

# TEACHING ADULTS TO READ

## *The World Education Approach to Adult Literacy Program Design*

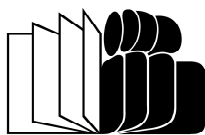
*John P. Comings  
Lisa Soricone*

**National Center for the Study of Adult Learning and Literacy  
Harvard University Graduate School of Education  
Cambridge, Massachusetts**

Pamela Civins & Barbara Garner & David Kahler & Chij Shrestha & Cristine Smith

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## Introduction

*“I want to be able to read the names of the gods before I die.”*

The statement above was made by a woman in Nepal in response to the question, “Why do you want to learn to read?” Her answer might seem frivolous to a national planner looking to allocate scarce resources in order to affect economic growth, but such a conclusion would be incorrect. While learning to read the names of the gods, this Nepalese woman can become literate. In most cases, literate women have healthier children, smaller families, and contribute more to family income and community development than do illiterate women.

Almost all of the world’s one billion illiterate adults, most of whom live in the poorest countries, probably want to be literate, but very few of them have opportunities to learn. The literacy programs that do exist are often poorly designed, ill managed, and inconvenient. This monograph draws on existing literature and specific experiences in Asia and Africa to provide advice on how to design, implement, and sustain adult literacy programs.

The United Nations has identified 2003–2013 as the World Literacy Decade and wants to ensure that every child and adult has an opportunity to learn to read. Most of the resources for this effort will support primary school education with the hope that by the end of the decade, every school-age child will be learning to read. This investment in schools will not, however, provide an opportunity for adults, or the many children who are not able to attend school, to learn during the coming decade. The United Nations Educational, Scientific and Cultural Organization (UNESCO) estimates that more than 860 million adults are illiterate and that approximately 100 million school-age children are not currently in school.<sup>1</sup> Literacy programs for adults and out-of-school youth offer a chance for almost one billion people to learn.

The World Literacy Decade is not the first time an international commitment to literacy for all has been voiced. The member nations of UNESCO, the leaders of the major international development institutions, and a large contingent of nongovernmental organizations (NGOs) made a commitment to education for all more than 15 years ago. In March of 1990, the world’s educational leadership gathered in Jomtien, Thailand to take part in the World Conference on Education for All. At the end of the conference, the delegates voted to support the *World Declaration on Education for All* and the *Framework for Action to Meet Basic Learning Needs* (UNESCO, 1990). The right of adults to have access to education was affirmed in the *Declaration’s* first article, which states that: “Every person—child, youth and adult—shall be able to benefit from educational opportunities designed to meet their basic learning needs” (p. 3).

The *Framework* set the specific goal for adult literacy as the:

*Reduction of the adult illiteracy rate (the appropriate age group to be determined in each country) to, say, one-half its 1990 level by the year 2000, with sufficient emphasis on*

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<sup>1</sup> See: UNESCO Institute for Statistics at [www.uis.unesco.org](http://www.uis.unesco.org).

*female literacy to significantly reduce the current disparity between male and female illiteracy rates. (p. 3)*

Over the past 15 years, governments, donor agencies, and NGOs have explored ways to meet this important goal and have developed several successful approaches. However, the world did not achieve the desired reduction in illiteracy by the year 2000. In fact, the total number of adults and out-of-school youth who are illiterate now is about the same as it was in 1990, though this number is a smaller percentage of a larger world population. The World Literacy Decade goal can only be achieved with additional resources, and all resources must be more wisely managed.

World Education was an NGO delegate at the Jomtein conference, and since that time has been supporting nonformal literacy programs for adults and out-of-school youth. World Education's approach to literacy instruction has developed over the course of more than 50 years of experience in Asia, Africa, and the United States. World Education began working in adult literacy in India in 1951. Since its founding, the organization has supported adult literacy efforts in 15 countries.<sup>2</sup>

Over the past half century, World Education has developed an approach to adult literacy that is grounded both in reading research and the experience of trying to make programs work under difficult circumstances. The materials and instructional design of these programs also draw from projects carried out by other NGOs and governments in several countries, and they have been improved based on evaluation findings. Projects in Nepal, Mali, and Guinea, which are highlighted here, provide specific examples of programs that were influenced by the approach set out in this monograph. The approach to adult literacy presented here is heuristic; that is, the approach is not based on a specific theory of literacy learning but, rather, draws the best elements from a wide array of theories and approaches.

While no single document can provide all of the details needed to carry out a successful literacy program in all situations, this monograph describes essential elements and processes that could be adapted to the specific needs of different populations. The monograph begins with the rationale for investment in adult literacy programs and then provides a brief history of adult literacy efforts. Together, these two sections establish a foundation for understanding the role of successful literacy programs in furthering the objectives of national development plans. Program developers may find these sections useful in arguing for investment in adult literacy programs.

The largest section, "Elements of Successful Programs," provides guidelines for the design of literacy programs, and these guidelines can also serve as a framework for evaluating existing efforts. The "Costs and Financing" section provides information that is useful for preparing a budget and financial plan for a literacy program, and the "Evaluation and Management Information Systems" section explains how to monitor a program's progress and impact. Program staff may find these sections useful for designing implementation plans.

The case study section discusses work supported by World Education in Nepal, Mali, and Guinea. The "Research and Development" section outlines strategies for how research can support the improvement and expansion of adult literacy programs. The conclusion offers insights about the realistic promise of adult literacy programs. The resources section provides a bibliography of useful materials and Web sites.

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<sup>2</sup> Bangladesh, Benin, Cambodia, Egypt, Ethiopia, Ghana, Guinea, India, Indonesia, Laos, Mali, Nepal, the Philippines, Thailand, and the United States.

## ✍ **Rationale for Adult Literacy Programs**

This monograph uses three terms to describe levels of literacy. *Illiteracy* is used in reference to an adult who has no ability to read, apart from a few memorized words, and possibly knows the letters of the alphabet. *Low literacy* refers to adults who can read but whose reading skill is insufficient to meet the literacy demands in their roles as workers, parents, and citizens. *Literate* is used for adults whose reading skills are sufficient to meet those demands. Though the monograph is focused on reading, writing and math *are* included as equally essential basic skills.

The level of literacy skill that would be considered sufficient in rural Africa is quite different from that in an urban setting in Europe. In fact, the only useful definition of literacy is one that is set within the life context of an individual. In any context, however, the inability to read a simple text, such as those used in the first grade of primary school, is considered complete illiteracy, and UNESCO's estimate of 860 million illiterate adults is made up of people who fit this definition. If literacy is defined more broadly as a proficiency in reading, writing, and math sufficient to compete for good jobs and participate fully in the social and political life of one's country, the number of adults, worldwide, who could benefit from literacy training would be much greater than 860 million.

Since only 21 countries determine national literacy rates by testing the skills of a random sample of their population (OECD & Statistics Canada, 2000), the population of low literate (as opposed to illiterate) adults is difficult to estimate. For example, in 1985 the World Bank (1990) reported the literacy rate in Lesotho as 74%, but in that same year an independent assessment found that only 62% of a sample population could perform satisfactorily on a test of simple reading and writing skills and only 46% could pass a test of basic math (Zieghan, 1992). UNESCO reports the United States' literacy rate at greater than 95%, but the 1992 National Adult Literacy Survey found that at least 21% of the U.S. population had very low reading and math skills (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993).

If low literate adults are added to UNESCO's estimate of 860 million illiterate adults, the total population that could benefit from adult literacy services might be close to 2 billion. Because approximately 100 million of the world's primary school age children are not attending school and some who do attend drop out before acquiring strong literacy skills, the world's illiterate and low literate population probably will not decrease dramatically over the next 10 years without literacy programs for adults and out-of-school youth.

Ten years ago, the World Bank (1994) estimated that 70% of the world's illiterate population was female, and an equal percentage of the world's out-of-school youth were girls. The World Bank found that in many countries, primary school participation rates were lower for girls, and female drop-out rates were higher at every grade. In most countries that have significant rates of illiteracy, those rates were higher for women than for men. In at least 10 countries, the percentage of literate women was less than 20% percent, while the male literacy rate could be as much as twice that of the female rate. The disparity between women and men is probably about the same now. Sometime in the next decade, when efforts to expand access to primary school will provide an education to most children, this disparity may begin to decline, but it could decline sooner with a nonformal education effort targeted at women and girls.

Even if primary school systems could be expanded and improved instantaneously, almost two billion illiterate and low-literate adults and out-of-school youth, the majority of whom would be female, would remain. For the next decade, only literacy programs for adults and out-of-school children can address the needs of this huge population. Development planners, however, have shown little interest in adult literacy programs because they believe that they are ineffective in two critical ways. First, they believe that the benefits to other development sectors (health, family planning, and economic growth, for example) accrue only from primary and secondary school education. Second, they believe that adult literacy programs operate with extremely low efficiency because of high drop-out rates and a quick erosion of skills after program completion. Proposals to fund adult literacy efforts must address these two misconceptions.

## **Benefits**

The hypothesis that adult education results in the same positive impact as formal schooling is sometimes supported, and never contradicted by the present body of empirical studies. However, almost all of the research on benefits from education looks only at formal school and, therefore, some people have been led to believe that adult education has no positive impact.

Research provides ample evidence to support the direct relationship between basic education and positive health indicators, lower fertility rates, higher agricultural productivity, higher family income, and other social and economic indicators. In cases where data can be analyzed by gender, the education of women is usually a much stronger predictor of positive impact. However, almost all of this research has looked at people who gained their basic education in the formal school system, and very few studies employed any measure of literacy skill level, not even a simple reading test. The relationship between education and these development indicators, therefore, is assumed to be years of schooling, not basic skill level attained.

Since little research directly explores the impact of adult literacy programs, this monograph will discuss both the research on the impact of formal education and the few studies that look at the impact of adult literacy programs. Most of these studies examine the relationship between women's educational level and positive health and family-planning behavior. This data will be used to explore the hypothesis that literacy skills acquired by women in adulthood would have some of the same impact, along with additional kinds of impact, as that demonstrated by research on women who attended primary school when they were girls.

