ICT and Literacy: who benefits?

EXPERIENCE FROM ZAMBIA AND INDIA

Dr. Glen M. Farrell, editor
ICT and Literacy: who benefits?

Experience from Zambia and India
ICT and Literacy: who benefits?

Experience from Zambia and India

Dr. Glen M. Farrell, editor

Commonwealth of Learning
Vancouver, Canada
The Commonwealth of Learning is an international organisation established by Commonwealth Governments in September 1988, following the Heads of Government Meeting held in Vancouver in 1987. It is headquartered in Vancouver and is the only Commonwealth intergovernmental organisation located outside of Britain.

The purpose of the Commonwealth of Learning, as reflected in the Memorandum of Understanding, is to create and widen access to education and to improve its quality, utilising distance education techniques and associated communications technologies to meet the particular requirements of member countries. The agency’s programmes and activities aim to strengthen member countries’ capacities to develop the human resources required for their economic and social advancement and are carried out in collaboration with governments, relevant agencies, universities, colleges and other educational and training establishments among whom it also seeks to promote co-operative endeavours.

The Chairman of the Board of Governors is Lewis Perinbam O.C. and COL’s President and Chief Executive Officer is Sir John Daniel.

© The Commonwealth of Learning, 2004

ICT and Literacy: who benefits?
Dr. Glen M. Farrell, editor


Published by:
Commonwealth of Learning
1055 West Hastings, Suite 1200
Vancouver, British Columbia
Canada  V6E 2E9

Telephone: 604 775 8200
Fax: 604 775 8210
E-mail: info@col.org
Web: http://www.col.org
contents

President’s message vii
Foreword ix
Preface xix

Chapter 1 THE COLLIT PROJECT: DEVELOPMENT AND MANAGEMENT 1
  APPOINTING A PROJECT MANAGER 1
  DEFINING THE PROJECT OUTCOMES 2
  DEFINING THE DELIVERY MODEL 3
  SELECTING THE COUNTRIES 4
  SELECTING THE IMPLEMENTING PARTNERS 4
  SELECTING THE LOCAL PARTNERS 5
  FORMING THE IMPLEMENTATION TEAM 6
  EVALUATING THE PROJECT 7
  IMPLEMENTING AND MANAGING THE PROJECT 9

Chapter 2 UNDERSTANDING THE CONTEXT 13
  TWO COUNTRIES – TWO CULTURES 13
  THE IMPLEMENTING PARTNERS IN CONTEXT 18
  THE IMPORTANCE OF THE LOCAL PARTNERS 19

Chapter 3 THE COMMUNITY LITERACY LEARNING CENTRES: DEVELOPMENT AND OPERATION 23
  INDIA 23
  ZAMBIA 39

Chapter 4 THE LEARNERS 47
  ANIMATING COMMUNITIES AND RECRUITING LEARNERS 47
  LEARNER PROFILES 49
  LEARNER PARTICIPATION RATES 54
  MOTIVATION FOR LEARNING 54
<table>
<thead>
<tr>
<th>Chapter 5</th>
<th>THE LITERACY CURRICULUM AND TEACHING APPROACH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INDIA</td>
</tr>
<tr>
<td></td>
<td>ZAMBIA</td>
</tr>
<tr>
<td>Chapter 6</td>
<td>THE COST OF DEVELOPING AND OPERATING LITERACY LEARNING CENTRES</td>
</tr>
<tr>
<td></td>
<td>BUDGET MANAGEMENT</td>
</tr>
<tr>
<td></td>
<td>REVENUE</td>
</tr>
<tr>
<td></td>
<td>EXPENDITURES</td>
</tr>
<tr>
<td></td>
<td>ESTABLISHING AND OPERATING THE LEARNING CENTRES</td>
</tr>
<tr>
<td></td>
<td>ANNUAL OPERATING COSTS – THE CASE OF KABWE CENTRE</td>
</tr>
<tr>
<td></td>
<td>SUMMARY</td>
</tr>
<tr>
<td>Chapter 7</td>
<td>THE PROJECT IMPACT</td>
</tr>
<tr>
<td></td>
<td>END-OF-PROJECT ASSESSMENT</td>
</tr>
<tr>
<td></td>
<td>DISSEMINATION OF EXPERIENCES</td>
</tr>
<tr>
<td></td>
<td>ONE YEAR LATER: IMPACT ASSESSMENT</td>
</tr>
<tr>
<td>Chapter 8</td>
<td>SUMMARY COMMENTS</td>
</tr>
<tr>
<td></td>
<td>PROJECT MANAGEMENT</td>
</tr>
<tr>
<td></td>
<td>ICT HARDWARE</td>
</tr>
<tr>
<td></td>
<td>LEARNERS</td>
</tr>
<tr>
<td></td>
<td>DEVELOPMENT OF LEARNING MATERIALS, CONTENT AND TEACHING</td>
</tr>
<tr>
<td></td>
<td>CAPACITY-BUILDING</td>
</tr>
<tr>
<td></td>
<td>COST</td>
</tr>
<tr>
<td></td>
<td>SUSTAINABILITY</td>
</tr>
<tr>
<td>Epilogue</td>
<td></td>
</tr>
</tbody>
</table>
president’s message

Literacy, whether achieved as the core of schooling in childhood or through learning later in life, is the passport that allows an individual to participate in contemporary social, economic and political development. Amartya Sen defines development as freedom, and literacy is the high road to freedom. The developing countries of the Commonwealth see literacy as a pre-eminent requirement and it is a central priority for the Commonwealth of Learning (COL).

The challenge, however, is enormous. In South Asia alone there are 380 million illiterate people, whilst in sub-Saharan Africa 80 million children are out of school – to say nothing of the further millions of illiterate adults. Although there are many basic literacy programmes operating throughout the developing world, they cannot meet the need. We must put new and more powerful tools in the hands of educators.

This report records the experience of literacy workers in India and Zambia who, with support and technical assistance from COL, used modern ICTs to design, create, develop and deliver literacy programmes in the rural parts of these two Commonwealth countries over a three-year period. Dr. Glen Farrell led the team and was at hand to encourage, motivate and support them throughout the work.

In today’s challenging world new programmes must be carefully focused in order to ensure that they address realistic targets and optimise the impact of the specialist skills contributed by partner organisations. COL’s mandate is to respond to the needs of the developing Commonwealth by applying its expertise in distance and open learning and harnessing appropriate technologies to education and training. The significance of the methods tested during this study is their capacity to reach out to learners in isolated regions as well as to penetrate into homes, work places and study centres in urban areas. Very importantly, they also hold the promise of significant economies of scale.
I congratulate warmly all those who made this activity a success and I commend their report to all who take an interest in this fundamental area of human development. Its lessons are highly relevant to the world’s ambitious campaign to reduce the scourge of literacy by half in the next decade.

Sir John Daniel
President
Commonwealth of Learning
Vancouver, British Columbia
Canada

10 August 2004
foreword

THE WORLD OF ADULT LITERACY TODAY

The COL Literacy Project (COLLIT) brings together three different fields of activity: development, information and communication technology (ICT), and adult literacy. Thus, any report about this project needs to be set within a wider context of the trends that are occurring within each of these fields.

The field of development is changing rapidly. Just as in the 1970s when development theory and practice took a sudden lurch towards more mass and socially oriented goals and away from an economic and technical paradigm, so today development policy is undergoing a change of focus towards the alleviation of poverty, and programmes are changing from participation to partnership. ICT is undergoing equally fast-moving changes, which on the whole strengthen the elitist control of these means of communication and present challenges to countries in closing the digital divide. In contrast, the changes which are under way in the field of literacy are not so obvious, but they still represent major challenges.

WHAT DO WE MEAN BY LITERACY?

Literacy has traditionally been defined as the process of writing and reading (i.e., making sense of written texts), and of writing and interpreting written numerals and their relationships. But recently, this definition of literacy has come under challenge.

First, literacy is often confused with both language and mathematical calculations of various forms. (Numeracy is almost always included in the portmanteau term of “literacy.”) For example, statements are sometimes made which seem to imply that adults cannot learn a language or how to do a
calculation without literacy. But adults universally learn to speak a language without any formal assistance; they learn to calculate in their heads, again without formal assistance (though it is true that such calculations are in general limited to relatively small totals and simple processes). The adults who come to literacy learning programmes have already acquired their language and their calculation processes. Many adult literacy learners in Africa and Asia themselves confuse literacy with language, frequently making statements such as, “It would be good if we could learn English.” But, in fact, many people learn to speak English without acquiring the skills of literacy. This use of the term “literacy” to mean language learning rather than working with written texts can confuse the larger issues of literacy that need to be addressed.

A second challenge comes from the increasingly common use of the term “literacy” in widely diverse fields. It is used in phrases like “computer literacy,” “environmental literacy,” “legal literacy” and “video literacy.” The intention behind these terms is very different from the meaning of literacy as the process of writing and reading texts. “Computer literacy” means having computer skills, “environmental literacy” means having environmental awareness, and “legal literacy” means having knowledge of the law and the confidence to use this knowledge. The use of the term “video literacy” is particularly interesting. It means not only developing the skills of analysing existing videos and films to disentangle the messages which are being conveyed (e.g., how women or poor people are being portrayed); in some cases it also implies people coming to control the processes by making videos and films of their own reality, reflecting their particular world picture and concerns. In these cases, “literacy” is used as a metaphor for “use and control.” (“Visual literacy” would seem to be different, for there is a process of decoding and interpreting symbols involved here in a way which is absent from these other cases.)

THE BENEFITS OF LITERACY

The different uses of the term “literacy” highlight the fact that some people see literacy as leading to other outcomes, such as cognitive development, skill enhancement and changes in personality. Many writers (particularly those coming from psychological and educational backgrounds) stress the benefits which they feel literacy inherently brings with it in thinking and doing.
But, increasingly, this view is being challenged. Others argue that literacy is not the same as awareness, skills, knowledge and confidence. They point out that it is possible to develop awareness without literacy, as people in Nepal are doing; to develop skills in many fields without literacy, as people in Kenya and other countries do; and to increase knowledge without literacy, as demonstrated in a legal literacy project in India being run by facilitators, some of whom are non-literate. And as development projects in Bangladesh show, many non-literate people can grow in confidence and act in their own development without taking part in literacy learning programmes.

Such practitioners assert very strongly that literacy is not some kind of magic, bringing with it inevitable changes in the personality and situation of the successful learner. Studies of a number of communities suggest that many of these cognitive benefits, where they can be identified, spring not from the acquisition of literacy skills but from engaging with others in all kinds of social action programmes. It is working with others on developmental tasks, not literacy, that brings about increased self-confidence, initiative and developmental attitudes and skills.

LITERACY AND MOTIVATION

The debate over the benefits of literacy exists partly because of the need felt by many agencies to motivate adults to learn literacy skills. UNESCO, for example, stresses that literacy is the key to health, wealth and happiness: “Without literacy there is no development.” They exaggerate the benefits that literacy will bring (e.g., that you will not be cheated) and the disadvantages of being non-literate (e.g., you will be more susceptible to diseases). But once again this view is strongly challenged in both theory and practice. It is argued in rebuttal that if such statements were true, then some 900 million adults throughout the world would be permanently excluded from all forms of development, for these people will never acquire effective literacy skills. And experience shows that many men and women do indeed engage in effective developmental programmes without having literacy skills.

Left to decide for themselves, poor people in developing countries rarely place literacy very high on their developmental agenda. They perceive more clearly than many agencies that the economic and social benefits of literacy are tenuous and long delayed. It takes at least two years and often longer for an adult to become fluent enough in literacy skills for there be any effect at all on the quality
of his or her life. And poverty cannot wait for two years, nor can the very poor afford to divert this length of time away from the more urgent cares of living. This, it may be argued, is the real reason why most adult literacy campaigns have failed. Until the right reasons (i.e., locally and individually relevant reasons) for adults to develop literacy skills are revealed, reasons that lie in communications, personal growth and social and religious life rather than economic enhancement, indeed in the complex power relationships which underlie literacy practices everywhere, the programmes will fail to achieve what are in fact the agencies’ goals rather than the people’s goals.

LITERACY FOR...?

There is a growing awareness that it is not the learning of literacy skills that brings about social and economic benefits, but the use of literacy in specific instances which does so.

This being the case, programmes of literacy learning are now being framed in terms of encouraging the use of literacy in real life and promoting the transfer of the literacy of the adult classroom into the external world (often by the transfer of that real life into the classroom as a basis for literacy learning).

It is this which has led to the recent emphasis on literacy existing to bring about the achievement of certain other specific goals rather than literacy for its own sake. Thus many programmes have been launched in terms of literacy for health (in Nepal), for citizenship (in Brazil) or for communal harmony (in UNESCO’s “learning to live together” programme). One aim of literacy today is to promote the international initiative of Education for All to increase children’s enrolments in school.

But once again there is an opposing view. It is argued that there is a danger in implying that without literacy it will be impossible to attain these goals: that improved health, citizenship, communal harmony or school enrolment rates cannot be achieved without literacy. Some countries have launched very successful children’s school enrolment programmes without having to run adult literacy classes for the parents first. Literacy skills, if used (and many adults acquire some literacy skills but never use them to bring about changes in their way of life),
will enhance the process and quicken the pace of improving health, of engaging actively in political activities, of challenging the intolerance of others (often the literate) in their own societies and of increasing school enrolment and retention rates. But literacy, so it is argued, is not necessary for the achievement of such goals.

LITERACY FOR LIVELIHOODS

The recent focus by international and national agencies on the relief or eradication of poverty has led to a concern of “literacy for livelihoods.” The definition of “livelihoods” taken is more comprehensive than the earlier concept of “income generation.” It now includes all members of the family unit rather than just the income generator. It includes both income and non-income elements of the family life systems. It includes things like health and housing, for these have an impact on livelihoods. It draws attention to the ongoing security and sustainability of such livelihoods rather than concentrating on short-term training for increased income.

The problem is that literacy is not an essential component of livelihood development. Family livelihood can be enhanced without further developing literacy practices. Studies of family, intergenerational and cross-generational literacies suggest that what is needed is access to rather than the acquisition of literacy skills by every individual, and that families with high levels of access to literacy skills may be better placed to exploit livelihood opportunities than those with low levels of access. Once again, it is the use of literacy skills rather than the learning of literacy which brings benefits.

A FAULT LINE

A fault line seems to be appearing in the world of adult literacy in developing societies. It may be worth highlighting this fault line even at the expense of being accused of over-generalisation.

On the one hand there are those who see adult literacy in terms of adult schooling set within the educational sector. On the other hand there are those who see adult literacy as rooted firmly in social and economic development. The impact of these two world views can be seen in both the programmes offered and the location of control of those programmes.
In the *educational approach*, programmes are normally located within Ministries or Departments of (Adult or Non-formal) Education. They usually take the form of learning groups or classes with set but flexible terms, taking into account local variations of harvests and holidays, using facilitators who have received some (although often limited) training in teaching methods. The discourse used is one of overcoming exclusion and encouraging the inclusion of adults in education. Textbooks are written by “experts” with every effort being made to root these in the experience of the (generalised) learners. The aim is to encourage formalised learning within a dominant literacy – normally a national language with an international language as a second stage.

In this model, literacy skills are taught in isolation from other learning activities. Indeed, literacy is increasingly being identified with basic education. Country after country is developing, under the influence of the growing acceptance of the ideologies of lifelong learning, the integration of adult literacy into adult basic education and training, leading not simply to post-literacy but to continuing education centres of one kind or another with a prescribed curriculum.

Although efforts are being made to ensure that such programmes are adapted to the needs of adult literacy learners, nevertheless the fundamental approach is similar: it is schooling for adults. Control over all of the essential elements still lies with the providers (e.g., the length of the course, the choice of teaching-learning materials), even though some elements such as the location and timing of the learning sessions may be determined by the individual group of learners. Despite some decentralisation, the provision is characterised by a “one-size-fits-all” approach. A generalised literacy (e.g., reading the primer; writing the primer exercises) is seen as the basis for a later process of reading other materials (e.g., newspapers) and writing (e.g., accounts) outside the classroom. Literacy learning is divorced from the immediate context, and the application of the newly learned literacy skills in real life is left to the literacy learners.

In the second view, adult literacy as *a part of social development*, programmes are normally located within social development agencies (e.g., the Ministry of Community Development or Women’s Affairs). Governments often view literacy as a means of getting their own messages to the people more effectively and quickly, and seek to base their assessments of literacy on how far such messages are received. In this approach, literacy learning programmes are set within the context of some other development activity. The location of the learning activity tends to be the same as that of some other developmental activity, and the
learning materials are often those being employed for that task. For example, credit and savings groups use the literacy activities of such groups as the basis for developing literacy skills, groups of women concerned with health development write diaries of their children’s growth and illnesses, and members of a farming group learn literacy skills through instructional material relating to crop pests. Different literacies are accorded different status, so some programmes promote reading the Bible and the Koran as much as extension training manuals. This is not schooling in any sense.

This view looks at literacy learning programmes in a new way. Literacy practices and written texts are seen as part of the fabric of daily life, essentially bound up with power, class, caste, bureaucratic regulations, and the religious and economic life of the various overlapping communities of which every individual is a member. A textbook is not separate from the society which produced it: it is part of the dominant group’s attempts to persuade others to conform to the norm of a “developed society” and become “literate.” But on the social side of the fault line, more of the control of the programme lies with the literacy learners. They set out to learn what they need for their own purposes within their own specific and immediate context. In this sense, it is a more limited approach, more highly focused and more practical, for it concentrates on the use more than on the acquisition of literacy skills, and it ceases when participants feel they have enough control of literacy to achieve their own goals. It is not a case of progression into continuing education, but of learning literacy while engaged in community development, self-help groups or sustainable family and individual livelihoods.

The literacy for livelihoods approach is clearly on this social side of the fault line. It argues that the literacy practices of taxi drivers are different from those of domestic cleaners; to ask both to sit in a class with a common textbook is hardly the best way to treat adult learners. It argues that adults are not grownup children to be told what and how they should learn. They will learn what is of immediate concern to them. One size cannot fit all.

**MEASURING SUCCESS IN LITERACY**

This fault line between literacy as education and literacy as development, between literacy isolated and literacy integrated, is reflected in current approaches to the measurement of literacy. In the main, success has been measured by counting heads: the number of those who enrol, who complete
or who pass a test. But those on the other side of the fault line argue that if the goal of an adult literacy learning programme is some activity other than literacy learning such as livelihoods or health, the measurement must increasingly be in these other activities, however diverse they may be.

A question of values arises at this point. How does one assess those who say they are able to read and write but do no reading or writing? How can the different uses which literacy learners put their new skills be assessed? How can one compare writing Christmas or Diwali cards, making shopping lists, keeping a diary, writing songs or filling in applications for development assistance? Is reading film notices, fashion newspapers and sports magazines to be equated with reading manuals on mushroom growing or children’s health?

The evaluation of adult literacy programmes is thus affected by the fault line. On one side is the collection of a set of statistics based on a division between “literate” and “illiterate” persons. Highly quantitative, such an evaluation concentrates, like school, on enrolments, attendances and externally established performance indicators (i.e., tests). Sociological criteria dominate. Barriers to enrolment and causes of dropouts (or pushouts) are identified. Such evaluation ceases at the end of the learning programme.

On the other side, since literacy learning programmes lie within a developmental programme, the evaluation tends to be more qualitative. It measures how far the literacy practices of the individual literacy learner or those practices which are located within the group activity have been enhanced, and these can be discerned only after the conclusion of the learning programme. And because of the diversity of uses of literacy by individuals and groups, ethnographic approaches tend to dominate – case studies, interviews, changing perceptions and the words of the participants rather than externally observed calculations.

**IMPLICATIONS OF THE FAULT LINE**

The main challenge presented by this fault line is to see how far both approaches can be employed in any adult literacy learning programme, especially an experimental one such as the COLLIT project. For example, in evaluation the use of both qualitative and quantitative methodologies may be necessary. Again, a formalised learning programme alongside or based on a more highly contextualised kind of learning may widen the applicability of the literacy skills of the participants beyond their immediate world.
The COLLIT project, then, needs to assess itself in terms of this fault line. Does it see the use of ICT as a tool to promote universally applicable literacy skills, or does it see ICT as a part of a world influenced by power processes, a means of manipulating the poor to conform? This is the challenge of such a project. In one sense, it can be interpreted as a challenge to the dominant users of ICT, as widening access to new technology. In another sense, it can be seen as controlled by the providers to achieve goals set by the providers. Just as today participation is seen as a tool by which resistance to the agendas of the developers is weakened, a way by which compliance is secured, so a project like this can be seen as seeking to achieve the generalised goals of the development agencies rather than the diverse and often contradictory goals of the participants. For literacy can be and often is a tool of domination, not liberation. And the same applies to both ICT and to development in general.

Professor Alan Rogers
The need to increase literacy levels remains one of the most pressing educational challenges facing developing countries in the Commonwealth. The promises from the 1990 Education for All Conference are far from fulfilled. Illiteracy rates remain unacceptably high, particularly in developing countries, and particularly among women and young adults. This situation has been attributed, in part, to a lack of innovation in curriculum design (too little emphasis on functional skills), a lack of instructional materials and inappropriate pedagogical strategies.

Against this backdrop, there is a worldwide increase in the use of learning technologies that enable the development and delivery of learning materials tailored to the needs and circumstances of particular groups. However, this increase is occurring to a much greater extent at the post-secondary levels of educational systems than it is in the context of basic and non-formal education.

In response to this need for increased literacy, the Commonwealth of Learning (COL) requested and received support from the British Department for International Development (DFID) to undertake a pilot project in selected Commonwealth countries to explore ways in which literacy programmes might be enhanced through the use of appropriate technologies. A grant was provided in 1998, and the Commonwealth of Learning Literacy Project (COLLIT) was born.

The venues for the three-year pilot project were located in India and Zambia. Implementation began officially on 1 July 1999 and was intended to terminate on 30 June 2002, but the end date was extended to 31 December 2002 because of some initial delays in getting partnership arrangements in place, acquiring and distributing equipment and mounting the necessary training programmes.

Data for this report were gathered over the three-and-a-half years of operation of the project and were used to inform decision-making as implementation occurred and to supplement the summative evaluation data that were collected in the months following the official end date. A post-project assessment was also carried out one year after the official end to assess the sustainability of the various activities that were initiated during the life of the pilot project.
This report is intended to provide readers with a comprehensive description of the context of the project, the experience of implementing it, an analysis of the outcomes and the insights gained. Hopefully it will help practitioners in their planning of future information and communication technology (ICT) applications in the context of community-level literacy development, and add to the general literature concerning the use of ICTs in the provision of literacy and non-formal education. A recent UNESCO study (Meta-Survey on the Use of Technology in Education in Asia and the Pacific, 2003-2004 – see www.unescobkk.org/education/ict/metasurvey) pointed out that while there are many projects using ICTs, there is very little information regarding the evaluation of results.

Alan Rogers’ Foreword to this report provides a background for the project in the historical as well as the current context of literacy programmes generally. The report proper begins by describing the role that COL played in managing the implementation of the project and the national contexts for the project in India and Zambia (chapters 1 and 2). This is followed by a description and discussion of the learning centres that were established in villages, the types of learners involved and the teaching approach used (chapters 3, 4 and 5). A financial analysis and a look at the impact of the project are also included (chapters 6 and 7). To conclude, the report documents the outcomes that occurred and the lessons learned (chapter 8), and provides an overall summation in the Epilogue.

