# Youth: Building Knowledge Societies

**Final Report and Recommendations to the Global Knowledge Partnership**

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In the global information society, young people are often the leading innovators in the use and spread of information and communication technologies (ICTs). Increasingly youth are adapting and using these technologies (including, for example, telephone, fax, radio, television, film, computers and the Internet) to meet local information and communication needs. However, young people can remain an untapped resource if their knowledge, vision, and experience are not integrated by decision-makers.

In January and February 2000, hundreds of young people came together in an online conference to explore how youth are using ICTs in the production, dissemination and use of knowledge for sustainable development. The e-conference, titled "Youth Building Knowledge Societies (YBKS)" focused on the actual experiences of young people in Africa, Latin America, Asia, and Central and Eastern Europe.

The e-conference findings were shared and further refined by a youth advisory committee at the Global Knowledge II Conference in Kuala Lumpur Malaysia from 7-10 March. This final report, as presented at the Global Knowledge Action Summit, summarizes the output of the e-conference and highlights specific issues for consideration and action by the members of the Global Knowledge Partnership (GKP).

## BACKGROUND

According to the United Nations, "youth" are people aged between 15 and 24 – a group constituting about 18 percent of the world's population. For the "Youth: Building Knowledge Societies" e-conference, we extended this age range to 30 years, in order to capture the knowledge and experience of young professionals promoting and adapting ICTs for sustainable development.

Youth is not a homogeneous group. Socio-economic, cultural, gender, and linguistic differences also shape young people's ability to participate in society. Some of the barriers to youth participation in the information age are also shared by other groups in society. However young people are often limited from full participation by notions that "their time will come."

> ***The idea that young people will one day 'inherit' the earth should be dispelled; their involvement today is necessary for achieving sustainable development. Although their 'expertise' in "youth issues" is evident, their input should not be limited to this arena. Youth are both willing and capable of formulating pointed criticism and action strategies; and therefore, should be involved in all of the pressing sustainable development struggles facing the global community.***

We hope that this youth perspective on ICTs and sustainable development, will add a fresh dimension to the global dialogue and contribute both to our understanding of the issues and strategies to move forward.

## OVERVIEW

The Youth Building Knowledge Societies e-conference was structured around three themes:

**Access** – Participants highlighted a number of barriers blocking widespread participation in the global information society. They also illustrated a number of examples of how they are overcoming these obstacles through new and creative ways of adapting locally available technologies to meet community information and communication needs. Some of the access issues discussed included those surrounding:

- Receiving information;
- Creating and disseminating information, and;
- Participating in the decision making processes that shape the context for ICTs.

**Education** - Participants gave a number of examples of how they are trying to use ICTs to help make education more equitable, more affordable and more humanitarian. Participants examined the overlapping issues of ICTs in formal and informal education.

**Livelihoods** - Participants stressed that sustainable livelihoods encompass more than simply employment. They noted that the concept includes other characteristics such as: meaningful work, meeting basic needs, health, security, and living within an equitable and just society. Participants highlighted a number of cases where ICTs are being used as tools for creating sustainable livelihoods. Some of the ICT related sustainable livelihood issues raised by participants included:

- employment and entrepreneurship,
- developing skills and sharing knowledge through internships and;
- sharing experiences through global networking projects.

In addition to these themes, the issue of how ICTs could enable greater youth participation in **governance** was raised.

## FINDINGS

This section details the findings of the e-conference and subsequent GK II youth participant inputs. It is organized by issue, illustrated by examples, and followed by recommendations. It is worth noting that the cases mentioned are not intended to serve as a comprehensive listing of initiatives, rather, they are those that participants were working with or were otherwise most familiar with.

### 1. Access

Information and Communication Technologies (ICTs) can only become tools for social development if they address the complex **challenge of improving the lives of the least privileged and most needy around the world**. The success of these technologies as development tools, should be measured not only in terms of sheer numbers of connected individuals, but also in terms of **access, appropriateness** of available information, and **usefulness** of the information. We need to build an all-inclusive "Global Information Society" instead of a stratified world of information rich and information poor. We need to ensure that the poor, the uneducated, the less computer proficient and the non-English speaking majority of the world has access to this new society. This will entail identifying and working to alleviate some of the barriers to this access, including: language, lack of useful content in local languages, lack of freedom of speech, gender and age discrimination, lack of access to the hardware, lack of access to the electricity or telecom systems etc.