Research has identified a strong relationship between levels of maternal education and lower morbidity, mortality, and fertility rates in families (Cochrane, O'Hara, & Leslie, 1980; Grosse & Auffrey, 1989), even after controlling for socioeconomic status (SES) and access to health services (Hobcraft, 1993). Both economic and social gains resulting from girls' education have been documented in multicountry studies (Subbarao & Raney, 1994). In a review of existing literature, Arun Joshi (1994) points out that maternal schooling accounts for as much as half of the positive effects on children's health, while SES is responsible for the other half. Joshi's review also indicates that a mother's schooling is a predictor of her children's long-term nutritional status. Paul Schultz (1993), analyzed aggregate data from 62 low-income countries to determine the factors affecting fertility decline and concluded that, "the education of women is the dominant factor associated with the decline in fertility in the cross-section and over time" and that



“growth in income alone lowers child mortality but has little total (reduced-form) effect on fertility” (p. 63).

Several theories have suggested mechanisms through which education positively affects children’s health. The most direct mechanism is delayed marriage. Girls in school delay marriage until after graduation or, if they drop out, sometime before graduation. Therefore, educated girls usually marry later than girls who never attend school or drop out. Educated young women are more likely than uneducated young women to seek paid employment, which also delays marriage. Women who delay marriage are older when they have their first child and have fewer children in their lifetime. With fewer children these mothers have more time and resources available for themselves and their children, a situation that promotes better health.

A delay in marriage would not usually result from participation in adult literacy classes, because most of the women in those classes would likely be married already. Adolescent girls, who also participate in adult literacy classes, might delay their marriages for the time it takes to complete a literacy class. In many cases, the real impact might come with the next generation. Women who complete adult literacy classes, like their schooled neighbors, are more apt to send their children to school (Comings, Shrestha, & Smith, 1992). Once there, the children’s (particularly daughters’) participation and performance in school is connected to their mother’s education (Ballara, 1991; Bown, 1990); in fact, a mother’s literacy level and reading practices are predictors of her daughter’s level of school attainment (Fuller, Hua, & Snyder, 1994). Manual Izquierdo, in a 1985 study reported by Ballara (1991), concludes that adults who had completed a nonformal literacy course were more likely than adults who had not attended the course to send their daughters to school. Ballara also suggests that children of women educated nonformally perform better in school than children of women with no education at all. A study of Save the Children’s program in Nepal found that literacy class participants sent more of their school-age children to school and that the number of girls attending school increased in villages where the literacy program took place (Reinhold, 1993). This differential in impact may not be due to the literacy skill acquired but, rather, to discussions in the adult literacy class about the need to send girls to school.

Some researchers (LeVine, Uribe, Correa, & Miller, 1991; Lindebaum, Chakraborty, & Elias, 1989) have found that mothers educated in school as girls have internalized an image of the role of teachers, which they subsequently take on in rearing their children. Through this acquired disposition, educated mothers interact more verbally with their children, who in turn make greater time demands on mothers. These mothers then perceive children as time-consuming and limit their family size or space childbirth over a longer period of time. Running counter to these findings, Joshi (1994) does not find that maternal schooling is significantly associated with more verbal responsiveness to children in Nepal, but he suggests that this may be due to cultural constraints on the high-caste women in his study, or that a society must be in a more advanced stage of development (as in Mexico, for example) for this effect to materialize.

Although women usually attend literacy classes for a much shorter time period than girls attend primary school, and are at a time in their lives when role models might influence them less, some changes in parent-child interaction may take place. More importantly, specific child-rearing practices can be taught within the context of a literacy class, and these can have a direct and immediate effect on maternal interactions with children. In the United States, a study based on an intergenerational literacy project,

which included a parenting component, found that 65% of the children whose mothers participated in adult education programs demonstrated educational improvement in school (Van Fossen & Sticht, 1991). Research into the impact of adult literacy classes may find that women do acquire dispositions that have an effect on child-rearing practices, which could lead to lower fertility in the same way as has been reported from primary schooling.

Studies of the effects of literacy skill in rural Mexico, rural Nepal, and urban Zambia found that positive health and fertility behaviors were related to the level of literacy skill retained in adulthood (LeVine et al., 1994). These studies used tests of both literacy and of decontextualized language,<sup>3</sup> a skill related to literacy acquisition, and found that literacy skill level is directly related to better understanding of health messages (printed or broadcast), and, less consistently, to more effective interaction with a nurse or doctor. In addition, these recent studies show that literacy skill acquisition affects both directions of the health and family planning communications channel: Literate women understand more of what they hear about health subjects and are able to communicate with health professionals better than women who are illiterate. The same outcomes may result from literacy skill acquired as an adult.

Unlike primary school, a literacy class can offer a venue for health and family planning education that can have a direct and immediate impact on women who are of childbearing age. Most literacy programs now have some health and family planning information included in their materials. In Nepal, several evaluations found that women's health knowledge improved dramatically as a result of attendance in literacy classes (Comings et al., 1992). In a review of 43 case studies of literacy projects that provided information about the effects of women's nonformal literacy acquisition, Bown (1990) concluded that participation in literacy classes increases the likelihood that women will use oral rehydration therapy and immunization services, follow better nutritional practices, and decide to have a longer interval between births. In relation to family planning, she concluded that a nonformal literacy program for women "can have an immediate and sustained effect on women's opinions and behaviors in matters that will determine family size (as well as possible access to schooling for those girls who would otherwise have been married off)" (p. 14). The Health Education and Adult Literacy (HEAL) project in Nepal, which will be discussed later, showed that positive effects could be even more pronounced when a literacy program is linked directly to a health and family planning service-delivery system.

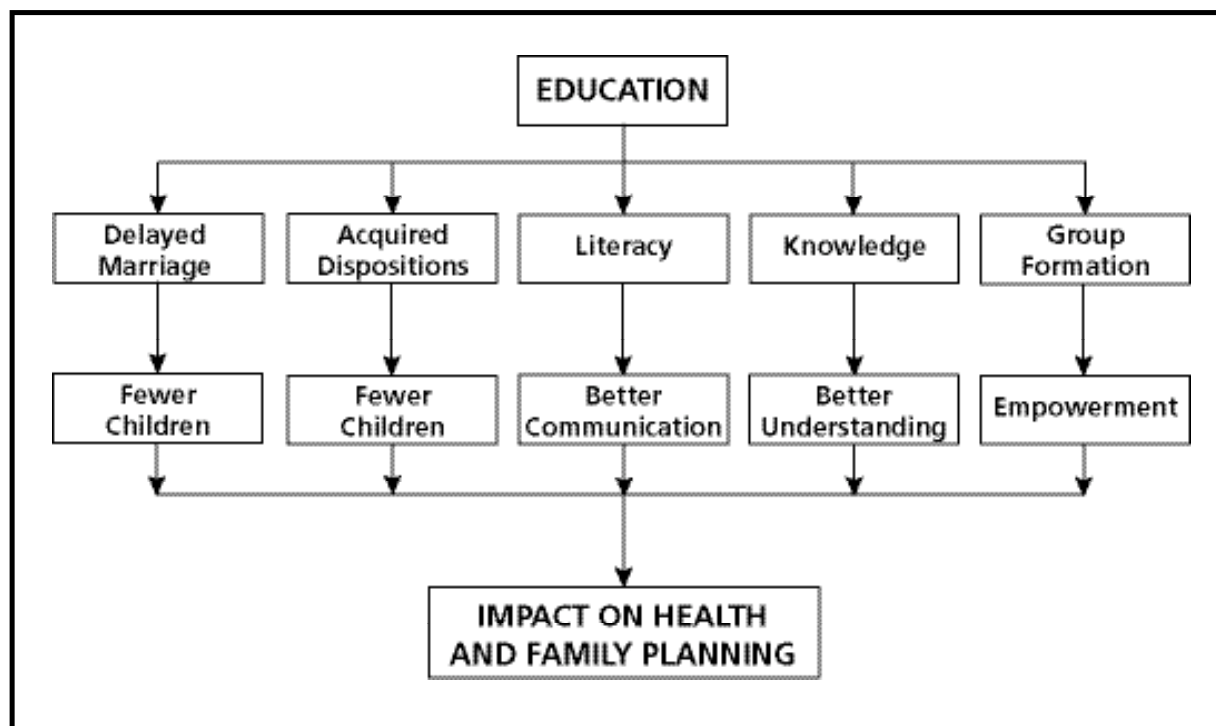
Literacy classes provide an opportunity for women in a community to come together over a long period of time, and this opportunity may generate positive effects from dialogue and peer support. The support of the group, along with the increase in self-confidence and self-efficacy that can come from acquiring literacy skills, may stimulate empowerment. Adult literacy classes serve as a venue for women to discuss a wide array of problems and possible solutions. Girls who go to formal school together do not necessarily live near each other for the rest of their lives. In some cultures, in fact, girls are required to marry away from their home village (exogenous marriage). The positive effects of group formation experienced by literacy class participants, therefore, may not occur among women who attended primary school.

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<sup>3</sup> Decontextualized language is defined as speech that is orientated to the listener and is the form of language used most in schooling. Use of decontextualized language indicates that the speaker is taking into account all of the contextual factors that the listener might not know and providing them in the speech. It is characterized by use of broader category names and abstract vocabulary, which orient the listener to the speaker's situation.

Figure 1 provides a graphic representation of the relationship between women's education and health and family planning. The five mechanisms that mediate between education and positive health and family planning impact are arranged from left to right in the order of their relevance to education experienced as an adult. An adult literacy program is less likely to delay marriage for participants in adult literacy programs, but it could lead to more time in school for their daughters who would, therefore, marry later. "Acquired dispositions" are more likely to occur in primary school, but they occur in adult literacy classes as well. "Literacy" should produce the same impact for both, and here the level of skill attained may be more important than the manner in which it is acquired. "Knowledge" is a mechanism that is probably more powerful in adult literacy classes, because adults' greater life experience provides a foundation for knowledge acquisition and adults can put this knowledge into practice immediately. Finally, the type of empowerment that results from "group formation" is probably more likely to result from participation in adult literacy classes than from primary schooling.

**Figure 1.** Model of Possible Mechanisms Mediating Between Women's Education and Improved Health and Family Planning



The argument over whether adult literacy programs exhibit the same positive impact as primary schooling assumes, in part, that literacy skill is worthwhile only as a catalyst for other development sectors, such as health. In reality, an educated population is a goal of development. Whether literacy is important because it is a development indicator or because it is instrumental in achieving other development goals, a question remains as to whether or not adult literacy programs can contribute to higher national literacy rates.

