographic Information Systems (GIS) that allow on to compare data across regions within a state and to access data from different sources for the same locality. The amount of social indicator data and the form they take can vary substantially across states, and from agency to agency within states. The amount of coordination that takes place among agencies in planning dissemination over the Internet is also variable, though it is minimal in most states. Nongovernmental organizations are also moving quickly to the internet. Many of the state Kids Count groups funded by the Casey Foundation are or will soon be disseminating their annual reports through their own Web sites.

Though the U.S. is among the most aggressive countries in moving their data onto the internet, this is also happening in many countries around the world. It seems likely that, within the next few years, most of the countries with substantial internet infrastructures will use the internet as a major medium for disseminating information, including information on children. International organizations such as the UN and the European Union are also moving in this direction.

Nongovernmental organizations such as Childwatch International and our hosts, the Child Research Net, are making social indicator data available through their Web sites.

Making what is Available on the Internet more Accessible to Everyone

The explosion of child and youth social indicator data now becoming available on the internet has substantially increased its availability to many user groups who would like to use it. Unfortunately, available does not necessarily mean easily accessible. To be accessible, the information must be in a form which is easily understood by the user and easily located. The challenges associated with putting social indicator data into a form that is easily understood by most potential user groups are many. These issues have been receiving substantial attention from those who produce social indicator data, since they are commonly concerned with reaching broad audiences, though the unique potential of the internet for enhancing presentation of such data is only beginning to be explored.

For this paper, however, I am focusing instead on that other dimension of accessibility, namely the ease with which data on children and youth can be located on the internet. The explosion of such data on the internet shares the features of any explosion, namely that it is fairly chaotic and disorganized. This is to be expected, coming as they do from so many different sources and developed for so many different purposes.

There at least two ways in which information is organized on the internet. First, there are the internet search engines which in the U.S. include Excite, Lycos, Yahoo, Info seek, Webcrawler, and others. These function through the use of keyword searches. They are excellent all-purpose organizing tools, but can often lead to long and incomplete searches. Second, there are topic-specific Web sites that identify and organize information in other Web sites in ways that will be useful to users interested in that particular topic. Such sites, if well designed, can dramatically increase the accessibility of relevant information, functioning as a single point of entry for the most pertinent information available on the internet on a particular topic. They organize links to other sites, providing brief descriptions concerning the contents of each site. Many of the search engine sites listed above also organize sites by topic.

Child Trends, Inc. has begun a project to develop such a Web page for social indicator data on child and youth well-being⁸. The focus of our site is on U.S. data, though key international sites will also be included. The site is still in the design stage. We have decided to limit our ambition in order to develop a site which is useful but capable of being developed quickly and maintained at low cost. The design is still in the early stages, and your suggestions are welcome. Table I shows the current draft of the design, with site links organized by substantive area (or topic) and geographic area.

Substantively, sites are organized into five topical areas, plus a separate listing for crosscutting sites that report on many dimensions of child an youth well-being. These are further sorted according to whether they focus on international, national, or state and local data.

Table I: Indicators of Child and Youth Well-being: Available Web Sites Organized by Substantive and Geographic Areas

By Substantive Area		
International	National (U.S.)	State and Local
Crosscutting Reports	Crosscutting Reports	 Crosscutting Reports
Education	 Education 	 Education
Health	 Health 	 Health
Economic Security	 Economic Security 	 Economic Security
 Population 	 Population 	 Population
 Social Development 	 Social Development 	 Social Development
By Geographic Area	1	
International	United States	
International Organizations	 National 	
	 Specific States and Localities 	
Australia	 Alabama 	
	 Mobile 	
• Canada	 Alaska 	
	 Anchorage 	
• Japan	 Arizona 	
	 Arkansas 	
_	 California 	
	_	
<u>-</u>	_	
	<u>-</u>	
 Zimbabwe 	 Wyoming 	

The geographic organization (located on the bottom half of the table) identifies data in sites that pertain to particular countries, states and localities. The major focus will be on state sites since they are the most numerous, although increasing numbers of countries and cities in the U.S. do maintain sites with data relevant to the wellbeing of children and youth. Within each state we intend to list major government sites as well as the sites of the state Kids Count organization when they are online. We are not currently planning to further organize sites by topic within state since at present there are a limited number of relevant sites in each state.

Using the Internet to Make Data About Youth Available to Youth

The Web site that we have begun to develop is being designed primarily to serve the needs of a variety of audiences who already use this sort of information and are familiar with it including federal, state, and local government staff who work on children's data and children's issues; journalists; advocates; and researchers. Adults all. However, there are a number of reasons to consider youth among the potential users of this site, and to take their needs among others into account in the design of the site, and in plans to market the site to users.

First, youth have a strong presence on the Internet in the U.S., and there is reason to believe that their presence will continue to grow as the home ownership of computers grows The President recently announced a \$400 million project to have all schools connected to the internet by the year 2002. Youth are also more familiar with the internet as a research tool than most adults.

Second, youth may have many uses for such data. These include:

- Academic use. As student they could take advantage of the site to do research on topics that are relevant to their own lives and those of their peers. Such a site might, for example, greatly facilitate a research project on trends in teen birth rates, as one could conceivably gather data on trends at the international, national, state and local levels including, perhaps, the city in which on lives.
- Informational use. Youth have a demonstrated interest in basic information about themselves. There are a growing number of Web sites that are designed for youth and about youth. For example, the Yahoo site has a special section called Yahooligans, which caters to child and youth interests and needs in many areas. Some sites are even designed by youth. For example, Children's Express is a highly successful news-oriented Web site that is run by children and youth.
- To inform social action. Many youth in the U.S. are involved in groups whose members provide social services to the community. For example, many high schools now require some minimum number of hours of community service in order to receive a high school degree. Church youth groups, and organizations such as the Boy Scouts and Girls Scouts encourage community service of various sorts. Access to social indicator data on children and youth, particularly for their own communities, could help youth to identify needs that can be met through community service projects.

