14

USE OF ICTS IN LITERACY AND LIFELONG LEARNING

ANITA DIGHE

Learning Objectives

After going through Unit 14, it is expected that you will be able to

- ❖ Work out the potential and role of ICTs in literacy programs

- ❖ Highlight the strengths and weaknesses of literacy programs that use ICTs

- ❖ Describe characteristics, concepts, outcomes and methods of participatory research.

14.1 Introduction

Unit 13 discussed the role of ICTs in education with particular reference to adult learning and Unit 14, the last unit of the course, takes you to forefront of current developments in the sphere of lifelong learning. After explaining the context of far-reaching social, economic and political changes on a global scale, the unit introduces the rationale for using information and communication technologies (ICTs) in literacy programs. Further, it discusses the potential and role of ICTs in the field of literacy. While elaborating the strengths and weaknesses of literacy programs, the unit directs PALDIN learners to the use of ICTs in their work. The hope is that this practice will facilitate your work and make it more effective and more efficient.

14.2 Context of a Rapidly Changing World

As you will agree, rapid transformations have taken place in the world in the past few years. We are now increasingly part of a globalized world that is affecting all aspects of our lives- social, economic, cultural and political. Likewise, the communication and information technologies (ICTs) have brought about enormous changes in our lives. Thus, middle class families in most Third World countries now have better access to information and news than ever before. Due to access to technology, we are now able to remain in touch with our family members, and friends in various parts of the world. Likewise, it is now possible for us to buy designer clothes from the Internet, inasmuch as it is possible to seek/share medical advice on care of a loved one with cancer or HIV/AIDS.

> **Reflection**
>
> Reflect on what changes technology has brought about in your life within the last ten years. How has your life changed? Is the change for the better or for the worse? In which aspects of your life is the change positive? And in which aspects is it negative?

Access to technology, however, is highly unequal. This is evident when we realize that there are more telephones in Tokyo or in New York than in all of sub-Saharan Africa. A computer in some parts of the world can cost a month's salary or more. This differential in access to technology is known as the 'digital divide'. The digital divide is not just an issue of the polarization of the information rich versus the information poor. It is also a divide between men and women everywhere. Even with regard to Internet users, in most countries, the number of Internet users is miniscule. According to the Telecommunications Union (ITU) statistics released in 2002 on female Internet usage, in poorer countries, women represent a much smaller proportion of even this insignificant number. While the users tend to be young, urban based, English speaking who are also overwhelmingly male, majority of women live in rural areas where connectivity is rare or even non-existent.

> **Activity 14.1**
>
> Take a quick tour of the village/*basti* in which you are working and make a table showing in separate columns the number of homes that have a (i) telephone (ii) mobile phone (iii) radio (iv) TV (v) computer. Also, show in the table the economic class (upper, middle and lower) and caste (SC, ST, OBC, General) background of these homes. Make a special column in the table to show the number of women in each home with access to each of these technologies? Write a short report of 500 words on the basis of your observations. If possible, compare your report with those of other PALDIN learners.

14.3 Why use ICTs for Literacy Programs?

In spite of the vital importance of literacy in terms of its benefits for individuals, communities and nations, a vast number of people remain illiterate. While progress has been made over the past 60 years towards achieving universal literacy, the poorest and most marginalized groups of people have yet to be reached.

In 2002, the United Nations declared

the decade between 2003 and 2012 the 'United Nations Literacy Decade.' The aim of the Decade is to bring literacy to all. The overall target for the Literacy Decade is the UNESCO Education for All (EFA) goal of increasing literacy rates by 50 per cent 2015.

Many people are insufficiently literate; they lack the written skills for expression and comprehension that enable them to learn and thereby to improve their daily lives. Some people lack literacy skills because they have not had the opportunity or the means to attend school; others because their schooling was cut short or was of poor quality. These people are almost all poor, two-thirds are women; most are older, almost all live in low-income households in developing countries, and most belong to linguistic and cultural minority groups.