Finally, I would like to acknowledge those who have contributed to the preparation of this report. The country directors of the project, Dr. Richard Siaciwena in Zambia and Dr. Anita Dighe and Dr. Usha Reddi in India, each prepared comprehensive reports covering the implementation of the project in their venues. The country-level evaluators, Mr. Zanzini Ndlovu and Mr. Chris Haambokoma in Zambia and Dr. Ila Patel in India, collected data through periodic site visits, interviews and questionnaires and prepared both interim and final reports on the implementation process and outcomes of the project in their countries. This report is a synthesis of the information and observations presented by the country directors and evaluators in their respective reports, copies of which may be obtained in unedited form from COL.

Dr. Glen M. Farrell
Project Manager
chapter one

THE COLLIT PROJECT: DEVELOPMENT AND MANAGEMENT

The interest of the Commonwealth of Learning (COL) in a project of this kind derives from its very mandate, which is to help the countries of the Commonwealth, particularly those with developing economies, to expand capacity with the use of open and distance education (ODL). In carrying out this mandate, COL develops and supports projects in the areas of ODL policy development, support and delivery systems, and applications that demonstrate how ODL can benefit individual learners, institutions and member states. Over the years, the projects undertaken by COL have been marked by the exploration of new educational models and the potential offered by information and communication technologies (ICTs).

This particular project, the Commonwealth of Learning Literacy Project (COLLIT), began with COL requesting funding support from the UK Department for International Development (DFID) to explore ways of enhancing literacy programmes by using ICTs through pilot projects in selected Commonwealth countries. The proposal to DFID was fairly general in nature and did not specify any particular details regarding the implementation and management of the project. As a result, there were a number of development and management tasks that needed to be attended to before implementation could be effected.

APPOINTING A PROJECT MANAGER

A project manager, accountable to the president of COL, was appointed as of 1 September 1998, with a mandate to maintain overall responsibility for the implementation and management of the project with part-time support from assigned COL staff.
The specific terms of reference for the project manager were as follows:

- Contribute to the conceptualisation of the project and the identification of outcomes and strategies
- Establish an advisory committee for the project to map out the strategic plan in conjunction with the chairperson
- Monitor and control approved project budgets
- Arrange and manage relationships with implementing partners
- Establish and monitor project outcomes and implementation timelines
- Produce reports on the progress of the project and additional reports as required
- Ensure the preparation of a final summative report detailing the project experience and outcomes

DEFINING THE PROJECT OUTCOMES

The project was approved on the basis of some broadly stated purposes. An early task, therefore, was to define the project outcomes at a level of specificity that would both guide implementation planning and enable the evaluation of results. The following outcomes were defined and approved by COL:

- Develop locally based literacy teaching materials that incorporate the use of ICT
- Enhance knowledge of what constitutes appropriate and sustainable use of ICT in literacy education
- Train a cadre of tutors who are knowledgeable in terms of using ICT in literacy education and who are aware of media-based instructional resources on a global basis
- Significantly improve knowledge and skills in reading, numeracy and the use of ICT appliances for learners who participated in the project
- Provide objective data regarding the role of ICT-based community learning centres (CLCs) in the education delivery model for the country
- Develop a set of materials for training literacy workers on the applications of technologies
DEFINING THE DELIVERY MODEL

The issues associated with providing access for literacy workers and learners to technology appliances (e.g., computers, audio and video equipment) needed to be resolved if the project was to proceed. With that in mind, the delivery model selected was a “technology-based community learning centre.” This model would:

- Enable learners to have access to the technological appliances
- Provide a place for learners, prospective learners, staff and tutors to gather and interact with others
- Provide literacy programme staff and tutors with the tools to develop, acquire and adapt teaching materials tailored to the context and interests of their particular learners

The development and operation of these centres became a core strategy for the implementation of the project.

The decision to use this delivery model was very much influenced by the development of “telecentres” in a number of other projects such as the Acacia initiative in Africa (see www.idrc.ca/acacia/telecentre.html). Hence an additional dimension to the strategy was that these centres could potentially be used for purposes other than literacy training, such as providing access to weather and market information and to ICTs for the wider community, and providing training in computer literacy for those who already had basic literacy skills.

More specifically, the development of the learning centres was to be guided by the following principles:

- The centre should not be a new part of the community infrastructure. Rather, it should enhance an existing form of community learning centre (e.g., school, teacher training centre, community development centre, health centre).
- The centre should not be restricted to providing literacy training. It should strive to maximise the types and forms of learning that it can facilitate (e.g., basic literacy, teacher and other professional development, community health education).
• The management model developed for the centre should encourage multiple uses, provide technical support and actively market the services to the community. In short, it must ensure that a sense of community ownership of the centre is developed and that the various education and training providers who use the centre are involved in decision-making.

• The centre should provide, as a core, access to computers, Internet connectivity, and supporting technology such as printers, copiers and fax machines. However, it must also ensure that it acts as a receive site for other technologies that are used in the country to deliver literacy and other forms of learning (e.g., broadcast radio, TV, forms of teleconferencing).

• The subject matter content for the literacy programmes offered through the centre should be based on the priorities and current activities of the country and, specifically, on the needs of the communities in which a centre is located. The impact of this principle is that COL will not dictate the content. It will, however, ensure that the effectiveness and efficiency of activities are assessed.

SELECTING THE COUNTRIES

COL chose Bangladesh, India and Zambia for the project because each of these Commonwealth countries faces major challenges in raising and maintaining literacy levels and each has a different national literacy development model. COL felt that these three countries collectively could provide a variety of contexts for the project. Ultimately, however, COL implemented the project at sites in India and Zambia only; it was not possible to proceed in Bangladesh (see below).

SELECTING THE IMPLEMENTING PARTNERS

To ensure that the project would be implemented in a contextually appropriate manner and would encourage sustainability by building a sense of local ownership, COL recognised that a number of partnerships, at different levels, would need to be developed in each of the selected countries. Therefore, in each of the three countries, an “implementing partner” organisation was identified to ensure that the project would develop in a way that would “add value” to ongoing literacy programmes. Several categories of organisations were considered: those that operate as a direct part of government, non-governmental
organisations (NGOs) and public education organisations with a demonstrated interest in the use of technology to enhance access to educational opportunities.

After considering factors such as national profile, prior and existing project relationships with COL, interest in both literacy as well as the development of community-based learning centres, and interest in the exploration of ICT applications, the following implementing partners were selected:

- **India:** Indira Gandhi National Open University (IGNOU) and (for the last year of the project) the Commonwealth Educational Media Centre for Asia (CEMCA).
- **Zambia:** The University of Zambia
- **Bangladesh:** Bangladesh Open University (BOU)
  
  *(Note: As the project planning progressed, it became evident that BOU did not have the capacity to implement the project successfully and so the decision was made not to proceed.)*

**SELECTING THE LOCAL PARTNERS**

The implementing partners were responsible for establishing the second level of partnerships. Each of them needed to find local partners who would work with them on tasks such as determining the project site, choosing the programme content focus, selecting tutors, choosing appropriate technologies, marketing and managing the community learning centres and developing and overseeing the implementation of the project overall. It was expected, therefore, that implementing the project in each country would vary to accommodate the different realities, needs and current literacy programme that existed.

It was also agreed that a third type of partnership would be important to the long-term sustainability of the community learning centres: these were the partnerships that could be developed with other organisations that could be encouraged to use the centres and the technology for their own educational programmes.

This concept of partnership was viewed as an important factor in maximising resources for the project. For example, in the initial conversations with the vice chancellors of the implementing partner institutions, COL stressed it was not
playing in a conventional donor role, but rather it was interested in a relationship in which all project partners would be expected to add “in-kind” resources where doing so would add value and remain consistent with the project goals. The partners, in turn, stressed the same point with their local partners.

FORMING THE IMPLEMENTATION TEAM

Following agreement in principle by the vice chancellors of each of the universities (the implementing partners) to collaborate with COL in the implementation of the project, each institution was asked to develop a draft implementation plan and to nominate a member of their staff to act as the country director for the project. A meeting of all parties was held in March 1999 to review the draft plans and agree on the process for implementation and management. It was agreed that all plans would be finalised by the project manager and the country directors, and that together they would constitute the Project Advisory Committee, along with the president of COL as an ex-officio member and others invited to participate on an as-needed basis.

It was further agreed that the elements of a Memorandum of Agreement between COL and each of the implementing partners should define respective responsibilities for the following:

- Establishment of technology-based community learning centres
- Delivery of literacy training
- Tutor development
- Budget management and reporting

The first meeting of the Project Advisory Committee was held in June 1999. At that meeting, the following items were agreed upon:

- The second drafts of the country-level implementation plans needed to be viewed as dynamic documents that would require modification as the project evolved. (The variety of local partnerships that were being formed was particularly noted.)
- The project implementation would begin officially on 1 July 1999.
- Project steering committees would be formed in each country to involve all co-operating organisations.
- COL would work with the implementing partners to encourage contributions from other sources to enhance and sustain project activities.
• The project monitoring would be done on the basis of activity plans that would provide a detailed description of the activities to be undertaken, the results to be achieved and the budget required. COL would require a report following the completion of each six-month period before releasing the next tranche of funds. (Note: Six months proved to be too tight a time line for all partners to work with, and the budget time frame was expanded to one year in 2001.)

• The budgets would reflect the value of in-kind contributions from all partners as well as any additional funds from sources other than those provided through COL.

• Budget guidelines would be defined regarding the use of donor funds. Specifically, it was agreed that the purchase of vehicles would not be allowed, and all out-of-country travel expenses were to be approved by the project manager.

• The people to be involved in the project would need to be trained in the following areas:
  o Learning centre management
  o Operation and maintenance of hardware and related systems
  o Use of software tools
  o Instructional design
  o Pedagogy strategies appropriate to using ICT in literacy education

The country directors agreed to prepare comprehensive training plans to accomplish these goals. As well, a draft Memorandum of Agreement was reviewed in preparation for circulation of the final version.

EVALUATING THE PROJECT

At the meeting in June 1999, the project directors recognised that each country had an interest in having an effective monitoring process in place in order to make changes as their project proceeded and to ensure that their unique assessment requirements were met. They agreed that the evaluation should be designed to serve both formative as well as summative purposes, providing information to the partners as the project evolved as well as reporting on “what happened” at the end. It was agreed, therefore, that the evaluation would be
undertaken at two levels. First, each country director would establish his or her own evaluation model, designate the persons responsible and budget for its implementation. At the same time, the project manager would ensure that an overall evaluation would be undertaken, which would include the following components:

- Achievement of project outcomes
- Documentation of unanticipated outcomes
- Inventory and description of materials produced
- Types of training provided and number of people involved in each type of training
- Number of learners served in literacy programmes that were enhanced through the project
- Constraints experienced in implementing the project
- Conclusions regarding any factors contributing to project successes and failures
- Analysis of costs

The project manager agreed to appoint the project evaluator in consultation with the country directors and that this person would work closely with the country evaluators as the leader of the evaluation team. It was also agreed that the project evaluator and the country evaluators should be members of the Project Advisory Committee in order to facilitate the formative aspect of the evaluation process.

The Evaluation Framework

Given that the technology-based community learning centres would be in different parts of two very different countries, thus embracing different cultures and languages, the feasibility of a common evaluation framework was open to question. At the same time the framework needed to take account of the multiple levels at which it had to work: international, national and local.

The proposed solution was to develop a framework based on a modified version of the CIPP (Context, Input, Process, Product) approach to project evaluation. It was felt that this would be flexible enough to take account of the different locations and levels of decision-making and, also, to capture data from the major areas of activity such as stakeholder participation, learning centre development and learning experiences. Data needed to be collected at the local level within
A twin-track approach was adopted for the collection of data. Management information systems (MIS) data were to be used to complement and underpin specially gathered data. It was felt that this approach would be both flexible enough to incorporate a diverse range of developments and sufficiently robust to enable a common evaluation framework to operate across all locations.

IMPLEMENTING AND MANAGING THE PROJECT

In an effort to enable sharing of knowledge and learning products, and to encourage joint problem-solving, the project manager undertook to foster the concept of a management team involving the country directors, the project evaluator and the country-level evaluators. To that end, a listserv was established to share information and encourage open and transparent communications. Monthly audio conferences were commenced in July 2000 and continued to the end of the project. As well, a Web site was established to share information about the project with anyone interested. The Project Advisory Committee met annually, and individual members were encouraged to attend relevant meetings and conferences and give papers whenever it was deemed appropriate.

However, a number of issues and challenges occurred over the course of the project that affected its implementation – demonstrating once again that managing projects of this sort are nothing if not “dynamic”! Many of these challenges occurred at the country level and are described in later sections of this report; however, there were several that had a significant impact on both the original design as well as on the overall implementation strategy:

- The process of getting the Memoranda of Agreement in place was prolonged because of the need to have everything vetted by officers in the universities who were unfamiliar with the project and who each had their own interpretation of what was required.

- Within the first six months it became apparent that Bangladesh Open University (BOU), being a relatively new organisation, did not have the capacity to provide the necessary leadership to the project. Accordingly,
the president of COL and the BOU vice chancellor agreed that it would be best if the project did not proceed. This action necessitated a major revision to the project budget plan. Funds that had been budgeted for the Bangladesh component were reallocated to support expansion of the project in both Zambia and India as well as to provide more support to the evaluation process, such as more visits to project sites by both the project evaluator and the country evaluators.

- The activity plans for Zambia and India that were discussed at the June 1999 meeting of the Project Advisory Committee required amendments in light of the additional resources coming available. For example, funding was possible to allow for upgrades to some of the learning centre buildings in Zambia. In India, the additional funds allowed for the consideration of an additional site in the south of the country in partnership with the M.S. Swaminathan Research Foundation.

- It became evident within the first six months of implementation that the time frame for the development and submission of activity plans needed to be longer than six months. It was agreed that the plans should be filed annually – and even this time frame became difficult to adhere to, particularly in the case of Zambia. The processes for getting the information, convening the planning bodies and getting the needed approvals from the university proved to be very time consuming.

- The pace of implementation of the activity plans proved to be frustratingly slow, for several reasons: 1) there was a delay in getting the initial activity plans in place, which in turn delayed the disbursement of funds from COL to the implementing partners and, through them, to the local partners; 2) the country directors had to wait for approval from their institutional finance officers to disburse funds to the centres, which proved very slow; 3) in the case of Zambia, the upgrades to the centre facilities took much longer than expected; and 4) the process of getting the equipment purchased and installed in the centres took much longer than anticipated as did the provision of training for the centre staff and tutors. Much of the problem was created by constraints placed on the country directors by the internal bureaucratic processes of their institutions. In light of the slow process of implementation, COL agreed at the end of the second year that the pilot period should be extended by six months to 31 December 2002.
• At the end of the second year of the implementation of the project in India, there was a change in the senior management at IGNOU which delayed decision-making on critical matters such as the organisation of training workshops for centre staff, the reappointment of the country evaluator and the release of needed funds to the centres. Moreover, it was suggested that there be significant changes made to the supervisory arrangements for the project. On review, COL concluded that the changes being proposed by IGNOU would be too disruptive to the operations of the partner organisations and would seriously compromise the achievement of outcomes given that the project was in its final year. COL therefore decided that the responsibility for managing the project in India should be transferred to another agency for the remainder of the pilot period. The Commonwealth Educational Media Centre for Asia (CEMCA), a COL-affiliated organisation based in New Delhi, agreed to take on the in-country management responsibilities. The original country director agreed on a personal basis to act as an adviser to the director of CEMCA for the duration of the project.

• Several other challenges arose concerning the implementation of the project evaluation process. One, already mentioned, was the delay of one year in the re-appointment of the country evaluator in India, which caused a major delay in the completion of her report. In Zambia, three changes had to be made in the appointment of the country evaluator. Finally, and saddest of all, was the untimely death in March 2002 of the project evaluator, Dr. Judith Calder. Dr. Bernadette Robinson, an international expert in evaluation and education, agreed to take over Dr. Calder’s responsibilities and worked with the country evaluators in designing the data collection process. However, Dr. Robinson was not able to complete the final project report and this task, in the end, fell to the project manager.
chapter 2

UNDERSTANDING THE CONTEXT

The differences between India and Zambia in culture, economy and historical approach to literacy development, together with the differences among the implementing and local partners, combined to create very different contexts in which the COLLIT project operated. An overview of these differences is presented here. The content is derived from the reports submitted by each of the country directors at the end of the project; the full unedited reports are available on request from COL.

TWO COUNTRIES – TWO CULTURES

India

India is a vast country, extending over an area of 3,287,263 square kilometres from the snow-covered Himalayan heights to tropical rain forests of the south. India’s population, according to the 2001 census, stood at 1,027,015,247, making it the second country in the world, after China, to cross the one billion mark. The population of the country grew by 21.34 per cent from 1991–2001.

Even after more than half a century of independence, there exist marked disparities within India, which make some sections of the population highly vulnerable. In addition to the rural-urban divide, the caste, class and gender disparities result in the many people of one country living in vastly different worlds in terms of health, education and other development indicators.

Further, despite nearly five decades of development planning, India is still one of the nine giants in the world where there is a heavy
concentration of illiteracy and an even higher incidence of poverty. While the rate of literacy has jumped impressively since 1947 (16 per cent to 65 per cent), there are still vast sections of India’s adult population that are illiterate. The problem of adult illiteracy has been further exacerbated by the high dropout rates at the primary school level.

The eradication of illiteracy has been one of the major concerns of the Government of India since independence and was included as an element of the first Five-Year Plan in 1952. The importance of spreading literacy as fast as possible was emphasised again by the Kothari Commission (1964–66) which observed that for literacy to be worthwhile it must be functional, which led to the launching of the inter-ministerial project of Farmers’ Training and Functional Literacy in 1967–68.

The first national endeavour for literacy was made in 1979 with the launch of the National Adult Education Programme (NAEP). Besides focusing on the problem of adult illiteracy, this programme also aimed at raising awareness and building functional skills among the non-literate adults. While the programme achieved success in some pockets of the country, it also suffered a setback due to the change in the national government.

In the mid-1980s, there was another major national policy thrust when a two-pronged approach to universalisation of elementary education and adult literacy was set out under the National Policy on Education. This recognised the need for keeping the district as the basic unit for planning and management and for ensuring the participation of local people through the setting up of the village education committees. However, over the last 15 years, adult education and literacy programmes have been transformed under the auspices of the National Literacy Mission (NLM) into a mass campaign leading towards a people’s movement for total literacy and a new awakening for education.

The NLM is guided in its work by four national core values that include national integration, conservation of the environment, women’s equality and observance of small family norm. The NLM has been supported in its work by international and bilateral agencies that have sponsored a wide variety of innovative projects throughout the country.

Recognising the fragile nature of literacy skills if there are not opportunities to use them regularly, the NLM has provided for a post-literacy phase where the gains of literacy are consolidated and an effort is made to link learning skills with
The NLM has a goal of attaining a 75 per cent literacy level by 2005. The primary focus is on the non-literate in the 15 to 35 age range, as they are the ones in the productive and reproductive period of their lives. The basic objective is to create a generation that will ensure that their children are educated and to realise the goal of Education for All.

Zambia

Zambia is a sub-Saharan African country that covers a land area of 753,000 square kilometres. It is a landlocked country, sharing its borders with eight other countries in central southern Africa. Zambia has a population of 9.3 million. It is estimated that 39.6 per cent of the population is urban and that 46.5 per cent are under 15 years.

Until the early 1970s, Zambia was one of the most prosperous countries in sub-Saharan Africa, but it is now one of the least developed, ranking 153 on the Human Development Indicator list. Over 70 per cent of the people are classified as poor. Poverty is more prevalent in rural than in urban areas, and the majority of these poor people have weak purchasing power, are homeless and have insufficient access to basic necessities such as education, health, food and clean water.

The recent increase in poverty and the devastating effect of HIV/AIDS has exacerbated the problem of access to suitable education, which is already
limited by inadequate development and provision. Many of the poor are not able to afford even the low cost associated with participation in school or training programmes. (Note, however, the government has just introduced free education at primary school level.)

Currently, it is estimated that nearly one-third of school-age children are not enrolled. Only half of the pupils leaving grade 7 (primary school) proceed to grade 8 (junior secondary) and just over one-quarter of children leaving junior secondary (at grade 9) proceed to grade 10 (high school/senior secondary). The many children orphaned by AIDS (some 700,000) contribute to these high dropout rates.

It is noteworthy that literacy development is part of the government efforts to reduce poverty, as highlighted in the Poverty Reduction Strategy Paper of 2002:

This programme will revamp the national literacy programme whose performance has deteriorated. Access to functional literacy for all marginalised groups will be increased. The quality of the programme will be improved too, and the capacity of providers will be enhanced. Lastly, communities will be sensitised to demand access to literacy programmes. Opportunities will be created for literacy graduates to continue education through distance learning, night school, and other modes of provision.


The involvement of the Zambian government in literacy education programmes began in 1966 through the Department of Community Development of the Ministry of Community Development and Social Services and with financial, technical and logistical support from UNESCO. Since then the government literacy programme has evolved through three main phases.

First, from 1966–71, the Basic Literacy Programme (BLP) was provided, focusing on reading, writing and numeracy. However, this programme had no social or economic context. After a summative evaluation, the BLP was phased out as a government educational activity but continued in prisons and municipalities. It was replaced with the Functional Literacy Programme (FLP) which had a particular emphasis on production of two cash crops: maize and
groundnuts. Teaching methods were primarily face-to-face supplemented with radio broadcasts that included interviews, stories and dramatisations. Rural libraries and local newspaper were also used.

But the FLP programme also encountered problems. The print materials (six primers) could be covered in a short time, and it became apparent that participants lost their new-found skills once they stopped learning. Other problems with the FLP model were a lack of linkage to other educational and training programmes and inadequate government funding. Neither programme, BLP or FLP, proved to be very effective in reaching women.

To address these issues, and to coincide with the international Educational for All campaign, the government launched a National Literacy Campaign (NLC) in 1990 under the auspices of a quasi-government organisation, the Zambia Alliance for Literacy (ZAALIT). The campaign lasted from 1991–94 and achieved some notable successes, including:

- Increased production of teaching and learning materials
- Revision and production of new learning materials
- Increased training of literacy cadres
- High enrolment of female participants
- Development of a national curriculum for literacy

Despite these achievements, the NLC had problems, most notably the low capacity among the literacy cadres to manage the campaign as well as other activities, and a lack of co-ordination among literacy providers. The NLC was also constrained by the end of the 1990s by low public awareness of the value of literacy and, consequently, by decreasing funding and eroding political will. Not surprisingly, programmes suffered from a lack of instructional materials and an erosion in the number of classes offered. Other providers, of which there were several including UNESCO, national donor agencies, many church-related organisations, and local councils and authorities, were not able to fill the gap. Furthermore, a number of studies revealed that while the participants were strongly interested in reading and writing, they were also interested in a broader range of content focused on topics such as farming, health, basic education, English language, business management, home management and academic improvement.
The COLLIT project was proposed just at the time the Zambian government was facing these significant challenges in dealing with the provision of literacy education. The pilot project was seen as a possible catalyst for renewed interest in the provision of literacy education in the country.

**THE IMPLEMENTING PARTNERS IN CONTEXT**

The selection of the implementing partners was crucial in the process of managing the project because it was they who were given the responsibility for ensuring that the project stayed focused on its objectives and that it “added value” to ongoing literacy activities in the country. Both institutions chosen, Indira Gandhi National Open University (IGNOU) in India and the University of Zambia in Zambia, appeared to be suitable choices in the context of both the project and the culture of the countries.