## Efficiency

The research reviewed here indicates that strong adult literacy programs are as effective at teaching literacy skills as primary schooling. The impression of ineffectiveness probably comes from observing poorly designed and underfunded adult literacy programs, which are then compared to better designed and better funded primary schools. In addition, the judgments are usually subjective.

Only a few studies or program evaluations have looked critically at the issue of effectiveness in adult education in the Third World, and almost none of the existing studies compare adult education to formal schooling. In fact, a 1975 study by Roy and Kapoor appears to be the only published report that compares primary schooling and adult literacy classes. The Roy and Kapoor study is widely misinterpreted as proving that primary school is more effective than adult literacy programs. In fact, a close look at the findings of the study reveals the opposite. Table 1 presents the data from the study.

**Table 1.** Retention of Literacy Skills by Year of Instruction

<b>Sample</b>	<b>Year of completion</b>	<b>Percentage in high-literacy group</b>	<b>Mean score</b>
<b>Literacy class (I and II)</b> n = 41 n = 44 n = 58	1958–1960	15	7.72
	1961–1963	14	9.05
	1964–1966	24	10.86
<b>Primary school (I, II, and III)</b> n = 27 n = 23 n = 21	1958–1960	18	13.20
	1961–1963	36	13.80
	1964–1966	38	15.49
<b>Literacy class (III)</b> n = 49 n = 46 n = 32	1958–1960	45	16.87
	1961–1963	63	17.36
	1964–1966	69	17.94
<b>Primary school (IV, V, and VI)</b> n = 93 n = 97 n = 99	1958–1960	71	19.90
	1961–1963	78	20.46
	1964–1966	80	20.48

This table has commonly been interpreted to show that schooling at each level is much more effective than adult literacy classes. However, each “level” of a literacy class represents no more than 100 hours of instruction while one “year” of primary school represents as much as 500 hours of instruction. The study shows that adults who attend 300 hours of adult literacy classes (literacy level III) retain their skill at a much higher level than adults who attained that skill as children with 500 to 1,500 hours of instruction (primary school levels I–III). Even the group that had 2,000 to 3,000 hours of primary school instruction (primary school levels IV–VI) has only a slightly higher mean score than the group that had

300 hours of instruction (literacy level III). The Roy and Kapoor study shows that adults can acquire and retain literacy skills with dramatically fewer hours of time-on-task than can children in primary school.

A review of the available evaluation studies of adult literacy programs in Third World settings concludes that poor program design and implementation are the causes of inefficiency (Comings, 1995). The review also found that when programs are well designed and well implemented, drop-out rates are between 30% and 50%, equivalent to drop-out rates in the first three years of primary school, and the adult participants achieve a skill level equivalent to primary school grade 3 or higher. It should be noted that the per-student expenditures are much higher in primary school than per-participant expenditures in adult literacy programs.

Because literacy campaigns have usually been connected to political processes, they have been under pressure to provide service to all those in need. Program implementation has suffered from unrealistic time constraints and inadequate resources, resulting in high drop-out rates and low skill acquisition. The measures of skill retention have been inaccurate because the skill was never acquired in the first place. When sufficient resources are allocated to both design and implementation of a comprehensive adult literacy program, it can be successful.

The available research on both impact and effectiveness provides sufficient evidence to support the contention that adult literacy programs are both an important and a viable effort in support of a country's development. Further debate should, therefore, focus on which approach to delivery of adult literacy services is most effective. A brief history of these approaches will set the context for this discussion.

## History

Written language was developed around 6,000 years ago as a tool of political, religious, and mercantile elites. The innovation of literacy was transferred between the elites of different cultures more quickly than between the elite and the less powerful within one culture, and until the middle of the eighteenth century, literacy rates in Europe and North America were never more than 10%. With the beginning of the industrial revolution in Europe and North America, workers with literacy skills became a necessity, and education was finally provided to the masses. By 1900, Sweden, Scotland, Germany, England, Switzerland, France, the United States, and Canada had all reached literacy rates of 90%. During colonial periods, education and literacy were often used as a means of binding the elites of the colony to the culture of the imperial power.

Only a few national governments mounted literacy campaigns before World War II. In the USSR, a literacy campaign served the socialist ideal of educated workers. In the case of Turkey, the literacy campaign was part of an effort to switch from Arabic to Roman script in support of Kemal Atatürk's move to make Turkey a European country. Before World War II, most literacy programs in the Third World were funded by religious organizations. These organizations saw literacy as an aid in the practice of their religions, but they also argued that literacy was important to the development of communities in which they worked.

After World War II, governments in newly independent Third World countries placed an emphasis on literacy for all of their citizens. Over the next three decades a number of countries, most of which had

socialist governments, mounted extensive national adult literacy campaigns. In 1975, UNESCO responded to this movement by holding the International Symposium for Literacy in Persepolis, Iran, at which they called for mass national campaigns to eradicate illiteracy. Unfortunately, the concept of mass literacy campaigns was soon caught up in the international political conflicts of the Cold War. Some members of the international development community criticized campaigns in Tanzania, Cuba, and Nicaragua as political indoctrination that provided no real education, while others hailed the campaigns as miracles. This polarization made it almost impossible to objectively evaluate the strengths and weaknesses of the campaign approach. At the same time, anticommunist donor organizations abandoned promising experiments that built on the teachings of Paulo Freire, the Brazilian educator who was identified as a Marxist.

In the 1980s, educational planners concluded that only primary schooling could solve the problem of illiteracy; subsequently, governments provided very little funding to develop effective literacy programs. The end of the Cold War made more objective approaches to developing effective adult education programs possible, and the 1990 World Conference on Education for All put a new emphasis on adult literacy. Now, many different approaches to adult literacy are receiving attention. These will be defined here under three broad categories: Literacy campaigns, literacy programs, and integrated literacy programs. The terms “campaign” and “program” are often used to mean the same thing, but the two will be separated here in order to define these categories more accurately.

**Literacy campaigns** attempt to serve almost all illiterate adults within a specific time period, usually a few years. The duration of instruction and the target skill level are usually limited. Also, campaigns generally depend on volunteers. A campaign offers the opportunity to directly involve a large number of adults in an educational process that can have several goals. Campaigns have been criticized as ineffective because, in many cases, only a small percentage of the participant population acquires and retains a useful level of literacy skill; however, the acquisition and retention of usable literacy skills is sometimes a secondary goal. For example, the government might use a campaign primarily to demonstrate its commitment to educating its people. In Burdwan district (population six million) in India’s state of West Bengal, a valuable impact of its campaign was the enrollment in primary school of almost 100% of the children who were old enough to enter first grade. If the Burdwan campaign is viewed as a social marketing effort with a goal of full enrollment of children in primary school, it has been enormously successful at a low cost. This approach to promoting children’s education has the unique quality of providing illiterate parents with a taste of the educational experience in which their children will be involved. If a literacy campaign is seen as having several objectives in addition to literacy, it may attain an acceptable level of success with some, but not other, objectives.

**Literacy programs** attempt to provide participants with a usable level of reading, writing, and math skills. They usually teach a range of important information and provide for the practice of critical thinking and problem-solving skills as well. The educational goal of a program is to bring adults to a literacy level, usually equivalent to third or fourth grade, at which they can retain their literacy skills and improve them over time through regular use. A program continues on a regular cycle each year until everyone able to participate has been provided with an opportunity. As opposed to a campaign, this approach might take a decade or more.

Several years of preparation are needed for a successful program. Materials and instructional designs must be field-tested and revised several times, and each test normally takes one year. Once the materials and instructional design are working well, the program expands its coverage each year until it reaches a maximum manageable size. A literacy program is probably more successful, in terms of drop-out rates and skill acquisition, in the first few years when classes are made up of those adults who are most eager to learn and, therefore, easiest to recruit and serve.

**Integrated literacy programs** attempt to provide a comprehensive education over a longer time frame than a program or campaign, usually more than one year for each participant. The curriculum combines the basic skills covered in a literacy program with another specific set of objectives such as health, family planning, cooperative development, or income generation. Rather than serving the entire population, an integrated literacy program provides a comprehensive education to a segment of the population with the goal of turning participants into leaders in their communities.

The participants in integrated literacy programs act as early adopters, as defined in diffusion of innovation theory (Rogers, 1971). This theory states that in rural Third World communities, some people will be interested in trying something new before most others. Once the early adopters have tried the innovation and found it useful, they promote it to others in their community. The theory also states that those in the community who adopt the innovation later are more likely to be influenced by someone who is close to their own social and economic status. Literacy participants come from the poorest and most disadvantaged segment of a community and are, therefore, good promoters of innovations to this difficult-to-reach group. The integrated literacy program acts as a selection process for identifying early adopters and a training program to provide them with skills and knowledge about the innovation. At the same time, it increases self-confidence and status, both of which make it easier for early adopters to act as promoters of new behaviors and attitudes.

A country might adopt one of these approaches or might use a combination of two or even all three. For example, an integrated literacy program might be followed by a literacy program or campaign that depends on the efforts of the people who participated in the integrated program. In Nepal, most participants are served by the literacy program approach, but a number of NGOs have successfully adopted the integrated approach. The government has experimented with a campaign approach and is continuing to study this option as well. Regardless of which approach is taken, there are common programmatic elements that must be developed before any approach can be successful, and these are described in the following section.

## **Elements of Successful Programs**

A literacy program requires more resources, on a per-participant basis, than a literacy campaign. Through careful recruitment of participants, teacher training, and the provision of additional support services, a program can achieve a higher level of success for a small percentage of potential participants. A literacy campaign, on the other hand, can provide a larger number of adults with lower levels of individual achievement. Both approaches could be called successful by their organizers and participants.

This monograph defines a successful literacy program in a Third World setting as one in which about 50% of the participants acquire a level of literacy skill sufficient to use and retain over time. Specifically, this definition includes the ability to recognize all of the letter/sound combinations, read all the words that are in a student's oral vocabulary, and comprehend simple text that uses that vocabulary.

This chapter describes the important elements of a successful literacy program, but a campaign or an integrated literacy program must pay attention to the same list of elements.

- Timing and duration of instruction
- Target group
- Instructional materials
- Language of instruction
- Teacher recruitment and training
- Participant motivation
- Supervision and monitoring
- Connection to other development activities
- Government/NGO collaboration
- Postliteracy activities

Though some elements may be more important than others, all contribute to program success.