Some of the ICT related access issues raised by participants included, **receiving information; creating and disseminating information, and participating in the decision making processes that shape the context for ICTs**. The findings on these issues follow.

#### Issue A. Receiving Information

ICTs as mentioned earlier, include a wide range of technologies such as radio, television, telephone, fax, computer, Internet etc. The importance of using the ***appropriate*** **technology** was repeatedly highlighted by participants as being a critical part of using information and communication for sustainable development. Whether because access to some of these technologies (particularly radio and television) were perceived as being already widely present in many communities, or whether it was because participants simply took another focus, mechanisms to improve access to these two technologies were not discussed extensively by participants. However, the need to improve capacity for creating content for these mediums was given a good deal of attention and is highlighted in the following section (Issue B. Creating and Disseminating Information).

One of the key issues discussed by participants was local information and communication access points (telecentres), comprised of some combination of telephone, fax, computer and Internet access. **Participants felt that telecentres were more cost effective and realistic than attempting to provide household level access facilities to everyone in a community**. These centers are, in many cases, recent initiatives, so it is still unclear as to how different models will impact on youth access, education, and livelihoods. Nonetheless, it seems that a variety of different models will continue to be required given the variety of local contexts and needs.

It is critical to consider all community members when developing access points to information and communication. A wide variety of factors (language, literacy, gender, and economic status to name but a few) can influence people's abilities to make use of telecentres in different communities. For example, many people have been affected or dislocated by conflict and war. In the most severe cases of refugees, they have extremely limited access to ICTs. Another example raised by participants was of physically challenged people. They too are also often excluded from participating in the information society because of oversight or a lack of funds targeting their inclusion, despite the large proportion of physically challenged youth alone in many countries (10% in Kenya, 15% in South Africa, etc). **It is difficult to see how sustainable development can occur if ICTs do not address these issues of marginalization.**

**Examples:**

- In South Africa, the government requires telecommunication operators (as part of their license obligations) to provide services in rural areas through the South Africa Universal Service Agency.
- In Sub-Saharan Africa, the IDRC's Acacia initiative is providing multi-purpose community telecenters to test ICT development solutions such as telemedicine, distance education and e-commerce.
- In the Philippines, Deutsche Telekom-supported local telecommunication provider Islacom is distributing affordable cellular phones in community units/barangays. Remote villagers buy prepaid cellular telephone cards at subsidized prices.
- In Bangladesh, the Grameen Bank is financing cell-phones for village women who in turn provide pay telephone services to their community. In doing so they create livelihoods for women while providing communications to rural villages without land-based phone services.
- In the Philippines, University student cooperatives have expanded their services to include fax and phone services, Internet cafes and computer rentals.
- In Colombia, women run Neighborhood Information Units <http://www.colnodo.org.co/uib/> are setting up local information systems and offering Internet services, especially to young people that do not have access to education.
- In South Africa, A Compaq-sponsored notebook computer helped a 16-year old YBKS participant in South Africa to participate and socialize more effectively with classmates after she made the decision to attend a mainstream school.
- In Canada and Jamaica, the Community Access Program <http://cap.ic.gc.ca/> is creating community owned and operated public Internet access sites. These are usually run by young volunteers or employees - providing them with employment opportunities or experience to gain such employment elsewhere.
- In Zimbabwe, the Education with Enterprise Trust <http://www.ewet.org.za/> is helping to develop "learning enterprises" – businesses (including cybercafes) where young people are able to gain hands-on experience.

**Recommendations:**

- **Business** should support programs in their communities that supply obsolete business computers to civil society organizations and telecenters. If these programs do not already exist, businesses should explore setting up such programs. Computer products businesses could consider supplying a number of new computers each year to such local initiatives. Business should also go beyond providing the hardware to setting up programs or encouraging staff to volunteer their time to train trainers how to use the hardware.
- **Business** should work with government education departments to make sure that both the hardware and relevant / appropriate training is in place.