IGNOU is one of the largest and most respected distance teaching institutions in the world. It has a wealth of academic resources and, at the time of its selection as the implementing partner for India, it was actively involved in the provision of extension education programmes. More importantly, both the vice chancellor and the director of the Centre for Extension Education were interested in exploring ways that the institution might contribute to literacy education in the country and in the development of community learning centres. The director, Dr. Anita Dighe, was well acquainted with the literacy movement in India having been involved in a wide variety of national adult education initiatives.

The University of Zambia, while not primarily a distance teaching institution, did have an active outreach programme through its Directorate of Distance Education led by the director, Dr. Richard Siaciwena. It was also home to Professor Dick Mwansa, of the Faculty of Education, one of Zambia’s foremost authorities on the development of literacy education in the country. The vice chancellor was interested in the project, in part because he recognised the need for an initiative that would re-energise literacy education in the country, but also because, like his counterpart at IGNOU, he was interested in exploring ways that the university could contribute.

These two institutions also offered the prospect of both infrastructure and expertise that could support the implementation of the project as well as a way for COL to handle the disbursement and accounting of donor funds. However,
as is described in subsequent chapters of this report, this support was not as forthcoming as it could have been – perhaps because the staff did not fully understand the nature of the project, and perhaps because universities tend to lack the flexibility needed to implement and manage projects of this kind.

In India, this situation led to a change in the implementing partner in the last year of the pilot project when COL asked the Commonwealth Educational Media Centre for Asia (CEMCA), its subsidiary organisation located in New Delhi, to assume the role. (CEMCA’s mission is to provide consultancy and technical infrastructure for audiovisual production and programming, training in electronic media for education, and a locus for networking efforts.)

THE IMPORTANCE OF THE LOCAL PARTNERS

The local partners chosen by the implementing partners were given the tasks of actually developing the learning centres and providing literacy education opportunities in communities. Quite logically, the implementing partners tended to choose to work with organisations that were already involved in literacy education or that already had a network of ICT equipped knowledge centres in place in communities.

India

Two of the three local partners selected by IGNOU were state resource centres (SRCs): one in Jaipur in the State of Rajasthan and one in Indore in the State of Maydha Pradesh. These (and other) SRCs were set up by the Government of India as registered non-governmental organisations (NGOs) to provide technical and resource support to the ongoing programmes of adult education. They are financed primarily through grants from the central government and by some project-specific grants from various international agencies and NGOs. Thus, the SRCs have good linkages with the central and state governments on the one hand, and with local NGOs on the other hand. They have considerable experience in providing literacy training and material development for the state programmes of adult education. As resource centres for adult education, both of the selected SRCs were favourably inclined to explore the potential of ICT in literacy work.
Despite the common interests of the two SRCs chosen, there were significant differences in the institutional context of each in terms of support from the parent NGO and in the organisational culture. The SRC in Jaipur functions under the jurisdiction of the Rajasthan Adult Education Association which is involved in the financial decision-making and staff recruitment of the SRC. This situation reduced the ability of the director to make timely decisions regarding the purchase of equipment and the recruitment of some staff.

On the other hand, the SRC in Indore operates under the enabling umbrella of the parent NGO, Bharatiya Grameen Mahila Sangh (BMVS), and it allows the SRC director considerable autonomy. In this case, the SRC was encouraged to participate in innovative experiments to promote adult education.

The third local partner in India was the M.S. Swaminathan Research Foundation (MSSRF). It was established as a non-profit trust in 1988, and is now a leading research and training institute in India focusing on agricultural and rural development, based on the principles of ecological sustainability, economic efficiency and social and gender equity. It is a well-endowed institute with diversified sources of funding, expert human resources, physical and communication infrastructure and facilities. MSSRF is governed by a board of trustees with an executive director looking after all administrative, technical and managerial matters in collaboration with the staff. Unlike most academic institutes, MSSRF functions as a “university without walls” in partnership with a wide range of institutions as well as farmers and marginalised communities.

MSSRF was attractive as a local partner because of the work done by its JRD Tata Ecotechnology Centre. Since the late 1990s, the centre has been engaged in harnessing the potential of ICTs to improve the lives of poor and marginalised communities. It is run by a dedicated and committed staff who strive to improve the livelihoods of people through equitable and sustainable development interventions. Specifically, the centre has been working for the last five years in the Kannivadi region of Dindigul district, Tamil Nadu, on issues related to sustainable agriculture. It had mobilised farmers and landless people to form self-help groups to develop economic enterprises and to take responsibility for their operation. This effort was supported by the creation of ICT equipped “knowledge centres” in communities which local people had been trained to use and manage. The opportunity to add literacy education opportunities in these centres had obvious value, even though MSSRF had no prior experience with literacy education.
Zambia

The University of Zambia chose as its local partner the Ministry of Community Development and Social Services (MCDSS) – a wise choice for the following reasons:

- MCDSS is the leading provider of literacy education in the country with a very long history of literacy provision mandated by the national government.
- Its literacy policy framework was relevant to and supportive of the philosophy and objectives of the COLLIT project, especially in terms of the use of ICTs and staff development.
- A partnership with the MCDSS linked the project to a government initiative that generated interest among political and government leaders.
- MCDSS had a widely developed physical infrastructure and human resource capacity to support the project.
- There was a long history of collaboration between the University of Zambia, through the Department of Adult Education and Extension Studies and the Directorate of Distance Education, and the MCDSS in various literacy activities.

There were also a number of organisations and institutions that were involved in the project in a variety of ways such as by providing training, developing learning materials and using the community learning centres. Notable among these were the Ministry of Health, Ministry of Education, Ministry of Agriculture, Kabwe Municipal Council, Reformed Church in Zambia (Kabwe), UNESCO and other NGOs. While these organisations were not defined as local partners through any formal agreements, they in fact contributed a great deal to the operations of the project. UNESCO, for example, provided learning materials, and the Ministry of Health staff participated on a voluntary basis at all the centres in the development of literacy lessons using ICTs.
chapter 3

THE COMMUNITY LITERACY LEARNING CENTRES: DEVELOPMENT AND OPERATION

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. Not surprisingly, and due to the different approaches taken towards literacy development in India and Zambia, the process of developing the centres in the two countries, and the form that resulted, differed. Interestingly, however, the differences were even greater among the intra-country venues, reflecting not only different community cultures, but also marked differences among the local implementing partners in terms of their approach to literacy programming and the way they developed partnerships with learners, neighbouring communities and other community organisations.

INDIA

Eight learning centres were established by the local partners in India: two by the State Resource Centre (SRC) in Jaipur (in the State of Rajasthan); two by the SRC in Indore (in the State of Madhya Pradesh); and four by the M.S. Swaminathan Foundation (MSSRF) in Chennai (in the State of Tamil Nadu).

Site Selection

The process of setting up the learning centres by the local partner organisations involved selecting project sites, mobilising the community, identifying the facilitators, recruiting learners, preparing a plan for operating the learning centres and arranging for the deployment of equipment. The selection of communities in which to locate the centres was guided by several requirements,
including the need for a reliable supply of electricity and a building with sufficient space and security to deploy equipment and enable people to meet. The directors and staff of the SRCs also wanted to have centres in both rural and semi-urban locations.

There were significant differences in how the SRCs and MSSRF approached site selection, partly because of their different organisational contexts and partly because of the differences in terms of their resources. MSSRF approached the site selection on the basis of its existing relationship with the communities. Over the five years of working in the area, MSSRF had mobilised farmers and landless people and facilitated them to form self-help groups (SHGs) that developed economic enterprises and provided mutual support and sharing of information. It also facilitated the formation of a federation of about 100 SHGs, called Kulumai, operating throughout the Kannivadi region. MSSRF had, therefore, a ready means of advice and consultation when faced with the task of choosing communities in which to establish the learning centres.

MSSRF had a ready means of advice and consultation when faced with the task of choosing communities in which to establish the learning centres. The Kulumai made recommendations and MSSRF then discussed the proposal with the individual SHGs in the selected communities. During these discussions it was made clear that if the community wanted to have a centre for literacy learning, it would need to agree to provide the appropriate space and establish a management committee to ensure smooth operation. MSSRF then entered into a contract with the SHG and began to provide funds and equipment. In effect, the SHGs became the community-level implementing partner.

The SRCs also chose to work in communities with which they had a prior relationship. However, in comparison with MSSRF, the local organisations were consulted but not given responsibility for any aspect of the implementation.

**SRC Jaipur**

After visiting various potential sites, SRC Jaipur decided to locate one centre in the semi-urban village of Jhir in the Jaipur district and the other at the Krishi Vigyan Kendra (KVK) Rural Agricultural Training Centre located near Tankarda village and the town of Chomu. The centre at Jhir operated from rented private houses, and the one at KVK was located in a building of a local NGO.
Jhir is a medium-size village with the population of 4100 with 500 households scattered among 12 residential localities. The literacy rate at the time of the project was about 60 per cent. Electrical connectivity was available, but the power supply was irregular. There were only a few households with telephone connections, and while some had televisions, transistor radios were more prevalent. Jhir is a homogenous village in terms of caste composition, and agriculture is the main source of livelihood. However, in the subsistence economy of rain-fed agriculture, agricultural wage labour and non-farm wage labour in the neighbouring towns and in Jaipur City are also important sources of income for the villagers.

In comparison to surrounding villages, KVK has good infrastructure facilities. It provided a separate room in its premises for the centre and had an assured electricity supply. Telephone connectivity at KVK was, however, poor. The villages that were served by this centre are multi-caste dominated by upper and middle castes. The majority of the farmers have small holdings, averaging one to three hectares. Agricultural wage labour is the main source of livelihood for landless families.

SRC INDORE

SRC Indore set up one centre in Rau, close to Indore City and another in Jamli, 30 kilometres from Indore. The centre at Rau was housed in a building of an NGO and the one in Jamli, as in Jhir, was in a rented private house.

Rau is a small, semi-urban town with a population of about 21,000, mostly migrants from the rural areas of Madhya Pradesh. It has access to several services and facilities, such as a post office, a nationalised bank, a co-operative bank, a government hospital, four private dispensaries and several public and private educational institutions. Almost all houses in Rau have electricity. Most of the people are landless and work as agricultural wage labourers in the surrounding farms. Some also work as construction labourers.

Jamli is a medium-size village of 630 households with a population of 5500. It is well linked to surrounding villages by road. This multi-caste community
consists of the socio-economically dominant community of Patidars and the disadvantaged communities of the scheduled castes and scheduled tribes. The literacy rate for Jamli is very low and the agrarian economy of the village is differentiated by class and caste with the scheduled castes and tribes being mostly landless agricultural labourers. About 79 per cent of the households have electricity, but the power supply is irregular. Nearly 50 per cent in the village have televisions, but there are only 50 radio sets available.

MSSRF

The Ecotechnology Centre of MSSRF established four centres in the Kannivadi region of Dindigul district in the State of Tamil Nadu where it had been working for five years on issues related to sustainable agriculture and the development of multiple livelihood strategies to alleviate rural poverty. The first two centres were located in the villages of Samiyarpatty and Pudupatty, situated in the semi-arid agricultural area of Kannivadi. The economy in both villages is based on subsistence agriculture. The other two centres were located in the villages of Chinnamangalam in the Kolli Hills area and Thonimalai on the interior mountain slope on the eastern side of Kannivadi.

Samiyarpatty is a small hamlet of 160 households. Most have electricity, but the power supply is irregular during summer and monsoon season. The community is heterogeneous, consisting of backward castes, scheduled castes and a few families of Christians. Agriculture is the main occupation of the villagers: some are small marginal farmers, but nearly half the working population is engaged in agricultural wage labour. The Samiyarpatty centre was located in the building constructed for the centre by the community.

Pudupatty is a larger village, with about 750 households. Unlike Samiyarpatty, the villagers in Pudupatty have access to facilities such as a primary and secondary school, a primary health centre, a public building (panchayat) and a post office. Most of the households have electricity, although power is not available for two to three days in the week. A few households in the village also have telephone connections. Pudupatty is also a multi-caste heterogeneous
community comprising backward castes, scheduled castes and a few Christians. The village economy is based on agriculture with a focus on horticultural crops. Nearly 40 per cent of the workforce are landless agricultural labourers. The Pudupatty centre was in a panchayat.

Chinamangalam in the Kolli Hills is relatively inaccessible and the hamlets there have weak links with the formal education system. The economy of the area is mostly subsistence agriculture.

Thonimalai is a mountain village located in an area of lemon, coffee, jack fruit and banana plantations. In the past, the people tended to be somewhat nomadic, but now have steady employment on the plantations and many have their own small land holdings. The community is quite isolated, but it does have electricity, cable television and telephone services. Further, prior to the community deciding to collaborate with MSSRF in this project, children had to be sent away for schooling. Under the project, it was decided to develop the centre in a way that would serve both as a school for the children and as a learning centre for adults.

**Equipping the Centres**

The technological equipment that each learning centre acquired differed depending on the partner organisation. The institutional approach to transferring technology to the community and the availability of technical support to the learning centres played an important role in determining how the centres were set up.

For the SRCs, the decisions regarding equipment were made centrally by the country director. However, the actual procurement was done at two levels. IGNOU, the implementing partner, purchased computers, printers, a photocopier, a digital camera, a handicam and an LCD projector in a phased manner. Other equipment, such as a still camera, television, audiocassette player and videocassette player, was purchased locally for each learning centre by the SRC with the help of a senior administrative assistant from IGNOU. The project lost some momentum in the initial stage because the purchasing and inventory control policies and procedures at IGNOU were not designed to facilitate a project with such a high degree of devolution of responsibility to non-university entities. This caused delays in both purchasing and deployment of the equipment which resulted in substantial delays in the start-up of the centres.
The process was different in the case of MSSRF. Instead of getting the same equipment as was provided to the SRCs, MSSRF made the decisions about what to supply its learning centres. And instead of buying new high-speed computers, it decided to install two recycled computers with touch-screen monitors in each centre, an electronic board and a colour printer. It was felt these would best facilitate the nature of the learning. MSSRF also purchased a CD writer, a scanner, a digital camera and a handicam and placed them at the field office in Kannivadi so that the core project staff and facilitators could easily access them. All equipment was purchased by MSSRF at Chennai and sent directly to the centres. This was far more efficient than the process used to equip the centres set up by the SRCs; however it must be remembered that MSSRF began its involvement in the project a year later than the SRCs, and thus had the benefit of learning from the initial problems.

The partner organisations followed different approaches in deploying equipment. Each SRC was expected to deploy a basic equipment package of two Pentium III computers, a laser printer, television set, VCR, audiocassette player and a still camera to each of their learning centres.

Initially, the SRCs were apprehensive about putting high-powered new computers in the centres. They were afraid that the learners might damage them because of their lack of computer training. Hence, each SRC began by deploying existing low-speed computers with the understanding that the old computers would be replaced with new ones as soon as possible.

SRC Jaipur retained the laser printer and three new computers at the SRC office, while giving old low-speed computers to the centres, with the result that each centre had only one computer for the duration of the project. Similarly, the new television set, VCR, audiocassette players and still cameras were kept at the central SRC office and older ones deployed to the centres. While the staff did use the centralised equipment to support the project, this strategy caused a significant problem of having insufficient equipment in each centre.

SRC Indore provided each learning centre with a new television, VCR, audiocassette player, still camera and a printer. However, it also passed on three old computers and one new computer to the centre.

The SRC’s approach to equipping the centres was shaped by several factors. They had little equipment themselves, and they were understandably keen to retain the computers in order to build capacity of the SRC staff. As well, they
recognised that there was little if any available technical support at the learning centre level. In the absence of a full-time computer professional at the SRC level, and with vendors being reluctant to service rural areas, it was difficult for SRC Jaipur to provide technical support to the learning centres on a continuous basis. Similarly, for the Jamli centre of SRC Indore, computer service was not locally available. Furthermore, the SRCs could not, at least in the beginning, perceive the possibility that learning material could be produced at the centres because of the lack of relevant training in instructional design and multimedia material development.

MSSRF was guided by its community-centred approach for harnessing the potential of modern ICTs for improving the livelihoods of the poor. MSSRF did not retain any equipment at Chennai, but equipped each centre as planned. As stated above, two used computers and other equipment was provided to each centre to ensure that learners had adequate access to computers for learning, and a digital camera was easily accessible to the centre as and when needed from Kannivadi office.

The Facilitators

The overall management and functioning of the learning centres depended on the facilitators who ran them. The identification and recruitment of the facilitators for the SRC centres, consisting of a team of two people (one male and one female) for each centre was undertaken by the core SRC project staff in consultation with the community on the basis of criteria such as a commitment to work with adult illiterate learners and the community, an interest in technology and some formal education. MSSRF, with the SHG of the selected villages, emphasised a commitment to work for the community and good communication skills as additional criteria. The SHG in each village conducted the interviews and made the selection.

For the most part, the facilitators selected were educated youth with diverse social and economic backgrounds. Most of the facilitators belonged to socio-economically disadvantaged castes, and the family occupation tended to be agriculture-based, although some held other jobs as well. The average age of the facilitators was 24 years and educational qualifications ranged from no formal education (but basic literacy skills) to secondary and post-secondary education.
Generally the educational qualifications of female facilitators were lower than those of the male facilitators. In fact, it was difficult for SRC Jaipur to find an educated female facilitator in Jhir, and ended up appointing a neo-literate woman. A few facilitators at the SRC-run centres had some prior teaching experience with adult learners or children. On the other hand, among the facilitators of MSSRF, only one at Pudupatty had worked for a year as an instructor of a literacy centre in the village.

Only a few facilitators had received computer education and training prior to the project. These tended to be at the SRC Indore centres and at the MSSRF centres in Samiyarpatty and Pudupatty where several worked in the Village Information and Knowledge Centre and had therefore received some on-the-job basic computer training. Most of the facilitators were familiar with conventional communication technology such as television, radio and telephone. Only a few facilitators had used a still camera, computer, printer or the Internet prior to the project. None of them had prior experience with a scanner, CD writer, digital or video camera.

The role of the facilitators was defined by the partner organisations, and while there were some differences in emphasis, these roles included acting as instructor, motivator and centre manager. In addition, MSSRF stressed that facilitators would compile local information and knowledge and develop learner-specific and locally relevant material. Given that there were typically two facilitators at each centre, there was some opportunity for role specialisation.

In general, the facilitators appeared to have understood their roles and responsibilities, however there were some differences in emphasis among the centres. For example, while the facilitators at both Jhir and KVK could describe their work as instructor and motivator, only one of the male facilitators at Jhir centre could articulate his role as centre manager. There were also subtle gender-based divisions of work among facilitators of SRC Jaipur. In general, female facilitators defined their responsibilities in terms of teaching neo-literate and computer learners, and mobilising the community. This division of work by gender was also evident in MSSRF Pudupatty centre where the female facilitator primarily worked on teaching adult learners, while the male facilitators focused more on computer training and centre management matters.
The facilitators of SRC Indore assigned priority to their role as instructor and community mobiliser. They also mentioned maintenance of various records as components of their work. The facilitators of MSSRF also highlighted their roles and responsibilities as instructor, community mobiliser and centre manager, but they placed more emphasis on using the technologies in the development of teaching and learning materials, downloading information from the Internet and displaying it on the notice board, and collecting and compiling local information.

There were subtle differences among the facilitators in their expectations of the project. Facilitators of Jhir and KVK expected the centre to become a literacy centre that would also impart computer training to the community. They felt that computer literacy would enable learners, but they could not clearly articulate how computer literacy would be useful to the learners. Facilitators from Jamli and Rau centres of SRC Indore envisaged the centre as a place for literacy and continuing education. They also expected the centre to provide the community with access to new technology and information, and therefore expected the community to sustain the continuing operation of the centres.

In general, the facilitators of MSSRF had a broader vision of the facility as a “knowledge centre” that would provide knowledge and information to the community on agriculture, development schemes of the government and locally relevant topics.

All the facilitators expected the learners to become literate so that they could effectively function in everyday life. However, only a few facilitators from the learning centres of SRC Indore and MSSRF expected the project to make learners proficient in the use of computers so that they could have access to information.

Despite the differences among the facilitators in their expectations of the project, as well as in their educational qualifications and experience, they demonstrated the ability to learn and grow as the project progressed. While the inevitable turnover that occurred among them over the course of the project created...
problems from time to time, these facilitators played a key role in shaping the type of inputs provided at the learning centres. No doubt their contribution would have been even more profound had there been more opportunities for training and for sharing their experiences among themselves.

Staff Training

SRCs

At the outset of the project, the country director consulted with the core project staff of both SRCs and, together, they planned a comprehensive training programme. However, for various reasons, the programme proved difficult to implement through IGNOU. This caused a lengthy delay in providing critical training inputs to both the SRCs in the initial phase of the project with the result that teaching materials were not developed within the proposed time frame. Eventually, in December 2001, training programmes for the partner organisations were organised by IGNOU, and then later by CEMCA when it assumed the implementing partner responsibility.

As shown in Table 3.1, the country director was not able to organise a formal training opportunity for the core project staff (both centre facilitators and SCR staff assigned to support the project) from both the SRCs until January 2001. While the country director had travelled to the sites and met with staff previously, this was the first opportunity to discuss implementing the project and developing staff roles and capacities.

Clearly it would have been preferable for this training to have occurred much earlier rather than nearly six months after project planning had begun, as it would have assisted the local partners to develop a common understanding of the project and of the community-based approach to planning and mobilising community support for establishing the learning centres.
## TABLE 3.1: STAFF TRAINING ACTIVITIES FOR CLCs PROVIDED BY IGNOU AND CEMCA

<table>
<thead>
<tr>
<th>Training Activity</th>
<th>Date/ Location</th>
<th>Content Areas</th>
<th>No. of Participants</th>
<th>Providing Organisation</th>
</tr>
</thead>
</table>
| **Induction Training Workshop**           | 8–10 January 2001, SRC JAIPUR | • Develop an understanding of the project<br>• Resource mapping exercise<br>• Group formation process<br>• How to mobilise community<br>• Need identification and prioritisation<br>• Leadership, patterns that work in organising the community | SRC JAIPUR 2 Project Staff<br>4 Facilitators<br>1 Project Staff (KVK)<br>SRC INDORE 3 Project Staff<br>4 Facilitators | IGNOU<br>CRC JAIPUR<br>IGNOU<br>CRC INDORE<br>CRC INDORE |}
| **Computer Training Workshop**            | 28–30 March 2001, IGNOU (New Delhi) | • Introduction to computer hardware<br>• Functioning of the computer<br>• MS Word, PowerPoint, MS Excel, Internet and web camera | SRC JAIPUR 2 Project Staff<br>1 Computer Consultant<br>SRC INDORE 3 Project Staff | IGNOU<br>IGNOU<br>IGNOU |}
| **Training Workshop on Instructional Design Using Multimedia** | 13–15 February 2002, New Delhi | • Need for instructional design<br>• Modular approach to instructional design<br>• Design principles<br>• Instructional design and multimedia | SRC JAIPUR 4 SRC Staff<br>SRC INDORE 3 Project Staff 3 SRC Staff | CEMCA<br>CEMCA<br>CEMCA |}
| **Follow-Up Training on Instructional Design and Multimedia** | 8–12 April 2002, New Delhi | • Need for instructional design<br>• Modular approaches to instructional design<br>• Design principles<br>• Instruction design and multimedia | SRC JAIPUR 4 SRC Staff<br>4 Facilitators<br>8 Secretarial Staff<br>Src INDORE 4 SRC Staff<br>4 Facilitators<br>1 Volunteer | CEMCA<br>CEMCA<br>CEMCA<br>CEMCA<br>CEMCA<br>CEMCA<br>CEMCA<br>CEMCA<br>CEMCA<br>CEMCA |}
| **Multimedia Courseware Development Workshop** | 15–24 July 2002, New Delhi | • Introduction to multimedia<br>• Learner analysis<br>• Scriptwriting and storyboard<br>• Introduction to multimedia | SRC JAIPUR 3 Project Staff<br>3 SRC Staff<br>SRC INDORE 3 Project Staff<br>3 SRC Staff | CEMCA<br>CEMCA |}
| **Training Workshop on Audiovisual Material Development** | 3–7 September 2001, SRC JAIPUR<br>25–29 August 2002, SRC INDORE | • Introduction to audiovisual media<br>• Technical terminology<br>• Research and scriptwriting<br>• Video and sound recording<br>• Project work | 4 Facilitators<br>20 Learners/Community Members (JHIR and KVK Centres) | CEMCA/Hired Consultant (TV Network) |}

---

33
The training events that followed the initial orientation workshop were planned to provide the staff with opportunities to enhance their competencies sequentially as the project developed. For example, the computer training workshops were offered once equipment had been delivered to the local partners. The primary objective was to prepare a cadre of trained people at each SRC who could competently use the computers and then train others. By the end of the workshop each SRC team prepared a schedule for conducting further computer-training workshops for other project functionaries and staff at their respective SRCs.

