

Tackling the Knowledge Divide to generate employment for young people: addressing the objections raised at the Youth Employment Summit 2002

Richard Curtain
Professional Fellow
National Institute for Governance
University of Canberra
E-mail: curtain@bigpond.net.au

The digital divide is real for most low and middle-income countries. This is due to a range of obstacles from a lack of infrastructure to the high cost of computers. The difficulties faced by young people in attempting to tap information and communication technology (ICT) as a source of employment needs more recognition. This was a key message from the recent Youth Employment Summit in Alexandria, Egypt, 7-11 September 2002.

The conference offered a good opportunity to debate the value of using information and communication technology to address one major issue facing all delegates: how to generate more employment opportunities in low and middle income countries. The Youth Employment Summit brought together youth delegates from some 140 countries as well as Ministerial delegations from 40 countries. The conference's location meant that most African and Middle Eastern countries were represented, all from countries with low ICT penetration.

What objections did the youth delegates and Ministers raise and what obstacles did they identify? Are their objections to the use of ICT to generate employment pointing to real barriers that exist? Or do they reflect a misunderstanding of what can be achieved as demonstrated by the best practice examples offered?

The purpose of this paper is to present the objections raised (six in number) and to offer a response. The first section of the response clarifies some basic issues about whether ICT is relevant to the poor at all. It then points to how problems with using ICT noted by the youth delegates has been addressed in similar settings in other countries. The first section draws out the deeper lessons of the best practice examples offered in the author's background paper and by Digital Partners at the conference. Where the problem or issue raised suggests the need for a new response, these are discussed in Section 2. In particular, establishment of a one to one mentoring arrangement based on e-mail is proposed to assist young people to address the barriers they are encountering.

The debates at the Youth Employment Summit suggest that a focus on access to digital technology misspecifies the problem as one of access to a form of technology rather than as access to low cost, relevant and reliable information. The real issue is the knowledge divide – the barriers the people in low and middle-income countries face in obtaining information that is directly relevant to their needs. If the issue for the poor is posed as how best to meet their information related to sustaining and

improving their livelihood, a number of the misconceptions raised at the conference dissolve.

A more relevant approach is a business driven one rather than one which focuses on technology. The starting point for a business approach is to view the opportunity to meet the information needs of the poor the same way as any other start up enterprise. The prime qualifications for such an exercise are knowledge of what it takes to set up a new business rather than the ins and outs of various technology options. The first questions are what information or knowledge is the poor seeking and why. One test of relevance is whether the poor are willing to pay for the information because it saves them money in the longer term.

1. Objections to ICT as a poverty reduction tool

The issues raised in response to conference presentations varied from a basic objection to the idea that the poor could benefit in any way from the new technology to a series of more specific difficulties related to availability and cost of the new technology. Some problems identified in the debates can be addressed by a better understanding of the implications of the best practice examples offered.¹ Other issues raised at the conference call for new approaches that have not adequately addressed in the existing literature on the digital divide.

Objection 1: the poor have more basic needs that need to be met

Addressing the information needs of the poor was seen by some delegates as having lower priority than meeting their basic needs related to good health and access to education. Is it not better, they argued, to direct scarce resources to uses more directly related to meeting such basic needs as the provision of clean water or reducing child malnutrition?

This view, however, is based on a simple understanding of the causes of poverty. It does not recognise that poverty consists of a number of elements, of which meeting basic needs is one aspect. Poverty is also the absence of enabling capacities. Simply aiming to meet basic needs does little to help people rise above their poverty in a sustained way.

In important enabling capacity to reduce poverty is access to low cost, relevant and reliable information. The poor often have to pay much more for their goods and services because they are dependent on intermediaries to provide such basics as water or to sell their crops. They are also exposed to intermediaries in their dealings with government who often demand an illegal 'transaction fee' for providing a service. It is essential, therefore, to investigate first what the information needs of the poor are

¹ Curtain, R; 2002, 'Generating youth employment through information and communication technologies: best practice examples and strategies', <http://www.youthemploymentsummit.org/summit/bgpapers.html>

before looking to technology for a solution.² Poverty can only be reduced in a sustained way if low cost access to relevant and reliable information is addressed.