- **Financial Institutions** should recognize the importance and potential of helping to support the development of telecenters. They should promote small business loans to help entrepreneurs establish telecenters. They should build in different types of loan criteria in recognition of the non-traditional skills sets often required by such businesses.
- **Government** should act quickly to establish ICT policies that support the rapid spread of access to these technologies.
- **Donors** should work with small business and NGOs to establish telecenters. They should strive to ensure that the telecenter models they support are flexible enough to adapt to changing situations.
- **Donors** should ensure that publicly funded telecenters do not shut out opportunities for private entrepreneurs. Publicly funded telecenters should recognize and embrace the fact that their role will change as access improves and *plan* to be outpaced by the private sector. In fact they should work with the private sector and governments to ensure that this does happen. As this happens donors can focus more on supporting content creation.
- **Donors** should consider providing access to ICTs in refugee and emergency situations as a tool for individuals divided by conflict / disasters to reconnect, stay informed, and support each other.

**Issue B: Creating and Disseminating Information**

**Young people need access to existing information sources, but they also must be involved in the development of new content reflecting their experiences and their communities**. ICTs provide an opportunity to broaden past assumptions about whose knowledge counts, by providing a forum for marginalized groups to disseminate their stories, learnings, and messages more broadly.

***Let's not forgot the 'C' in 'ICT'!***

ICTs are part of broader "chains of access" that help connect people around the world. Along these lines of communications, people transform information and knowledge many times. These transformations may be between one communications media and another (e.g. radio to e-mail to fax to print newsletter), between languages and between cultures. **Youth often play an important role as infomediaries (information intermediaries)**. Many participants pointed out that youth infomediaries are well positioned to take advantage of ICTs to gather, filter and repackage knowledge for sustainable development from around the world to meet the needs of their communities; to share the knowledge of their communities with others -- and to make a living by doing this.

Participants emphasized the potential for ICTs to serve as a vehicle for people to practice and nurture their cultures. Global knowledge allows young people to define who they are by comparing and contrasting themselves with others. It can foster a greater respect for the wide variety of local knowledge bases and customs, thus helping to maintain cultural diversity.

By sharing our experiences and learnings we will increase our capacity to create sustainable communities.

**Examples:**

- In Uganda, new FM radio stations are providing information programs on issues such as health, security, micro finance, and local culture. They also are establishing deals with computer training schools and cyber-cafes and providing subsidized training courses and often free Internet access.
- In Venezuela, the Alianza Anillo Verde relays important e-mail messages dealing with environmental and indigenous' issues to communities equipped with 40 meter band radios powered with automobile batteries.)
- In Costa Rica, Santa Furia is enabling young people to communicate with their peers through radio about such issues as sexuality.
- In a number of regions, young people, particularly university students, run community of interest stations that have given youth access to tools to disseminate information and generate knowledge. In the case of South Africa, most of the young people involved in the commercial radio industry started in community radio stations.

- In Canada, young Kenyans are promoting Kenyan hip hop music through their internet site <http://mungano.8m.com/music.htm>.
- In South African, the government has established the National Film and Video Foundation to promote access to the film and video industry through training, pre-production, production and postproduction grants.
- In North America, Bagelhole <http://www.bagelhole.org/>, Adbusters <http://www.adbusters.org/> and PopSustainability <http://www.popsustainability.org/> use media tools to showcase the unsustainability of high consumption lifestyles.

**Recommendations:**

- **Government** needs to remove policy barriers preventing or limiting access to the tools for creating or disseminating information. For example, in many regions community radio is not permitted because of government regulations.
- **Governments** should fund training programs to promote local content creation, which once implemented will be self sustaining and replicable.
- **Business** should provide equipment and training to communities though various entry points in order to help them create new content (e.g. schools, community groups, telecenters, NGOs).
- **NGO's** should focus attention on creating locally relevant content. Even if local users may seem to be small in number, the user base will grow as relevant content is available to them.
- **Young people** should take advantage of the opportunities provided by the internet to develop web based content of their own. The internet provides previously unavailable access to many different stakeholders to share their concerns and strategies with a potentially huge audience.
- **Media** needs to continue to publicize the ways in which ICTs are being used for development and to help overcome lingering fears that these technologies are too complicated and difficult for laypeople to use.
- **All stakeholders** should provide funding for local language content creation and translation of sustainable development content.
- **All stakeholders** should also support initiatives to create locally based content.
- **All stakeholders** should work together to avoid replicating their work. For example some of the current funding going to develop numerous similar directories and gateways could be redirected into local content creation.
- **All stakeholders** should consider funding and support for more public oriented broadcast networks such as PBS in the US. These types of organizations help to channel funds for the creation and dissemination of local content.
- **All stakeholders** need to build in a more inclusive approach to their content and recognize that their audience is global. This means trying to make content available in different languages, and formats, as well as trying to simplify and de-mystify content wherever possible.