As indicated in Table 3.1, the country director organised four training programmes for the SRC project staff to enable them to develop multimedia materials. The first took place in New Delhi and was designed so project partners would evolve a common understanding of the principles of instructional design and the process of developing multimedia materials. Then, follow-up training was planned at each SRC to help the project staff in using instructional design to develop learning materials for the centres. The third training workshop on multimedia courseware development was planned for New Delhi to enable staff to develop materials using multimedia applications. Finally, a workshop on the use of audio and video technologies was offered so that facilitators, village youth and women could be given hands-on training in the use of these technologies for developing locally relevant literacy learning materials.

It must be noted that there was a gap of almost one year between the initial computer training workshop and the workshop on instructional design using multimedia because the country director was unable to obtain approval from IGNOU officials to proceed with contracting appropriate resource people. As a result, the project lost momentum in a crucial area of capacity-building for the partner organisations. Indeed, it was this delay that resulted in the decision by COL to ask CEMCA to assume the implementing partner responsibilities. Once CEMCA was in place, a schedule was established and the remaining training programmes were delivered on time as planned.

**MSSRF**

The training for the staff at the MSSRF centres was organised and provided by MSSRF itself. As described earlier, MSSRF joined the project about a year after the SRCs when the project director and the country director became aware of the work MSSRF was doing establishing community knowledge centres using ICTs. Although MSSRF was not involved in the initial planning, they had the
internal resources to provide training when it was required. Furthermore, the manner in which MSSRF worked with the target communities in establishing the centres meant that people were well aware of the nature of the project.

The project encouraged the community and SHGs to conduct interviews and select animators from the community. The MSSRF project staff then conducted a one-week training course for the animators at Chennai followed by a 10-day training course in the field. The training focused on various aspects of telecentre management including word processing, PowerPoint presentation, Internet and e-mail communication and the management of CD copiers. Within two months, most of the facilitators acquired proficiency in using the software, coding and editing materials, and doing digital photography.

The MSSRF facilitators were also given training on the fundamentals of adult literacy education. This emphasised the concept of facilitation in which the facilitator mobilises the learner, understands the needs of the learner, and encourages the learner to find the solution. The differences between teaching and facilitation were discussed in the village meetings and the terms of reference were established by the SHGs in consultation with the villagers.

STAFF INTERACTION

Initially there was no interaction among the project staff at MSSRF and those at the two SRCs. However, the director of the project at MSSRF was asked to attend the February 2002 workshop in Delhi on instructional design using multimedia, and to give a presentation describing the way in which MSSRF was implementing the project in Tamil Nadu. The presentation was well received and everyone became aware of the marked differences in the process of community involvement between the MSSRF model and that of the SRCs – essentially contrasting a “bottom-up” approach with one that was more “top-down.” This led to increased interactivity and communication among staff from all sites and it continued to grow over the remainder of the project.

Over the last quarter of the COLLIT project, CEMCA facilitated two meetings of the local project partners. The primary objective of these meetings was to expose the partners to the work undertaken by each other and to learn from the strategies adopted by different organisations. Each meeting was scheduled for three days so that participants had ample opportunity to visit the learning centres and to interact with the project staff, field staff, learners and community.
FEEDBACK ON TRAINING

Towards the end of the training, participants were invited to share their experiences and provide written feedback on the relevance of that training. On the whole, participants found the training useful and felt confident in using and applying what they had learned. The programme co-ordinator (material division, SRC Indore) found the training very useful in her work: “I got new ideas and direction to work on material development.” Similarly, the assistant programme officer (material division, SRC Jaipur) found the training very useful. According to the field co-ordinator for the COLLIT project, “Training helped us to understand how ICTs could be used for development of literacy material.”

So it seems that the training served a wider purpose beyond the project as SCR staff were able to generalise their learning to other aspects of their work. Indeed, one year after the end of the project, some staff were providing training to SRC staff in a neighbouring state. Following are some of the points noted in the feedback provided:

• **Timing:** SRC staff and project functionaries appreciated efforts made by the implementing partner organisations, particularly CEMCA, to organise several training programmes in instructional design and material development in the last phase of the project. However, such training would have been more helpful if it had been organised at the beginning of the project.

• **Duration:** For the SRC staff and facilitators with limited ICT equipment knowledge and skills, the length of the CEMCA training programmes was thought to have been too short and the pace of learning too fast. According to them, each training session should be at least five to seven days. They would also have liked more intensive follow-up sessions.

• **Emphasis on practical work:** Although most of the training programmes integrated theory and practice, the need for more practical work was emphasised by all the participants.

• **Language of instruction:** Most of the training programmes used both English and Hindi. However, staff suggested that in future Hindi be used as the language of instruction.

• **Training material:** Some material was distributed for various training
programmes. However, the participants who had difficulty keeping up with the pace of teaching, and with the use of English, felt the need for more. They wanted reference materials that they could take away and refer to as needed later on.

• **Relevance:** In general, the participants found all the training programmes informative and useful. However, programmes in instructional design and multimedia were considered most relevant by project staff, the SRC staff from the material development and training sections and the facilitators because they could put into practice whatever they had learned. For the others, who were either not using computers in their daily work or not directly involved in the COLLIT project, the training was useful in enhancing their general knowledge, but they could not perceive the relevance of such training for their routine work at the SRCs.

**Centre Operations and Management**

Each centre provided literacy classes, predominantly for adult learners, as well as computer training classes for adults, school children, and youth. The schedule of operation was decided by each partner organisation in consultation with the community. The key criterion for scheduling was consideration of the learners’ availability. In general, adult learners came for literacy classes in the evening in most of the centres, school children came before and after school hours and youth came in the evening. The only exception was at the KVK centre where the schedule was determined by the times the institution was open. Over time this became more flexible.

Each centre also set up a small library to provide some reading material to neoliterate learners and the community. The library at both SRCs had booklets for post-literacy and continuing education. The MSSRF centres used booklets from SRC Tamil Nadu. Each centre also subscribed to a local newspaper.

Facilitators of each centre were asked to maintain records which included an enrolment register for learners, a class attendance register, library use register, materials use register, and visitors’ register. However, the type and quality of reports, computerisation of records and use of records for monitoring differed across the centres. For example, the facilitators at both SRC centres maintained a diary of activities. The MSSRF centres at Samiyarpatty and Pudupatty maintained a record of electricity breakdowns, a telephone register, a facilitators’
attendance register and an accounts register. The computerisation of various types of records was uneven across SRC centres, but the MSSRF staff, because of their experience, were able to use the computer to maintain all records. Both SRC Indore and MSSRF made use of the data collected to analyse their operations and make changes as warranted. SRC Jaipur, because of changes in senior staff, became less rigorous about the maintenance of records as the project progressed.

The communities played an important role in monitoring the implementation of the centres. For example, each SRC established a village management committee (VMC) to help select centre locations and to provide ongoing monitoring of the centre operations. Monitoring involved a monthly review of the general functioning of the centre, performance of facilitators, coverage of curriculum, status of learner participation, performance of learners, maintenance of records, problems faced in efficiently running the centre and suggestions to improve centre operations. Membership varied, but the attempt was to have the VMC be representative of learners, community members and staff. Some of the VMCs were not sustained because of changes to the location of some centres over the course of the project.

The community had an even more active role in running the MSSRF centres, which reflected their considerable experience in establishing community knowledge centres which, in most cases, enabled the COLLIT project to simply add value to an ongoing operation. Right from the start, MSSRF set up the learning centres with active participation of the community SHGs and local village leaders. It also emphasised the active involvement of facilitators, learners, their families and the community in monitoring overall functioning of the centres. Monitoring involved weekly and monthly community meetings, various reports generated by the facilitators and regular field visits by the MSSRF project staff. Availability of e-mail facilities at Samiyarpatty and Pudupatty centres as well as at the Kannivadi office also facilitated overall monitoring of the project and enabled the project director and project co-ordinator to stay in touch with the facilitators and project staff, and provide input as and when needed.
ZAMBIA

Site Selection

The project was implemented as a collaborative activity between the University of Zambia and the Ministry of Community Development and Social Services (MCDSS). Following the delivery model adopted by the project, three main learning centres were set up: one in Kabwe (urban) in Central province, one in Monze (peri-urban) in Southern province and one in Katete (rural) in Eastern province within the existing structures of the MCDSS. These centres were selected for participation because they had some established adult literacy activities and they had a physical infrastructure and a source of electricity for use with ICTs. Each of these main centres had affiliated sub-centres in neighbouring smaller and more rural communities, some of which were as distant as 30 kilometres from the main centre.

- **Kabwe:** One main centre and six sub-centres. The main centre was located at the premises of the MCDSS within Kabwe in an office belonging to the Provincial Community Development Training Centre. For literacy lessons, the project also used two classrooms belonging to the Provincial Community Development Training Centre.

- **Monze:** One main centre and four sub-centres. The main centre was located at the premises of the MCDSS about five kilometres east of Monze in an office belonging to the Provincial Community Development Training Centre, which also provided a classroom for literacy lessons. The rooms used by the project were built in 1957 and were, therefore, in need of some restoration. While this was being done, the equipment was deployed in two small offices. The communication links available were old, unreliable telephone connections.

- **Katete:** One main centre and four sub-centres. The main centre was situated at the Provincial Community Development Training Centre, a cluster of 1940s structures that were renovated to provide a venue for the project. A telephone line was also added. Various government ministries
such as Community Development, Agriculture, Health and Education were located around the centre along with a number of other commercial and non-governmental organisations. Thus, some of the people in the community were formally employed; others earned their living through self-employment or by subsistence farming. Many youths were out of school because their parents were unable to pay for their school fees. A number of households had radio and television sets and phones were largely available in offices. There were hardly any computers in the area.

Equipping the Centres

Decisions regarding the selection of equipment were made by the country project steering committee on the basis of what the members felt would be needed to carry out their functions. Table 3.2 describes the equipment selected and how it was used in the learning process.

**TABLE 3.2: EQUIPMENT INSTALLED IN ZAMBIA LEARNING CENTRES**

<table>
<thead>
<tr>
<th>EQUIPMENT INSTALLED</th>
<th>HOW EQUIPMENT WAS USED</th>
</tr>
</thead>
</table>
| COMPUTER (MONITOR + CENTRAL PROCESSING UNIT) | • POWERPOINT PRESENTATION OF LESSONS  
  • TEACHING LEARNERS HOW TO OPERATE A PC AND HOW TO WORD PROCESS  
  • SENDING AND RECEIVING INFORMATION (E-MAIL) BY CENTRE STAFF  
  • PRODUCING LOCAL TEACHING/LEARNING MATERIALS |
| PRINTER | • PRINTING TEACHING AND LEARNING MATERIALS  
  • PREPARING LOCAL TEACHING/LEARNING MATERIALS |
| SCANNER | • SCANNING DOCUMENTS FOR PREPARING LEARNING MATERIALS |
| DIGITAL CAMERA | • TAKING PICTURES FOR USE DURING LITERACY LESSONS  
  • PREPARING TEACHING/LEARNING MATERIALS (TEACHING AIDS) |
| VIDEO CAMERA | • TAPING EVENTS TO USE FOR TEACHING PURPOSES |
| INTERNET CONNECTIVITY AT KABWE AND KATETE (AVAILABLE AT KATETE FOR A SHORT PERIOD UNTIL TECHNICAL PROBLEMS DEVELOPED) | • PROVIDING A SOURCE OF INFORMATION FOR INSTRUCTORS FOR TEACHING ADULT LEARNERS  
  • COMMUNICATING VIA E-MAIL (E.G., SENDING DOCUMENTS INCLUDING MONTHLY REPORTS) |
| AUDIOCASSETTE PLAYER | • RECORDING LEARNERS DURING LESSONS WHEN THEY WERE READING TO MOTIVATE THEM TO PARTICIPATE IN THE LEARNING PROCESS  
  • PLAYINGRecorded information during teaching  
  • PROVIDING A SOURCE OF INFORMATION FOR INSTRUCTORS |
| VIDEOCASSETTE RECORDER | • PLAYING TAPES TO LEARNERS DURING TEACHING |
| TELEVISION SET | • SCREENING EVENTS/VISUAL IMAGES FOR TEACHING AND LEARNING PURPOSES |
| PHOTOCOPIER | • REPRODUCING TEACHING AND LEARNING MATERIALS |
| TELEPHONE AND FAX MACHINE | • COMMUNICATING WITH NATIONAL OFFICE |
While the equipment was used mainly by the people involved in the project (literacy instructors, centre managers, operations manager and learners), some staff in the MCDSS, other government departments and some NGOs had access when it was not being used by project staff and learners.

Procuring the equipment was the main challenge in setting up the learning centres because of the length of time involved. The tendering process was managed by the University of Zambia’s purchasing department according to its policies, which were not geared to accommodate a project of this nature. There were also problems of transport for deployment of equipment which further delayed the project implementation.

Staff Roles and Responsibilities

Staffing for the project fell into three categories that reflected the levels on which it was operated. At the national level, there was an executive steering committee established by the country director. This committee comprised the director of community development from MCDSS who acted as the chairperson, the country project director, a literacy expert who also served as project co-director, two ICT experts and the country evaluator (with a co-evaluator).

At each of the main literacy centres there was a centre manager who had responsibility for overseeing the overall centre operations. This person was assisted by an operations manager who was in charge of ICT-based activities and who led a team of instructors in developing materials and delivering instruction. These people were recruited by the local MCDSS officials and approved by the executive steering committee.

At each of the sub-centres there was a literacy instructor in charge who was, in most cases, a MCDSS permanent staff person. The main task of these instructors, who were often assisted by other instructors (some of them volunteers), was to teach and co-ordinate all literacy activities at that level.

Staff Training

The training programme, as outlined in Table 3.3, was designed by the national steering committee to take into account the background and circumstances of instructors and centre staff. The centre managers and operation managers were the first to be trained. The topics covered centre management, the use of
management information systems and computer basics. Other training involved all instructors including volunteers.

There was some differentiation in terms of training focus. For example, in the case of instructors who came from centres that were distant from the main centres, where most of the ICT equipment was located, the focus was more on the use of the technologies to develop teaching materials in print and other formats that could be used where no electricity was available. On the other hand, the training for instructors at the main centres who had regular access to ICT equipment focused on using the equipment in the teaching process as well as in preparing materials. The training was repeated at all centres in response to needs from the centre managers and instructors.

The training offered under the project benefited all instructors regardless of position, volunteer or not, so long as one was an instructor at one of the projects’ classes. Instructors acknowledged the training received to be the greatest benefit the project had given them. One instructor put it this way: “I am privileged to have been given an opportunity to use these modern technologies. I am now comfortable and knowledgeable at teaching literacy classes using these technologies.”

In addition to this initial training programme, there were a number of training activities undertaken throughout the life of the project. These included:

- **Training of operations managers and at least two instructors from each centre in the use of ICT for developing teaching materials, particularly with the use of video and digital cameras and audiocassette recorders**
- **Training in teaching of arithmetic using ICT**
- **Advanced training in computer usage for centre managers, sub-centre staff and some instructors**
- **Training in lesson development and delivery (teaching skills) for centre staff and instructors**

These training activities were conducted in Lusaka and at the main centres and were repeated in response to needs and for new staff at the Monze and Kabwe centres. Operations managers supplemented these activities with in-house training for their literacy instructors to help them build skill in using ICTs to develop instructional materials and use them in their teaching activities.
### TABLE 3.3: STAFF TRAINING ACTIVITIES IN ZAMBIA

<table>
<thead>
<tr>
<th>TARGET GROUP</th>
<th>CONTENT</th>
<th>NUMBER OF PARTICIPANTS</th>
</tr>
</thead>
</table>
| CENTRE MANAGERS AND OPERATIONS MANAGERS | • PROJECT VISION, AIMS AND OBJECTIVES  
• GENERAL MANAGEMENT CONCEPTS AND HOW THEY APPLY TO MANAGEMENT OF THE LITERACY PROJECT  
• BASIC UNDERSTANDING OF THE USE OF ICT, HARDWARE AND SOFTWARE AND SOME BASIC MAINTENANCE SKILLS  
• TRAINING SKILLS  
• COMMUNICATION SKILLS  
• ADULT EDUCATION METHODS  
• LEADERSHIP  
• BASIC SKILLS OF WRITING AND EVALUATION | 10 MAIN CENTRE STAFF  
5 CENTRE MANAGERS  
5 OPERATIONS MANAGERS |
| SUB-CENTRE SUPERVISORS (3 WORKSHOPS) | • PROJECT VISION, AIMS AND OBJECTIVES  
• MANAGEMENT AND LEADERSHIP IN THE CONTEXT OF COLLIT PROJECT  
• INTRODUCTION TO ICT – MANAGEMENT INFORMATION SYSTEM  
• TRAINING SKILLS  
• COMMUNICATION SKILLS  
• ADULT EDUCATION TEACHING METHODS  
• LEADERSHIP  
• COLLECTING DATA FOR MATERIALS DEVELOPMENT  
• BASIC SKILLS OF MONITORING AND EVALUATION | 30 – CENTRE MANAGERS, SUB-CENTRE INSTRUCTORS AND SOME MCDSS STAFF |
| MATERIALS DEVELOPMENT (1 WORKSHOP) | • REVIEW OF EXISTING NATIONAL LITERACY CURRICULUM  
• IDENTIFICATION OF NEEDS FOR LITERACY LEARNERS  
• NEEDS FROM LOCAL SITUATIONS  
• ANALYSIS OF MATERIALS IN USE  
• DEVELOPMENT OF MATERIALS FOR BEGINNERS  
• DEVELOPMENT OF INSTRUCTORS’ GUIDE | 15 – OPERATIONS MANAGERS AND INSTRUCTORS |
| INSTRUCTOR TRAINING (3 WORKSHOPS) | • PRINCIPLES OF ADULT TEACHING AND LEARNING  
• METHODS OF TEACHING ADULTS  
• HOW TO USE INSTRUCTORS’ GUIDE  
• METHODS AND TECHNIQUES OF ASSESSING LITERACY LEARNERS  
• USE OF TEACHING AIDS  
• DEMONSTRATIONS ON TEACHING OF LESSONS | 21 – ALL INSTRUCTORS, MCDSS STAFF RELATED TO THE PROJECT AND VOLUNTEERS |
| TRAINING IN THE ADAPTATION OF LITERACY MATERIALS TO ICT (1 WORKSHOP) | • USE OF POWERPOINT  
• PRACTICAL WORK, CONVERTING LITERACY MATERIALS FROM MS WORD TO POWERPOINT | 3 – OPERATIONS MANAGERS |
| ORIENTATION MEETINGS FOR TRAINERS | • ADULT TEACHING AND LEARNING METHODS  
• USE OF INSTRUCTORS’ GUIDE  
• USE OF PRIMERS (LITERACY MATERIALS)  
• HOW TO CONDUCT THE TRAINING WORKSHOPS | 2 – RESOURCE PEOPLE FOR THE TRAINING WORKSHOPS |
| TRAINING IN FIELD TESTING OF LITERACY MATERIALS | • GENERAL PRINCIPLES OF FIELD-TESTING LITERACY MATERIALS  
• PROCEDURES FOR TESTING LITERACY MATERIALS (E.G., HOW TO RECORD REACTIONS TO CONTENT AND ILLUSTRATIONS)  
• REPORTING | 3 – WRITERS OF MATERIALS (I.E., UNIVERSITY STUDENTS AND INSTRUCTORS) |
Centre Operations and Management

The management structure and procedures were determined to respect and reflect the collaborative nature of the project between the University of Zambia and the Department of Community Development of the MCDSS.

The executive committee was responsible for the overall co-ordination of the project and provided administrative and professional leadership and technical support to the centres and monitored project implementation. It met once a month and any other time as the need arose. The project country director was responsible for implementing the decisions of the executive committee and for co-ordinating all project activities. These included liaising with relevant departments of the university, providing logistical support for training activities, receiving reports from centres, arranging meetings, writing monthly reports and participating in the monthly teleconferences among members of the project steering committee.

The project director was assisted by other members of the executive committee, one of whom served as the secretary and one as a co-director who made decisions in the absence of the project director. Administrative staff in the Directorate of Distance Education of the university provided secretarial and clerical support. The director of the Department of Community Development served as chair of the executive committee. Communications between the director and the various centres was primarily through telephone and, where possible, e-mail.

Monthly project meetings were attended by the executive committee members and centre staff, which included centre managers, operations managers and, occasionally, one or two instructors from each centre. This provided for closer interaction between the executive committee and centre staff and facilitated quick implementation of decisions taken at the meetings.

At the centre level, the centre manager was responsible for local planning, co-ordinating material support, field supervision of sub-centres, recruitment of instructors, training staff in centres, operating the management information system, evaluating learners, supervising satellite centre staff and general management of the programme in the locality. He or she reported directly to the project director.
Each sub-centre was managed by a trained instructor who was responsible for the general management, which included supervising the tutors/instructors, organising literacy activities, providing supplies, promoting community involvement, motivating learners, collecting information for materials development, record-keeping and monitoring the impact and acceptance of the programme by local communities.
Different strategies were used in both India and Zambia to recruit and involve people from the communities in the programmes offered at the learning centres. These “learners” were remarkably diverse in terms of gender, age, occupation and the reasons they had for participating, and they experienced varying progress in achieving their learning goals.

**ANIMATING COMMUNITIES AND RECRUITING LEARNERS**

Because the communities selected for the location of learning centres tended to be where the local partner agencies were or had been already offering literacy programmes using conventional teaching methods, the need for such programmes was already established. However, in many cases the evidence for that need required an update.

**India**

In India, after selecting the project sites, both local partner SRCs conducted quick surveys in the communities to determine the level of awareness about computers. SRC Indore also investigated the degree of ownership and use of other media such as television, radio and newspaper. These surveys helped the SRCs gauge the community’s interest in literacy education involving the use of ICTs.

In addition, both SRCs used multipronged strategies to mobilise the community in the hope of motivating potential learners to participate in the activities of the centres. For example, SRC Jaipur conducted street plays with the help of trained local artists, the centre facilitators and other community members to
raise awareness about the use of computers in the village. SRC Indore held consultations with community leaders and functionaries from local government administrations and organised film shows, street plays and cultural activities in the community.

