

Barriers Encountered by Women to the Use of Information and Communications Technologies for Open and Distance Learning

Presented by:

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Background

Education and training opportunities provided through distance and open learning are one of the few educational areas in which women in the developing world are fairly well represented. Flexible delivery methods, such as those employed by open and distance learning (ODL) help to overcome some of the challenges that women and girls face when attempting to obtain their education through conventional means. However, with the increased use of the new information and communications technologies (ICTs) in the delivery of open and distance learning, it is feared that this trend may be reversed and that women may become marginalised in educational opportunities delivered through ODL due to access issues relating, at least in part, to their gender.

The influx of the new technologies may also have a detrimental impact on the number of female staff employed to work in distance teaching environments. If women are disadvantaged when it comes to training opportunities in the use of the new technologies, this may result in fewer women being employed as teachers/tutors in institutions that deliver courses through technology. Fewer female instructors will have a negative influence on the number of female students enrolled in programmes, and will eventuate in there being fewer female learners.

In order to further explore these concerns, The Commonwealth of Learning (COL) contracted to have an environmental scan carried out on the research and information available on issues pertaining to women and their access to information and communications technologies, with particular regard to open and distance learning. The scan found little research in this area, although some sources acknowledged that women might face additional barriers due to their gender when accessing information and communications technologies, especially in parts of the developing world (Tandon 1998).

Because of the lack of relevant information, The Commonwealth of Learning took the initiative to support regional symposia during which information and research data would be presented through country papers. The information would assist institutions delivering education and training through ODL and help to ensure equal access regardless of the gender of the potential learners. One of the main purposes of the symposia was to identify common barriers that women encounter when attempting to access ICTs for education and training. It was also hoped that suggestions and recommendations would emerge during the meetings for activities that could assist in overcoming the barriers identified – it was anticipated that possible strategies that had been used successfully in specific circumstances might be replicated in similar situations, or that new ideas would emerge.

Information of this nature would be invaluable, especially with the increased use of ICTs for the delivery of ODL, not only to educational institutions, but also to organisations and agencies concerned with women's access to information, to government agencies, and to others working in similar fields.

The first meeting, which was held in the Asian region, took place in New Delhi, India in November 1998. The meeting for the Caribbean region took place one year later in Barbados. The third meeting was held in Zanzibar in March 2000 and covered the African region. The meeting for the South Pacific, which was the final meeting, took place in Wellington, New Zealand in May 2001.

Regional Symposia

Asia

The first regional meeting took place in New Delhi, India, at the Electronic Media Production Centre at the Indira Gandhi National Open University. The meeting was sponsored by the British Council in Delhi, as well as by local British Council offices, and was attended by persons from Bangladesh, India, Malaysia, Pakistan and Sri Lanka (The Commonwealth of Learning 1998).

The meeting participants identified the following as barriers that women encounter when attempting to access and use ICTs:

- The lack of available hardware – simply not accessible
- Low literacy levels, including low levels of English literacy
- High costs – initially and in sustaining the use of the technologies
- The lack of training
- Institutional barriers – lack of hardware and support to sustain
- Infrastructure barriers – lack of national connectivity

A series of actions, which were grouped into three main categories, were recommended at the meeting:

- Awareness raising through such means as developing networks of women's organisations, linking up websites, carrying out research activities, publicising "success stories" and other relevant and pertinent information, and so on.
- Capacity building which included supporting activities such as local initiatives relating to gender issues and ICTs, hands-on training programmes for women in the use of ICT, projects for using radio and other available technologies, and similar initiatives.
- Regional meetings which include both private, as well as public sector participation and resources, interaction with other regional associations in similar areas and fields, and increased consultations at all levels.

The final outcomes from the meeting included three draft project outlines for consideration for expansion into project proposals and submission to external funding agencies: a project to develop and use community radio stations to specifically cater to women's needs, a project to carry out national surveys on ODL and women which would add to the knowledge base on women and their access to ICTs and their use of ODL, and a training workshop for ODL providers and women learners for the purpose of raising awareness about the potential of ODL to reach out to women and overcome the challenges that they face as learners.

Caribbean

The meeting for the Caribbean region was arranged in conjunction with an international conference that was held in Barbados on the use of technology enhanced learning in November 1999. Representatives attended the meeting from Barbados, Belize, Dominica, Guyana, St.

Kitts/Nevis, St. Lucia and Trinidad and Tobago. The attendees were for the most part from tertiary educational institutions in the region, including the regional University of the West Indies, although there were also some participants from Ministries of Education (The Commonwealth of Learning 1999).