**Issue C: Participation in Decision-Making**

Making the growing information society inclusive is a tremendous challenge. However it is not only access to creating and sharing information and knowledge that is required for this to happen. **ICTs do not exist within a vacuum but, rather, are shaped by the socio-political context**. The process for developing national and global ICT policies should also be accessible to all stakeholders. The development of the information infrastructure should not be reserved for businesses, academics and governments; all members of society should have the opportunity to play an active role.

ICTs can facilitate this access by enabling the rapid dissemination of information about current and proposed activities of these agencies, and create forums for stakeholder views, opinions, and recommendations. Indeed, one advantage in using ICT tools in policy-making is that they can help decision-makers focus on the strength of ideas, rather than the individuals behind them. ICTs provide stakeholders with the unique opportunity to by-pass certain barriers and participate in decision-making processes as equals. **Virtual collaboration can also be a more flexible mode of participation by allowing stakeholders from widespread geographic regions to work together.**

**Examples:**

- In India, the IT Schools 2000 Initiative <http://jiva.org/itschools/> of UNESCO and the Government of India is involving stakeholders (including youth) in discussions on IT policy for education
- The Youth Building Knowledge Societies E-conference provided an opportunity for hundreds of youth from all around the globe to share their experiences in using ICTs for development, and to present their collective learnings to some of the leading players working in the ICT and Development field.

**Recommendations:**

- **Government** needs to recognize and draw on stakeholders as resource people rather than try to shut out their input. They need to open up the processes of developing ICT policies.
- **Government** should make their ICT policies and regulations available in plain language.
- **Government** needs to train their own staff on using ICTs.
- **Media** have a critical role to play in making IT policies and issues understandable to the public.
- **Donors** should support government and other stakeholders in efforts to create multi-stakeholder forums that encourage broad public participation.
- **The World Trade Organization (WTO) and the International Telecommunications Union (ITU)** need to open up their processes regarding telecommunications policy to various stakeholders including youth.
- **NGOs, youth groups, and other civil society organizations** need to keep pushing for inclusion in the decision making process. This process can be aided by ICT tools.
- **Youth networks and other civil society organizations** should consider including ICT policy issues on their agendas. This could include monitoring whether national policies on ICTs take into account how different stakeholders will benefit from these technologies; and pushing national governments to use ICTs for creating sustainable livelihoods and communities.
- **All stakeholders** need to avoid apathy or pessimism about multi-stakeholder approaches. While these approaches can be difficult – they still remain the most likely to ensure that barriers to broader participation in the global information society are overcome.

## 2. Education

ICTs have the potential to make education more equitable, more affordable, and more humanitarian. They could add a depth and richness to current education systems. Not only do they allow for new ways of learning from a distance, they also allow youth to pursue their own interests at their own level. These characteristics begin to blur the distinction between formal and informal education.

Since many students around the world do not have easy access to advanced ICTs, especially computers and the Internet, schools can be an ideal starting point to introduce these technologies. Television, videos, and the Web can all be useful classroom tools when used appropriately. Many participants stressed that with the introduction of ICTs, education systems need to enable learners to assess the relevance and quality of the information accessible to them through these technologies. Critical thinking and analytical skills are increasingly in demand in an information-rich world. However, in addition to access issues (to both infrastructure and hardware), there is often inadequate support for teachers and students to integrate new technologies with other styles and methods of teaching and learning.

The formal education system alone, however, cannot keep pace with the rate of change or with the demand for education. Participants stressed that informal education in its many forms can help to reach those who cannot effectively participate in formal education for any number of reasons. Informal education can encompass many forms of learning and build upon many different ICTs. Radio, television, story telling, and the written media, are all examples of tools that have been used to educate and reach people not involved in formal education. Participants raised many examples of how newer ICTs such as computers and the Internet are now also being used in new and creative ways to foster sustainable development.