Objection 2: ICT means computers and computers are too complex

The second major source of misunderstanding of the potential of ICT raised at the conference was the view that ICT referred to computers and the Internet only and these are forms of technology are too complex and expensive for the poor to use. One youth delegate from Bosnia Herzegovina in a plenary session forcefully expressed his view that ICT was technology was of no benefit to the rural poor of his country. This was because, he argued, it required high level skills and levels of literacy that few, if any, possessed in his country outside the cities. In addition, he noted, that even if they could read, there was a lack of suitable content and, if the content was suitable, it was not in a language they could understand. He also noted that his country does not have the infrastructure to offer Internet access in rural areas.

To some extent the term 'digital divide' is to blame for this view of what the use of ICT involves as it suggests that the problem is a lack of access to digital technology – computers and the Internet. UNDP Human Development Reports confirm this impression by including the number of computers per head and number of Internet Service Providers as key indicators for their Human Development Index.

A focus on the use of digital technology offers a narrow perspective on what ICT involves. ICT also refers to other forms of communication such as mobile phones and even radios. Innovative ways to offer low cost access to information for the poor include combining Internet access to obtain relevant content with access to a local radio station to broadcast that information to the poor. In Sri Lanka and Mongolia, for example, local populations have gained access to information on the Internet through community radio networks. Radio stations use facilitators to search the Internet for information sought by local communities and broadcasts the information in their language.³

Another way of combining limited access to the Internet with a low cost means of delivering the information is to use CD ROMs to copy relevant material from the Internet and to send the disks by mail to community centres or schools with computers. This has been done in Ecuador where access in rural areas to the Internet is not possible. The solution has been to service a large number of community based computer centres with CD ROMs so that rural users can access relevant information independently of Internet access.

The challenge from an entrepreneurial perspective is to work out creative ways that the more content rich but expensive forms of technology can be combined with low

² TARahaat or Star Marketplace is an Internet gateway in India that connects the village user to information about social services, health, entertainment, and to markets, through a network of franchised cyber centres, customised in the language of their choice. The design of the web site was based on extensive market research using socio-economic surveys, including a house-to-house survey of selected villages in the region (see Curtain 2002, p 25-26).

³ ILO, 2001, *Generating decent work for young people: An Issues Paper*, prepared for the Secretary-General's Youth Employment Network, p 9.

cost means of information delivery. Options for doing this are discussed further below.

Objection 3: Computers are too expensive

Several African delegates also raised the issue of computers being too expensive. One person noted that it cost about \$US5,000 to purchase a computer in his country. One factor explaining this high cost was that the Government treated computers as a luxury item and taxed it accordingly. This is in contrast to other African countries, such as Mozambique, where it was noted by another delegate that tax exemptions are given for computers used for education purposes and by Non Government Organisations.

One response at the conference to the issue of expensive computers was to point to the availability of second hand computers through organisations such as the World Computer Exchange in the USA⁴ and Green PC in Australia.⁵

It is also important to note that PC cost is relative to its use and income generating capacity. As the resource paper highlighted, PCs in low and middle income countries are much less likely to be used for personal use.⁶ Community access is more likely to be the norm with the possibilities for a small fee for service capacity. This means PC ownership in these countries needs to be calculated based on return on investment criteria rather than as a consumption good as in high income countries.

Objection 4: Second hand computers are not suitable

An objection raised in relation to the use of second hand computers was that this could lead to the high-income countries dumping their old computers on low income countries as an easy way of disposing of items of equipment such as monitors that otherwise would pose an environmental hazard.

This objection does not show an understanding of the hardware requirements of up to date software, especially Open Source software. As the list in Attachment 1 of free or low cost Office Suite, including word processor, spreadsheet, and advanced engineering maths software, shows, a basic Pentium, a Random Access Memory size of 32 or 64 MB and a hard drive capacity of 250 MB is all that is needed.