The rapid expansion and growth of ICTs have now brought unprecedented opportunities for achieving greater educational access and reach. Given this potential, it is necessary that attention be paid to how ICTs can contribute to increasing access to literacy and improve the quality of literacy education.

> **Reflection**
>
> Reflect on some of the ways in which technology can be used for acquisition of literacy. Are you familiar with any project in which technology was used for literacy?

14.3.1 What is meant by ICTs?

ICTs are often associated with high-tech devices such as computers and software, but ICTs also encompass more conventional technologies such as radio, television, and telephone technology.

The term ICTs refers to forms of technologies that are used to transmit, store, create, share or exchange information. This broad definition of ICTs includes such technologies as radio, television, DVD, telephone (both fixed and mobile), satellite systems, computer and network hardware and software; as well as the equipment and services associated with these technologies, such as videoconferencing and electronic mail.

14.3.2 Current use of ICTS in Literacy Programs in some E-9 countries

In order to understand the use of ICT in literacy programs, in 2004 UNESCO, Bangkok, commissioned case studies from seven of the nine most populous E-9 countries of the world that are still faced with the problem of adult illiteracy. These case studies from China, Bangladesh, India, Pakistan, Egypt, Mexico and Brazil, examined initiatives that use ICT as a tool to improve literacy and highlight innovative practices, where applicable (see references to the case studies in the list of references, denoted by the name of each of the seven countries).

The case studies highlight that adult literacy programs as part of educational policy and practice have generally remained a neglected area for policy makers and planners in most countries. This is particularly so with regard to India, Pakistan and Bangladesh. Evidently their commitment and investment in adult literacy programs is not commensurate with the massive problem of adult illiteracy faced in these countries. Since these countries are far

from achieving EFA goals, they are still struggling to expand primary and secondary education and to address quality issues. Consequently, these priorities take precedence over considerations such as those relating to adult illiteracy.

With regard to ICTs, there are problems relating to those of infrastructure. The country studies from Pakistan, Bangladesh, Egypt and China refer to a limited telecommunications infrastructure. Problems of bandwidth capacity, non-availability of computers, poor transportation network, including those relating to uninterrupted power supply, have hampered the use of ICT even in school education. Lack of sufficient financial resources is a major constraining factor.

The country study from Egypt has assessed the reasons for the non-use of ICT by literacy teachers. These include: i) financial constraints, ii) scarcity of trained manpower, iii) lack of technical and maintenance personnel, iv) inadequate number of specialists in use of ICT for literacy, and (v) negative attitude of the educational personnel at various levels and their unwillingness to change.

While India's leadership in the application of computer technology is well acknowledged, it has only made sporadic efforts in the use of ICT in adult literacy programs. This is also true of Bangladesh where even though NGOs have initiated most innovative work in education, there is still limited use of ICT in literacy programs. Also, such initiatives have largely been donor-funded, pilot-based, and small scale. As a result, as pilot projects, they become a major cause for quality initiatives not being sustained.

There are other problems with regard to the use of ICT in literacy programs. These relate to problems of perception. Thus, there are those countries where ICTs are seen as add-ons to the education system. In other words, there is little recognition that ICT can be used to supplement and complement the conventional education delivery system or processes, or that they can be used to improve the quality of teacher training programs. As a result, few teachers have been provided with training on how to integrate ICT into the teaching/learning process.

14.3.3 Broad Trends in the Use of ICTs in Literacy Programs

Some of the following broad trends emerge from these country studies with regard to the use of ICTs in literacy programs.

❖ Most countries do not use ICTs in literacy programs. Nor have they formulated policies for integration of ICTs in adult literacy programs.

❖ Most countries have problems with regard to financial resources and lack of technological infrastructure.

❖ There is one characteristic that is common to almost all countries. The ICTs used are typically basic ones - radio and television. When computers or the Internet are involved, they are for restricted, targeted users.

❖ There is much greater use of ICTs, particularly in school education. The use of ICTs in community learning centers is still limited.