**Examples:**

- The International Institute for Communication and Development's global teenager program <http://www.iicd.org/globalteenagers/>, gives students the chance to share knowledge and information about themselves their schools and their cultures while also learning to use new technologies.
- The GLOBE Program <http://www.globe.gov> supports a global process of student environmental investigation and research.
- In a number of African countries, including Zambia, South Africa <http://www.school.za/>, Mozambique, Zimbabwe, Lesotho, and Angola, Schoolnet activities supported by the IDRC's Acacia initiative are using access to ICTs as a way of transforming and enhancing education in Africa.
- Digital Peers International <http://www.digitalpeers.org/> works with primary and secondary schools in West Africa to promote interest in information and communication technologies including application of IT tools, software development, hardware management and innovative design.
- In Malaysia, some schools are collaborating with private firms that provide the computers in the school and collect a small fee from students, a portion of which goes to the school to maintain the computer room and pay for electricity charges.
- The Schlumberger Excellence in Educational Development (SEED) program <http://www.slb.com/seed/cp.d/> is working with education partners to develop computer learning centers. Preference is given to underprivileged organizations – which are provided with grants to cover the cost of Internet equipment and access.
- The Cisco academy program, operating in 60 countries around the world is working with high schools and colleges to provide trainers so students can become certified network specialists.
- In Costa Rica, Jovenes a Dar Todo <http://www.tododar.or.cr/ >, a training program, is introducing ICTs to out-of-school youth as a way to help them play a more active role in today's knowledge societies.
- In Venezuela, the Proyecto de Madres Adolescentes Teletrabajadoras Rurales (MATER) is helping to build livelihood opportunities for teenaged mothers through the use of ICTs.
- In Uganda, the Council for Economic Empowerment of Women in Africa is setting up an information resource center called WIRES (Women's Information Resources and Electronic Service) to promote economic activity among rural women through the use of ICTs.
- In India, Development Alternatives has produced a CD-ROM on making roof tiles. Illiterate villagers are able to follow the Hindi voice instructions -- and the cartoon Hanuman guides them easily through the training.
- In Zambia, youth from the Potential Agribusiness Youth Association of Zambia have learnt entrepreneurial skills from the Internet from the Future Farmers of America in the US.
- In central Kenya, a six-year eco-farming initiative targeting youth has disseminated its findings and local plans of action through presentations at seminars and workshops, including e-mail. The feedback they received helped fine-tune the approach - paving the way for financial commitments locally and abroad.

**Recommendations:**

- **Government and schools** should build ICTs into the curriculum in a way that does not attempt to replace traditional pedagogical approaches with technology but which focuses on content. In fact ICTs should be used to promote outcome-based education.
- **Government and schools** need to train administrators and teachers on using ICTs as teaching tools.
- **Government** in certain regions needs to act quickly to bring ICTs into the public school system and train public school teachers to prevent this from becoming yet another site of inequity in the growing gap between public and private education.
- **Governments** should work with the private sector to help see that funds available for ICT training in schools are used in the most effective way.
- **Schools** should introduce students to initiatives such as the GLOBE Program and the IICD program which both focus on learning with and from others.

- **Schools** should explore the potential to make their ICTs available to the community when they are not in use by students (for example after school hours). These types of approaches could help to recover some of the school training and equipment costs.
- **Business** should work with schools to develop ICT curriculum that is relevant for future work, as well as initiating work placements and other types of joint training sessions.
- **NGOs** should initiate more programs that enable business to donate used equipment to disadvantaged schools and receive tax benefits for doing so.
- **Donors** should continue to support ICT initiatives that encourage learning by doing.
- **Donors** should expand their support for school based networking projects (such as SchoolNet Africa). Programs should include attention to new curriculum development and training for school personnel on ICT use.

### 3. Sustainable Livelihoods

**Sustainable livelihoods encompass more than simply employment. They include other characteristics such as: meaningful work, meeting basic needs, health, security, and living within an equitable and just society.** Sustainable livelihoods is about creating new ways of living that enable people to meet their varied and interwoven needs without compromising the ecosystems that support them and their community. Participants were very conscious of how ICTs are creating new employment opportunities for many of today's youth. They expressed the importance of expanding these new employment opportunities to a broader section of the population and developing these opportunities into sustainable livelihoods.

Sustainable livelihoods are about local, self-sustaining solutions. Many participants pointed out that **adaptability and enterprising behavior are essential to generating sustainable livelihoods**.

Some of the ICT related sustainable livelihood issues raised by participants included employment and entrepreneurship, building peaceful communities, and sharing experiences through internships and global networking projects. The findings on these issues follow.

#### Issue A: Social Entrepreneurs

Some of the most exiting developments to come out of the e-conference are examples of how **youth are earning a living through ventures that allow them to merge their social values with ICT and enterprise skills. In the process they are helping to promote sustainable development and create opportunities for others in their communities.**

Participants highlighted the fact that youth, like other members of society, often have responsibilities for supporting extended families – parents, cousins, siblings, partners and children of their own.