The SRCs adopted somewhat different strategies to identify learners. SRC Jaipur upgraded its earlier survey of learners to identify learners for the centre in Jhir. While no baseline data were used for identifying learners for the KVK centre, non-formal interactions with people from some neighbouring villages indicated that, in addition to those interested in enhancing their literacy skills, there were a number of educated girls and young women, as well as school children, who were interested in joining the centre in order to learn about computers.

SRC Indore decided to focus on a group of learners in the 15 to 40 year age group who were either illiterates, neo-literates or school dropouts. They also found there was considerable desire among school children and youth from Rau and Jamli to acquire computer skills, so it was decided to offer basic computer training at the centres. The learners were divided into different groups on the basis of age and educational background.

MSSRF followed a unique strategy in recruiting learners to its programme. It decided to focus its literacy programming exclusively on adult illiterates in the selected communities. Learners were identified through a consultative process, involving the centre facilitators, the partner SHGs and community families. The facilitators conducted a baseline survey with the help of the SHGs to determine literacy levels in the communities. This survey also identified the families of illiterates and explored their interest in having an illiterate member of their family become a learner in the programme. There was a great deal of interest expressed and about 50 individuals (half men and half women) were finally selected as learners in each village. The selections were made at the community level through the partner SHG. Once the individual learners had been identified, the facilitators and project staff began working with the potential learners to clarify their needs, set specific learning goals and plan for the conduct of classes.
Zambia

In contrast to the situation in India where the direct provision of literacy programmes was a new venture for both the SRCs and MSSRF, the programme-providing partner in Zambia had a long history in that role and needed a catalyst and resources to get it going again.

As described earlier, the participating communities were selected primarily because the Community Development Division of the Ministry of Community Development and Social Services (MCDSS) was already providing some degree of literacy programming both in the primary community as well as in sub-centres in some of the surrounding smaller communities. While these programmes had pretty much collapsed due to the lack of available resources, there was at least evidence that there was interest in literacy education, and there was a cadre of instructors and other MCDSS staff able to describe the project to people in the communities and animate their participation.

LEARNER PROFILES

The learners in both India and Zambia fell into two groups. The largest by far was the group consisting of those people who wanted to develop their literacy skills. Some of these, the neo-literate, had some previous literacy training and wanted to enhance their skills. However for most learners this was their first experience. The second group, smaller in number and younger, were those who wanted to develop computer literacy skills.

India

In India the number of literacy learners was about 425. Most were young women (15 to 24 years), engaged in agriculture wage labour, and illiterate or with some prior exposure to literacy education. They came mostly from the families of agricultural wage labourers and belonged to socio-economically
disadvantaged castes and communities. On the other hand, the computer learners were predominantly lower caste young male adults (15 to 24 years) with secondary or higher secondary education.

While most of the learners were from the villages where the centre was located, some came from neighbouring villages as was the case at the SCR Indore centre in Rau and the MSSRF centre at Pudupatty. Gender differences showed up as well. All the literacy learners at the SCR Jaipur centres and at the SCR Indore centre in Rau were women. However, at the Indore centre in Jamli, 63.5 per cent were male.

The mean age for learners at the MSSRF learning centres was higher (about 40 years) than at the SCR centres (early twenties), because the MSSRF staff recruited adult family members. All centres had learners who were school dropouts, mostly from the primary school – a reflection of the dismal situation of primary education in rural areas.

The number of computer learners was in excess of 650. They were mostly adolescent boys with secondary education and most of them (70 per cent) came from the SCR Jaipur centres of Jhir and KVK which were located close to village schools. Computer learners were mostly secondary and higher secondary school students, however some had college education but had not had the opportunity to develop computer literacy skills.

While most came from disadvantaged parts of society, a higher portion of the computer learners came from higher caste groups than was the case with the literacy learners. The majority of computer learners (90 per cent) were male despite the availability of female facilitators. According to the facilitators, the low participation of school-going girls in computer training was because of patriarchal constraints. In general, parents did not allow girls to remain after school for computer training as they were expected to help with household chores or in the fields. No such restrictions were imposed on boys.

Zambia

The number and gender distribution of learners in Zambia is shown in Table 4.1. Note that the figures include the main centres and their associated sub-centres.
TABLE 4.1: NUMBER OF LEARNERS REACHED DURING THE PROJECT PERIOD (ZAMBIA)

<table>
<thead>
<tr>
<th>LEARNERS</th>
<th>KABWE</th>
<th>KATETE</th>
<th>MONZE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALE</td>
<td>6</td>
<td>101</td>
<td>2</td>
<td>109</td>
</tr>
<tr>
<td>FEMALE</td>
<td>230</td>
<td>216</td>
<td>65</td>
<td>511</td>
</tr>
<tr>
<td>TOTAL</td>
<td>236</td>
<td>317</td>
<td>67</td>
<td>620</td>
</tr>
</tbody>
</table>

As was the case in India, the vast majority of learners in Zambia were women. However, there was a notable number of males at the Katete centre which also had the highest number of younger learners, many of them school-age children wanting to acquire computer literacy skills. A number of factors were reported as hindering adult male participation:

- Time and opportunity costs in terms of short labour contracts/offers
- Discomfort with learning in a predominantly female environment
- Opportunities to attend school when they were young which their female counterparts did not have because parents preferred to send their male children to school

As indicated in Table 4.2, the age of learners across all centres ranged from 10 to 69 years with the majority between 25 to 40. Nearly 40 per cent had never attended school. It is notable that 37 per cent of the learners were in the 10 to 25 year age group, the age range of “normal school-going pupil.” These were expected to be in regular schools, but it was established that they could not afford the fees or cost of school materials and the adult literacy classes offered an alternative as there were no charges involved. (Note: The Government of Zambia declared free education for all up to grade 9 effective February 2002, abolishing fees and most school requirements.)

Although some learners went as far as grade 7 in their education, they said when interviewed that they forgot what they learnt some years back and wanted to start learning again.

The majority of learners reported that they had seen and used a radio to listen to music, religious programmes, dramas, funeral messages and news prior to the introduction of the project. Eighty-five per cent said that they had seen but not used a television set, and while 81 per cent indicated that they had seen a
### TABLE 4.2: AGE AND EDUCATION LEVEL OF LEARNERS (ZAMBIA)

<table>
<thead>
<tr>
<th>CATEGORY OF LEARNERS</th>
<th>KABWE</th>
<th>KATETE</th>
<th>MONZE</th>
<th>TOTAL</th>
<th>% OF TOTAL LEARNERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGE RANGE IN YEARS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10–25</td>
<td>79</td>
<td>146</td>
<td>5</td>
<td>230</td>
<td>37.1</td>
</tr>
<tr>
<td>26–40</td>
<td>122</td>
<td>121</td>
<td>38</td>
<td>281</td>
<td>45.3</td>
</tr>
<tr>
<td>41–55</td>
<td>30</td>
<td>37</td>
<td>15</td>
<td>82</td>
<td>13.2</td>
</tr>
<tr>
<td>56 AND ABOVE</td>
<td>5</td>
<td>13</td>
<td>9</td>
<td>27</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>EDUCATIONAL LEVEL IN GRADES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NONE</td>
<td>68</td>
<td>161</td>
<td>11</td>
<td>240</td>
<td>38.7</td>
</tr>
<tr>
<td>1–4</td>
<td>113</td>
<td>129</td>
<td>12</td>
<td>254</td>
<td>41.0</td>
</tr>
<tr>
<td>5–7</td>
<td>55</td>
<td>20</td>
<td>23</td>
<td>98</td>
<td>15.8</td>
</tr>
<tr>
<td>ABOVE 7</td>
<td>0</td>
<td>7</td>
<td>21</td>
<td>28</td>
<td>4.5</td>
</tr>
</tbody>
</table>

telephone, only 30 per cent reported ever using one. Seventy-six per cent had seen a camera, while few had seen an audiotape recorder. Very few learners interviewed had heard about a computer prior to the introduction of the project.

The main occupation of learners in the rural sub-centres was farming: growing maize, sweet potatoes and groundnuts during the rainy season and vegetables during the dry season. Literacy lessons were held under trees in many cases. In the case of learners at the main centres, their primary occupation was selling baked food items and garden produce which they bought from the local farmers as they had no capacity to grow their own. The learners at the main centres were mostly housewives and single older women from within the township and nearby unplanned settlements.

Though the project had 620 learners, only those at the main centres had access to computers, TVs, VCRs and other reprographic equipment on a regular basis, as those at many of the sub-centres lived too far away. Table 4.3 shows the classes and number of learners that did and did not have access.

Of the 620 learners, 323 (52.1 per cent) had access to ICTs at the main centres. The remaining learners from sub-centres (47.9 per cent) did not have access, but used materials produced at main centres by their instructors who used the ICTs. These learners/classes were able to use radios (battery operated) which were available at almost all centres. Instructors were able to use videos and digital cameras to capture “visual action” at these centres, which they later used in producing teaching materials.
### TABLE 4.3: ACCESS TO ICTS BY CENTRE (ZAMBIA)

<table>
<thead>
<tr>
<th>CENTRE</th>
<th>CLASS</th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
<th>OVERALL TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLASSES WITH ACCESS TO COMPUTERS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KATETE</td>
<td>BOMA</td>
<td>1</td>
<td>30</td>
<td>31</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>JEKE</td>
<td>7</td>
<td>21</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TIGWILIZANE</td>
<td>11</td>
<td>8</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SAMALANI</td>
<td>18</td>
<td>16</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>KABWE</td>
<td>BUYANTASHI</td>
<td>0</td>
<td>23</td>
<td>23</td>
<td>174</td>
</tr>
<tr>
<td></td>
<td>KUUNIKA</td>
<td>1</td>
<td>18</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAKWATI</td>
<td>0</td>
<td>21</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAPALO</td>
<td>0</td>
<td>24</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWASHUKA</td>
<td>0</td>
<td>43</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWATASHA A</td>
<td>0</td>
<td>21</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWATASHA B</td>
<td>2</td>
<td>21</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>MONZE</td>
<td>CHIMWEETA</td>
<td>1</td>
<td>16</td>
<td>17</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Lukamantano</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>41</td>
<td>282</td>
<td>323</td>
<td>323 (52.1%)</td>
</tr>
</tbody>
</table>

| **CLASSES WITHOUT ACCESS TO COMPUTERS** |           |      |        |       |               |
| KATETE  | ALICK     | 7    | 11     | 18    | 205           |
|         | Kazala    | 7    | 13     | 20    |               |
|         | KUZEMBA   | 7    | 12     | 19    |               |
|         | TIGWILIZANE 2 | 12  | 18     | 30    |               |
|         | MPHITA    | 8    | 23     | 31    |               |
|         | CHIZANJE  | 9    | 18     | 27    |               |
|         | TIKONDANE | 7    | 23     | 30    |               |
|         | CHIENDA-AWIRI | 7   | 23     | 30    |               |
| KABWE   | MWACHISOMPOLA | 1  | 23     | 24    |               |
|         | LUYANDO   | 2    | 23     | 25    | 62            |
|         | KATUBA    | 0    | 13     | 13    |               |
| MONZE   | MABUWA    | 0    | 16     | 16    | 30            |
|         | NCHEMA    | 1    | 13     | 14    |               |
| **TOTAL** |           | 68   | 229    | 297   | 297 (47.9%)  |
| **TOTAL ACCESS + NO ACCESS** |           | 109  | 511    | 620   | 620           |

### LEARNER PARTICIPATION RATES

Participation in the literacy classes varied across all centres in both India and Zambia, largely because of the nature of the way people earned their living. Agriculture-related work is driven by the seasons and by the weather, and because most learners earned their living from such work, the times they were available to attend classes varied. In Zambia the number of sessions per week also varied amongst the classes. The average number of meetings/sessions was twice per week. The irregular sessions for some classes were the result of instructors having other community commitments, experiencing illness or having to attend funerals.
Participation rates in India were higher at the MSSRF centres than the SRC centres, perhaps because of the involvement of the learners’ families in the selection process. Each family was required to encourage regular participation by its learner nominee and to facilitate this by covering off on work requirements when possible. Between two SRCs, the centres of SRC Indore had relatively better participation rates among learners than the centres of SRC Jaipur. This may have been because of the way these centres were managed and the local context within which they functioned. For example, at both the centres of SRC Jaipur, changes in the location of the centre in Jhir and changes in the venue of literacy classes from KVK to the nearby villages of Ramgatta and Tankarda adversely affected participation.

MOTIVATION FOR LEARNING

Before starting literacy classes, each partner organisation in India attempted to assess motivation for learning among learners. In general, learners were interested in acquiring basic literacy skills so that they could use them in their everyday life. Neo-literates and school dropouts who had acquired limited literacy skills were interested in enhancing their skills and acquiring a sustainable level of literacy.

The need to acquire literacy skills to effectively function in daily life was common among both men and women. However, at the MSSRF centres in Samiyarpatty and Pudupatty, women were keen to learn to read in order to effectively function in their immediate environment. They also wanted to become literate to help with their children’s education. As members of the SHG, they were interested in being able to read credit documents and sign the SHG register. On the other hand, the learning needs of men were linked more to their work. They were keen to acquire reading, writing and counting skills that would help them in work-related transactions, such as selling agricultural produce, keeping wage accounts, reading and signing legal documents, counting money, using weigh scales, etc.

When the centres started, learners showed considerable enthusiasm for using the computers to learn literacy skills, but they were apprehensive about learning to operate them. Some learners considered themselves too old to learn with
the help of the computer. Efforts were made by each partner organisation to mobilise learners and motivate them for learning throughout the project.

Reasons that learners in Zambia had for participating were generally similar to their Indian counterparts. Some learners said that they wanted to learn to read and write so that they would be able to read the Bible, road signs, information displayed in clinics and public places, letters from their relatives, and so they could write to their children. Others said they wanted to regain writing and reading skills they had forgotten, or had almost forgotten. Some indicated that they joined to learn how to use ICTs, especially computers, so that they could get a job. A good number indicated that they were hoping they would get loans to enable them engage in income-generating activities.
chapter 5

THE LITERACY CURRICULUM AND TEACHING APPROACH

One of the primary objectives of the COLLIT project was to encourage the use of ICT to develop instructional materials for literacy programmes. There was great variety in how those materials were used and the different ways that the learners and their communities were involved in the process. As might be expected, the manner in which the materials were developed differed between India and Zambia; however, differences in the approaches used by the local partners in India were even more marked.

INDIA

As described in chapter 2, the Indian government, through the National Literacy Mission, has established a national curriculum that is based on the Improved Pace and Content of Learning (IPCL) approach. The curriculum consists of three IPCL primers with built-in exercises and self-evaluation test papers. It focuses on teaching both the basic literacy skills of reading, writing and arithmetic (the three Rs), as well as functional skills related to health and livelihood. The role of the state resource centres (SRCs) is primarily to develop materials for learners, mostly print-based, as well as instructor guides based on this curriculum, and to promote their use by NGOs and other organisations involved in the direct provision of literacy instruction. The historical model, therefore, is one of centrally developed generic literacy material for use in communities on a decentralised basis. Thus, as the COLLIT project began, the prior experience of the two SRC partners was as producers of literacy teaching materials, primarily in print form, with neither having had much experience in the direct provision of instruction.

On the other hand, MSSRF had no prior experience in the development of material for literacy education. However, it did begin the project with experience
and expertise in the use of ICTs in community development gained through its Village Knowledge and Information Centre programme. Therefore, unlike the SRCs that used a standard literacy primer or a fixed literacy curriculum, MSSRF used locally generated teaching materials designed to develop the basic literacy skills of reading, writing and numeracy at a flexible pace in the context of learners’ needs.

During the COLLIT project, divergent types of material were acquired, modified and generated by the partner organisations. The approach was different for each partner organisation depending on their capacity to design relevant material with the available technology and by the institutional readiness to enable the facilitators and learners to create material at the local level.

SRCs

The country director carried out a survey at the beginning of the project to determine the availability of multimedia teaching and learning material that facilitators and learners could use. This survey revealed that there was very little relevant material available in Hindi. Therefore the director acquired three multimedia CDs, two focused on Hindi alphabets and numbers, and the other on folktales to enable learners to practise using a computer. Instructional CDs on using a computer for developing mediated materials were also made available to project staff and facilitators at the SRC centres in Jaipur and Indore. In addition, a series of video programmes, one on gender equality and another designed to motivate learners to participate in literacy education, were distributed to the SRC centres along with an audio cassette about the importance of literacy. The country director also downloaded some materials from the Web and made these available. (Note that all of this was done at the beginning of the project before MSSRF had joined as another local partner.)

The instructional materials provided by the country director were supplemented by those acquired by partner organisations. For example, a small library was set up in each learning centre by the local partner organisations with the booklets from the SRCs. SRC Indore purchased a few books on computer use from the local computer training institute and used them to conduct training for the facilitators, acquired an Indian version of Clip Art software (originally developed in Japan for literacy functionaries and instructors) and used it to generate literacy material for neo-literate learners, and obtained different types of general educational materials in videocassette and CD formats.
There were also efforts made to modify existing print materials in order to enhance their instructional effectiveness by incorporating the use of ICTs. This was of particular interest to the SRC partners since they had such a wealth of print materials. A consultant was made available to assist with this initiative by reviewing materials and making suggestions for incorporating ICTs.

SRC Jaipur focused on developing CDs based on existing print material. SRC Indore scanned 30 booklets on various socio-economic and environment issues for neo-literate learners and the community, and installed them on the computer at the learning centres. These were later converted to PowerPoint presentations used by the facilitators to reinforce learning and by the neo-literate learners for practising reading skills.

The development of learning materials at the centres increased as the staff and facilitators acquired the requisite skills and became more comfortable with the use of ICTs. As mentioned previously, this would have occurred more quickly at the SRC centres had the deployment of equipment and the provision of training happened in a more timely manner. Nevertheless, there was considerable activity at all centres, although it varied depending on the degree to which the local partner was committed to promoting need-based, location-specific and learner-centred literacy education. For example, unlike SRC Indore (and MSSRF), SRC Jaipur followed a top-down approach to material development where most of the material development was centralised and led by a small team of SRC staff. Their efforts were hampered by a lack of expertise in software application and in instructional design. However they did produce more than 30 CDs based on print material that was on hand. These were text-based and therefore did not offer much value to the facilitators and learners in the centres. However, at both of the SRC Jaipur centres, some of the neo-literate learners created pictorial material (drawings) with the help of Paintbrush software, and they were able to use basic vocabulary to describe their feelings about what they had created.
SRC Indore followed a consultative model, involving SRC staff from its material
development division, core project staff, facilitators and learners in the process of
material development. As a result materials were developed both centrally at the
SRC and at the centres. The facilitators, using the computer, printer and scanner,
developed several instructional aids such as word and memory games, as well
as cards showing numbers, alphabets, names of flowers, fruits and colours. As
the staff received training, they were able to use PowerPoint and Visual Basics
to create multimedia materials on reading and writing skills as well as on legal
rights, health and water conservation. The project staff also downloaded material
from the Internet, primarily from two Indian Web sites, on specific themes
and issues of current relevance to the communities. Printouts of downloaded
material were placed at both centres where the facilitators used them in reading
and writing sessions.

Also, like some of the learners at the Jaipur centres, learners with rudimentary
literacy and computer skills were able to express their ideas in both text and
pictures. This learner-generated material was in the form of short stories,
posters, poems, slogans, puzzles, folders, pamphlets and wall newspapers. The
themes included nature and the environment, social issues, health, entertainment
and autobiographical data. Given the limited literacy skills of the learners, the
accompanying text was very simple, similar to spoken language.

At SRC Indore, a request from some learners wanting to know how to ensure
cleanliness in cowsheds resulted in some of them using the digital camera to
take pictures of the sheds in their neighbourhood. This led to a discussion on
the present conditions and the remedial measures they could take. At another
centre, an audio recording was made of those veterans who had participated in
the freedom struggle, and this recording was used to honour the unsung heroes
of the village. Some neo-literate adults also began to use digital cameras and
handicams to take pictures and compose their own stories and materials. Such
experiences showed that technology has the potential to create an environment
of learning in the community.

The process of material generation promoted teamwork and provided learners
with an opportunity to express their ideas. Further, it instilled a sense of pride
and accomplishment in the learners when they shared what they had produced
with learners at the other centres.
MSSRF

MSSRF used a very learner-centred approach for material development based on both the learners’ previous knowledge and their environment. The project staff believed that developing the materials in local and simple language familiar to the learners would arouse and sustain their interest. Learners were involved in refining the style and relevance of the material according to their learning needs.

Because of this strong focus on the community, MSSRF, unlike the SRCs, did not begin by using the National Literacy Curriculum and primers. Instead, they explored the potential of ICT for developing location-specific and learner-centred literacy material. Staff developed a wide range of teaching and learning material, such as Tamil-language CDs of letters, words and English numerals consisting of 400 PowerPoint slides with sound and visuals. All were copied and given to each learner. The facilitators of the learning centres developed all other project-specific material in collaboration with the learners and the community.

For example, instead of using a literacy primer, the facilitators produced a CD for each learner that was specific to their individual needs and interests. First the facilitators identified the learning needs in consultation with the learners and their family members. Then they trained learners and some family members in the use of a digital camera, and they took 20 to 25 photographs related to their family, neighbours, household articles, livestock and everyday life. Next, with the help of facilitators, the learners selected 10 to 12 photographs and identified simple words and short phrases for each one. The photographs and accompanying text were then mixed with sounds of each learner and converted into PowerPoint presentations. Thus, learners had a CD tailored to their individual needs and interests.

MSSRF also acquired some materials for the learners and the wider community. These included a set of booklets on cultivation of five crops grown in the area as well as CDs on topics such as MS Office, learning the Tamil language, mathematics and stories of general interest. The audiovisual medium of instruction in these CDs was appealing to both neo-literate learners and young school children for learning Tamil.
The facilitators at the MSSRF centres also developed several instructional aids. For example, they prepared PowerPoint charts of vowels with simple words derived from the learners’ local context for teaching recognition of letters, vowels and words. A number of workbooks were also developed for practising reading and numeracy skills and then they were converted to PowerPoint presentations for use in both group and individual learning contexts. Several small booklets on specific themes, such as local proverbs, cultivating flowers, predicting rainfall, and local medicinal plants were developed to provide information relevant to the learners and the community. These booklets made local knowledge available in both text and digital formats.

MSSRF also modified some existing materials for use at their centres. One of these was a CD on the topic of gender issues, compiled by taking video clip excerpts from different sources. Another was on pest control in paddy crops using text and visual clips. The latter was used by farmers for information on pest control, while neo-literates used them as reading material.

ZAMBIA

As described in chapter 2, the project in Zambia was implemented in the context of a programme structure managed by the Community Development Branch of the Ministry of Community Development and Social Services (MCDSS). A feature of the programme was that the emphasis should be on “functional literacy,” focusing on topics relevant to the lives of learners. However, the programme had become almost inoperable due to a lack of funds and, therefore, one of the challenges the implementing partner faced was the development of new learning materials.

The approach used in Zambia fell somewhere in-between the approaches used by the SRCs and the MSSRF in India. Like the SRCs, the initial core materials in Zambia were developed centrally, they were extensively field tested with prospective learners and, as in the MSSRF context, staff at the centres were trained and encouraged to develop locally based instructional materials.

The choice of subjects and later themes was influenced by findings from research studies indicating that among all materials used in literacy classes in Zambia, the primer on health and nutrition was perceived to be the most beneficial. This was reinforced by an evaluation of the literacy campaign in Tanzania.
which had indicated that participants valued learning which informed them about health and nutrition. Additionally, a needs assessment using participatory learning techniques was carried out in order to identify other topics for material production.