However, it is important that some quality control standards be specified in relation to the use of second hand computers. This issue is addressed below in the second section of the paper. It is also important that people in low income countries seeking the 'free' computers also be aware of the additional expense that will be required to set the computers up in terms of relevant software and accessing the Internet. The

⁴ <http://worldcomputerexchange.org/>

⁵ Green Peripherals and Components, otherwise known as Green PC, is a social enterprise aimed at helping the long-term unemployed young people obtain IT maintenance and repair skills.
<http://www.greenpc.com.au/>

⁶ Curtain, R; 2002, 'Generating youth employment through information and communication technologies: best practice examples and strategies',
<http://www.youthemploymentsummit.org/summit/bgpapers.html>

'lifetime' maintenance costs will also need to be estimated by the recipient of the second hand computer and allowed for. Funding to set up and maintain the computers is an important feature of the use of second hand computers in Ghana through the Global Digital Divide Initiative's Educational ICT Pilots in Ghana (see Box 1)

Box 1: Use of second hand computers in Ghana

The World Economic Forum's Digital Divide Task Force is proposing three Forum initiatives to be piloted in Ghana. The goal of each is to extend Internet access for students into remote, rural schools that will not otherwise be connected for several years. Each seeks to develop and test new collaborative business models that are sustainable, scalable, and could be rolled-out to other countries in Africa. The three Forum pilots are:

- Africa Online and World Links (NGO) piloting a sustainable business plan placing telecenters in rural schools to provide students with free Internet access supported by market rate charges to adults for use of the telecenter outside of school time. In addition to seeking the donation of 600 used computers over three years, the initiative partners seek US\$140,000 per year for the three years of this initiative. Locally adapted open source curriculum content will be made available as part of this initiative. This is a pilot that is planned to be rolled-out to 8 other Africa countries.
- A team of rural Ghanaian NGOs led by the Centre for the Empowerment of the Vulnerable (NGO) recruiting, training, and preparing local schools and installing 1,200 used computers into 100 rural schools to connect to the Internet 50,000 students over the initiative's three years. In addition to seeking the donation of 1,200 new or used computers over three years, the initiative partners seek US\$120,000 per year for the three years of this initiative. Locally adapted open source curriculum content will be made available as part of this initiative.
- Partnerships between The University of Ghana and the Kwame Nkrumah University of Science and Technology and 150 neighbouring primary and secondary schools with 75,000 students that they recruit to do the following: (a) develop and adapt local open source software and content in local languages of Ghana, (b) train 1,200 new and future teachers in the use of computers and of the Internet to improve their instruction, and (c) have their technical students assist local businesses to maintain 1,800 used computers and their networks that will be placed in the schools. In addition to seeking the donation of 1,800 new or used computers, the initiative partners seek US\$240,000 per year for the three years of this initiative. This is a pilot of an African Universities Initiative that will be expanded to nine other countries in Africa.

Source: WCE role in educational ICT initiatives of the World Economic Forum, <http://worldcomputerexchange.org/>

Objection 5: the form, language and content of Internet does not address the needs of the World's poor

This objection is based on several aspects of the Internet that are seen as biased to users in high-income countries. This refer to the requirement to be literate, read English and content that is relevant to a local community that is preoccupied with the struggle to survive.

In the reverse, each of these objections to the use of the Internet as a tool for poverty reduction can be readily addressed. In terms of content, there are a range of sources of information on the Internet that are relevant to the needs of the rural poor. These vary from scripts for radio broadcast on methods of sustainable agriculture, to education and health related issues.⁷ The number of major languages on the Internet has grown greatly in the last few years so that English is now in a minority alongside Spanish, Portuguese and Russian. Literacy is also not a requirement to use the Internet as Voice over Internet applications make it possible to send messages by voice.

However, it does need to be acknowledged that much more needs to be done to develop content relevant to local communities, develop that content for publication on the Internet in local languages or to seek out relevant content on the Internet and to represent it verbally or in written form for local communities. The World Computer Exchange offers advice on the technical issues related to the use of local languages on the worldwide web.⁸ Considerable opportunities exist for young people to take a lead in these areas. These opportunities are outlined further below.

Objection 6: young people do not have the skills to use the technology

Concern over the lack of the necessary skills to make good use of ICT is based on a perception that ICT only involves the use of the high-end spectrum of ICT technology based around the computer and the Internet. As noted above, this overlooks other simpler forms of information and communication delivery such as mobile phones and the use of radio broadcasting.