Third, the Web offers a unique and low-cost opportunity to get input from youth on measures of well-being that are most important to their lives. A number of researchers have emphasized that children and youth should have significant input into how society defines and monitors their well-being⁹. Such a notion is clearly present in the International Convention on the Rights of the Child. And yet, at least in the U.S. (and probably elsewhere) such input is very rare when social indicators of child and youth well-being are being identified for tracking, reporting, and so on.

Implications for Child Trends' Web Site. There are several strategies which Child Trends (and others who provide data on children and youth on the Web) can pursue as we consider the needs of youth for data on children and youth. First, we can design the site in ways which will increase its utility for interested youth. Second, we can work with sites where youth are active, listing our site with them as a link, discussing how they might make the best use of the site, and soliciting feedback on simple changes that will improve the utility of the site for youth.

For many purposes, thankfully, the things that will make our Web site useful to youth are also the things which will make it useful to the average adult user, namely, that the sites we organize be sorted and described in a way that make it easy for the user to locate the data he or she needs. Beyond that, however, it may be useful to develop an additional list of key links to those sites most likely to be of interest to youth. For example, sites that focus on youth (as opposed to child) indicators could be helpful. Sites that take maximum advantage of the multimedia capabilities of the internet may also be of more interest to youth. In addition, to the extent that youth are using the information to inform community service decisions, they may be particularly interested in data for their particular community. To help youth to interpret the social indicator data they find through the web site we could develop a tutorial section that would teach youth by answering basic questions such as "What is a survey?", "What is a time trend?", and "What is a social indicator?" These represent some obvious places to begin, though ultimately we would certainly need to ask the youth themselves for suggestions on ways to make the site more useful for their needs.

A complementary strategy requires working with those sites that already serve the needs of youth, especially academic, news-related, and service-oriented sites. Such sites might include the following:

- Children's Express: This is news service run by children and youth ages 10 to 18, with bureaus in seven cities, five in the U.S., and two in England.
 Several of the bureaus have Web sites. They report on children and the issues affecting children's lives.
- Yahooligans: This is a section within the Yahoo Web site devoted to children and youth. It has organized many Web sites into both recreational and informational areas of interest to these groups.
- UNICEF Voices of Youth: This Web site is a place where youth from all over the world can express and share their opinions about the rights of children and youth. In addition, youth can take part in interactive global learning projects organized through UNICEF.

Once our own Web site is running, Child Trends is considering developing a more complete list of such Web sites and contacting Web administrators to elicit interest in using our Web page, including direct links from their site to ours.

Implications for Research on Children and the Internet

An effort such as the one I have just described could benefit greatly from greater knowledge of how youth actually use the internet for research, for recreational purposes, and so on. Unfortunately, I have found very little information of this sort available. One project that may shed useful light on these issues is the

project "Cyberkids: Children's Social Networks, Virtual Communities, and on Line Spaces" directed by Drs. Bingham and Valentine of the University of Sheffield and Dr. Holloway of the University of Loughborough, and sponsored by the Economic and Social Research Council in England. This project will examine the ways in which children use internet communication (or computer mediated communication, to use their term) as part of their everyday lives. Other projects that examine and categorize the types of Internet sites youth visit, how often, for what purpose, and so on, would also aid those who would like to take the needs and interests of youth into account when designing Web sites.

Conclusion

In the United States and many other countries a great deal of effort is being but into the construction, collection, analysis, and dissemination of social indicators reflecting the well-being of children and youth. To date, only sporadic efforts have been made to make these data available to an obvious audience, the children and youth themselves. The internet represents an opportunity to bring the data to this audience in ways that are accessible and useful to them. This paper is a modest attempt to consider their needs as part of a more general effort to make data on children and youth more accessible to all interested users of the Internet. A great deal more can and should be done to make these data available to youth over the internet, and to shape both the data and the dissemination strategies in ways that better meet their particular needs and interests.

REFERENCES

- Brown BV, Corbett T. Social Indicators and Public Policy in the Age of Devolution. Special Report SR 71. Madison: Institute for Research on Poverty, 1997.
- 2. The Interagency Forum on Child and Family Statistics. The report is located on the Web at http://www.cdc.gov/nchswww/about/otheralct/children/child.htm.
- Brown B, Stagner M. 1997. Trends in the Well-Being of America's Children and Youth: 1997. Washington, D.C.: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. This report can be viewed on the Web at http://aspe.os.dhhs.gov/ hsp/97trends/intro-web.htm.
- 4. The White House has recently added a section to its own Web page that contains recently relased social indicator data, and links to the Web pages of individual federal agencies where additional information can be found. The site is located at http://www.whitehouse.gov/fsbr/ssbr.html.
- Brown BV, Kirby G, Botsko C. Social Indicators of Child and Family Well-being: A Profile of Six State Systems. IRP Special Report SR 72. Madison, WI: Institute for Research on Poverty, 1997.
- 6. The United States has not yet signed the Convention.
- 7. Brown B, Harper M. International Surveys Containing Information on Children and Their Families: An overview. Washington, D.C.: Child Trends, Inc., 1997.
- 8. Child Trends' home page address is http://www.childtrends.org. The page featuring links to other web sites containing child indicator data will be accessible from the home page.
- Qvortrup J, Bardy M, Sgritta G, Wintersberger H. Childhood Matters: Social Theory, Practice and Politics. Brookfield: Ashgate, 1994.