## **Timing and Duration of Instruction**

The little data that is available suggests that, for the average adult, 200 to 300 hours of instruction are needed to acquire a level of skill sufficient to use and retain over time (Comings, 1995). Evaluations have shown that a greater skill level is attained when additional hours are spent in class or in organized groups or self-study (Comings, 1995; Roy & Kapoor, 1975). This added impact appears to be especially true for math and writing, which are generally more difficult skills to master (Comings, 1995).

The timing and duration of instruction is the first design element that planners must consider, since it dictates the scope and structure of the program. Adults often have responsibilities that take precedence over study. During some times of the year, agricultural demands prevent participants from attending literacy classes in rural areas. In most rural communities, adults can find a few hours each day to study during about 6 months of a year, while in urban communities adults may have less time each day but be able to participate every month. Festivals, holidays, marriage seasons, and other traditional times of celebration often close down classes for a month or two each year. Within a 6-month time period, a program of approximately 250 hours could take place on a schedule of 2 hours per day, 6 days a week for 5 months. In an urban area, the same 250 hours could take place on a schedule of 2 hours per day, 3 days a week for 10 months.

How to best configure these 250 hours has never been studied. A program that takes place 8 hours a day over 30 days might achieve the same result as one of 2 hours a day over 120 days, but there is insufficient evidence to make this determination. Even if greater intensity were more effective, few adults have that amount of time available to spend in class. A consistent effort that includes classroom instruction and individual practice is probably best. However, some subgroups, out-of-school youth for example, might be able to attend an intense course of study for several months.



Program planners must identify the months during a year and the hours during a day when potential students have the time to participate. The participants are probably the best judges of the most appropriate schedule. The schedule should include at least 250 hours of instruction.

## Target Group

In primary school, some children learn to read and write quickly with little trouble, while others find this task very difficult. The same is true for adults. A review of reading research on children in the United States has identified several factors that predict which children will find reading easy to learn and which will find it difficult (Snow, Burns, & Griffin, 1998). One factor is dyslexia, a condition that makes processing of text difficult. Children or adults with dyslexia need a lot of support to learn how to read. Other factors include physical or cognitive disabilities that make learning to read difficult or even impossible. Unfortunately, the funding for both primary schools and adult literacy programs in the Third World is too limited to provide sufficient time and resources to help students who require special attention.

Another factor is home and community environment. Children who grow up in homes and communities in which literacy skills are used a lot learn about reading from their immediate environment. When they begin primary school, the task of reading is familiar to them. Children who grow up in homes with educated parents also acquire a much larger vocabulary, including words that are used more in writing than in everyday speech. Once these children learn how to decode the alphabet into sounds, they can read many more words than a child of less educated parents who must first acquire a larger vocabulary. Adults come to literacy classes with varying degrees of preparation as well. Some have attended primary school for a year or two, or grew up in families in which their siblings went to school and one of their parents or another relative could read. Others grew up with little or no exposure to text.

Age may affect an adult's ability to learn to read. Abadzi (1994) postulates that, as adults age, they lose the ability to learn how to process text, either for the first time or in a second language. Reder (2006) followed a cohort of high school dropouts in the United States, and found that those under the age of 30 were much more likely to improve their reading skills, as measured by a test, than were those over the age of 30. However, the older adults did learn to expand the types of reading they did; they learned to use their existing skills to accomplish new tasks. In industrialized countries, eyesight begins to decline in adults who are around 45 years of age. In the Third World, eyesight probably declines at the same or earlier age, and few adults have the ability to purchase reading glasses. Studies in OECD countries (Abadzi, 1994) also show that the ability to learn completely new skills becomes more difficult each year, starting in an adult's twenties, while learning that builds on already acquired skills becomes easier. Learning to read for the first time is a completely new skill, and so older adults may find it more difficult than younger adults.

Both literacy campaigns and programs usually target all adults but have sufficient resources to serve only a small percentage of the target population. A good place to begin an adult literacy effort is with the easiest to serve. As the staff of the program or campaign becomes more experienced, they can turn their attention to the more difficult to serve. The easiest-to-serve group includes adults less than 30 years of age who have some exposure to text and do not have disabilities that make learning to read difficult. The second-easiest-to-serve group is those less than 30 years of age who have no exposure to text and do not

have disabilities that make learning to read difficult. Adults over 30 years of age, first those with exposure to text and then those with no exposure, form the next two groups, which are followed by adults (of any age) with disabilities that make learning to read difficult.

## **Instructional Materials**

In adult literacy programs, instructional materials can provide the focus for classroom learning and define the knowledge and skill units of the curriculum. This can be particularly helpful for teachers who have little training. The instructional materials must be built around a coherent approach to teaching basic skills, contain sufficient material so that students can reach self-sufficiency, cover content that is of interest to participants, employ a large type size, and have an appropriate number of words on a page. A good set of materials provides a framework in which teachers and participants can work out a way to learn, even when teacher training has been insufficient.

To ensure that the materials are well designed, program staff must field-test and revise them several times to ensure that they are serving the needs of participants. Each field test requires a full class cycle, usually one year. The complete development of a set of effective literacy materials, therefore, requires two or three years of development and testing. During the first year, the number of participants served must be kept low so that the materials-development staff can focus on identifying strengths and weaknesses. After the first year, the program can serve a larger number of participants while still refining the materials.

## ***Reading***

The earliest adult literacy materials followed a phonics approach in which participants were first taught the sounds of the alphabet and then learned how to put letters together into syllables, words, sentences, and paragraphs. Later, a whole-word approach, in which participants learned words and built a vocabulary that they could recognize on sight, became popular. Then, a whole-language approach, which emphasized reading in context, gained wide support. In fact, good readers use all three skills (phonetics, sight reading, and context), and most adult literacy programs now employ an approach that combines all three techniques.

Two other trends have influenced the development of reading materials. During the 1960s and 1970s, UNESCO popularized the concept of functional literacy, which stipulates that literacy should be learned within a context of practical skills and knowledge (UNESCO, 1976). For example, literacy was learned in conjunction with improved farming methods. At the same time, Paulo Freire, a Brazilian educator, was promoting a literacy learning process that also built critical thinking skills (Freire, 1972). In Freire's approach, participants engaged in open dialogue about themes related to oppression and empowerment as they learned to read and write. Parts of both of these approaches are employed in many of the best materials.

All literacy materials should be based on an understanding of how adults learn to read, but most reading research has been done with young children. This research with children has identified a set of component skills and knowledge that can be learned and practiced separately but must be put into use in the complicated process of making meaning of text. Acquiring and practicing the component skills should take place at the same time as applying literacy skill to reading meaningful text.

This approach is consistent with cognitive learning theory that describes how the brain uses short-term and long-term memory to read. Short-term memory is limited in the amount of material it can hold at one time, while long-term memory has an almost infinite storage capacity. When reading, the mind depends on skills and knowledge in its long-term memory, which are pulled up into short-term memory for the time they are needed, and then drop away. Through practice, the mind can automate the component skills. The component skills include alphabets, fluency, vocabulary, and comprehension.

Alphabets consists of two parts. The first is phonemic awareness, the knowledge that letters represent sounds and the learning of each of those sounds. The second is word analysis, the ability to sound out a word made up of letters and letter combinations that are stored in long-term memory. To read effectively, a student must automate these processes. For example, as you are reading this sentence, you are not carefully sounding out each word. Rather, you are moving through each sentence with an automatic recognition of most of the words. When a new word appears, you may slow down and sound it out, but you do not have to think about each letter, or letter combination, and its sound. Your pronunciation happens automatically. Alphabets are taught by exposing a student to letters and sounds and having them practice this visual-to-auditory relationship until it becomes automatic. Then students practice putting together and taking apart words by their syllables. This process, too, must be practiced until it becomes automatic.

Fluency includes both speed and accuracy. Adults who read accurately at more than 200 words a minute are more likely to comprehend what they read than those who read slower. Fluency is taught by practicing reading for speed and accuracy. First, students increase their fluency with words that they know well and then begin adding new words. Oral reading provides an opportunity for a teacher to check both speed and accuracy.

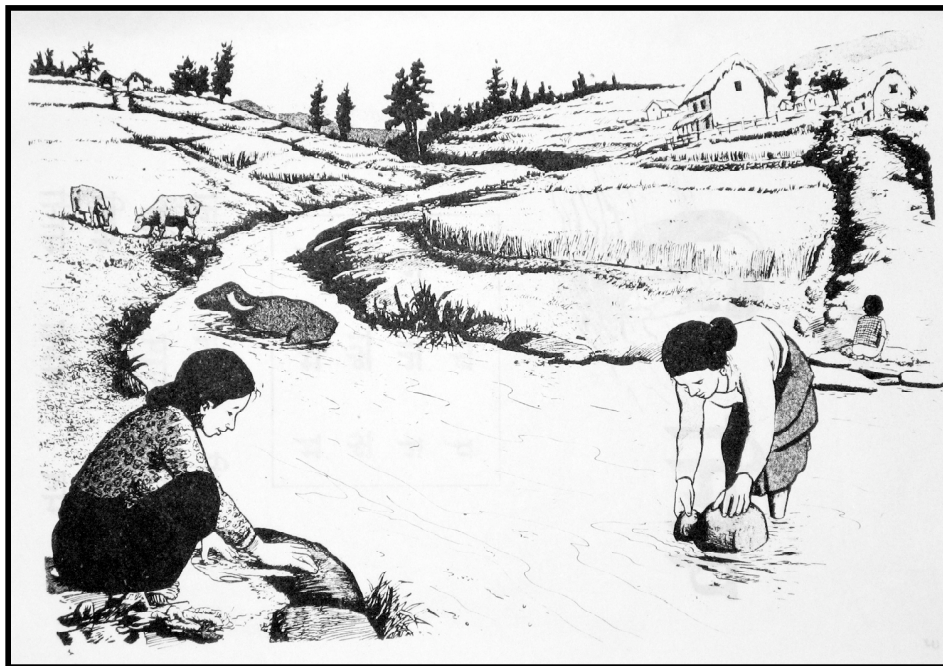
Most adults have both an active and a passive vocabulary. Active vocabulary includes words that an adult can use accurately in speech, while passive vocabulary describes words that are known only in context. Most adults have words in their vocabulary (*turgid*, *mitigate*, or *insouciance*, for example) that they recognize when they see them in a reading passage or hear them in speech but rarely, if ever, use in their own writing or speech. Often, adults cannot provide a definition for some of the words in their passive vocabulary, but they can understand text that employs those words. Some words are easy to learn because they describe something that is part of a person's life (*chair*, *green*, or *anger*, for example). Other words require the acquisition of background knowledge before the word makes sense. For example, the word *Uruguay* requires an understanding of geography, and a reference to the Roman Empire requires some knowledge of ancient history. Vocabulary is learned through using reading to learn. As new vocabulary is encountered, the student must learn what it means and then practice using it in writing and oral speech.