Through this analysis, and with advice from field officers, it was decided that the initial learning materials should provide information about health, specifically the diseases of malaria, diarrhea and HIV/AIDS, as well as on organic farming which was a new type of farming that had been adopted in the country because of the adverse effects from repeated use of chemical fertilisers.

Extension officers from the MCDSS were trained in methods of structuring instructional materials using the Freirian approach, psychology of adult learning and the use of ICT in learning. Working in groups, they researched the nature, causes, prevention and treatment of the diseases and produced the first draft of the health primer. This was written first in English and later translated by university students into the three Zambian languages used in the three regions where the centres were located. They also produced an instructor’s manual for use by tutors at the various main and sub-centres. While the primer was skeletal, comprising the key words divided into phonemic families, the instructor’s guide contained a lot of activities aimed at helping participants explore their environments, values and beliefs and to share their cultures. The manual encouraged participants to tell stories, share and record music and dances and evaluate the use of local knowledge on causes and cures for the diseases.

A further dimension of material production was the development of a syllable board designed to accelerate and enhance word creation. Each syllable board had syllable chips made out of cardboard that included all the letters of the alphabet. This enabled learners to practise creating new words, to divide the new words into phonemic families and to promote learning in a game-like format. It was hoped that the board would act as a bridge between print and electronic media.

All materials were field tested with tutors and learners and revised before being put into general use. After the field test, the transition to electronic media began.
The lessons in print were adapted to the computer with the aim of speeding up future learning while assessing the value of using ICT in communities where it had never been used before. At this stage the print material was used to back up ICT formats in case of a disruption to the electric power supply or a computer breakdown, and to enable use in those sub-centres that did not have electricity.

Computer-enhanced learning was introduced incrementally. Participants first learned how to manipulate the equipment, how to write their names using Microsoft Word and how to print out what they wrote. Second, they learned how to use PowerPoint to actually learn to read. Computer-enhanced learning generated a great deal of interest in computer use and attracted other learners such as secretarial staff in government offices.

Project staff also used the video equipment in combination with drama, a familiar and effective form of teaching that has been widely used in Zambian society. In this instance the introduction of drama had a twofold purpose: to evaluate knowledge and skills the participants had acquired, and to extend learning to the surrounding community. At each centre, participants created three dramas on malaria, diarrhea and HIV/AIDS to demonstrate what they had learnt from the primer. The video camera was used to record each skit, which was edited by a professional videographer and used to disseminate the information to other communities and organisations. University of Zambia students involved in the study of theatre for development were hired as research assistants to facilitate the creative process. One of the consequences of showing the videos was that the performers, who were primarily women, emerged as heroines in the communities.

The existing print materials on growing crops and organic agriculture were also adapted for use in the centres. While the core materials on diseases and crops were developed centrally by staff at the university and the ministry and adapted for use in the different regions, the staff and tutors at the centres became more involved in the production of learning materials as their skills developed. For example, digital cameras were used to take pictures in the field. These were then used to make teaching and learning materials that were specific to the learners’ communities. The printers were used to print documents and the photocopiers were used to reproduce printed materials for teaching and other
purposes. The video cameras were used to film events and activities of interest in the community and the videotapes were then used during lessons using the videocassette recorder and television set.

Audiocassette recorders, locally referred to as “radio recorders,” were also used to support learning in various ways:

- Learners narrated folktales and the instructors recorded them. These folktales were then transcribed and used to make teaching and learning materials. Thus, learners contributed to the production of the materials.
- Learners began to do interviews with regional subject experts in areas such as health and agriculture and then used the tapes during lessons.
- Learners were recorded as they read from a book or primer and then the recording was played back to the class.
- Instructors recorded themselves reading a passage before the lesson, and then during the lesson the recorded material was played to learners who were told to follow the print material as they listened.
- Instructors used the radio as a source of information and then shared what they had heard with learners.
chapter 6

THE COST OF DEVELOPING AND OPERATING LITERACY LEARNING CENTRES

The centrepiece of the COLLIT project was the community learning centres where ICTs were made available to learners and the staff who facilitated their learning. Presented below is information about the cost of setting up and operating these centres as well as some general comments about the cost impact of using ICTs in literacy education.

BUDGET MANAGEMENT

The initial agreement between COL and the implementing partners called for budgets to be developed on the basis of six-month plans that defined the outcomes and activities for the period, the funding required and the source of the funding (i.e., donor, partner or other). In-kind contributions were to be indicated and an audited account of donor funds spent was to be submitted to COL by the implementing partner before the next tranche of funding was released.

However, as the project got underway, a couple of problems became evident. One was that a six-month time frame was not long enough; thus it was changed to a yearly process to accommodate local realities. Another problem was the difficulty in collecting detailed information about the in-kind contributions of the partners. Many of the staff assigned to the project by the local partners also had other duties and a detailed accounting of their time would have required keeping a daily or weekly log of time spent on project matters. This proved to be too cumbersome for many staff and facilitators to manage. Therefore, the value of the in-kind contributions...
is, in most cases, an estimate made by the partner organisations. A final, and perhaps obvious, point to emphasise before looking at the available data is that the cost of setting up and operating community learning centres similar to those in this project varies remarkably among countries and even among regions within countries. While the data presented here are indicative of the actual costs to be expected in setting up and operating a learning centre in a similar context, perhaps more importantly they illustrate the relative proportion of resources that need to be allocated to the various expenditure categories.

REVENUE

The major source of financial revenue for the project was the funding provided by the donor, the UK Department for International Development (DFID) through the Commonwealth of Learning. However, the implementing partner organisations, Indira Gandhi National Open University (IGNOU) and the Commonwealth Educational Media Centre for Asia (CEMCA) in India, and the University and the Ministry of Community Development and Social Services (MCDSS) in Zambia, each made significant in-kind contributions by assigning a person to act as the country director and by not charging for all overhead costs. The local partner organisations also contributed resources in several ways:

- They assigned one or more staff members to lead the project implementation.
- Some of them were able to draw on their internal expertise to provide training for centre staff and facilitators.
- The SRCs in India provided some existing instructional materials.
- The Community Development department of the MCDSS in Zambia integrated the project into its existing literacy programme in the selected communities, thereby supplying instructors some infrastructure and funds to support operations at the various centres.
- MSSRF in India incorporated the project into their existing Community Knowledge Centre Programme, which meant that equipment and computers were already in place, along with a technologically savvy group of staff.

Another source of revenue was generated by the centre managers from entrepreneurial activities. While this was not large, it grew over the course
of the project and is now a significant factor that is enabling some centres to sustain themselves. The centres at Kabwe and Katete in Zambia have been quite successful in this regard – particularly Katete which, because it is rural, offers facilities and services not common in the area.

This interaction with the wider community and the concept of “partnership” were notable aspects of the project. It simply could not have been implemented as ambitiously as it was had it not been for the contributions of the implementing partners. However, some staff in the partner organisations found this approach a bit frustrating at the outset because it did not fit a typical donor-funded project model whereby all direct and overhead costs are covered from donor funds.

**EXPENDITURES**

In general terms the funds provided through COL were used to pay for:

- ICT hardware and operating software
- Refurbishment of the buildings used to house the learning centres (although at the MSSRF centres this was a responsibility of the community)
- Some centrally produced learning materials (e.g., in Zambia)
- Training for centre managers, staff and tutors
- Salaries for some project staff – depending on the context (e.g., in Zambia, most centre staff and all the tutors were provided by MCDSS)
- Supplementary support for centre operations
- Project support staff with the implementing partners as needed

The services provided by the partner organisations through in-kind and direct funding included:

- Staff and tutors/facilitators (in Zambia and at MSSRF centres)
- Centre facilities
- Learning materials – particularly at the SRC centres
- Some ICT equipment at MSSRF centres
- Centre operating costs – particularly in Zambia and at the MSSRF centres
ESTABLISHING AND OPERATING THE LEARNING CENTRES

A precise costing of all inputs and activities was not possible, primarily because of the difficulty in accounting for the labour contributions from local partners. Even some of the direct costs are difficult to attribute to individual centres because they were aggregated on a country basis. Nevertheless, the data shown in Table 6.1 below and discussed in the accompanying notes provide a reasonably valid picture of the costs involved in establishing and operating the learning centres.


<table>
<thead>
<tr>
<th>CENTRE LOCATION</th>
<th>FACILITY REPAIR (1)</th>
<th>EQUIPMENT</th>
<th>TRAINING</th>
<th>MATERIALS (6)</th>
<th>LOCAL MANAGEMENT (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAIPUR</td>
<td>$ 0</td>
<td>$32,250</td>
<td>$ 9565</td>
<td>$1040</td>
<td>$ 610</td>
</tr>
<tr>
<td>INDORE</td>
<td>$ 0</td>
<td>$33,600</td>
<td>$11,680</td>
<td>$ 770</td>
<td>$ 8876</td>
</tr>
<tr>
<td>MSSRF</td>
<td>$ 0</td>
<td>$30,000 (3)</td>
<td>$12,240</td>
<td>$6430</td>
<td>$10,435</td>
</tr>
<tr>
<td>KABWE</td>
<td>$5725 (FOR ALL CENTRES) (2)</td>
<td>$22,800 (4)</td>
<td>$12,000 (5)</td>
<td>$4000</td>
<td>$ 5750</td>
</tr>
<tr>
<td>KATETE</td>
<td></td>
<td>$17,750</td>
<td>$12,000</td>
<td>$4000</td>
<td>$ 5750</td>
</tr>
<tr>
<td>MONZE</td>
<td></td>
<td>$12,675</td>
<td>$12,000</td>
<td>$4000</td>
<td>$ 5750</td>
</tr>
</tbody>
</table>

NOTES:

1. The selection of the buildings to house the learning centres and make them operational was managed by the local partners in India. In some cases, such as in the MSSRF centres, it was done entirely by the local community. No data were gathered on the monetary value of these contributions, however, there were no direct costs to the project budget.

2. The implementing partner in Zambia spent USD5725 on rehabilitating an existing building at each of the main centre locations. The buildings were provided by the MCDSS, but because their literacy programme had languished for lack of funding over the years prior to the start of the COLLIT project, they had fallen into disrepair. The major portion of the money was spent repairing the facility at Katete.

3. MSSRF supplied all the equipment for their community centres either from inventory they had on hand or through special purchases (e.g., touch-screen computers). While no project funds were requested for this, an in-kind valuation has been made that is generally comparable to the costs at the SRC centres.

4. A total of USD53,225 of project funding was spent to purchase equipment for all the centres in Zambia. The Kabwe and Katete centres had a few more pieces of equipment than Monze because of different start-up dates and because the equipment at Kabwe was added to by local officials – an in-kind contribution that was not assigned a value.

5. The total amount of project funds spent on training centre managers and staff in Zambia was approximately USD36,000. The amount has simply been evenly distributed across all centres.

6. The remarkable difference between the amounts spent by the SRCs and MSSRF on the development of learning materials is mostly due to the SRCs having materials on hand. Indeed, a major part of their mandate is to produce learning materials for literacy education. Unfortunately no value was assigned to this important in-kind contribution. In Zambia, the University of Zambia, working with the MCDSS, developed new materials for use at all centres. The direct cost of this was approximately USD12,000 which has been allocated across all the main centre locations. However, there were also significant in-kind contributions from staff at both the ministry and the university that have not been included.

7. The amounts attributed to Local Management cover items such as tutor/facilitator salaries, travel, consumables and, in some cases, the salary for a project director in the local partner organisation. No specific estimates have been included for overhead cost; however, in the case of Jaipur they were obviously significant. The MSSRF had no staff involved in literacy education prior to the start of the project. The figures for the Zambia centres are derived from the detailed analysis of the annual cost of operating the Kabwe centre. It was assumed that the other centres would have had similar costs.
ANNUAL OPERATING COSTS – THE CASE OF KABWE CENTRE

The country evaluators in Zambia worked with the managers of the Kabwe centre to develop an overview of the annual operating costs after the start-up costs of equipment purchases, training and the development of central materials had been taken care of. Table 6.2 displays this overview.

**TABLE 6.2: ANNUAL COST OF KABWE CENTRE OPERATIONS**

<table>
<thead>
<tr>
<th>DESCRIPTION OF COSTS</th>
<th>SOURCE OF FUNDS (IN US DOLLARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PROJECT</td>
</tr>
<tr>
<td><strong>STAFF SALARIES @ $845 PER YEAR</strong></td>
<td></td>
</tr>
<tr>
<td>• VOLUNTEER STAFF ALLOWANCES — $10 PER YEAR/STAFF MEMBER</td>
<td></td>
</tr>
<tr>
<td>• STAFF OPPORTUNITY COSTS (NOT ABLE TO GO ON VACATION, ETC.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$5750</td>
</tr>
<tr>
<td><strong>INTERNET CONNECTIVITY</strong></td>
<td></td>
</tr>
<tr>
<td>• CONNECTION COSTS</td>
<td></td>
</tr>
<tr>
<td>• MONTHLY CHANGES @ $20</td>
<td></td>
</tr>
<tr>
<td>• INSTALLATION OF PHONE LINE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$240</td>
</tr>
<tr>
<td><strong>UTILITIES AND OFFICE SPACE</strong></td>
<td></td>
</tr>
<tr>
<td>• ELECTRICITY PER MONTH @ $10.20</td>
<td></td>
</tr>
<tr>
<td>• TELEPHONE</td>
<td></td>
</tr>
<tr>
<td>• CLASSROOM/OFFICE SPACE</td>
<td></td>
</tr>
<tr>
<td>• WATER AND SEWERAGE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$50</td>
</tr>
<tr>
<td><strong>CONSUMABLES</strong></td>
<td></td>
</tr>
<tr>
<td>• PAPER</td>
<td></td>
</tr>
<tr>
<td>• TAPES (VIDEO, AUDIO)</td>
<td></td>
</tr>
<tr>
<td>• SPIRAL BINDING</td>
<td></td>
</tr>
<tr>
<td>• TONERS</td>
<td></td>
</tr>
<tr>
<td>• PHOTOCOPIES</td>
<td></td>
</tr>
<tr>
<td>• FAX INK CARTRIDGES</td>
<td></td>
</tr>
<tr>
<td>• BATTERIES (CELLS)</td>
<td></td>
</tr>
<tr>
<td>• DISKETTES</td>
<td></td>
</tr>
<tr>
<td>• CHALK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$1150</td>
</tr>
<tr>
<td><strong>TRANSPORT AND SUNDRY</strong></td>
<td></td>
</tr>
<tr>
<td>• TRANSPORT/FUEL COSTS</td>
<td></td>
</tr>
<tr>
<td>• TEA/COFFEE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$1,450</td>
</tr>
<tr>
<td><strong>LOCAL EXPERTISE COSTS (IN KIND)</strong></td>
<td></td>
</tr>
<tr>
<td>• TROUBLE-SHOOTING</td>
<td></td>
</tr>
<tr>
<td>• SIMPLE REPAIR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$170</td>
</tr>
<tr>
<td><strong>MATERIALS PRODUCED</strong></td>
<td></td>
</tr>
<tr>
<td>(PRINT, AUDIO AND VIDEO RECORDINGS, ETC.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$300</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$1740</td>
</tr>
<tr>
<td><strong>TOTAL COST OF RUNNING THE CENTRE PER YEAR:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$13,300</td>
</tr>
</tbody>
</table>
As Table 6.2 notes, the cost of running the centre per year was USD13,300. But the costs noted represent a “best analysis” of the direct costs; they do not include any estimate of the in-kind costs related to the use of buildings and of local experts in ICT who provided their services without charge. The costs shown are gross costs, some of which were offset by funds raised through entrepreneurial activates. On average the Kabwe centre generated about USD60 per month.

No comparable data are available for the centres in India. However, the country director did ask the Jaipur SRC local partners to provide some estimates during the follow-up assessment interviews. They estimated their annual operating costs at approximately USD7150 per centre – 33 per cent of which is an allowance for the cost of the in-kind contributions. The reason for the substantial difference between this figure and the comparable one for the Kabwe centre in Zambia is because the SRC Jaipur has developed partnerships with local NGOs that are now delivering the literacy training with support from the SRC – thus distributing costs among more partners.

SUMMARY

Unfortunately, the financial data do not provide a basis for an empirical cost-benefit analysis regarding the use of ICTs in literacy education. The reader will need to reach conclusions based on the available data on costs together with the mostly qualitative data about project outcomes. However, it is clear that the major cost factors of incorporating ICTs into existing literacy programmes relate to the initial cost of purchasing equipment and the training that must be provided to staff in order to use it. Even these costs are mitigated to some degree when the organisation already has some equipment and staff expertise as in the case of the MSSRF partner. As the country evaluator for Zambia observed, “The cost effectiveness of the project could be seen in terms of the benefits and value added to the traditional approaches used by the Ministry – which, according to the Minister, offered a reasonable basis for expanding the programme countrywide.”
chapter 7

THE PROJECT IMPACT

The impact of the COLLIT project was evaluated using both formative and summative processes. The country evaluators collected data throughout the project, and this information was made available to project directors at all levels to help guide decision-making in a formative manner. Further data gathered on the outcomes and impacts at the end of the project were then used as the basis for the final summative reports of the country evaluators.

Two other opportunities afforded additional perspectives. First, dissemination workshops/seminars were held in each country a few months after the project ended. These were organised by the respective country directors for the purpose of sharing information about the project with government officials and leaders of other organisations with an interest in literacy and the use of technology. Second was the opportunity to survey the activities at the centres one year after the project formally ended. In India, this was carried out by the country director and in Zambia by the country evaluator.

END-OF-PROJECT ASSESSMENT

Learners

Most of the learners who participated in the project came from socio-economically disadvantaged communities that had had no, or very limited, exposure to ICTs. Initially, learners were apprehensive about their ability to use technology, and most could not perceive it as being useful or relevant in the context of their lives. The prevalent belief was that such technology was meant only for educated persons. Overcoming those initial beliefs and apprehensions was the first challenge for them and their facilitators and was, for most of them, their most empowering experience.

The original plan to collect pre- and post-quantitative data to measure the change in learners’ reading, writing and numeracy skills over the course of the
THE PROJECT IMPACT

The project proved impossible for a variety of reasons, such as the delay in getting the project underway, the lack of adequate test instruments, the view that initial testing would “scare off” prospective learners, and the fact that people dropped in and out of the programmes at the centres as other circumstances in their lives dictated. Tests were administered at most of the centres in India as the project ended, and these did provide an indication about learners’ skills at that point. There was no end-of-project testing done in Zambia.

A considerable amount of qualitative data were collected in each country through observations and interviews with learners and facilitators. The general conclusion was that while reading, writing and numeracy gains were variable and fragile, learners had made progress and were approaching a “take-off” point as the project came to an end. However, the most profound impact of the project was the effect it had on learners’ self-esteem and on the way they used their newly acquired literacy skills in everyday life.

INDIA

The following observations were made by the country evaluator for India following discussions with learners on the impact of literacy in their lives:

- No matter how rudimentary the literacy skills acquired by the learners were, most of them reported that they had started using them. The most frequently cited examples were reading bus schedules and station signs, banners, posters and advertisements. A few women also mentioned that they now read printed labels and prices on the products at the local grocery shop. Some reported reading the captions and titles of television serials. Learners from the Samiyarpatty and Pudupatty MSSRF centres who were involved in agriculture started reading agriculture commodity prices at the centre and in the market. Several learners reported reading materials such as newspapers and books from the centre libraries. Those with school-going children also read children’s textbooks. Clearly, reading various types of material opened the learners to the world of print.

- In general, learners used writing skills less than reading skills, perhaps because of limited opportunities to write in their immediate environment. However, although they used writing skills less frequently, being able to sign their name and do small writing tasks did enhance the learners’
self-esteem. Most of the writing applications were limited to specific purposes such as signing various forms and applications such as ration cards, attendance registers, children’s report cards, bank/post office forms, government scheme forms, etc. A few women used writing skills for preparing shopping lists. Those who were engaged in small trades and other income-generating activities used writing skills for maintaining business accounts and client lists.

- Most of the learners reported using numeracy skills, most frequently for counting and handling money in transactions, maintaining household accounts, reading bus numbers, and telling time. Learners who were engaged in wage labour used numeracy skills for monitoring wage payments, saying that now nobody could cheat them! A few learners used their newly acquired skills in business activities, such as keeping business accounts, taking measurements of tiles and bricks for masonry work, using a measuring tape, taking measurements for tailoring, etc. Women learners also felt that numeracy skills had increased their ability to check prices, buy/sell products and figure out correct payments.

- Parents reported a new ability to read the report cards of their school-going children and monitor their educational progress. Some parents also started interacting with the school teachers and developed better awareness about the progress of their children’s education.

- For the school dropouts who joined literacy classes, the learning centres provided the second chance for education. Literacy classes served as an open learning situation for acquiring basic literacy skills and accessing new knowledge and information. After acquiring some fluency in literacy, these young learners aspired to pursue further studies either at the centre or in formal schools.

- Participation in literacy classes and the acquisition of some literacy skills had a profound impact on the personality of older learners (those over 40), particularly those at the MSSRF centres. These people had considered themselves too old to learn anything, but they soon realised that they could learn to read and write and use technology, and their self-esteem improved. They gained greater confidence to deal with others and reported feeling more self-reliant in everyday life. Many felt their status in the family and community had increased as a result of their improved literacy.
• The acquisition of literacy skills was greater for learners who could link the skills being taught with livelihood activities, such as small trades, animal husbandry, agriculture, wage labour and non-farm occupations. Small increases in savings or increased income as a result of their improved abilities were perceived as the most empowering experience by the learners. Some of the wage labourers from Rau and Pudupatty also found literacy skills useful in finding better opportunities for work outside the village. Earlier they worked as wage labourers in the village or surrounding villages, but once they could read the bus board, their mobility increased and they started travelling to distant places to find better opportunities for work.

• In the MSSRF centres at Samiyarpatty and Pudupatty, many learners were also members of SHG groups in their respective villages. They became more active participants in SHG meetings and activities because they now were able to read the minutes, resolutions and other correspondence and comprehend what was going on. This was particularly true for women who said they felt less like spectators at the meetings.

• Acquisition of literacy skills also enabled learners to use the telephone for social communication and business activities, which, some reported, had considerable economic benefits.

• The learning centres also introduced the learners to new functional knowledge either through literacy material or through specific continuing education activities. Learners started reading books from the centre library on divergent topics. For example, women at the SRC Indore centres reported that they learned about balanced diets and the nutritional value of different foods, proper hygienic practices, how to make a first aid box, the importance of sterilised needles, sanitation and water conservation. For those involved in agriculture, access to information on agricultural prices and how to grow specialised crops was felt to be very useful. A few male learners from the MSSRF centres also mentioned that they had a new awareness about gender-based division of work.

Those who were classified as “computer learners” tended to be younger than the “literacy learners” and were either in school or had some schooling and therefore were able to read. They were motivated by acquiring computer skills that would help them get jobs or pursue further education. While a few did realise these goals, for most the results were different. Most of them reported that they used
the centre’s library for reading books and newspapers. They participated in many of the activities at the centres which provided them opportunities to develop their communication skills and enhance their self-esteem. They also interacted with literacy learners, which sensitised them to work together with illiterate and semi-literate people; it became a common sight in all the centres to observe computer learners assisting literacy learners to use the computer and with other learning tasks. The computer learners at Jamli centre came from higher castes and they reported that these experiences provided them the opportunity to overcome caste and class barriers and assist learners from the socio-economically disadvantaged sections of society. Indeed, some of the computer learners from Jamli centre became volunteers who assisted the facilitators in running the centres. They also helped the facilitators in organising various community-based activities. As they became well versed with centre operations and management, they often ran the centre in the absence of facilitators.