Even where access to a computer is sought, the level of skills needed can be limited to specific purposes such as typing up documents, operating a set of accounts or using email. The common approach in low and middle-income countries is for individuals to use community-based facilities to do this rather than to incur the expense of owning and maintaining a personal computer. Personal ownership of a computer does involve considerable post purchase expense and access to a reliable maintenance service provider to rectify a range of possible problems that a computer or reliable access to the Internet can require.

This is where the role of young people as intermediaries in setting up and maintaining the services is crucial. The skills required can range from the basic through to the advanced. At one end of the spectrum, young people can act as a scribe for people who are not literate. This can involve not only being able to read and write but also to be able to touch type with a basic understanding of how to use email and prepare documents for transmission as attached files.

⁷ *Developing Countries Farm Radio Network* has produced hundreds of scripts, suitable for radio, for farmers. The information ... encourages sustainable agriculture that requires only resources ordinarily available to small-scale farmers. See http://www.farmradio.org/english/published_scripts.html

⁸ Martin Wolters, 2002, *Support for Local Languages in Computer Software*.
<http://worldcomputerexchange.org/> e-mail: MWolters@WorldComputerExchange.org

Other forms of information intermediary include access information on the Internet in English or one of the other main languages represented – Spanish, Portuguese or Russian and translating the content for local consumption. It is possible, for example, to obtain radio scripts in English for farmers on methods of sustainable agriculture and to broadcast these scripts over a regional radio station in the language of the local population.

At the more sophisticated end of the spectrum, young people are well placed to acquire skills which are likely to be in demand in running a bank of computers in a school or in a regional health system. These can vary from running a helpdesk function, answering others queries about problems with software or hardware, to the more demanding skills of running a small network of interconnected computers. Skills in demand may also involve maintaining computers and access to the Internet in a telecentre or Internet Café.

At the high end of the skill spectrum are the problem solving skills required to operate an Internet Service Provider or to run a large network. Other high level skills involve the setting up and maintaining database-backed websites.

2. ISSUES that need addressing

The above responses to the issues raised by youth delegates at the Youth Employment Summit are intended to show that, despite the objections raised, a good case still exists for the use of ICT generate employment for young people in low and middle-income countries.

However, other issues raised over three sessions on the use of ICT to generate employment opportunities suggest the need for further follow up action. The first is the need for more information about the availability of used computers and more coordination in high-income countries about making these computers available. A related issue is the need to respond to concerns about whether the specifications of the second hand computers donated by companies in high income countries are appropriate for the uses they could be put to in low and middle income countries.

The third issue that needs addressing is the luxury tax rate imposed by some governments on computers. The issue of the cost of Internet access is also another major barrier that needs to be addressed. Fourthly, information about success stories needs to be balanced by details of the obstacles encountered and the actions taken to solving problems. Finally, how to support on a one to one basis young people seeking to set up an ICT based employment initiative also needs to be addressed.

Access to low cost computers

Lack of information about how to access low cost computers and how to obtain free or low cost software is a barrier that can be relatively easily addressed. As noted above, there are organisations such as world computer exchange in the USA and Green PC in Australia that obtain used computers from the private sector and government departments, refurbish them and distribute them for free to those on low incomes. However, there is obviously considerably more potential to do this in high-

income countries. A key challenge, therefore, is for others in high-income countries to work out how to access more of these discarded computers, refurbish them and to ship them to where they are needed.

Also noted above is the issue of lifetime maintenance costs which can be a significant cost factor not adequately taken into account. Costing models need to be developed which detail the options for reducing lifetime maintenance costs such as printing. For example, the cost of an Inkjet printer may appear to be low and the lifetime cost of the ink supplied by the manufacturer can cost up to ten times the purchase price of the printer. A much cheaper option in the medium term is a laser printer such as the bottom of the range Kyocera printer with a long life ceramic drum and the only consumable is toner.⁹

Need for a set of minimum specifications related to purpose

A widely available specification list of hardware and software requirements and the capabilities of free or low cost software is needed. The advantages and disadvantages of the use of Linux as a free or low cost operating system need to be spelt out. Concerns over whether learning to use office software that is not part of the Microsoft family of products also needs to be addressed. One form this could take might be to identify the additional learning time it may take an experienced user of a non-Microsoft office product to convert to a Microsoft office product. This is not likely to be a significant as the basics are similar in most cases.