Comprehension is the goal of reading. Comprehension builds through answering questions about what is read and by discussing text both with a teacher and among a group of students. Teaching comprehension strategies, which include monitoring one's own attention, making notes, and discussing reading, can help build comprehension.

Adult literacy materials usually consist of one or two books that carefully build from a few letters to full paragraphs. Some materials are short, as few as 24 pages, and some are long, more than 150 pages. More

pages provide more practice. In addition, a class might have a set of instructional aids, such as charts, word or syllable cards, and games, which help teachers to present and review content and help participants practice skills. Literacy materials from Nepal provide an example of what this looks like. A class begins with a discussion of a picture such as the one in Figure 2 (all examples that follow are presented at about 25% of their actual size).

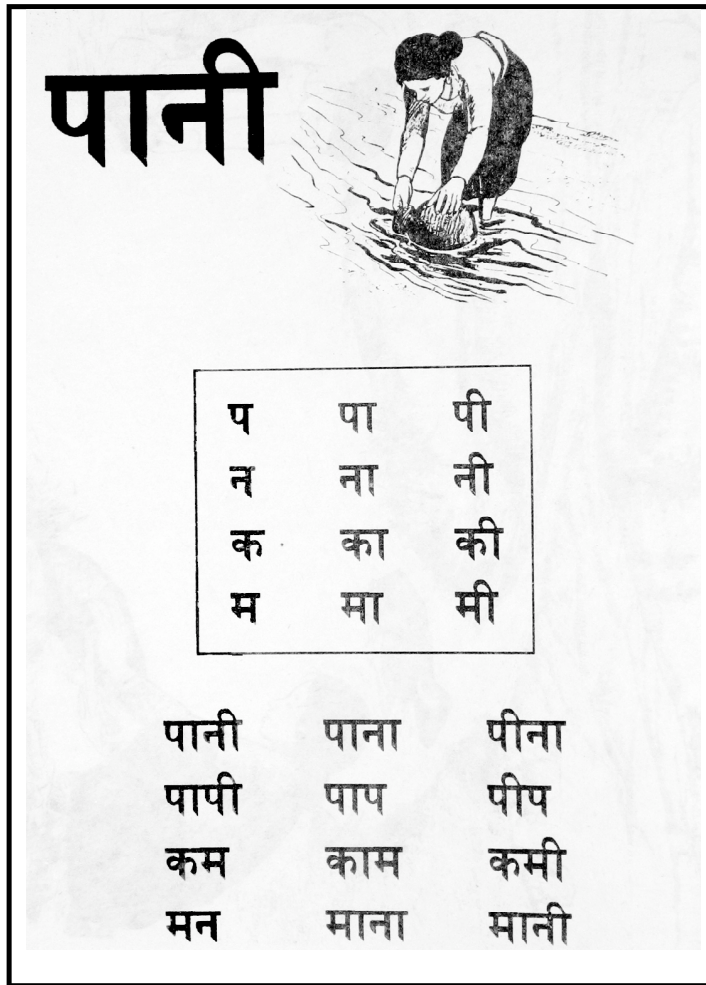
**Figure 2.** Water in a Nepali Village



In this lesson, participants first describe what they see: A source of water and several activities that take place around it. Gradually, the discussion grows to include concepts such as where the participants themselves get their water, who brings it to the house, and what is clean—as opposed to dirty—water. Eventually, the discussion might end with suggestions on how to make water easier to get and how to ensure that it is clean.

During the session participants get up in front of the group and discuss the drawing while pointing out specific aspects of it on a poster-size version that is visible to all. For some participants, this is the first time they have spoken before a group. Some participants might be shy and embarrassed and sometimes say only a few words, but they are gaining self-confidence by doing something they have never done before. The discussion about water also allows the participants to articulate their own position about an essential aspect of their lives. No matter what the subject, however, participants are learning how to talk about topics within a group, which is a skill they need in negotiations within their family and community, a skill particularly important for women. The participants then move on to learn the word for water as shown in Figure 3.

**Figure 3.** The Nepali Word for Water, Its Letters, and Words Made from Those Letters

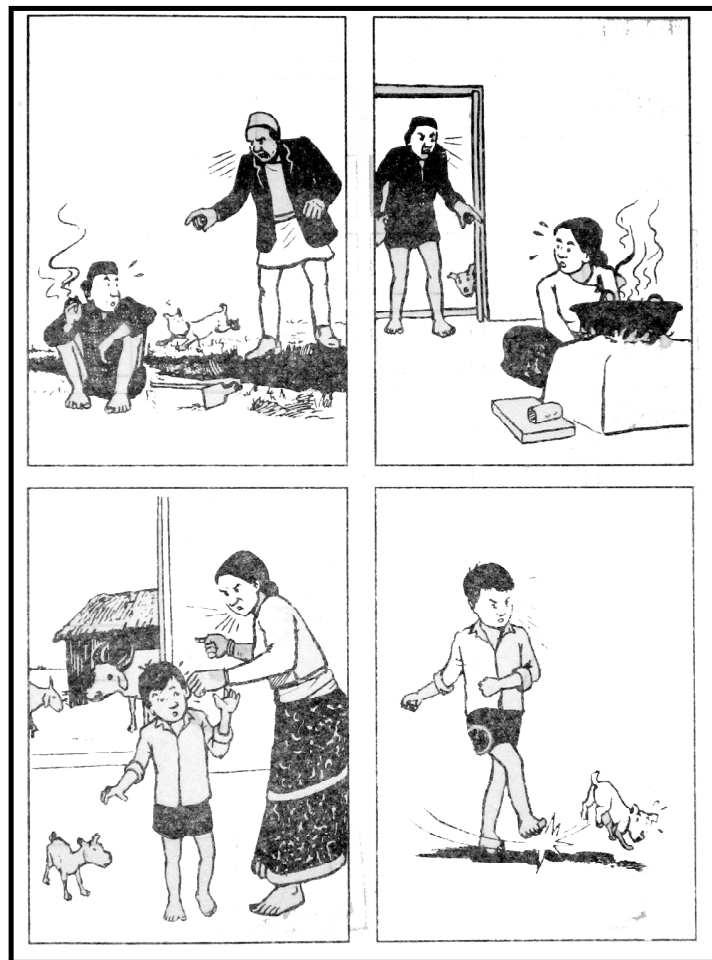


At this point the participants are learning “water” as a whole word, but they move quickly to learning its syllables and letters, along with other words that can be made with the same letters. Participants practice these skills through playing games with cards that display the letters and syllables. During these games, participants are actively discussing options and helping each other to make words, rather than focusing on the competition.

As participants learn and practice the skills of reading, they also use that skill to read simple words, sentences, and eventually stories. Research during the design stage of the Nepal program showed that rural adults could understand pictures in a comic-book format but were unfamiliar with stories told in a sequence of drawings. In the first five lessons of the Nepal materials, the conventions of a comic-book story are presented and practiced as a way to make the reading of comics easier. These stories deal with general social topics or problems in participants’ lives, such as an abusive husband or a dishonest moneylender, while others focus on specific development themes such as health.

Participants learn how to read comics by first looking at the four-frame story without words shown in Figure 4.

**Figure 4.** A Simple Comic Book Story



Participants study the story in small groups, and then one member of each group reports what the members have decided is happening in each frame. The objective of this activity is to learn that a sequence of pictures can tell a story. The participants are then asked to imagine what the characters might be thinking or saying. They can even role play the story. In the next step, the participants read a simple dialogue without pictures. Then, the two forms, pictures and dialogue, are put together, as in Figure 5.

**Figure 5.** A Simple Dialogue

Finally, a similar dialogue is presented in a comic-book format in dialogue bubbles. Different kinds of dialogue bubbles are introduced later in the materials, as shown in Figure 6.

**Figure 6.** Dialogue Bubbles

Eventually, participants read full stories. Figure 7 presents a page from a lesson that focuses on the transmission of disease by flies.

Much later in the curriculum, participants begin reading articles that focus on specific topics, such as the one in Figure 8, which explains how to mix oral rehydration solution. Participants are encouraged to stand in front of the group to read and discuss the information presented in the text. This exercise builds oral presentation skills while reinforcing what has been learned about the content.

New readers must practice recognizing syllables and putting them together to form new words. The AID-funded Ecuador Project (Center for International Education, 1974) developed a number of games that provide this practice, which the Nepal program adapted for use in its literacy classes. The simplest of these games consists of cards with syllables printed on one side. In the beginning of a course, participants play games that require them to match identical syllables. Later, these same

**Figure 7.** A Comic Book Story about Food Safety



**Figure 8.** Mixing Oral Rehydration Fluid





cards are used to play games in which participants build words from the syllables. Cards with words are used to build sight vocabulary or to construct whole sentences.

A good literacy curriculum teaches comprehension as well as oral reading. Participants are encouraged to discuss the words, sentences, and stories that they encounter in class. The teacher continually questions participants about what they are reading, and as participants learn more, they are encouraged to write in response to the readings.

Stories that present a common dilemma but do not offer a specific resolution can motivate participants to discuss what they have read. Materials that pose specific questions in the text stimulate participants to answer orally or to discuss answers as a group. For example, one of the stories in the Nepal materials focuses on a woman whose husband steals money for drinking and gambling that she has earned by raising and selling her own vegetables. They have a fight, and the woman leaves her husband and goes home to her parents. Her husband feels remorse, seeks her out at her parents' house, asks her to return home, and promises that he will stop drinking and gambling. The story ends with her wondering whether she should return to him, as shown in Figure 9. After reading the story, the participants discuss what they have read and talk about what their advice to the woman would be.