ZAMBIA

The Zambia country evaluators reported the following:

- Lapsed learners (i.e., learners who once attended formal school when they were of school-going age) who attended project classes stated that they had enhanced their reading and numeracy skills. This was also the view of their instructors as reported in separate interviews. As one learner put it: “Before I started attending COLLIT classes, I had difficulties in writing and reading, but now I am able to write and read with less difficulty.” (Similar results were reported in India regarding neo-literate learners.)

- Some learners who had never been to school acquired the ability to read, write and count. For example, the husband of a learner at the Monze centre had this to say about his wife’s achievement: “My wife is now able to read. She has developed an interest in reading any piece of paper she comes across. In the past she simply threw such papers away.” Not surprisingly, these results were reported most often among those learners who regularly attended the sessions.

THE JOY OF LEARNING!
• Many learners who participated in the project developed a more positive attitude towards education. They reported that they encouraged their children to go to school and, in some cases, they reported helping their children with schoolwork. One man said: “Because of attending lessons, my wife developed an interest in our children’s schoolwork. She is teaching them now.”

• Learners who participated in the project acquired knowledge of how diseases such as HIV/AIDS, malaria and diarrhea were spread and how they could be prevented.

• People were motivated to join literacy classes, including some who once went to school. One instructor stated that, “The computer cultivated a desire in people to join literacy classes. Initially when classes began, there were a lot more learners compared to previous literacy programmes.” Another learner made the same point: “The computer motivated me to join the class.”

• Generally, attendance by learners was more regular in classes in which there was more use of technologies.

• Concentration and participation by learners during lessons increased with the use of various technologies. For example, more learners volunteered to read when they were being audiorecorded. Another learner stated that, “The computer makes us pay attention during our lessons.”

• Learners’ self-esteem improved. The following comment was typical: “Before I started attending computer lessons, I did not think I could do anything. Now that I know how to use a computer, I feel I can do anything.”

• Learners were stimulated to think differently. As one learner said, “The computer has opened my head to think quickly.”

• Learners who participated in the videotaped dramas on health issues (mostly women), emerged as heroes in their communities which was very positive in terms of enhancing self-esteem and providing role models for others.

• A number of factors hindered male participation in literacy activities at the centres. Many could not afford the time and opportunity costs in terms of short labour contracts. Some were uncomfortable learning in a predominantly female environment. Others had already acquired some basic literacy skills as they had had opportunities when they were young.
(which their female counterparts never had because parents preferred to send their boy children to school over their girl children).

- Some learners did not attend lessons regularly, which resulted in them not achieving as much. Most of the learners were living in poverty and the drought that affected most communities made attending lessons regularly difficult as they had to look for food for their children. Sickness, having to attend funerals and being long distances from the learning centres also contributed to poor attendance.

- Not all learners joined classes at the same time. For example some joined about three months after the start of lessons while others joined after five months. This caused problems for instructors and was reflected in the learners’ level of achievement.

**Facilitators, Tutors and Staff**

The impact of the project was most visible on the people involved in operating the learning centres, 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 centres, in both countries, emerged as well-respected ICT-trained literacy instructors with experience in using the equipment to develop locally relevant instructional materials.

For example, the facilitators at the centres in India noticed that by supplementing their family income by working on the project their social status in the family was enhanced. They also earned the respect of the community because of their work at the learning centres. Adult learners were very grateful that the facilitators helped them to become literate. School children and youth respected them as their “computer teacher.”

Facilitators in Zambia had similar experiences even though in the beginning some staff of the MCDSS approached the project with some trepidation. As one instructor put it, “We were told that they will bring computers, videos…and I wondered if I would also be able to use a computer like those people in big offices…I was scared at first…but they said we will be trained on how to use it.”
But by the end of the project, the country evaluator concluded that the status of centre managers, operations managers and instructors had been substantially enhanced. The ICT knowledge and skills they had obtained was a source of power, and the improved infrastructure of the centres resulted in them being comparable to some prestigious professions in the community. Further, the level of activity at the centres greatly increased. Institutions and organisations, both governmental and non-governmental, prominent business men and women, and individuals began coming to the centres which added to the stature of the centres and hence to the staff working there.

On the other hand, the increased status of the staff working at the centres gave rise to some initial tension in a few cases, particularly at Katete and Monze where the staff had titles that did not fit the usual ones in the Department of Community Development. Further, some of the staff who participated in the project did so on a part-time basis as they had other responsibilities to perform in their respective posts. This sometimes meant that their attention was divided between project activities and other responsibilities, and in some centres, scheduled lessons were cancelled from time to time because of other commitments. These difficulties were resolved as interaction and communication among the different stakeholders improved.

For some instructors, the ICTs created more interest and pleasure in their work. The India country evaluator concluded that the project had an important impact on female facilitators. For some of them, it was a turning point in their life as indicated by the following comments:

- “All my friends of my age are getting married. But I don’t want to marry now. I would like to appear for my board examination (secondary school examination) this year and then take up a job at some computer centre. Earlier my family would not have allowed me to pursue higher education. Now they are very supportive of my decision.”
- “Earlier I did not know where the SRC office was located in Jaipur or where Chennai was. Now I know about new places and people. I could go to the SRC on my own.”
- “Before we were not allowed by our parents (or the husband/in-laws) to go outside the village on our own. Now we can go alone to Dindigul and other villages. Nobody objects to it now. We go for payment of telephone bills, post office, bank deposit, purchase of booklets, paper and material, etc…. Earlier we had hardly gone beyond the neighbouring villages and
towns in our district. In the project, we went to Chennai several times and we also visited SRC Jaipur and its centres in Rajasthan. In fact, our Jaipur trip was most memorable. On our own, we could have never thought about visiting such places. None of our family members have gone as far as Jaipur and Agra. We learn about other people, their culture, their food habits, etc.”

**Use of Technology**

The use of technology by facilitators, learners and the community was shaped by the extent to which the partner organisations succeeded in creating easy access to the equipment, training staff to use it and providing technical support.

**INDIA**

The facilitators at the MSSRF centres made good use of the computers and other ICT equipment for material development, literacy teaching and computer training as well as for preparing project documents and reports. The phone, fax and Internet helped them in centre management and communication with project staff in different locations. For the learners, computers with touch screens and electronic boards proved useful tools for learning. On the other hand, the use of technology by the community was limited to telephone and, at times, the Internet. However, the community used the centre for getting access to information, such as agriculture prices, weather, etc.

At the SRC centres, the slow process of acquiring and deploying equipment and in providing training for facilitators and staff once the equipment was in place significantly constrained the use of technology. They were also adversely affected by an irregular supply of electricity and, in the case of the Jaipur centres, by the fact that only one computer was made available at each centre. The facilitators at these centres also received less training which further limited their ability to make use of the available technologies. Telephone service to the SRC centres proved difficult to sustain and, as a result, regular access to the Internet was not available.

On the other hand, facilitators at the SRC Indore centres made extensive use of technology for literacy teaching, computer training and materials development.
They also used it for word processing of project records and development of learner-generated material.

The differences among the local partners’ ability to provide sustained technical support to the learning centres was another factor that accounted for variance in the way the technologies were utilised. For example, SRC Jaipur did not have an in-house computer professional to call on for support, so was forced to make ad hoc arrangements with external technicians. On the other hand, SRC Indore had a computer programmer who was part of the core project team. Also, the facilitator at Rau centre learned basic computer hardware maintenance from CDs provided by IGNOU and was therefore able to solve minor hardware-related problems.

There were no major problems of providing technical support at the MSSRF centres as they evolved a decentralised system whereby most of the minor technological problems were fixed either by the project staff or local professionals.

ZAMBIA

Zambia also experienced some difficulty because of the length of time it took to acquire and deploy equipment. Once equipment was in place, computers were used in four ways:

- Learners used the computer screen as a “board” for writing. Instructors told learners to practise writing their names, words, letters, stories, etc. Some of these items were saved and retrieved during the following lesson and were used to practise reading.
- Instructors prepared and saved PowerPoint lessons. They then asked learners to look for the lesson and read the material. Thus learners developed their computer skills as they practised reading.
- Instructors displayed pages from the primer on PowerPoint and then asked learners to read.
- Learners used the numbers on the keyboard to learn counting and other numeracy skills.

The video camera was used by the instructors to capture events and activities related to community life which were then incorporated into the teaching process using the videocassette player and television monitor. After viewing the tape, learners were asked questions by instructors on what they saw. They also
used some of the scenes to produce print teaching materials.

The audiostream recorder was also used in a variety of ways:

- To record an expert, such as a health worker speaking on some topic, and then play the recorded lesson for the learner
- To record learners telling a story and then play it back for all to hear
- To record learners reading, play it back to them and ask them to take note of any mistakes made
- To record instructors reading a passage and then asking learners to follow along on a printed copy of the passage as it was played back to them

Despite the positive experiences that instructors and learners had with the technologies, there were major frustrations over the inadequate number of computers per centre. There were often 25 to 30 learners per computer over a 60-minute period. Some went away without any hands-on experience during a session, and this had a negative impact on learners’ achievement.

Partner Organisations and the Communities

The project made an important contribution to strengthening the institutional capacity of local partner organisations by equipping them with new technology and developing a cadre of ICT-trained staff. However, this impact was uneven across the centres because of differences in organisational culture and leadership among the local partners. For example, the director at SRC Indore was able to arrange staff training in ICT applications as well as in instructional design and multimedia material development, which allowed staff to become involved more quickly in project activities. On the other hand, the main contribution of the project to MSSRF was that it strengthened the organisation’s capacity to provide literacy education at its knowledge centres and enabled staff to experiment with using technology for literacy education and computer training, and to involve facilitators, learners and the community in the process of material development.

The most visible impact of the project in the communities where the centres were located was the development of a cadre of ICT-trained facilitators who could work as literacy instructors and computer trainers.
The evidence is that they are now providing a local resource for training others, for providing services to other organisations and, in the process, providing role models and demystifying the use of technology.

The involvement of the communities in the MSSRF centres was very high. The project put technology in the hands of the learners and the community and, as a result, the communities involved enhanced their confidence to manage the centres and make them financially viable.

In Zambia, the multiple use made of the centres led to partnerships that added value to the project in ways that weren’t anticipated at the outset, particularly with the Ministry of Health, Ministry of Agriculture, several NGOs and some co-operative colleges. This collaboration led not only to a new era of understanding and collaboration among the organisations, but it also provided important support to the centres in terms of additional resources. The following descriptions of how the centre in Kabwe was used are typical:

- The Provincial Officer of the Department of Community Development used a computer for storing information and accessing information from the Internet on literacy activities in other parts of the world when the computer in the provincial office was down. In addition, when there was an important event in the country, staff at the provincial community development office went to the centre to watch the event on television.

- The Programme for Urban Self-Help (PUSH) became a partner. Adult literacy learners under this programme used materials produced at the main centre and PUSH staff rented ICT equipment (video camera and digital camera) to capture events related to their community development activities. The centre also provided training to five PUSH literacy instructors.

- Care International used the centre for training its literacy instructors in computer skills.

- The Programme Against Malnutrition (PAM) provided farming inputs to selected project classes. In turn PAM used the project camera to record field days.

- The Ministry of Health used the centre to disseminate information on health matters, and some nurses came to the centre for training in operating a computer.
Ownership of the project by the communities at the centres grew over the course of the project. The centre managers and instructors saw the programme as part of their role to serve the community. However, community sensitisation was slow, and it took time for other organisations to realise the range of services available. Over time, the centres attracted people from different walks of life and institutions. The visitors came for information on health and agriculture, meetings, training and to use the available facilities for photocopying, telephone and fax. There was a reasonable charge for these services, which some opposed, feeling they should be free if the centre really belonged to the community! However, the regular users and those sensitised to the project appreciated the centres and welcomed the idea of cost sharing as a necessary step towards sustaining the services.

DISSEMINATION OF EXPERIENCES

At the end of the project both implementing partners were asked to organise one or more events in their respective countries to both share information resulting from the project experience and to invite others to contribute their experience as well. It was hoped that such exchanges would start a sustainable dialogue regarding the use of ICTs in literacy education.

India

A two-day national workshop, entitled Towards Sustainability of ICT Projects in Education and Development, was organised by the India country directors on 2–3 September 2003 in New Delhi. The primary objective of this consultative workshop was to share the findings of the project with others in order to promote and advocate a greater awareness about use of ICT for education and development and to facilitate networking among Indian partners. The workshop brought together 25 participants from government agencies, NGOs and educational institutions. All the participants were from India, except three from UNESCO (Bangkok).

The agenda included presentations by the country director, staff from the local partners, and the
country evaluator about the project findings. These were followed by a number of other presentations from NGOs and other agencies on topics such as bridging the digital divide, the potential of ICTs in making a difference to the rural development process, and critical issues affecting sustainability of such projects. The discussions that followed focused on questions such as:

- What partnerships can be developed with different stakeholders to build sustainability of ICT use in education?
- Where do we go from here?

The discussion highlighted the need for initiating and building networking with different agencies and institutions across the public and NGO sectors to promote sustainable use of ICT in education for the disadvantaged sections of society. It also stressed the need for documenting successful examples of partnerships and the use of ICT in education.

Zambia

The dissemination seminar in Zambia was a one-day event held on 8 April 2003 in Lusaka. It was attended by over 30 participants representing the major organisations that provide literacy programmes in the country.

The Minister of Community Development and Social Services opened the seminar, and in her address noted that illiteracy is a difficult but extremely important challenge to overcome, requiring the efforts of many organisations. She strongly supported the model developed for the project in Zambia and expressed a commitment to continuing to use the ICT equipment for the purposes for which it was provided. She also applauded the collaborative activity between the ministry and the university and invited other stakeholders to assist the ministry to replicate the model in other areas of the country.

The vice chancellor of the University of Zambia also spoke, noting that applied research and its close partner, “guided and evaluated” action, are important to support progressive social change. He also highlighted some of the achievements of the project, and in doing so stressed the importance of learning from “unintended outcomes” and finding ways to sustain the initiative that has been started.

These addresses were followed by presentations from the project staff and representatives from some of the other organisations that provide literacy
programmes in Zambia. Highlights from those discussions included the following:

- The participants noted that policy on adult literacy is missing.
- It was resolved that there should be a common basic curriculum for literacy programmes. It was agreed that a meeting should be arranged by project staff to discuss this and that the Ministries of CDSS, Health, Education and Agriculture should be involved along with other stakeholders such as the Adult Education Association, the Zambia National Education Coalition and UNESCO.
- The UNESCO representative expressed interest in replicating the project in other areas but not the whole country. She requested information on the cost of setting up and running a centre.
- The centres were implored to maintain the equipment that they had. It was emphasised that this was the first step towards sustaining the programme.

(Note: The complete reports of these dissemination workshops are available from COL.)

ONE YEAR LATER: IMPACT ASSESSMENT

The collection and analysis of data following the official completion of the pilot project on 31 December 2002 took much longer than was anticipated, in part because some members of the project evaluation team had personal matters arise that delayed the completion of their reports. While the delay was unfortunate, it did allow an opportunity to conduct follow-up studies to examine the degree to which the activities initiated during the pilot phase were being carried on by the local partners at the centres. These follow-up studies were carried out by the country director in India and by the country evaluator in Zambia. The following summations are based on the reports they submitted.

Learning Centres

The learning centres were continuing to operate in both India and Zambia, but with some changes.

INDIA

- The number of centres had been increased at SRC Jaipur to four from the earlier two. The additional centres had been each equipped with a
computer, TV, VCR, a still camera and five learning packages. These centres were opened in partnership with locally based NGOs who now run and “own” them. SRC Jaipur provides training to the NGOs as well as technical support, although this is becoming less needed due to the presence of computer technicians and technical institutes in the villages and small towns of Rajasthan. The community now feels that it has a stake and “owns” the equipment, which has stirred debate about whether the learning centres should be located in a home or in the panchayat ghar (local government office).

- SRC Indore had to shift one centre, moving it to a location where the parent NGO has a range of other activities, enabling them to optimise educational activities while integrating the operation and maintenance of the centre into their overall budget. The community contributed to the move by constructing a three-room building to house the centre. The community now decides who will learn, what will be taught and the pedagogical methods – an example, perhaps, of the impact of staff interactions with MSSRF project staff.

- There have also been changes at the MSSRF centres. While those at Samiyarpatty, Thonimalai and Pudupatty remain more or less stable, the Koli Hills centre has been badly affected by a lengthy period of having no electricity in the village. However, the other centres have continued to operate and attract new participants.

**Zambia**

More people have come to know about the facilities available at the main centres in all locations with the result that the services they offer are being used much more by other groups in the communities. For example, in addition to the literacy development activities, other groups such as the Ministry of Agriculture and Cooperatives, the Ministry of Health and many more NGOs are using the centres for meetings, workshops and for accessing technology services. This has helped to generate supporting revenue.

**Funding**

One of the concerns throughout the duration of the project was whether the centres would be sustainable when donor funding was no longer available. It was hoped that the partner organisations would feel that the activities were
sufficiently useful to justify incorporating them into their ongoing budgets. This has happened to some degree in most instances.

For example, in India, funding has been integrated into the overall activities of the local partner organisations. Indirect costs are borne by the institution as part of its regular activities by integrating salaries and other fixed costs into core budgets, leaving only the direct operating costs to be addressed. This is being done in different ways in different centres:

- At SRC Jaipur, the partnership with other local NGOs has meant that their own costs are substantially reduced.
- SRC Indore is using some unspent balance from the initial project funding to sustain activities, but is charging for teaching computer skills, feeling that the clientele for this activity can afford to pay a fee.
- MSSRF has covered staffing costs from the outset of the project, but is now generating some revenue through training programmes provided for other organisations for the use of ICTs in literacy and other community development work.

All three partners are looking for other sources of funding. Some have projects with UNESCO, which help cover some costs. MSSRF is exploring the area of private-public partnership. For example, the fees that MSSRF charges for training are shared with the local SHG which enables them to run the learning centres on a fifty-fifty basis. Other examples of revenue generation include charging for Internet services and for using the camera to take photos for village and family functions.

In Zambia, the minister has committed to sustaining the programmes at the centres, a difficult task because the overall funding for the ministry is severely constrained. As mentioned previously, each of the centres is generating revenues by offering access to equipment, facilities and services to other organisations in the community. While this is helpful in terms of covering some operating costs such as stationery, fuel to visit sub-centres, cleaning materials, etc., it is not likely to be sufficient to sustain the overall operations of the centres. Given the clear evidence that many other government departments have found that the technologies, facilities and services are useful, an obvious strategy would be for core operating costs to be shared among the MCDSS and other ministries that make use of the centres.
Programme Content and Learning Materials

In India, the demand for continuing education is increasing as the relationship between literacy and livelihood becomes more integrated. For example:

- The MSSRF centres are offering more information on topics such as the role of self-help groups (SHGs) and livelihood, health, nutrition, use of libraries, etc., and are continuing to develop learning materials on such topics at the centres, often with a high degree of learner participation.
- Semi-literate women in Rajasthan are keen to learn English so they can monitor their children’s studies and learn to operate computers.

While very little learning material has been produced at the SRC centres, both SRCs have completed the multimedia lessons they were preparing during the project, and SRC Jaipur has produced software for the evaluation of literacy data that is now nationally certified for use by all SRCs in the country. SRC Indore uses learning materials that are produced as part of their regular activities and this will increase as the project is integrated into the mainstream activities of the organisation.

In Zambia, the centres have continued producing materials where possible, often helping NGOs in the area to prepare and reproduce learning materials for their own literacy classes. For example:

- Katete centre reproduced 42 Mvelani primers for Lutheran church literacy classes, raising over USD200 to help with centre expenses. However, staff from the sub-centres have not been able to make much use of the facilities at the main centres because of the long distances involved and lack of transport for field staff. The centre has, however, recorded folk tales and the tapes have been rotating amongst the sub-centres so that learners can share knowledge.
- Kabwe centre reprinted copies of the Kutikeni primers for new learners and produced the following literacy materials: *Shibukeni Mukubelenga* (a booklet developed by an instructor containing six different reading lessons), *Ukusumbula Abasambi* (reading material developed by a learner and an instructor) and *Better Ways of Fishing* (material using both print and audiotape that was developed by an instructor from Waya sub-centre).
- Staff at Monze produced the following materials, in some cases with their learners:
  - *Musololi Mubotu*: Material in print form meant to assist learners at reading in the Tonga language.
o Atwiya Akubal: Promotional material on better farming methods.

o Kunywa Meenda Mabotu: A pamphlet containing information on safe drinking water.

o Twaambyo: A pamphlet on good behaviour prepared by one of the literacy classes.

o Condoms: An audiorecording prepared by a literacy class about promoting family planning and avoiding STDs.

Learners

The participation rates of learners have continued to be strongly influenced by the vagaries of the weather and the cycles of agricultural production.

INDIA

Drought conditions in Madhya Pradesh and Rajasthan and the seasonal migration of the landless labourers in Tamil Nadu have affected learners’ ability to attend centre programmes. Nevertheless, the number of learners attending the centres has remained relatively constant with the exception of the MSSRF centre at Thonimalai where there has been an increase.

The type of learner coming to the Indian centres has also changed. There is an increase in the number of younger learners and a larger number of girls interested in learning about income-generating activities such as weaving, farming, screen printing or literacy as a part of their career planning. Many girls come for the Family Life Initiative programme, where gender-related issues are discussed in groups.

Content is changing both in format and the way it is delivered, which has affected the learners. Development of post-literacy materials and training on “quality literacy” has been taking place at some of the MSSRF centres, particularly at the Pudupatty centre where learners are interested in post-literacy packages delivered, in part, through a wired community radio network. “Quality literacy” is a term that MSSRF is experimenting with in an effort to establish the extent to which the project has achieved its stated objectives. It is defined as the extent to which the consumer (the learner in this case), feels that his or her needs have been met at the right time, at the right cost and in the appropriate time and space. In other words, if the learner wants to meet his or her needs for simple accountancy of farm outputs and sales, has the project enabled him or her to achieve that goal?
Some “literacy graduates” from the centres have become mentors for other learners in the community. For example, at Palaniamma in Tamil Nadu, a destitute village woman now helps others learn Tamil while she herself is learning English. Her status in the community has risen from being a beggar to a contributor of community learning activities.

ZAMBIA

In Zambia, literacy activities have continued at all the centres with total enrolments of about 570 – still predominantly made up of females. Many of these learners became involved after the pilot phase of the project ended. For example:

- Katete started 12 new literacy classes. Centre staff recruited previous learners to teach the newly opened classes as volunteer instructors. However, staff reported that previous learners had not done anything to advance their computer skills which they had acquired, and none of them had enrolled in formal education apart from forming drama groups which had become popular in the area.
- Kabwe began three new classes, however staff reported that many previous learners had stopped attending the centres. Some had acquired reading and writing skills and therefore did not find the need to continue with the literacy classes, others had learned how to use a computer and others felt they were not making progress.
- The centres at Monze experienced an overall increase in learner participation, perhaps because their operations had been interrupted during the course of the pilot.

Facilitators, Tutors and Staff

Since the completion of the pilot project, there has been less emphasis on training, but it has not been neglected.