❖ Most ICT projects for adult literacy are pilot projects and are often funded by foreign/international agencies. They suffer from problems of sustainability.

❖ Not much attention has been paid

14.4 Case studies of Literacy projects using ICTs - the Indian experience

In India there have been experiments in using radio, television, video cassettes for educational and instructional purposes. But there has been no consistent use of technology in adult literacy programs. For details on this subject see Dighe and Reddi 2006.

Three pilot projects in India titled 'Khilti Kaliyan,' 'PREAL' and 'Chauraha' attempted to use television and radio for teaching literacy to adults, particularly adult women. While these were innovative initiatives and highlighted the potential of media in addressing the problem of adult illiteracy, the fact remains that these initiatives were thwarted due to lack of political and administrative commitment, inadequate planning and management effort and lack of concerted coordination at various levels. Box 14.1, 14.2 and 14.3 on the three projects are based on Ghosh (2006).

Box 14.1 Khilti Kaliyan

This 24 part serial aimed at women in the age group of 15-35 years. It was made with the intention of encouraging them to recognize the need for literacy and the changes that literacy would initiate in their lives. The serial was based on an experimental literacy primer by the same name. It was developed for women learners, and dealt with themes and issues pertaining to the lives of rural women. In the course of its effort to complement the primer, the TV serial established a link with the real problems of social, economic and political deprivation and oppression faced by women. Thus, the narrative of *Khilti Kaliyan* forced the audience to consider the position of women in society and the reasons for their unequal status.

Although made with the two main objectives of attracting women learners to adult education centers and enriching the learning process, *Khilti Kaliyan* went beyond that in its potential 'as a radical new effort to draw women into the mainstream by transforming education into a real tool of development and change.' The TV serial was telecast by Delhi Doordarshan Kendra once a week over 24 weeks. However, it was telecast without adequate preparation to ensure that adequate TV viewing facilities, and the literacy primers were available at the adult education centers. Nor were the adult education instructors trained in using the films in conjunction with the primer being taught in class.

Source: Avik Ghosh, Avik 2006. *Communication Technology and Human Development*, New Delhi: Sage Publications

Box 14.2 PREAL (Project in Radio Education for Adult Literacy)

PREAL was operational in 16 selected districts of Bihar, Uttar Pradesh, Madhya Pradesh and Rajasthan. Weekly programs under the title *Nai Pahal* was broadcast from eight AIR (All India Radio) stations that covered these districts. The objective of PREAL was to study the effectiveness of using radio lessons to enrich the learning experience of women learners in adult education centers (AECs) and thereby sustaining their interest in attending

the classes regularly and achieving the prescribed literacy norms. Particular emphasis was laid on reinforcement of reading ability through a planned and systematically graded reading drill that was inducted into every lesson that was broadcast. The instructional content was in standard Hindi but the spoken dialect of the particular region was also used to enrich program content, vocabulary and cultural specificity. In tribal districts, however, literacy was initiated in the local tribal language and vocabulary and then gradually built up to standard Hindi. Five hundred AECs in non-tribal districts and 300 AECs in tribal districts were identified for each AIR station, making a total of 3,800 AECs.

PREAL encountered several problems. The AECs did not function regularly. Sometimes, the literacy instructor was not present and at other times, the learners were not there or the two-in-one sets had problems or the batteries were weak. The organization and management of listening sessions at the AEC were also poor and therefore exposure to PREAL broadcasts was not regular. Consequently, the effectiveness of PREAL in terms of reinforcing reading ability was limited. In conclusion, it can be said that the management of PREAL was weak in comparison to the magnitude and complexity of the project. The decision-makers in the government, both at the Centre and at the state levels, did not fully appreciate the scale of significance of the project.