Changed tax regimes in relation to education and non profit use

Critical scrutiny of the tax regimes of low and middle-income countries in relation to the importing of computers is needed. Particular attention needs to be paid to the conditions that Governments required to be met to gain exemption from the import taxes. For example, the Global Digital Divide Initiative's project in Ghana, described above in Box 1 has requested a duty waiver for the importation of used computers for schools. It may also be necessary to see a waiver of tax on imports of software.

Internet access is expensive

The cost of Internet access in Africa is high. African IT Exhibitions and Conferences (AITEC) report on ICT infrastructure and service for 2002/03 notes that Africa's total international bandwidth has more than doubled in the last year. However, the report also notes that cost is a key constraint - it is more expensive for an African ISP to operate compared with other ISPs elsewhere.¹⁰ The report notes that new business models such as prepaid billing for mobile phones are reducing costs. Also noted is the introduction of new low-cost satellite-based services which has increased the availability of bandwidth. The first adopters of the free ISP model are also beginning to appear in the region. However, the report also notes that these new business models and technologies, in turn, present challenges to the established regulatory environment and to policy-makers at both the national and regional level.

⁹ <http://www.kyoceramita.com/products/products.cfm?Item=FS%2D1000%20Plus&PCat=2&PSub=1>

¹⁰ African Infrastructure and Service Report 2002/03 (<http://www.aitecafrica.com>)

Need for critical evaluations of successes and failures

The initial stage of promoting the success stories of ICT access in poor communities has shown that adoption of the new technology is possible and that it can have a range of beneficial effects. However, the next stage of promotion needs to offer a more critical account of the barriers encountered and how they were addressed. This will also necessarily involve case studies of failed attempts to make use of the new technology. Just as the bubble has burst for a number of Internet related ventures and a second generation of survivors are now operating on leaner funding sources and more sophisticated business models, the reaction of many youth delegates at the Youth Employment Summit suggests that a more transparent and balanced account of the use of ICT in developing countries is needed. One example of this is in relation to telecentres. More information is needed on the failures as well as the success stories.

Access to ongoing support

Many best practice examples of the use of ICT to generate employment such as Kenya's www.ecosandals.com and the example from Nepal in Attachment 2 have required strong support from mentors, usually from high-income countries.

Attachment 3 outlines a proposal to set up a mentoring arrangement by e-mail. Possible forms of support might include providing information about and support for the use of free open source software eg Open Office. Other help could be related to the setting up an ICT-based venture such as recording and distributing music created by young people from a low or middle-income countries.

Conclusion

The divide between the knowledge rich and the knowledge poor is huge and the barriers to lessening this divide are huge. However, there is little grounds for the often extreme pessimism that some youth delegates expressed at the Youth Employment Conference. This is not to overlook that difficulties that do exist – the challenge is to refocus attention away from a preoccupation with technology and to identify the opportunities and the obstacles for giving the poor access to knowledge that will greatly improve their chances of developing a sustainable livelihood.

Attachment 1: Outline of the hardware requirements of free or low cost application software, September 2002

	Cost	Operating systems	Min process or required	Min RAM required	Typical disk space	Components	Languages for spell checker	Where available
Office Suites								
Ability Office 2002	\$US 70	Windows	Any Pentium	32 MB	25 MB	WP, SH, DB		www.ability.com
OpenOffice	Free	Windows and Linux	Any Pentium	64 MB	200 MB	WP, SH, P, D	French, German, Italian, Spanish and Portuguese	www.openoffice.org
Software 602 PC Suite 2001	Free	Windows	Any Pentium	32 MB (16 MB for Windows 95)	40 MB	WP, SH,	French, German, Italian, Spanish and Portuguese	www.software602.com
E-press Easy Office Premium	Free to non business users	Windows	100 Hz Pentium	16 MB	50 MG	WP, SH, P, CM		www.e-press.com
Gnome Office	Free	Linux				WP, SH, D,		www.gnome.org/gnome-office
KOffice	Free	Linux			15 MB			www.koffice.org
Web browsers and E-mail software								
Mozilla	Free					E		www.mozilla.org
Internet protection Firewall								
Zonealarm	Free							www.zonelabs.com

* WP = wordprocessor, SH =spreadsheet, DB = database, P = presentation package, D = Draw graphics program CM = contact manager, E = email software
 Source: Australian PC World, October 2002, pp 36, 39, & 69-73.