**Figure 9.** A Comic Book Story about an Argument between a Husband and Wife



## Writing

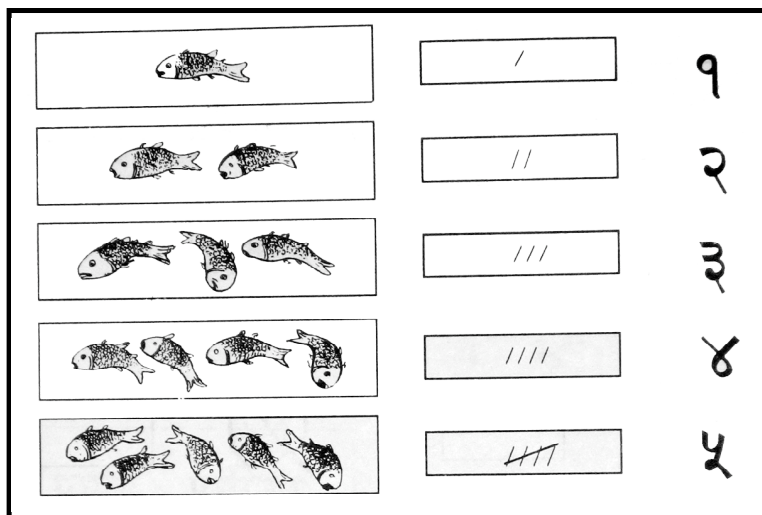
Many adults in Third World countries come to class never having held a pencil. Writing, therefore, should begin with the writing of simple shapes such as X, O, and +. After some practice with these shapes, participants can use the syllable cards from the reading games to practice making words. Games that build writing skills can be played by small groups of participants or by the class as a whole. For example, one participant could be asked to form a word suggested by the group, and the group can then decide if it is correct or not and provide the correct spelling, if needed. Once writing comes easier, teachers can dictate single words and full sentences so that participants can practice their skills. Participants can also write the names of familiar objects shown to them or depicted in pictures in the materials. Later, they might be asked to write out answers to questions about the pictures. Before the course is complete, the participants should be reading questions and writing answers on their own and even writing down their own ideas and memories.

Because writing also helps participants to improve their reading comprehension, these two skills should be combined as students progress. Combinations of these two activities are nearly always profitable. For example, participants can read a passage from their books and then write about it. They can then read each other's writing, silently or orally.

## Mathematics

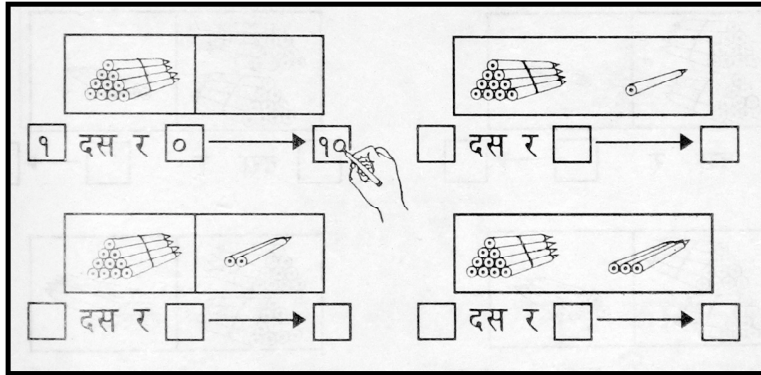
Math requires some of the same skills as reading and writing but requires its own separate skills as well. Early in the Nepal program, participants are taught the number symbols and helped to understand them by counting with real objects or marks on a piece of paper. This practice is similar to learning to arrange letters into words. Figure 10 shows how this appears in the Nepal materials.

**Figure 10.** Counting Single-Digit Numbers



Operations are usually taught after participants have studied reading and writing for a month so that they are not asked to learn the basics of too many skills at the same time. Addition is introduced first, followed by subtraction, multiplication, and division. In the beginning, the math operations are taught within the limits of numbers one to ten, but later go to two- and three-digit numbers. In the Nepal curriculum, addition is taught with exercises that use drawings of objects to help participants understand the concept. This is shown in Figure 11. After an explanation by the teacher and practice in a whole-class setting, participants work in small groups. Later, they perform these activities in workbooks. Subtraction is taught using similar activities.

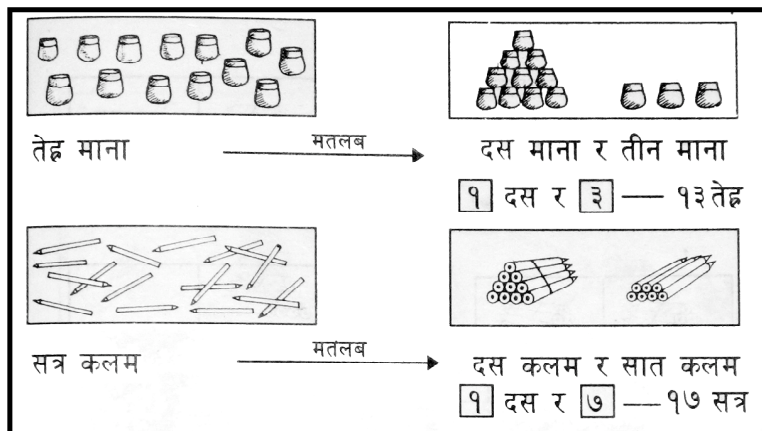
**Figure 11.** Simple Addition Exercise



Once simple addition and subtraction with numbers up to ten has been introduced, the relationship between the two operations is practiced. Participants can use grain or pebbles to help solve problems until they have learned to work only with numbers. Math card games, similar to the reading and writing games, help to reinforce these concepts and to support progress to number symbols.

The next step in math learning is to progress to addition and subtraction with two- and three-digit numbers. Drawings are used to explain the concept of the decimal system, as shown in Figure 12. Participants are encouraged to use fingers and slashes on paper as they learn to work with larger numbers.

**Figure 12.** Addition Exercise



Multiplication and division, which are more difficult operations to learn, are covered later in the Nepal program. They are taught in the same way—with drawings of objects in sets, which are added together. Participants are more comfortable with numbers by this time and can, therefore, move more easily from real objects to paper and pencil.

In a 250-hour course, participants cannot be expected to learn to read, write, and perform math at a high level, but exposure to the four basic math functions and written numbers is important. Evaluations in Bangladesh and Nepal show that addition is learned most easily, followed by subtraction, multiplication, and division (Jennings, 1990).

## **Language of Instruction**

Many Third World countries have a national language and a number of local languages. Learning literacy in a local language is easier because the difficulty is not compounded by having to grapple with a less familiar national language at the same time. Furthermore, for minority groups, learning to read and write their mother tongue might reinforce their culture, history, identity, and feeling of self-worth. On the other hand, a single national language can be a binding force that contributes to building national unity within a rich cultural diversity. In addition, many countries cannot afford the costs of literacy programs and reading materials in all their local languages. As is the case with most government issues, language policies are usually decided on political and economic grounds rather than on cultural, psychological, or pedagogical ones.

Learning or improving fluency in a national language may be valuable, and most adults are exposed to their national language via radio and in the marketplace. Anecdotal evidence points to increased oral fluency in the national language among adults who complete the literacy program. An additional outcome of a literacy program, therefore, can be increased fluency in the national language among participants.

## **Teacher Recruitment and Training**

Although a well-designed and -tested set of materials is essential for a good program, success cannot be assured without a competent teacher. According to one study of literacy programs (Comings et al., 1992), the most important teacher behavior is simply showing up for class. If the materials are adequate and the teacher shows up for class on a regular basis and makes some attempt to teach, a completion rate of around 50% can be expected. In primary schools in poor rural communities, teachers often do not show up to teach, but those schools generally have more than one teacher. The extra students are simply brought into the class of another teacher. Most literacy programs, however, have only one teacher for a class so if the teacher does not appear, there is no class that day. Children are likely to continue going to school when teacher attendance is sporadic, but adults are likely to quit under such circumstances. Teacher selection, incentives for teacher attendance, and monitoring that focuses on teacher attendance can ensure an acceptable level of success. Administrators of the literacy campaign in Burdwan district in India addressed this problem by assigning two volunteer teachers to each class, thus improving the likelihood that one would show up.

The Nepal study (Comings et al., 1992) also found that the behavior of a teacher toward his or her participants could affect success. In classes with teachers who treated their participants with respect, the drop-out rates were low. In classes with teachers who treated their participants with condescension, the drop-out rates were high. Children are more likely to endure disrespectful behavior, but adults will cease to attend in such cases. The Nepal study found that positive teacher behavior could reduce drop-out rates to 30% or less. Respectful behavior can be assured by carefully selecting teachers, training them in appropriate behavior, and monitoring their activities by observing them in class and interviewing participants.

Teacher training should include both an introduction to concepts of adult learning and an orientation to the specific materials and instructional approach used in the program. Unfortunately, most programs in poor countries do not have the resources to train for more than two weeks. In this amount of time, teachers cannot be exposed to the entire curriculum or taught to be effective in classroom practice. To address this problem, the program in Nepal provides each teacher with a format for classes that is reflected in a set of lesson plans and trains teachers in their use. The lesson plans comprise the following four activities for each class:

1. **An introduction** during which the teacher presents information.
2. **Group work** during which students discuss issues or do reading and writing activities.
3. **Games** during which students practice skills and help one another.
4. **Testing** during which both teacher and students check their understanding and progress.

New teachers are introduced to these four ways of teaching by participating in two mock lessons using Arabic script. In this way, new teachers experience a lesson as an adult participant might. The mock lessons also allow the future teachers to observe how the trainer handles the four activities of teaching. After the mock lessons, the new teachers watch a trainer teach the actual program materials to a real class. Literacy teachers in Nepal must teach differently from the rote memorization methods they experienced in school. Ample practice time for new teachers is crucial; when the duration of training is limited, trainers should concentrate on practice teaching, so that teachers have an opportunity to experience the behavior they are asked to perform.

## Participant Motivation

Arguments against investment in adult literacy programs often focus on participant motivation and the general relevance of literacy to poor rural people. The target group for adult literacy programs is poor people living in communities where literacy may appear to be a low priority to outsiders. Within these communities, however, are people who truly want to learn to read, have the time to study, and are motivated to complete a literacy course. Experience in Nepal has shown that as literacy class participants begin to acquire reading and writing skills, their confidence and motivation increases. What's more, the example of the first classes provides a model of success that can help motivate the next group of participants.