Source: Avik Ghosh, Avik 2006. *Communication Technology and Human Development,* New Delhi: Sage Publications

Box 14.3 *Chauraha*, an Instructional TV Serial

Chauraha was an ambitious project of the National Literacy Mission. This TV serial attempted to teach reading and writing the Devnagari (Hindi) script. It was based on the belief the instruction through a powerful audio-visual medium like television would quicken the pace of learning and adults could be made literate in a shorter span of time. *Chauraha* was a set of 40 15-minute TV film episodes that, for the first time in India, used sophisticated computer animation techniques to teach Hindi writing within the overall framework of a narrative storyline. The technique was to show an easily identifiable image from daily life (or a graphic representation) and then superimpose a letter that could be associated with it.

The storyline of *Chauraha* followed the pattern of a TV serial filled with emotional content as the main characters went through their travails in life. Its theme was woven around the value of education. *Chauraha* combined direct instruction with awareness on various development issues and did so in an entertaining and enjoyable manner.

The lesson from the *Chauraha* experience was that planning and developing good quality materials were not sufficient for cost-effective application of communication technology using a sophisticated medium like television. Preparing the ground, ensuring availability of the hard ware, sustaining learner motivation, providing supplementary print materials, training the instructors to use the materials and design other learning activities had to be an integral part of the planning process.

Source: Avik Ghosh, Avik 2006. *Communication Technology and Human Development,* New Delhi: Sage Publications

The Tata Computer-based Literacy program (CBFL) uses a mix of methods, including computer software, animated graphics, multimedia presentations and flashcards, to teach reading skills (for details see Box 14.4).

> ### Box 14.4 The Tata Computer-based Functional Literacy Program
>
> In this program, computers deliver the lessons in multi-media form, but these are supplemented with textbooks. Audio voiceovers explain how letters combine to give structure and meaning to various words and pronounce the words.
>
> The emphasis is on words rather than alphabets. Lessons are designed to be visually stimulating and entertaining, using elements such as puppets. The lessons are based on material developed by the National Literacy Mission. The lessons focus on different languages, even dialects
>
> Under the project, a number of learning centers have been established. Each centre has a computer and an instructor. Because the project relies on computer programs, it has less need for highly trained teachers, which is an advantage in areas which lack teachers. A typical class has 15 to 20 people and is held in the evening hours.
>
> Source: http://www.totalliteracy.com

Bridges to the Future Initiative (BFI) was designed to improve basic skills of literacy and vocational skills of youth and young adults, in poor communities. It uses innovative ICT tools and methodologies to promote adult learning (for details see Box 14.5).

> ### Box 14.5 Bridges to the Future Initiative (BFI)
>
> While great strides in India education have been made, it is now clear that many schools are able to offer only inadequate quality of instruction, leading to a primary school drop-out rate of between 35-50% across the poorest states of India, including in Andhra Pradesh where the BFI has been operating since 2003. Thus, the main target are the tens of millions of disadvantaged youth (ages 9-20 years) who are at risk of never getting a good job, performing poorly in trades that are education-dependent (especially those that change with the knowledge economy), and suffering a variety of health consequences due to poor education and income. Many of these youth (especially girls and young women) have had some schooling, but often too poor in quality for these individuals to achieve a functional literacy ability.
>
> The BFI model is designed to take advantage of already-existing ICT infrastructure, largely in secondary schools, and create content to which such out-of-school youth have access. The instructional model builds on the oral competence of the learners in their mother-tongue, Telugu, the majority language in the state. As part of the BFI, a major impact assessment- a longitudinal study- has been undertaken to follow BFI out-of-school youth, and other youth in control groups, to measure skills and knowledge acquisition. Up to March 2005, over 200 youth (age 10-20 years, about 60% girls) participated in the BFI program. Results indicate that the participating youth are learning literacy skills at an accelerated pace and show greatly enhanced motivation and retention. Further, results suggest that those youth with least schooling- especially girls- show the most gain in performance, and many of these have left the BFI program to return to complete their primary schooling. The BFI in India (along with a companion project in South Africa) was designed to demonstrate that cost-effective solutions can and should be developed for the most challenging situations.
>
> *Source*: Wagner, Daniel (ed). *Monitoring and Evaluation of ICT in Education Projects: A Handbook for Developing Countries, p. 96*

The Commonwealth of Learning Literacy project was undertaken on pilot basis. It took place in two sites each in Rajasthan, Madhya Pradesh and Tamilnadu and it highlighted how ICTs can play an enabling role in literacy programs (for details see Box 14.6).