Participants stressed the importance of entrepreneurship in creating sustainable livelihoods through ICTs. The concept of "enterprise" includes skills, attitudes and behaviors that allow a person to adapt to changing circumstances by taking control and initiative over their lives.

**Examples:**

- In Guyana, GuyberNet <http://www.sdnp.org.gy/guybernet/> is working to educate the public about important sustainable development issues through the use of information technology, training and educational programs that they develop with young people.
- The Committee to Democratize Information Technology (CDI) <http://www.cdi.org.br/> based in Brazil, is promoting citizenship, literacy, ecology, health, human rights, and non-violence through its computer science and citizenship schools. The Committee was set up by then 25 year old Rodrigo Baggio and has created 117 computer schools which have trained 32,000 young people. The program received initial from Ashoka, a non-profit international venture capital foundation.
- In South Africa, the Green House Project will demonstrate through various interventions how inner-city citizens can live sustainably. It will feature a one-stop environment and development information center (equipped with computers, Internet, library, food gardens,

small restaurant etc. Young people through their organized formations are also taking part in this initiative.

- In Nigeria, the Green Dream Foundation is striving to inculcate the next generation of African youth with appropriate business, information technology and environmental management skills. Their biggest project is building "Green Centers" - multipurpose centers consisting of a library, cyber-cafe, recycling and environmental information unit, training halls, business information units and a vocational training center.
- In South Africa, the Youth TechKnowledgy (YTech) Network <http://www.hsrc.ac.za/corporate/conferences/ytech1.html> is addressing the problems of youth unemployment through telecentres where trainees will receive interactive distance training and education, in addition to support by local trainers, employers and other stakeholders.

**Recommendations:**

- **Donors** should evaluate some of the current projects to determine why they are successful in order to guide them in funding similar activities.
- **Financial Institutions** need to reevaluate their loan criteria to support youth projects. Banks and other credit organizations should support the emerging economic potential of these youth driven businesses.
- **Business, schools and training centers** should work together to teach enterprise skills such as self-determination, focused decision-making, creativity, negotiation, conflict resolution, risk management, initiative, strategic planning and marketing.
- **Donors and government** should support training programs to foster the development of more social entrepreneurs.
- **Global organizations and governments** should launch intensive education program on e-commerce and its accompanying policies. This should be presented in a language and format that is accessible to small entrepreneurs from all over the world.
- **All stakeholders** should work together to develop, fund, and operate information centers for youth for skills training and as an ongoing resource for their sustainable development work within their communities.

**Issue B: International Exchanges and Internships**

By providing a non-formal learning opportunity to develop both technical and interpersonal work skills, internships can play an important role in developing sustainable livelihoods. In ICT internships, **interns can reinforce the capacity of organization either by developing concrete applications or by transferring their knowledge** to benefit society. Participants stressed that in the new knowledge economy, exchanges should be south-south, south-north, and north-north and not only the traditional north-south programs.

**Examples:**

- NetCorps Canada International, NetCorps Malaysia and NetCorps Americas, will have placed more than 750 Canadian youth in ICT initiatives around the globe by 2002. The NetCorps Canada domestic initiative has placed more than 3900 Canadians in ICT initiatives within Canada through the community access program.
- In Canada, IISD has been sending Canadian interns to their partners around the globe to help foster stronger partnerships and strengthen information sharing on ICTs and sustainable development, since 1997.
- The United Nations Volunteers E-Vols program plans to provide onsite ICT-savvy volunteers to development-oriented institutions in the South that can clearly articulate the need for their support. These people would be recruited not only from the North, but from developing countries as well.
- NetAid <http://www.netaid.org> is planning to start offering an online volunteering service. It will hopefully make it easy for people anywhere to donate their time and skills to development projects/institutions, using the Internet (e-mail, in particular) as their prime communications channel.