Literacy program organizers can assume that every adult wants to learn to read and write, but even when education is a personal priority, some adults are reticent to participate for any number of reasons. Program planners must invest some of their resources in formative evaluation focused on the reasons

why participants are unwilling to join a literacy class or drop out early and devise activities that lower such barriers to participation. Other development programs, such as childhood immunization and family planning, usually spend a significant percentage of their resources to reach and motivate participants, but too often adult literacy administrators assume that participation is either guaranteed or impossible. In the Burdwan literacy campaign, as with other campaigns in India, the first activities were focused on motivation. The Burdwan literacy campaign used parades and other types of entertainment to attract attention, and then local leaders and politicians gave speeches to urge people to teach and enroll.

## **Supervision and Monitoring**

The purpose of supervision is to ensure that classes are being conducted according to plan and that teachers receive the support they need to be effective. Teachers benefit from support and advice during the course of a literacy program. A designated supervisor, whose role is to visit the classes several times a month to check on the progress of the classes, should provide this counsel. When supervisors visit, they should observe the entire class, answer the teacher's questions, solve logistical problems, and record class data on a form or in a notebook. The supervisor can usually determine if the class is going well by talking with participants and family and friends of participants. The supervisor must be assigned authority to make changes in case the class is not going well. Teacher and participant attendance, teaching style, and participant progress are the primary concerns on which supervision and monitoring should be focused. If these elements are strong, then additional time can be spent helping the teacher and participants discuss and solve any remaining class problems.

Supervisors need training to be effective mentors to teachers. In Nepal, supervisors attend a five-day training session during which they are introduced to the objectives of the literacy program, approaches to adult literacy education, the roles of the supervisor, and indicators and expectations of effective supervision. After a hands-on orientation to the curriculum, the teacher's guidebook, and the instructional methodology, the supervisors receive practical training in such skills as open-ended questioning and giving feedback.

Supervisors need to be supervised as well. The implementing agency has the responsibility to ensure that supervisors, themselves, are doing their jobs. This can be accomplished through spot checks on supervisors' activities.

In Nepal, supervision is carried out in many different ways. In some programs, local schoolteachers or headmasters do the supervision. In others, NGO staff performs this task. All of these methods have been successful. A close connection of the supervisor to the community and oversight by the implementing agency appear to be key to success.

## **Connection to Other Development Activities**

If learning to read were easy, requiring only 20 or 30 hours of time, almost every illiterate adult would be willing to put in the time and effort needed to accomplish this task. For most adults (and children as well), learning to read and write takes a lot of time and effort, and after a few weeks of study, motivation can wane. Linking education to real problems and solutions helps provide the additional motivation needed to persevere to the end of the course; it can also improve the quality of participants' lives.

Adults who persevere and complete a literacy program are people who would be likely to succeed in other activities. As mentioned earlier, literacy classes can serve as a selection process for identifying good candidates for recruitment to development projects in the community. Connecting adult literacy programs to development activities motivates adult participants, and the literacy skills acquired in the class have a positive impact on the development activity.

Despite the obvious mutual benefits, deliberate efforts must be made to link development activities with literacy programs. Integrated programs have the best chance of success in connecting participants to other activities that may improve their lives when there is a direct partnership with development agencies. For example, local personnel from development agencies could visit the class or become involved in the program as a supervisor or teacher.

In Nepal, staff from other agencies, such as health or agriculture, provided input into the design of the materials. In some of the integrated programs, staff from health, family planning, or credit agencies make presentations in class and participate in follow-up activities. Some NGOs make completion of the literacy class a prerequisite for participation in other development activities.

## **Government/NGO Collaboration**

Adult literacy programs offer an opportunity for collaboration among national government, local government, and NGOs. Some aspects of a literacy program are best directed at a national level (for example, developing and printing materials and training teachers and teacher trainers) and logically benefit from the economies of scale that a national effort can provide. Most individual NGOs do not have the resources needed to develop and field-test a comprehensive set of literacy materials or to maintain a quality teacher-training department. A national training staff, however, can train local staff to take on this specific role.

One of the primary strengths of NGOs is their direct connection to the communities they serve. They can also make decisions more quickly than national governments and mobilize all of their resources for a single effort, while national governments must slowly address several goals at the same time. NGOs, therefore, are usually more efficient and effective at recruiting teachers and supervising classes. Some local government structures can approximate the advantages of NGOs. In such cases, passing implementation responsibility to their level can produce the same results as NGOs.

In Nepal, the initial collaborations between government and NGOs were hobbled by suspicions on both sides; however, the high quality and low cost of the materials and the free training of teacher-trainers convinced some NGOs to try the government literacy program. The positive results obtained by these NGOs encouraged other NGOs to begin including literacy training in their missions. The government saw that the number of people being served was increasing with little additional cost and, therefore, began to encourage other NGOs to participate. NGOs found that they could add materials and lessons that focused on their particular interests while depending on the government program to cover both literacy and the basic aspects of community development. Eventually, many NGOs decided to begin their work in a community with a literacy program because it was effective in providing basic-skills education to adults, served an expressed need, and acted as a good mechanism for selecting and training the community members with whom they would work.

## **Postliteracy Activities**

One concern about adult literacy classes is that acquired literacy skills will quickly erode. Critics point to the lack of reading material in rural villages as one cause. Very little research exists that addresses this issue, but a review of the existing studies reveals that while some adults do experience a partial loss of skills, most adults retain their skills, and some even improve them (Comings, 1995). This same review concludes that an organized program that provides new readers with simple and interesting reading materials can help adults to improve their reading, writing, and even their math skills after the end of their program. Though very little data is available, the review found that a regular periodical, such as a newspaper, appears to be most successful for maintaining skills and that a connection to a radio program that exposes adults to the concepts and vocabulary covered in the reading material can increase the impact.

Common sense supports the notion that if interesting reading materials are available, adults will use their reading skills and improve them through practice. In addition, national governments are investing an enormous amount of money to teach children how to read in primary school, and providing reading materials is a way to build on that investment. Both adult literacy class participants and adults who have learned to read in primary school can improve those skills at very little unit cost through an organized postliteracy program.

A review by the British Overseas Development Agency (ODA) (Rogers, 1994) concludes that postliteracy programs should be designed both to provide reading materials and to assist people with limited literacy skills to cope with real situations in which their skills can benefit them. The ODA study suggests that these activities should begin during the literacy program. Teachers should use existing reading materials, such as a family-planning poster, instructions on a packet of oral rehydration salts, a government form, or a newspaper to supplement the specially prepared materials. As the literacy course progresses, existing materials should gradually supplant all other texts.

Effective postliteracy materials rightly focus on content. Unfortunately, the focus on content sometimes produces materials that are dry and uninteresting unless the content is of immediate and urgent need. Most children practice their skills by reading stories, and stories are also appropriate for adults. Good stories can provide motivation to read, and content can be integrated into the narrative. Stories that have no development content, though, should also be part of a postliteracy program, since any reading practice improves skills. Libraries and simple newspapers are the usual approach to providing opportunities to use literacy skills, but several other creative options have been successful, including comic-book rental kiosks and local blackboard newspapers. All of these approaches lead to improved skills that can be used later, when they are needed for more functional content.

## **✍ Costs and Financing**

Adult literacy efforts are usually underfunded in relation to the size of the population in need. Unfortunately, the usual response to this situation is an attempt to serve the entire population with the inadequate funds, rather than serving a portion of the population well. Literacy programs



should be based on a commitment to serve only the number of people for whom sufficient funding is available.

The major development costs are those associated with the design and field-testing of materials, curriculum, and teacher training, which can take several years to accomplish, if done well. This development should be assigned to a team of materials developers and consultants who address specific technical needs. The scope of the field test must be limited in the first year so that the development team can observe classes every day and teach some of them as well. In the second and third years, a much larger group of classes can use the materials. Some of these field test costs can, therefore, be attributed to the per-participant recurrent costs of literacy classes because participants in these early classes do learn how to read and write. Financing the costs associated with the development of a literacy program can be attractive to donor agencies if they understand that the return on their investment increases as the literacy program uses the materials over many years.

Recurrent costs are most easily calculated on a per-class basis. Since class size can vary, per-person costs are usually an approximation. The major expense is the teacher's salary, which needs to be sufficient to motivate the teacher to do his or her job. Other costs include classroom equipment, lighting, literacy texts, and writing materials. A portion of monitoring, supervision, evaluation, and general administration costs should also be attributed to each class.

Some donor agencies are interested in supporting these recurrent costs but want national governments to take on part of this responsibility as a show of commitment. NGOs and local government agencies can sometimes provide cash to pay for some of these costs or provide in-kind support, such as volunteer teachers or administrative support, which lowers the unit costs for national governments.

In Nepal, the development costs of the program were supported by the Ministry of Education and USAID. Several donor agencies, including UNFPA and UNICEF, also contributed to specific aspects of the development costs that were of interest to them. The Ministry of Education supports approximately 30% of the recurrent costs while donor agencies such as USAID and UNICEF support 60%. NGO and local government contributions make up the remaining 10% of costs.

## ***ℵ* Evaluation and Management Information Systems**

While researchers have not yet developed and tested a strong evaluation and management information system (MIS) for adult literacy, H. S. Bhola has proposed an excellent model that limits the quantitative data to the basic information needed to serve the policy and management system while providing rich qualitative data to help improve a program during implementation (Bhola, 1990). Recently, the need to show impact to donor agencies has led to a demand that evaluation measure literacy as an outcome and also gauge gains in other areas of knowledge and behavior, such as health and family planning. The following sections describe the sorts of data that should be collected.

## **Monitoring Data**

Program planners should know the number of participants that begin and complete their program each year and the skill levels they have achieved. Given the nature of life in rural Third World villages, some participants drop out before completing the course. If some of these dropouts have acquired a usable skill, they can be counted as having completed the course even if they are not there on the last day, but locating and testing dropouts can be difficult. Because teacher attendance and participant time on task appear to be key indicators of successful programs, data on teacher and participant attendance should be collected. This limited data is usually enough to provide policymakers with a measure of the success and coverage of a program.