During discussion of the barriers encountered, the point was made that in the Caribbean there should be little or no distinction made between male and female perspectives with respect to access issues. Women consistently have a higher participation rate than males in all levels of education, including programmes offered through open and distance education. There are problems associated with the availability of ICTs, but these exist regardless of the gender of the person/s attempting to access and use.

Having made that point, the barriers identified by the meeting participants to the access to ICTs for open and distance learning included:

- Age – older persons, particularly women, expressed fear and intimidation at the thought of using ICTs.
- Curriculum – girls and women tend to study traditional female subjects and not engage in training in subjects such as mathematics, science and technology.
- Gender – personnel in senior administrative and management positions, with more access to ICTs, are most likely to be male.
- Rural versus urban locations – persons living in rural areas are being left behind as the technologies are not available, not affordable and/or not viewed as being useful or relevant.
- Policy – policy-makers tend to be male, and either address the under-participation by males in education or ignore gender differences to the detriment of all.

Recommendations by the participants at the meeting included:

- Carry out more research on gender-related challenges faced by Caribbean residents.
- Increase access to information on successful initiatives which use ICTs for open and distance learning.
- Support regular networking among the countries on the development of strategies and projects which relate to ODL and the use of ICTs.
- Develop a Caribbean-wide database of information on ODL and ICTs.
- Assist in the development of a regional policy on telecommunications and access to ICTs for all segments of the population.

The meeting participants recommended a number of specific projects based on the above recommendations. They also identified the need for other initiatives which included training workshops for educators and policy makers in the use of ICTs to support teaching and learning, and the development of pilot telecentres to increase access and promote the use of ICTs in rural communities.

Africa

The African meeting had the largest number of countries represented and included persons from Botswana, Ghana, Kenya, Lesotho, Mozambique, Namibia, Senegal, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe. The Acacia Initiative of the International Development Research Centre located in Ottawa, supported the meeting which was held in Zanzibar. The participants came from wide-ranging professional backgrounds, which included universities and colleges, development agencies and Ministries. Many of the participants also had some

awareness of women's issues and concerns, and had worked in the area in some capacity (The Commonwealth of Learning 2000).

The barriers identified through the presentations and discussions to the use of ICTs encountered by women were many, but through some debate, were categorised under one of four types of barriers: socio-cultural, political, economic, and education and training.

In small group discussions, each of the barriers was further expanded into greater detail through the identification of why the barrier actually exists, how it affects the access to ICTs by women and girls, and what specific group/s of women (girls, rural poor, older women, etc.) it affects.

For the *socio-cultural* barriers, the group found that the specific barriers within this category included such issues as sexual harassment; negative attitudes in the workplace; lack of confidence, interest, cooperation and accountability; illiteracy and the use of multiple languages; religious customs and beliefs; and so on. Generally, the barriers that fall into this category tend to affect women living in rural areas more so than those living in urban areas, and also have a greater impact on the uneducated than the educated.

The *political* barriers identified were governance, policy and politics, under which a number of specific barriers were classified. These included barriers such as lack of accountability, infrastructure issues, mismanagement, lack of policy regarding both gender and ICTs, instability and unemployment. All of these contributed to the difficulties that women encounter when attempting to access ICTs although many of the barriers could be termed "gender-neutral" inasmuch as many contribute to a general lack of access to ICTs.

The third category of barrier was that of *economics*. Under this category, three main types of barriers were identified: female poverty, lack of technology and sustainability issues. Again, some of these barriers could be considered gender-neutral as they contribute generally to an overall shortage of ICTs and their use and maintenance.

The three groups of *education and training* barriers identified were management, provision and access. Under these three headings, a number of barriers including the lack of coordination among providers, the shortage of relevant education and training opportunities and the general lack of credibility and quality assurance often associated with ODL were all identified as contributing to the general inability to access ICTs. Other contributing factors included low literacy levels, few ICT trainers, multiple local languages and a poor reading culture.