Box 14.6 The Commonwealth of Learning Literacy Project (COLLIT)

Commonwealth of Learning (COL) received support from British Department of International Development (DFID) to undertake a pilot project in India and Ghana to explore ways by which literacy programs might be enhanced through the use of appropriate technologies. The three year pilot project which began in July 1999 was implemented through the 'technology-based community learning centre' model. The concept of a community-based learning centre, where various types of ICT equipment could be deployed, managed and accessed by members of the community, where learning could be facilitated and where locally relevant learning materials could be developed, was a central ingredient in the COLLIT project. The impact of the project was most visible on the people involved in operating the learning centers, most of whom had no prior exposure to computers and other ICTs. By the end of the project, the facilitators and staff at the learning centre, in both countries, emerged as well-respected ICT-trained literacy instructors with experience in using the equipment to develop locally relevant instructional materials. The COLLIT project also demonstrated that given the opportunity, learners are quite capable of using ICTs in ways that not only help them achieve educational goals, but that are also remarkably motivating and applicable to other facets of their lives.

Source: Farrell, Glen (ed.) 2004, *ICT and Literacy: Who Benefits?* Vancouver: Commonwealth of Learning,

---

In Same Language Sub-titling (SLS), the lyrics of film songs shown on television appear as sub-titles in the same language as the audio, on the television screen. Capitalizing on the insatiable appetite most adults and children have for film-based entertainment, SLS ensures that the nascent reading skills of those who are barely literate or semi-literate, are reinforced in even the remotest villages of India.

The M.S. Swaminathan Village Knowledge Centers project is an innovative project in India that has a pro-nature, pro-poor, pro-women and pro-livelihood orientation. The project has shown how learners can develop locally relevant content with the use of technology. For details see Box 14.7.

Box 14.7 Village Knowledge Centre in Madurai district

Implemented by the Asia-Pacific Program of Education for All (APPEAL) through the UNESCO Bangkok office, the 'ICT Applications for Non-Formal Education' project supports the use of ICT in non-formal education, so as to enable learners to expand their livelihood opportunities and assist them in improving their quality of life.

The project supports the development of Community Learning Centers (CLC) and Village Knowledge Centers (VKC), and encourages equipping these centers with appropriate ICT. The project also supports the provision by these centers of literacy and basic education courses which utilize relevant ICTs

The literacy course offered in the Madurai VKC begins with a lesson on how to use a digital camera. Participants photograph people and objects in their daily lives, including family, household items and surroundings. In the next lesson, participants learn how to

put their photographs into slide presentations and how to store them on CD-ROMs, using the computers in the VKC. Then, with the help of the trainer, learners pair each photograph with a letter of the alphabet. The slides are used as learning material in literacy courses and print-outs are also prepared so as to enable learners to practice and build their literacy skills outside the VKC.

Source: www.unescobkk.org/education/ict/nfe

14.5 Role of ICTs in Promoting Literacy

On the basis of the country studies that highlight best practices in the use of ICTs for literacy programs, as well as other experiences around the world, particularly in school education, it is averred that ICTs have the potential to play the following specific roles in promoting literacy (see UNESCO 2006).

❖ **Enhancing learning**: ICT can be used as a tool for acquisition of literacy skills. For example, radio, when used in combination with printed course material, can make literacy lessons more true-to-life and interesting. Also, this combination of audio and visual stimuli is more effective than visual stimuli alone in enhancing vocabulary and sentence construction skills and can aid information processing and memory.

❖ **Broadening access to literacy education**: Access to literacy education may be limited, or may be denied, for a number of reasons. These include social, cultural, political and geographical factors, as well as lack of time to attend classes, lack of qualified teachers, lack of literacy materials in local languages, and issues such as delay in receipt of feedback and results.