Attachment 2: example of the value of a mentor

Village in the clouds embraces computers

Mahabir Pun is a Nepalese educational pioneer who is trying to break the cycle of poverty in his mountain village of Nangi by taking it into the computer age. Having founded Himanchal High School, he sees the Internet as the way to improve the children's education.

The Internet has been a great help for Nangi, even though we do not have a connection here. One of my professors had helped me to put a simple website about my village and school on the web in 1996. That website has connected my village to the outside world, and I think my village is the first one in Nepal to be on the Internet.

With the simple website we have now, people from around the world have been able to locate my village and have come to volunteer. We regularly get volunteers from America, Britain, Australia, Singapore, Switzerland and Malaysia.

Those who have not been able to visit have also helped in different ways, such as sending books, teaching materials, and money as a donation. Moreover, students from Australia and America have been writing letters to our pupils as penpals through ordinary mail.

... I have installed two small hydro-generators in the stream near our village for power for the school. We got some computers from Australia, Singapore and Malaysia as donation. I also collected some used computer parts in the US and took them to the village and assembled the parts in wooden boxes, building 14 computers.

Now we have 15 computers in our school, which has about 300 students from six neighbouring villages. As far as I know this is the only community school in the entire country that provides computer classes for high school students.

I have seen that even a small village like mine can benefit a lot from the Internet. We can use it to generate money for the village, to provide quality education for our children, to provide information about our culture to children all over the world, and to invite volunteers to come to our village.

Source: BBC News, 22 October, 2001
http://news.bbc.co.uk/hi/english/sci/tech/newsid_1606000/1606580.stm

Linking up expertise across the Internet: Proposal to Set Up E-mailed Based Telementoring as a by-product of the Youth Employment Summit

Richard Curtain
30 September 2002

Aim

Telementoring involves the use of e-mail to conduct a mentoring relationship. It is proposed, through the capacity building session, to set up e-mail-based mentoring relationships for young people who indicate an interest in participating in such a relationship. It is further proposed that the mentors be young people from high-income countries who indicate an interest in working with other young people from low and middle-income countries.

Issues around which telementoring might operate are:

- Information about and support for the use of free open source software
- Help with setting up an ICT based venture such as recording and distributing music created by young people from a low or middle income countries
- Establishing links with sports clubs in high-income countries and young people's sport clubs in low and middle-income countries eg Soccer clubs.
- Assistance with education at the tertiary or senior secondary level
- Assistance with appropriate methods for collecting and analysing data related to young people's needs.

Mentoring: what is it?

Mentoring refers to a one-to-one relationship or one-to-several relationship where a person with relevant knowledge and experience provides on a voluntary basis support, advice and challenge to another person or persons. The focus is usually one of learning associated with an important transition in the mentored person's life such as completing their full time education, acquiring new occupational skills or starting work in a large organisation. However, it may also refer to a group situation where the knowledge, experience and contacts of the mentor are tapped to help start and grow a new venture.

Mentoring can best be seen as a continuum of helping behaviours. Mentoring might start with exploring the issues, making known relevant information, offering guidance

and advice, and then moving to obtaining support, teaching new skills or coaching based existing skills and providing direction.¹¹

Important characteristics of successful mentoring are mutual benefits and equality between the mentor and the person who is being mentored. This means the mentoring relationship should be promoting independence and risk taking.

Telementoring

Telementoring has been successful as a way of helping to bridge significant social gaps in knowledge and behaviour. It has, for example, helped women studying engineering or science in the USA to complete their degrees and to go onto further studies or find appropriate employment.