Recommendations

It was noted by the meeting participants that many of the barriers identified were not actionable by the group and were, therefore, not considered as topics for strategic interventions. The remaining issues were examined as to possible ways they could be addressed and the following recommendations emerged:

- Conduct a needs assessment and select areas for piloting telelearning centres
- Work with specific groups of persons to raise awareness about the use of ICTs
- Establish national training teams with in-country responsibilities to train trainers
- Establish policy guidelines to support access to and use of ICTs
- Coordinate open and distance learning initiatives and the provision of learner support for ODL for women and girls

- Circulate the report from the meeting to government officials, telecommunications companies, and others as appropriate for increased awareness of the issues raised

South Pacific

The meeting for representatives from the South Pacific took place in Wellington, New Zealand, and was supported by the New Zealand Official Development Assistance of the Development Cooperation Division. The countries that sent delegates included Kiribati, Nauru, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. In addition, representatives from Australia and New Zealand attended, as well as from the University of the South Pacific (The Commonwealth of Learning 2001).

Following presentations from the countries represented, a number of general points were raised that were true across the Islands. For example, it was acknowledged that many critical problems face the education sector in the Pacific Islands, and these in turn have a negative effect on the access to and use of ICTs. These problems range from weak internal infrastructures to the fact that an extremely high percentage of children leave school before completing secondary school.

Following a plenary session during which specific barriers were identified, the participants categorised the barriers into four groups: policy/planning/politics; access/infrastructure; societal/cultural; and education/training. During this discussion, it was agreed that although financial issues were barriers they also affect all areas and should be considered as part of each of the categories identified.

Within the *policy/planning/politics* category, the two barriers identified were the lack of reliable and informative data and the lack of policies for education and training. Data collection was identified as an extremely important activity that should be carried out at all levels of education throughout the region in order to inform policy-makers and assist in strategic planning.

In the *access/infrastructure* category, a number of general problems, such as unreliable, or the lack of, electricity and telecommunications services lead to many specific barriers which cannot be addressed through education projects or initiatives. However, some barriers identified in this category are actionable, such as the lack of awareness about the use and potential of ICTs, illiteracy and the shortage of technical skills.

In many parts of the South Pacific, *societal/cultural* barriers such as negative attitudes and perceptions towards women, education and technology must change before any real progress can be made. These attitudes and perceptions are often due to ignorance and misinformation and therefore strategies that can address the provision of quality information are important.

In the category of *education/training* both illiteracy and computer illiteracy were identified as barriers. In addition, the shortage of training opportunities, especially for women teachers and technicians in ICTs and related areas, was highlighted as a barrier.

Overlap among the barriers identified resulted in the group working to derive a comprehensive list of barriers which would help to facilitate the recommendations of strategies. There were:

1. lack of government policies
2. lack of data/information
3. poor or the lack of infrastructure
4. shortage of resources

5. lack of training and education, especially in the area of ICTs
6. traditional attitudes and perceptions towards women
7. brain drain from rural to urban, from the Islands to other countries
8. lack of finances (cross-cutting all barriers)

Three projects were proposed and outlined as possible ways to implement strategies to overcome the barriers. These were the development of a regional database on ODL and the use of ICTs with an emphasis on women and girls; the development and delivery of training programmes in the area of ICTs; and the establishment of pilot telelearning centres in rural areas.

Summary

From these regional meetings, we can draw a number of conclusions regarding the impediments to and barriers that women and girls face in developing regions of the Commonwealth when accessing and using ICTs for education and training purposes. The shortage of financial resources is the common thread which runs through the reports from all the countries that sent representatives to the meetings. It impacts negatively on virtually all persons – men, women and children – in the ability to access and use ICTs, whether the technologies in question are radio, television, or the newer communications technologies, such as computers or the Internet.

The lack of funds not only prevents the initial purchase of the hardware, but also has a negative effect on the existing hardware's maintenance, upgrading and use. Further, inadequate financial resources contribute to the inaccessibility and unavailability in related ways, such as the inability to purchase appropriate software and peripheral equipment, and to pay for electricity or batteries in order to use the equipment.

These specific impediments that have a negative impact on the poorer regions are obvious, but poverty also has a number of insidious effects which often have more severe consequences for women than for men. For example, an impoverished family may only be able to afford to educate some of their children – and usually that means the boys, as educating girls is not viewed as a priority in many countries. This failure to educate girls contributes to their inability to access and use ICTs in many ways: they lack self-confidence and are easily intimidated; they are illiterate; they are not trained in the use of, or even familiar with the technologies; and so on.

Because girls and women are not as well educated or trained as men in many developing regions, they are also not as qualified for positions which would provide exposure and training on the use of ICTs on the job site. Especially in the poorer rural areas, women tend to be responsible for homes, child-raising, farm work, and other jobs that do not require an education, and therefore they have little opportunity to use ICTs during the course of their working day.