**Recommendations:**

- **NGOs and Donors** should explore different internship models, documenting and evaluating each model as well as exploring the validity of the concept and sharing these lessons with others organizations doing similar initiatives.
- **NGOs or other organizations working with interns**, should try to ensure that internship experiences are paid. Youth bring valuable skills to these enterprises and most 16-30 year olds bear responsibilities for supporting extended families. Additionally, it will reduce the erosion of sustainable youth livelihoods as agencies grow dependent on a steady supply of free labor.
- **Donor agencies** should be cautious when supporting Northern volunteer initiatives, in order to avoid undercutting the legitimate growth of opportunities for young ICT entrepreneurs in the South. For example, virtual volunteers from the North may inadvertently destroy opportunities for Southern ICT professionals to earn a living with their skills.
- **NGOs or other organizations working with interns**, should try to insure that existing IT youth exchanges are broadened to include south-south, south-north, and north-north and not only the traditional north-south programs.
- **Donors** should target funding to internship programs that include the above types of exchanges (south-south, south-north, and north-south) as well as the relatively well funded north-south programs.

**Issue D: International Networking**

Many participants were members of international youth networks and they highlighted the value in these types of communities for sharing sustainable development resources. **ICTs are increasing the number and the effectiveness of these types of stakeholder networks by increasing the speed of information transfer and removing some previous barriers to participation (such as geographic constraints)**.

**Examples:**

- International Youth Co-operation <http://www.iyoco.org/> provides a platform on the Internet to publish specific projects worldwide in which young people can co-operate.
- Planet Xpress <http://www.planetxpress.org/> is a website project aimed at empowering and connecting young people all over the world who are concerned about global issues. It is managed entirely by a group of 12-25 year olds.
- Ynternet.org <http://www.ynternet.org/>is a non-profit organization created in 1998 by young people from North and South to contribute to sustainable development by encouraging cooperation among young people via the Web.
- The Young Internationalists <http://www.egroups.com/list/y-int/ > global network brings together young, globally minded activists and professionals to debate transboundary issues, share information on campaigns and events, and channel input from the next generation of leaders into the millennium gatherings held in 2000 and 2001.
- The Global Youth Action Network. <http://www.youthlink.org > works to ensure that the concerns and voices of the world's young are taken into account by world institutions such as the United Nations. Supporting tools including a fully searchable database for networking amongst youth and amongst youth groups worldwide as well as a Worldwide Calendar of youth-related events.

**Recommendations:**

- **Youth networks, other networks and donors** must strive to build alliances around common interests.
- **Youth networks** should search for common interests and work together in order to avoid replication and share experiences.
- **Donors** should continue to support networking initiatives as well as projects geared at creating linkages between existing networks.

## 4. Governance

Young people around the world are using ICTs to lobby their governments and to form coalitions for political change. However, in many situations, advocating such change can result in the repression of student and youth organizations through mechanisms ranging from the imposition of restrictions to outright violence. Given the possible repercussions, youth do not engage in governance issues lightly.

Youth participants were more willing to share how they have used ICTs to build bridges between communities divided by long-standing conflicts. E-mail has been a powerful tool to help them learn more about each other and support each other through difficult times.

Most youth felt that virtual dialogues, sponsored by governments or inter-governmental agencies, were excellent tools for building youth participation in governance. In many cultures, youth are not traditionally allowed to participate in decision-making. However, in a virtual environment in which an individual's age may be less obvious, young people felt that they were judged more on the quality of their ideas than on their years of experience.

Finally, it is becoming clear that governments will have difficulty attracting and retaining the best young people as staff unless they improve their information-sharing practices, ICT infrastructure, and human resource management. Governments risk becoming irrelevant as young people turn their energies toward the creation of social enterprises that allow them to live out their values in the more dynamic and innovative atmosphere enabled by ICTs.

**Examples:**

- In Cyprus, young people from both sides of the Green Line dividing the capital city have met online to see if they could work together and make computer access/ internet easier for all in order to "prove to the politicians that we can live together." The Internet allowed the young people to organize a meeting in a neutral zone in early February 2000.
- Cyberpeace <http://www.cyberpeace.org> uses a summer computer camp as a mechanism to bring together young people from the Middle East to work and learn together.

**Recommendations:**

- **Governments** should establish virtual dialogues and consultations as one element of the policy development process. Governments also must put in place resources and mechanisms for integrating and using the input that is collected.

## Conclusion

This report, founded upon of the insights and efforts of numerous youth from around the world represents a concrete attempt to try to address some of the issues revolving around ICTs and sustainable development. With this report we stand behind our assertion that "Youth are both willing and capable of formulating pointed criticism and action strategies; and therefore, should be involved in all of the pressing sustainable development struggles facing the global community."

## Credits

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