❖ **Creating local content**: ICTs can enable the rapid and cost-effective creation and distribution of socially, culturally and linguistically appropriate learning content. For example, word processing software can be used to modify literacy education material that has been developed elsewhere to make it available in local languages and on locally relevant subjects.

❖ **Professional development of teachers**: Qualified and trained teachers represent the key to quality teaching and learner motivation. However, in many countries professional expertise is limited and thinly distributed particularly for the provision of non-formal literacy education. While ICTs cannot be substitute for teachers, ICTs can supplement and support teachers by reducing their workload and enhancing their lessons.

❖ **Cultivating a literacy conducive environment**: For literacy to become widespread in a society, written material should also be readily available in daily life and accessible to all. Such environment cultivates opportunities for coming into contact with, and creating, written material and thereby reinforces and promotes the development of literacy skills.

14.6 Strategies for Using ICTs as a Tool to Achieve Literacy Decade Goals

On the basis of the experiences thus far, it should be possible to formulate following

strategies to use ICTs meaningfully in literacy programs.

Formulating a Policy for Integrating ICT in Adult Literacy Programs

Rather than regarding ICT as add-ons, there is need to formulate a policy that integrates ICT in the adult literacy programs. With regard to literacy, there are two aspects that the policy would have to address. A rights-based approach to literacy would have to be promoted. For, it has to be recognized that Education for All cannot be guaranteed until right to literacy becomes a fundamental right of all citizens- women and men. This would have major implications insofar as women's literacy programs are concerned. With a rights-based approach, the thrust in a women's literacy program, would be on women's empowerment, organization-building, and forming alliances with like-minded groups. Secondly, since the problem of illiteracy is inextricably linked to that of poverty, it would be necessary to deal with the problem of poverty centrally. If poverty becomes the main focus of intervention, then an expanded vision of literacy and livelihoods education, in the overall process of lifelong learning, would become critical. It is equally important that the policy be clear about the relationships between literacy programs and other sectors. This would entail mainstreaming literacy across sectors, ministries, agencies, and facilitating implementation of literacy programs that are cross-cutting and inclusive. Women's literacy programs would have to be embedded as part of a larger effort towards social, economic and political empowerment. This important policy perspective will determine the way in which gender and literacy programs will be implemented and the manner in which ICTs would be integrated in such programs.

Providing Infrastructure and Access to Technology

Literacy programs have suffered from paucity of financial resources and political will. Even with regard to access to technology, pressures to put hardware and Internet access in the formal schools, would be overwhelming. Thus, the United Nations Decade provides an opportunity to policy makers to focus attention on the poor, the illiterate and the low-literate population, and this priority could extend as well to the ICT domain. Community technology centers are an efficient way of making this access available to rural communities. The use of effective and appropriate technologies can play a significant role in creating a learning environment. The investment in such Community Learning Centers can be worthwhile if such centers become Community Literacy Centers as well. Special efforts would have to be made to ensure that such centers are physically and socially accessible to women.

Ensuring Community Participation through ICT Projects

ICT projects, like any rural development project, must ensure sustained and ongoing consultations with members of the community, particularly the poor members, and women among them, so that they take crucial decisions relating to physical location, timing and use of ICTs. The poor benefit from ICTs when they know and control both technology and related know-how. Beside providing access to information, there would be need to increase the 'voice' and participation of the poor, particularly women, in various decision-making processes. It is important for the poor to use ICTs to share knowledge and to build networks.

Developing Learner-centered and Context-specific ICT Tools

In order to reach the unreached and the most excluded groups, programs will need to be tailored so as to address their diverse needs. Building learning demand is a major challenge in the field of adult literacy, basic and adult education. ICT can play an important role in arousing interest and enthusiasm, and engaging learners when they pay attention to the specific needs of varied learners. Women's participation in such programs goes up the more diverse the education program is and includes topics that are relevant to their daily lives.