In India, MSSRF has ensured that their staff regularly receives training in the pedagogy of adult learning and literacy education, SRC Indore has ensured that their staff has been trained in participatory rural appraisal techniques, and SRC Jaipur conducts regular training for the NGOs who now operate the project. Every monthly review meeting is coupled with some form of training in adult education or technology. Since the programme budget cannot underwrite the
cost of training on a regular basis, efforts are made as and when possible to combine meetings with training. The staff at SRC Jaipur and Indore, especially those engaged in this project, have been co-opted for the training of SRC staff and field workers in the state of Bihar.

Centre staff, especially the facilitators, felt they had grown personally. They reported feeling motivated to improve and learn, and a greater sense of self-esteem and confidence to carry out innovative efforts. At SRC Jaipur, one facilitator has set up his own NGO in a few villages and is serving as an agent of change. A young woman, a product of a broken marriage, is now a schoolteacher while also carrying on as a facilitator. Similar instances of facilitators improving their education and proceeding with higher education were reported at Indore as well.

The project managers at the SRC centres feel that for most of the duration of the project, they were coming to terms with understanding and getting comfortable with the use of ICTs, which challenged their own prior training and preconceived notions of literacy and adult education. They felt that trial and error as well as innovation were hallmarks of the project. Staff at MSSRF felt that, not having worked with adult education and literacy before, they had to come to terms with educational pedagogy and with determining how ICTs could be used in adult education.

In Zambia, the reactions were similar among the staff and tutors, but there were also issues related to their perception of how this project related to their day-to-day work. Many were expected to carry out other functions not related to the project, which sometimes created difficulties in terms of priorities. However, all instructors said they had benefited from the experience. Some said they would have liked to have received a certificate in recognition of the training they had taken!

**Use of Technologies**

**INDIA**

The level of access to ICT infrastructure has changed somewhat in India. For example, one of the centres now has dial-up Internet connectivity, something not possible two or three years ago. Also, the growth of mobile telephony in the villages now enables people to get regular news and other updates.
This has rendered access to the Internet less urgent – at least for those purposes. There have also been changes at some MSSRF centres with the development of a wired community radio system.

The original equipment has been maintained at all centres in India. This has become less of a problem with the increasing number of locally available repair services.

**ZAMBIA**

In Zambia, most of the ICT equipment was in good working order. The only problem was the servicing and maintenance of the photocopier because there was no expert available locally and the centres had to depend on people from Lusaka who were very expensive.

Table 7.1 shows the uses being made of the various technologies.

**TABLE 7.1: ONGOING USE OF EQUIPMENT AT THE ZAMBIA CENTRES**

<table>
<thead>
<tr>
<th>ICT EQUIPMENT</th>
<th>USE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYLLABLE BOARD</td>
<td>USED BY NEW LEARNERS FOR LITERACY LESSONS.</td>
</tr>
<tr>
<td>COMPUTERS AND PRINTER</td>
<td>USED BY LEARNERS, BOTH OLD AND NEW. THE NEW ONES LEARN HOW TO BOOT, ACCESS FILES, CREATE DOCUMENTS AND TYPE. THE CONTINUING LEARNERS LEARN HOW TO COPY FILES, CUT AND PASTE, EDIT, AND OTHER ADVANCED ROUTINES TO PRODUCE MATERIALS.</td>
</tr>
<tr>
<td>TV AND VCR</td>
<td>USED BY LEARNERS TO WATCH LOCAL NEWS IN LOCAL LANGUAGES AND ALSO WATCH VIDEO RECORDINGS OF LOCAL FUNCTIONS, AS WELL AS SHOWS CONTAINING INFORMATION ON HIV/AIDS, DRAMAS, ETC.</td>
</tr>
<tr>
<td>VIDEO CAMERA</td>
<td>USED TO RECORD LOCAL FUNCTIONS. THIS WAS THE MAJOR SOURCE OF FUNDRAISING FOR THE CENTRE. IT IS NOT USED MUCH FOR PRODUCTION OF MATERIALS.</td>
</tr>
<tr>
<td>DIGITAL CAMERA</td>
<td>MOSTLY USED TO GET PICTURES FOR LOCALLY PRODUCED MATERIALS.</td>
</tr>
<tr>
<td>AUDIOTAPE RECORDERS</td>
<td>USED TO RECORD FOLK TALES AND LEARNERS’ VOICES TO BE PLAYED BACK LATER.</td>
</tr>
<tr>
<td>SCANNER</td>
<td>USED TO SCAN PICTURES FROM BOOKS OR PAMPHLETS FOR INCLUSION IN MATERIALS.</td>
</tr>
<tr>
<td>PHOTOCOPIER</td>
<td>USED FOR PHOTOCOPYING LEARNERS’ WORK TO BE USED DURING LESSONS. ALSO THE MCDSS USES THE COPIER APART FROM INDIVIDUALS IN THE COMMUNITY WHO ARE CHARGED FOR THE SERVICE.</td>
</tr>
<tr>
<td>TELEPHONE/FAX</td>
<td>AT THE TIME OF THE VISIT, BOTH THE TELEPHONE AND THE FAX LINES WERE NOT OPERATIONAL. THEY WERE IN GOOD WORKING ORDER, BUT THE SERVICE PROVIDER HAD DISCONNECTED THE LINES DUE TO NON-SETTLEMENT OF OUTSTANDING BILLS.</td>
</tr>
</tbody>
</table>
Communities and Partner Organisations

INDIA

All three local partners in India felt their own capacities had been enhanced. MSSRF, a highly techno-savvy institution, now feels more comfortable with adult education and the nature of change that it brings about. The two SRCs feel that, in a span of three years, their organisations have changed from being solely paper-based to having incorporated ICTs into their operations. This, they report, has resulted in a sea change in organisational climate. Most visible is the team approach to project management and an understanding of the importance of networking and collaboration, which has been fostered in part by the interactions that occurred among the staff of the centres during the project, but which has been difficult to sustain because of costs.

The two SRCs often share experiences when meeting in connection with other activities. SRC Indore has been sharing ideas, findings and other information through e-mail with the MSSRF, and has published a paper from MSSRF as well.

The project appears not to have had much impact on the policy environment as it affects literacy programmes in India. However, the local partners don’t see this as necessarily bad because it allows them a relatively free hand to innovate and experiment with different technologies. The Jaipur and Indore SRCs are sharing their knowledge with other SRCs and both are engaged in enabling similar activities in the State of Bihar through the sister SRC there.

As a result of the dissemination meeting in India, other NGOs such as the Foundation for Research in Community Health in Maharashtra and the Telugu Velugu poverty alleviation initiative in Andhra Pradesh have begun exploring how technology can be used to address literacy and basic education in different sectors. Donor agencies such as UNESCO and UNICEF have visited the project sites and are keen on taking this experience with them as they design centres in other parts of Asia.

The MSSRF reported that it provided field training on the methodologies used in the project to 40 representatives from NGOs in Africa and that they have established centres in their countries upon their return. The MSSRF has also
indicated that financial institutions such as banks are increasingly looking at the literacy centres as economically viable options to explore, especially when such centres can become a “common property resource” in villages rather than just an “Internet kiosk.”

ZAMBIA

In Zambia, the staff at all three centres are working collaboratively with other stakeholders in the areas of operations and programmes. At Katete the acting district administrator has promised to purchase toner for the colour printer at the centre as a sign of appreciation for the excellent services the centre provides. The Katete district staff have also trained two literacy instructors for the Lutheran World Federation, and there were plans to produce teaching materials for the Ministry of Health as well as material on conservation farming methods and teaching guides for the Ministry of Agriculture and Cooperatives. The Pilgrim Wesleyan Church has also approached the centre with a view to working together in the literacy programme for their church members. And the Micro Bankers Trust has been offered office accommodation at the centre by the MCDSS. At present, it is assisting the centre with telephone services.

At Kabwe the centre has been visited by a number of organisations and individuals interested in their activities and programmes:

- Eighteen literacy learners from Mpika district, Northern Province, representing Development Organisation for Peoples Empowerment (DOPE), toured the main centre and St. Pauls and Waya sub-centres.
- The district administrator for Kapiri Mposhi visited to learn about the centre operations.

A CENTRE FACILITATOR AT WORK
• The deputy minister of MCDSS came to learn more about the project and meet with literacy learners
• Staff from Katete and Monze centres exchanged visits to learn and observe and share ideas on operating literacy centres and material development.

Generally, it seems that the communities in which the centres are located have come to feel a sense of ownership of the initiative. However, staff also point out that the project brought “breathtaking” new technologies to conventional literacy programmes, and this, they report, requires new ways of thinking about literacy definitions as well as programmes, which should have been more effectively addressed at the beginning. They feel this would have brought about a common understanding of what the project was about more quickly, which would have resulted in more dramatic results.
Any pilot project raises the question, What was learned? The following summary comments attempt to respond to that question – hopefully in a way that will be of use to others contemplating how these technologies might be applied in a particular context. These comments are not put forward as recommendations, but rather as a synthesis of the outcomes obtained in the specific context of this project.

**PROJECT MANAGEMENT**

1. The pre-implementation phase took much longer than had been anticipated and progress was very slow during the first two years of implementation. In fact the project only reached “take-off” during the final year of the pilot period. In many respects, the implementation of the project followed a classic project development curve with the initial period being marked by slow rates of adoption, followed by more rapid growth as people began to see results and become comfortable with the innovation.

2. Working with universities as the implementing partners was a mixed blessing. On the positive side, the reputations of the universities brought credibility and prestige to the project, as evidenced by ad hoc comments to the project manager from some of the local partners. On the negative side, the bureaucratic processes of the universities concerning matters such as budget management, equipment purchasing and distribution, spending approvals and spending audit reports were at best cumbersome and frustrating for the directors. While none of this was intentional, the fact is that the core business processes of such organisations are not set up to deal with flexible, project-based management that is focused on addressing the needs of third-party partners.
3. The slow pace of administrative decision-making by the implementing partners had several deleterious effects on the project. For example, the delay in getting the centres established and equipped and in providing the training for centre staff and tutors resulted in many months of lost time. This was frustrating for the local partners as their expectations for getting the project underway were not met and, in some cases, led to a degree of cynicism that took time to dissipate.

4. The experience in both countries showed that it would have been helpful if the initial efforts to define a common perspective and vision had been constantly reiterated so that a common vision would have evolved more quickly among those involved – by both the implementing and local partner organisations. Many of the issues that delayed the implementation could have been dealt with much faster if everyone had understood the nature of the project in the same way.

5. The lack of shared vision resulted in a lack of shared ownership of the project, both between and within some partner organisations. In Zambia for example, the country leader depended on staff in various administrative units who perceived the project as belonging to MCDSS since virtually everything being purchased and carried out by way of services was for the literacy centres – which did not belong to the University of Zambia! A similar situation existed within MCDSS. While the permanent secretary, the director of community development, and the assistant director of community development all demonstrated a strong sense of ownership, this was not always shared by some of their colleagues who were not directly involved and, therefore, who tended to see the project as belonging to the university. A similar situation existed at SRC Jaipur. Again, more time spent explaining the project and developing an understanding of the need for a team approach would have paid dividends.

6. The people involved from the partner organisations tended to have other duties as well as those concerning the project. This often made it difficult to give priority to project matters in a timely manner. Furthermore, at the University of Zambia, the project was being implemented at a time when extra work was being rewarded through extra compensation. Previously, any work over and above one’s normal teaching load did not attract any financial rewards as it was considered a contribution to the university service and used as a criterion for promotion. However, in
the context of this project, these contributions were expected from the implementing partner as part of the partnership agreement. In hindsight, some monetary incentives might have been appropriate.

7. In both countries, a more detailed situation analysis to not only explain the project to the implementing and local partners, but also to understand their readiness and capacities to undertake these roles would have been useful. It would have helped to clarify those aspects of project implementation that needed fiscal support as well as made the implementation time lines more realistic.

8. Implementing a project such as this simply takes time. The decision processes of partners that have different cultural contexts must be respected, and, as in most developing countries, issues such as access to vendors, transportation, skilled service people, etc., is limited. As a result, the implementation time line expectations that were created at the beginning of the project proved unrealistic.

ICT HARDWARE

9. There is a principle that derives from the literature on the adoption and diffusion of innovation that seemed to operate in connection with the involvement of the MSSRF as a local partner in India. The principle is that the speed of adoption of an innovation is directly related to the extent it is seen as assisting and adding value to current tasks, rather than as an “add-on” that will either add costs to current tasks or make them more complex. The MSSRF had for several years been demonstrating how ICTs in community centres could be used effectively for economic and social development. When they were approached about becoming involved in the project, it was seen as an opportunity to add value to what they were already doing. However, for the other two local partners in India, the state resource centres at Indore and Jaipur, the use of ICT, while interesting, was seen as an innovation to a much greater extent.

10. The experience highlighted the need to plan for hardware and its maintenance, including the problem of non-availability of electricity. MSSRF installed solar panels to augment the supply of electricity and thereby ensured uninterrupted power for about 22 hours.

11. Internet and e-mail connectivity was not possible at most centres, which was a great disappointment in terms of the original goals of the project.
However, most of the staff of the implementing and local partner organisations did have access and, by the end of the project, were using it to communicate with each other and to search for materials on the Internet. However, this latter activity wasn’t sustained because most of the available materials are in English.

12. The use of wireless technology developed remarkably over the duration of the project, particularly in India where cell phones became commonplace in several of the communities. Any replication of this project should consider how these technologies might be incorporated.

LEARNERS

13. Progress in the acquisition of literacy skills was variable, in part because of variable participation rates due to seasonal labour requirements, illness, family and differing enrolment times. This is a problem in any regularly scheduled group-teaching context such as existed at the SRCs in India and at the centres in Zambia. It appeared to be less of a problem at MSSRF – in part because of the high level of community and family involvement, but also because the instruction was more individualised and flexible.

14. It was not possible to collect pre- and post-quantitative data in order to measure the gains achieved by the learners participating in the project. However, the experience demonstrated that use of ICT had the following effects:

- It was motivating for learners.
- Learning to use the equipment enhanced learners’ self-esteem.
- The use of multimedia obviously provides more learning channels, enabling more flexibility to accommodate different learning styles. For example, many learners reported that being able to use audio, print and video together helped them to learn and remember.
- The novelty and entertainment value of technology, particularly multimedia technologies, can be a source of attraction to bring adults into educational programmes and to sustain their interest in learning.

15. No matter how rudimentary the literacy skills that the learners had acquired were, most of them reported that they were applying them
in their daily lives. This point was explored further in India where the country evaluator concluded the following:

- In general, the use of writing skills among neo-literate learners was used less than reading skills, perhaps because of more limited opportunities in their immediate environment to use writing skills.
- Learners also used numeracy skills in activities as diverse as computing floor areas, monitoring the educational progress of their school-going children and computing bus fares.
- The impact of literacy was greater for learners who could link literacy with their livelihood activities.
- Enhancement of literacy skills and self-esteem appeared to lead to increased participation in SHG meetings and activities at some of the MSSRF centres.

16. Learning to use the ICT equipment was not difficult for staff, literacy learners, or people from the communities once they overcame their initial trepidation.

DEVELOPMENT OF LEARNING MATERIALS, CONTENT AND TEACHING

17. The development of locally based learning materials appeared to have important beneficial effects on learners’ motivation to attend to their learning tasks – both physically and mentally. It also generated considerable interest in the communities where the centres were located.

18. The content of literacy “curricula” became more focused on functionality. At the MSSRF centres it was based primarily on the interests of the learner and his or her family. In Zambia the content was developed to include knowledge aimed at empowering communities to prevent or manage common serious diseases, such as malaria, diarrhea and HIV/AIDS, in addition to knowledge about growing crops, such as maize and groundnuts, as emphasised in National Literacy Programme curriculum. Functionality of another sort was added through the development of local materials focused on village elders, local culture, and community issues.

19. The process of developing learning materials became more decentralised and involved other stakeholders as staff and tutors gained experience in
using the technology and as their understanding of instructional design developed. This enabled a shift from having to rely solely on centrally produced materials as locally produced materials became available. In India, this shift was particularly evident at SRC Indore. Interestingly, the MSSRF centres began with an exclusive focus on locally developed materials and only latterly began using some materials from the SRC for the State of Tamil Nadu. In Zambia, learners contributed to the development of locally produced teaching materials as did people in local communities who recorded stories based on their life experiences or folklore. Thus the literacy primer was no longer the only teaching material.

20. The experiences at the SRC centres in India and the Zambian centres demonstrated that print materials can readily be adapted for computer applications in ways that enhance both instructional value and learner motivation. This seems important since so much of the currently available material is in print format.

21. The teaching processes that evolved at many of the centres seemed to foster a sense of teamwork and collaboration among both learners and tutors. This was evident in the co-operation required to develop locally based materials and in the way learners began assisting each other with tasks that ranged from operating the equipment to volunteer peer-to-peer tutoring. It was also particularly evident in Zambia as teams emerged that included staff from the centres, NGOs and other government ministries for the purpose of preparing materials. Lastly, centre staff developed skills and gained experience in training local literacy staff.

CAPACITY-BUILDING

22. By the end of the project all of the local partners stated that their organisations had benefited in terms of staff training and overall enhanced capacity. The most obvious example was the provision of ICT hardware and the staff training that enabled them to use it. However, in spite of this, not all of them began with the same degree of openness to changing their current practices. Those that were motivated more by the prospect of material benefits rather than by a commitment to explore how they might do their work differently took more time to begin using the technologies creatively with their staff and learners. The project also
made it possible to refurbish some buildings for use as centres, thus adding another dimension to the enhancement of infrastructure.

23. In Zambia, the project helped the Ministry of Community Development and Social Services revive the provision of literacy programmes in the selected communities. It also gave impetus to the implementation of the ministry’s new policy objectives related to literacy work. These were to increase and expand access to quality literacy programmes, to recruit and train instructors (including instructors for people with visual impairments), to develop instructional materials relating to literacy and poverty reduction and to procure equipment for the literacy programme such as computers and photocopiers.

24. There is now a small cadre of people within each partner organisation with knowledge and experience in the use of ICT in literacy programmes in areas such as teaching, development of materials, centre management and ICT equipment use and maintenance.

25. Communities now have a new resource in the group of people that have acquired skills in using computers and other ICTs.

COST

26. There are no recipes for determining the cost of incorporating ICT applications into literacy programmes, in part because equipment and labour costs vary, but also because implementation costs depend so much on the current realities in the particular context. The vastly differing situations between the Zambian and the MSSRF contexts demonstrates the point. The importance of first developing a plan that defines the ends to be achieved, the means for achieving them and the context of the applications cannot be overemphasised. Elements of the plan should include:

- The types of literacy outcomes to be achieved
- The ICT equipment needed, how it is to contribute to the achievement of outcomes and how it is to be acquired (e.g., through lease, purchase, donation, etc.)
- Whether the application is to be an integration into an existing programme model or as an add-on activity requiring some duplication of staff and facilities
• Necessary staff requirements and competencies in areas such as ICT use, management and instructional design
• Training needed for staff and learners, and resources for providing it
• The degree to which the development of learning materials will be decentralised
• The availability and reliability of electricity and connectivity
• The procedures for servicing equipment
• The involvement and contributions from other stakeholders

27. The experience in Zambia suggests that the major differences in the costs associated with this project, as compared to a more exclusively print-based model, were in the initial set-up and equipping of the centres and the ICT-related training.

**SUSTAINABILITY**

28. The sustainability of the community learning centres model used in this project would seem to depend on a combination of the following factors:
• The more the centres can be multifunctional and utilised by several stakeholders, the more likely they can be sustained.
• The greater the degree to which the local community is able to feel ownership of the centre, the more likely people are to use it and support its continuation.
• Local managers need to be encouraged to engage in entrepreneurial activities that generate revenue to support centre operations.
• Sustainability will be very much influenced by the degree to which government ministries, NGOs and other organisations involved in literacy education decide to spend the resources they currently have in different ways. The use of ICTs in literacy, or any other type of education, is not likely to be sustained if it is viewed as a special project that is additional and peripheral to normative practices.
In the Foreword to this report, Professor Alan Rogers presents the notion of a “fault line” that is appearing in developing countries as a result of contrasting world views about the purposes and processes of adult literacy. He states that on one side of the fault line there is the view that adult literacy is analogous to adult schooling with programmes set within the educational sector, using learning materials that have been developed by “experts,” and with the essential elements of the learning process controlled by the providers. On the other side are those who see adult literacy as inextricably linked to social and economic development with more of the control of programmes, and the determination of content, resting with the literacy learners. The emphasis is more on the use rather than the acquisition of literacy skills.

It is fitting to conclude this report with some observations about the COLLIT project in the context of Professor Rogers’ fault line analysis, in part because the different approaches used by the partners in implementing the project illustrate these two world views of adult literacy, and also because of the apparent impact that the use of ICTs had in terms of modifying these views over the course of the project.

The differing views were most evident in the way the project was implemented by the local partners in India. The SRCs, integral components of the national adult education infrastructure, began the project using a national curriculum model, scheduled classes and pre-existing materials. MSSRF, on the other hand, incorporated the project into their ongoing social and economic development activities, with the learners, their families and their communities as the starting point for developing both curriculum and materials.

These contrasting approaches led to different perceptions of success. MSSRF defined a “quality” literacy programme as one that met the goals of the learner rather than the standards of an externally developed literacy curriculum. In contrast, the SRCs tended to use the examinations associated with the national literacy curriculum to determine learner achievement. However the fault line began to blur as the project progressed. MSSRF staff began to foresee that some of their learners might want to progress into the national curriculum and
achieve the recognition of meeting national literacy standards. The SRC staff, on the other hand, became more “learner focused” in terms of both outcomes and learning materials.

The implementation of the project in Zambia straddled the fault line in several ways. The national literacy programme is the responsibility of the Community Development division of the Ministry of Community Development and Social Services rather than the Ministry of Education, which perhaps accounts for the strong emphasis on the need for the programme content to be functional in the sense of being applicable to the health and livelihood of the learners. This relationship between literacy and livelihood is a core concept guiding all literacy programme activities of the ministry. On the other hand, the basic delivery model, with scheduled classes and centrally produced materials, is largely borrowed from traditional education. However, this changed, as it did in India, as the project evolved and learners and tutors became more involved in the development of learning materials.

The fault line also has implications regarding the use of ICT in literacy programmes. Those on the “literacy is like education” side of the fault line would be more likely to use the technologies to produce curriculum materials for use in classrooms and, perhaps, to assist in classroom teaching. Those that view literacy education as an ingredient of socio-economic development would be more likely to put the technology in the hands of the learners and to encourage applications that are meaningful in the context of their daily lives.

However, in the COLLIT project, the use of ICTs appeared to contribute to a blurring of the fault line. For example:

- When learners and their tutors were provided with the tools and skills to produce their own learning materials, the focus of their learning shifted to the issues and outcomes that were priorities for them rather than those of the programme provider.
- The enhanced self-esteem and personal confidence resulting from becoming computer literate appeared to foster teamwork and collaboration among learners as well as a greater degree of involvement in the development of their communities generally – and, presumably, a demand for greater control over their learning.
- The need to share the costs of providing ICT appliances, related infrastructure, electricity, connectivity and training became an incentive for
inter-agency collaboration in order to achieve sustainability. This seemed particularly evident at the Katete centre in Zambia where the involvement of different agencies led to collaboration on the development of learning materials for use in a variety of contexts.

Obviously, the circumstances that pertain to the implementation of any given literacy education initiative are important determinants of how it can be delivered. The lesson that evolves from this project with regard to the use of technologies seems to be to “start where you can,” keeping in mind that, given the opportunity, learners are quite capable of using the appliances in ways that not only help them achieve educational goals, but that are also remarkably motivating and applicable to other facets of their lives.