Similarly, poor, rural women tend to be very busy, with both housework and family responsibilities, as well as often trying to eke out a living, or supplement their family's income. Unless the use of the ICTs provides immediate benefits and are relevant to improving their standard of living, they are unlikely to spend the needed time to become proficient users even if the technologies are available.

Common Initiatives Suggested

Throughout the course of the four meetings, it was clear that not only were there commonalities among the countries within the regions in terms of obstacles that women encounter in their ability to access and use technologies, but also, in many cases, these commonalities extended into other

regions. Thus it was no surprise that the project activities that were suggested at one meeting often were the same, or very similar, in content and in anticipated results to those recommended in other meetings.

The following is a list of some of the common project initiatives and recommendations that were suggested in the regional meetings, and although there were differences in target audiences and focal points, depending upon the region, there was a great deal of similarity as well:

1. Collection of data in the area of education and the use of ICTs, with a particular emphasis on women. This data collection was recommended as a means to inform and provide better quality information upon which to base decisions and policies.
2. Organisation of regional workshops on ODL and ICTs, for women teachers, trainers, and others that might benefit from such knowledge and skills. Activities of this nature were recommended as one way of being able to show progress and outcomes fairly quickly and efficiently. This type of training was particularly needed for women, so that they could, in turn, provide training to others. The participants in the regional meetings (with the exception of the Caribbean), noted the lack of trained women teachers and instructors as being a significant barrier to girls being educated generally, as well as to girls and women being specifically trained on the use of ICTs.
3. Establishment of pilot test sites for appropriate technologies for education and training purposes, such as radio stations and telelearning centres. These types of pilot projects were recommended as a means to demonstrate and collect information about the importance and value of investing in technologies for the purpose of increasing access to education and training through open and distance education techniques and methodologies.

Next Steps

In order to follow up on this initiative, and particularly on some of the concerns that were raised, The Commonwealth of Learning contracted to have a synthesis report written (Green and Trevor-Deutsch 2002) which took the salient points from the regional meeting reports and brought them all together into a cohesive summary. The report also updated the information in this area through a series of case studies which covered different regions and different applications of ICTs. Once this report was drafted, it was circulated to the participants who attended the four regional meetings for their comments and feedback.

Following the circulation of the synthesis report and update, a meeting has been arranged in conjunction with the International Development Research Centre (IDRC) in Ottawa to take place June 2002. Representatives from the four regional meetings have been invited for the purpose of reviewing the synthesis report, providing input and updated information, and giving approval to the final version from their regional perspectives. During the meeting, it is anticipated that other issues will also be discussed, such as successful strategies that have been used to overcome barriers and the ability to replicate them in similar situations, new initiatives that should be implemented as pilot tests or to inform on related activities, and future directions that COL, IDRC and other agencies should pursue in their determination to overcome barriers that girls and women encounter when seeking education and training.

The third activity that The Commonwealth of Learning is planning is the organisation, in partnership with the IDRC, of an international conference on Gender Issues and the use of ICTs in the developing world. This conference would serve the purpose of raising awareness about the impediments and barriers that women encounter when attempting to access ICTs, in the

anticipation that strategies and success stories would emerge which could be used as inspirations and models for further work.

References:

Green, L. and Trevor-Deutsch, L. (2002) "Women and ICTs for Open and Distance Learning: Lessons Learned from Commonwealth Countries in the Developing World." Unpublished manuscript.

Tandon, N. (1998) "A Survey of Gender Differentials in Access to Information and Communication Technologies." Unpublished manuscript. Online. Available: <http://www.col.org/wdd/>

The Commonwealth of Learning (1998) "Barriers to Information and Communication Technologies Encountered by Women." Unpublished manuscript. Online. Available: <http://www.col.org/wdd/>

The Commonwealth of Learning (1999) "Identifying Barriers Encountered by Women in the Use of Information and Communications Technologies for Open and Distance Learning in the Caribbean." Unpublished manuscript. Online. Available: <http://www.col.org/wdd/>

The Commonwealth of Learning (2000) "Identifying Barriers Encountered by Women in the Use of Information and Communications Technologies for Open and Distance Learning in Africa." Unpublished manuscript. Online. Available: <http://www.col.org/wdd/>

The Commonwealth of Learning (2001) "Identifying Barriers Encountered by Women in the Use of Information and Communication Technologies for Open and Distance Learning in the South Pacific." Unpublished manuscript. Online. Available: <http://www.col.org/wdd/>