Developing Useful and Relevant Content

As mentioned above, it is important that the content of any ICT-based literacy program should address local needs related to health, nutrition, family welfare, employment, agricultural production and so forth- information that people with new literacy skills could use to improve their lives. ICT-based programs must first and foremost be about learning, and about building a learning environment.

Ensuring Professional Development of Literacy Personnel

The professional development of administrators, directors, and literacy personnel at various levels is critical to improvement in literacy, basic and adult education programs. Since adult literacy programs in most countries are largely volunteer-based, and since the quality of training such personnel is generally not satisfactory, there is a compelling reason for addressing the issue of professionalization of the literacy personnel. ICT tools can help greatly in this area. While there exist on-line distance education courses for teachers in the formal system, there is much that ICT can do for the professional development and growth of the literacy personnel.

Ensuring that Research, Monitoring and Evaluation are built into Program Design:

There is a dire need to know what works and what does not work, with a focus on the poor. Feminists have averred that the learning styles of women are different. It is therefore necessary to build research into program design so that meaningful insights can be obtained for on-going program improvement. The Brazilian experience has shown the value of participation of researchers since the inception of a program. Universities and research institutions can play a significant role in assisting in outcome evaluation and monitoring processes that would help in determining whether further investments are required. Also, collaborative research would be necessary to promote promising innovations.

Ensuring Multi Stake-holder Partnerships

Since ICT projects require huge financial investments for setting up technological infrastructure; it is possible that in the order of priorities for most governments, the claims of the poor to participate in the information economy, would get short-changed. A strong political commitment would therefore be critical to ensure that the share of the poor and the disadvantaged in the gains from ICTs is accorded primacy. It is possible that partnerships between government, NGOs and private sector would be necessary so that the respective strengths of each player can be leveraged. The principal role of the government, however, would be to facilitate the creation as well as equitable diffusion of infrastructure and the adaptation and up scaling of successful pilot projects. The private sector could play an important role in supporting development of content and applications in local languages relevant to people's

needs. NGOs could partner with the government for enabling participation of the poor, illiterate women, in the various initiatives and also facilitate their capacity building.

Ensuring Sustainability of ICT-based Literacy Programs

One of the serious problems of such initiatives, which are largely pilot projects funded by international agencies, is that of their sustainability. What is the mechanism for ensuring that ICT-based projects become sustainable? There is no single answer to this question. On the one hand, there are proponents who advise that the ICT-based projects must become commercially viable by levying fees for those who avail of the services provided. While there is merit in this argument,

there is no gainsaying the fact that any fee-driven Community Learning Centre would automatically exclude the poor and the marginalized groups, particularly poor women. That is the reason why the MEVyT project of the Mexican government does not charge any fees to the users. On the other hand, involvement of the community, right from the time of locating physical space and installing the equipment and taking charge of its maintenance and administration, fosters a sense of ownership on the part of the community. The Mexican experience has shown how sustainability of projects can be ensured through community involvement, but more importantly, how government commitment and government funds are still essential.

14.7 Conclusion: Beyond Literacy

In today's fast changing complex world, it would not be enough to acquire the traditional skills of reading, writing and numeracy. Developments in technology are taking place so rapidly that the perceptions about what it means to be a literate person are also changing. As use of ICTs grows, it would be necessary for people, women particularly, to go beyond literacy to develop the skills that

would be necessary to utilize the new technologies effectively and productively for their own empowerment. The challenge for the educationists would be to constantly anticipate and to plan educational programs that would enable adults to cope with and take advantage of the rapid advances made possible by technology for the betterment of their lives and conditions.

14.8 Apply What You Have Learnt

You have now read about the varied experiences in the use of ICTs in literacy programs. If you were asked to use ICTs in your literacy project, describe how you would proceed, keeping some of the lessons learnt in use of ICTs in literacy

programs, in mind. Write a short essay of 1000 words, focusing on choice of technology, issues relating to access, development of content, enlisting community participation, ensuring sustainability, etc.