Using e-mail as the basis for conducting a mentoring relationship has a number of advantages. A key advantage is that there is no geographical limitation on the linking up of a mentor with a person or persons being mentored. Access to e-mail is becoming more widespread in low and middle-income countries. All 54 African countries are now connected to the Internet. In Kenya alone, there are now said to be more than 100,000 subscribers with Internet access and some 250 cyber cafes across the country.¹² Dakar, the Capital of Senegal, is said to have 300 to 500 cybercafes, most with a minimum of 10 computers connected.¹³

Use of e-mail reduces problems of arranging and/or changing dates and times of meetings that can hinder the effectiveness of face-to-face mentoring. E-mails can be sent at anytime and allow for frequent communication based on maximum convenience to both parties. E-mail encourages a clear focus on the problem at hand.

E-mail makes it easier for 'time poor' mentors to become and stayed involved because they can respond at a time most convenient to them. It also makes it easy to overcome the time differences between countries in different hemispheres. E-mail provides an easy way to involve a third party who might be able to offer additional advice.

One potential problem of a mentoring relationship is minimised – the differences between the mentor and the mentee in terms of age or status that could make it harder to communicate.¹⁴ E-mail, due to its time delay, provides more opportunity for the person or group being mentored to identify the issue they are seeking help on and to express themselves clearly on the assistance they are seeking.

¹¹ Miller, A, 2002, *Mentoring: a handbook of effective practice*. Kogan Page, London, p 28.

¹² 'The great African Internet robbery'

http://news.bbc.co.uk/1/hi/english/world/africa/newsid_1931000/1931120.stm posted to GKD list, 13 July by Ashish Kotamkar.

¹³ Frederick Noronha, 2002, Africa and South Asia: ICT Lessons For Each Other...Posted to the GKD list, 13 April.

¹⁴ Miller, A 2002, p137.

Potential risks

There is a need for access to e-mail and reliable software to keep track of messages. Persons seeking help who cannot communicate well in the language of the mentor or the reverse will be at a decided disadvantage. This may restrict telementoring to the better educated. Also using of written communication can be a poor means of establishing trust. Some form of face-to-face meeting is likely to be needed to enable the mentoring relationship to survive in the medium term. E-mail demands a highly reciprocal relationship. If one party does not respond quickly, the other party is unsure as to what this might mean – is the mentor or mentee getting cold feet and is not keen to continue?

Setting up a telementoring program

Merely matching a mentor with a person who wants a mentor, exchanging e-mail addresses and urging the two parties to communicate on matters of common interest is not sufficient. Evaluations of telementoring have shown there is also a need for an online facilitator to act as a monitor and guide where necessary.¹⁵ External assistance is needed to set the ground rules on the amount, frequency and types of communication so that the expectations fit the realities of the environment of the mentor and the mentee. Funding will be needed to cover the time of the online facilitator.

Issues to consider in setting up a telementoring program are:¹⁶

1. Identify clearly the areas of common interest for both parties
2. Ensure that the technology is available to support the telementoring (ie access to a computer, capacity to download and print off messages)
3. Set up a web site to post guidelines (eg in relation to realistic response times to messages and frequency of communication, provide information on netiquette – appropriate manners and style in communicating through e-mail), application forms for mentors and mentees, a training manual and to act as a contact point for access to the facilitator.
4. Provide sensitivity training to mentors to enable them to be aware of, for example, important details of national and gender differences.
5. Give mentors and mentees the chance to view a potential match without giving either party's contact information. Give each party time to accept or reject the match to increase the mutual acceptance of the relationship.

¹⁵ Miller, A 2002, p144.

¹⁶ Miller, A 2002, p145

6. Try to maintain a regular flow of emails and short turn around times and allow the facilitator to monitor the message flow.
7. A facilitator is needed to send regular 'coaching' messages to mentors and mentees to encourage the flow of e-mails, resolve any difficulties and offer support in the form of a newsletter with information, for example, about suitable web pages.
8. Invite mentors to communicate with each other to share experiences and to work out what works and what does not.
9. Ensure that mentors provide regular progress reports to the online facilitator.
10. Have an external body conduct an evaluation of the telementoring exercise to fine tune its operation if successful.