Measurements of skill are usually based on a written test, but adult participants have usually never taken one, and test-taking is a skill that must be learned through practice. To familiarize participants with testing, teachers should administer practice tests while participants are learning and again just before they are tested at the end of class. Other approaches to measuring skill, such as portfolio assessment (each participant builds a body of work that is judged by a tester), are usually too cumbersome to use in most Third World adult literacy settings.

Historically, the gathering of monitoring data in literacy programs is notoriously inefficient. Tests are improperly administered and recorded, attendance logs are not always kept up, and there is always pressure on teachers and supervisors to show a successful outcome. Any national system, therefore, should maintain a subsample population that is surveyed in a controlled and managed way so that the subsample data can validate the larger data set.

## **Qualitative Data**

Monitoring data can give program managers a measure of success rate and coverage, but they provide no directions for improving the program. Only qualitative research can identify specific factors that are leading to success and failure in a program. Direct observations, interviews, and focus groups with teachers, participants, and nonparticipants can provide this important information.

## **Impact Data**

Monitoring data is limited to literacy skill levels measured at the end of a class cycle, but skills learned in a literacy program can continue to grow over time. Administrators should collect more elaborate impact data based on a research model that compares a random sample of participants several years after they have completed a class to a control group that did not attend class. Of course, a longitudinal study that tracks participants from the beginning of class until several years later would provide much richer and informative data, but this approach is extremely difficult in rural Third World settings. A cross-sectional study is much easier, but can be hampered by problems such as locating past participants.

## Case Study of Nepal

At present almost nine million people in Nepal are illiterate and in 1996, Nepal's Ministry of Education reported that the female literacy rate was 33% while the male literacy rate was 64%, with an overall rate of 39.5% nationwide. While the literacy rates in Nepal are increasing, the gap between literate males and females is predicted to widen for many more years (World Education, 2001, p.2).

In 1978, the Government of Nepal asked World Education to help develop a nonformal education program<sup>4</sup> to serve adults in rural areas. The first few years of work done by World Education focused on basic research into how to provide effective adult education in rural villages. During the initial two years, project staff identified what rural people wanted to learn, from their perspective, and needed to learn, from the perspective of development experts. They also experimented with ways to present this material. During this pilot phase, project staff was not convinced that literacy needed to be part of the program. Rather, they developed an innovative and interesting set of lessons that engaged participants in discussion and action around a wide range of development topics. Feedback from participants, however, indicated that they wanted to learn how to read and write as well.

During the third year, the project staff developed a set of literacy materials and field-tested them in several sites. Once the materials were ready, limited implementation began. Each year the materials, teacher training approach, and implementation plans were reviewed and revised. As the materials improved, they attracted attention from international NGOs and the limited number of local NGOs that existed at that time. Several large, integrated rural development projects also began using the materials. By 1985, these NGOs and integrated rural development projects were supporting more than half of the literacy classes in Nepal.

The NGOs and integrated rural development projects discovered that the literacy program was an excellent starting point for their work at the village level. The literacy programs were easy to start, as the materials and training were already well developed, and literacy was a commonly expressed need in every community. The participants who successfully completed the literacy classes also proved to be the best people with whom to work in the community. In part, the literacy class acted as a selection mechanism to identify the best people with whom to work. In addition to training participants in literacy skills, the content in the literacy materials prepared participants to consider and understand the development concerns that these organizations and projects wanted to address.

By the late 1980s, the national program was serving more than 50,000 people a year. The Ministry of Education undertook an effort to increase that to over 100,000 a year. To that end, the Ministry experimented with intensive large-scale campaigns while encouraging NGOs and other development agencies to take on a much bigger responsibility. A few years later, Nepal changed its form of government to one that was democratic, and this process delayed the expansion of the literacy program. By the early 1990s, the government was ready to begin expansion again, by then with the help of

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<sup>4</sup> In addition to the authors of this paper, a number of people have been instrumental in the development of the Nepal Literacy Program, but three were key to its development. David Walker was World Education's Project Director during the early days of research and materials development. Lyra Srinivasan provided advice on a consultant basis. Dil Bahadur Shrestha was the Director of the Adult Education Section of the Ministry of Education during the development of the materials and continued on during the initial stages of expansion.

hundreds of new NGOs that emerged from the democratization process. Expansion of both the government and NGO programs brought the number of participants served to over 100,000 a year in 1995.

The Nepal program is based on a two-volume set of materials, *Naya Goreto* or the New Trail, that are the focus of a six-month basic literacy course. The basic course classes usually begin in late November (after the harvest work is completed) and continue to late May. The classes meet six days a week for two hours a day (approximately 300 hours of instruction). An educated local person is trained to teach the basic course. The teachers are called facilitators to emphasize their role in facilitating the learning of the participants. Local teachers or other local leaders serve as supervisors who visit each class on a regular basis to provide support and technical assistance to the facilitator.

The process that takes place within a class is a critical element of the program and leads to some of the most important outcomes. In the basic literacy course, a class begins with a discussion of a picture, such as one of women collecting water from a stream. (For examples of the pictures used in this program, see the Instructional Materials section earlier in this paper.) In the class, women discuss the picture by first describing what they see: A source of water and all of the activities that take place in or near it. The discussion continues on concepts such as the source of their own drinking water, who brings water to the house, and what is clean—as opposed to dirty—water. Eventually, the discussion ends with suggestions on how to make water easier to get and how to ensure that it is clean.

During these discussion sessions, participants stand up in front of the group and discuss the drawing while pointing out specific aspects of it on a larger, poster version that is visible to all. For some participants, particularly women, this is the first time they have had to stand up in front of a group, other than their family, to speak. Participants may be shy and embarrassed and sometimes say only a few words, but they gain self-confidence by doing something they have never done before. The discussion about water allows the participants to articulate their own position about this essential aspect of their lives. Even if the participants, in the beginning, are saying things that are wrong, in the sense that they are inconsistent with the suggestions of development agencies, they are practicing talking about issues within a group, a skill they need if they are to take action to improve their communities.

After the discussion, participants move on to learn the Nepali word for water. At this point, participants are learning water as a whole word, but they move quickly to learning its syllables and letters, along with other words that can be made with the same letters. They learn this skill, in part, through playing games with cards that display the letters and syllables. During these games participants are actively discussing options and helping each other to make words, rather than focusing on the competition. This group work, along with being fun, helps provide valuable practice essential to learning literacy. Later in the course, participants take turns leading the class in team games of recognizing words and syllables.

Very early in the curriculum, participants begin practicing their reading with comic-book stories that focus on concerns and problems in their lives. Some of these are general social problems, such as an abusive husband or a dishonest moneylender, but others are specific to health (such as one focused on the transmission of disease by flies), or other important development topics. Much later in the curriculum, participants begin reading articles that focus on specific development content, such as a lesson that explains how to prepare oral rehydration solution. Participants are encouraged to get up in

front of the group to read and discuss the stories and information in the text. This, too, builds social interaction skills needed to overcome the barriers to a better life.

A good deal of innovation has taken place since the basic program was established. For example, NGOs and government agencies have adapted the materials and the program design to serve children who are not attending school. Many Nepalese children do not attend school, or drop out in the first few years. Recognizing this problem, ActionAid, a British NGO, began to experiment with adapting the adult materials for children. The Ministry of Education and UNICEF took up this experiment, and programs eventually served almost 100,000 children. The Out-of-School Children (OSP) program serves children who are not attending formal school, with the goal of bringing them into the school system at grade 3. With assistance from UNICEF, this project was extended to a two-year program that approximates the five years of primary school.

World Education developed three integrated literacy programs that built on the basic course. The Health Education and Adult Literacy (HEAL)<sup>5</sup> program integrated a comprehensive health and family planning curriculum into the basic program. The Women's Economic Empowerment and Literacy (WEEL) program integrated a comprehensive savings, credit, and micro-enterprise curriculum into the basic program, and the Girls Access To Education (GATE) program adapted the basic curriculum and materials to serve the needs of adolescent girls.

## **Health Education and Adult Literacy (HEAL)**

Nepal is one of the world's poorest countries, and life in its rural villages is difficult. Most rural villages have no electricity, running water, or paved roads. Even the most basic health care services can be several hours or even more than a day's walk away. Although the government, with help from UNICEF and other agencies, has been building safe water systems in rural areas, most villagers still draw drinking water from unsafe sources such as rivers, ponds, or trapped run-off. Rural people must depend on crops grown in their village for nutrition, and some traditional eating habits work against good health. Other health issues plague the country. Blindness occurs in unacceptably high rates, largely due to vitamin A deficiencies. Maternal childbirth and infant mortality rates are very high, and female life expectancy is below that of males.

The primary resource for improving health in Nepal is individual action to change both behavior and the environment in which people live. In this context, women have an important role to play in helping to promote good health, sanitation, and nutrition for their families. Although in Nepalese society women have little input into major family or community decisions, they are involved in the daily decisions that affect their health and that of their families. Women usually have the responsibility of bringing drinking water into the home and preparing all of the food consumed by the family. Moreover, once a family decides to limit the number of their children, the wife is usually the one who has the responsibility for seeking out and using family-planning methods.

Although health and family-planning resources in Nepal are severely limited, rural villagers do have access to some health care facilities but must be willing and able to take advantage of them. A lack of education puts women at a disadvantage in using health and family-planning services, and learning from

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<sup>5</sup> Smith, 1994.

health education. The health education that is available to women in rural villages is more easily understood by those who have basic literacy skills because it depends on the written word (i.e., posters and pamphlets) or on a type of oral language that is not commonly used in village life.

Nepal is expanding access to primary education and working to ensure that all Nepali girls have a chance to acquire basic literacy skills. In the meantime and for several years into the future, adult literacy classes will be the only opportunity for women to gain the basic skills and knowledge they need to make decisions about their family's health. A successful educational program for women can shorten the road to equality and improve the health and family-planning decisions made in families or communities.

## ***Background***

The Ministry of Health in Nepal has established a system of rural health posts with a staff that includes village health workers who visit villages and provide health education and services. The focus of the village health worker is primary health care, with an emphasis on prevention of mortality and morbidity through immunization, hygiene, sanitation, family planning, and home treatment of simple ailments with, for example, first aid and oral rehydration therapy. To augment the efforts of the village health workers, the Ministry of Health has invested in the training and support of Community Health Volunteers (CHVs). CHVs are local villagers who provide health education and information; distribute oral rehydration packets; keep simple statistics on births, deaths, and illnesses; and arrange for immunizations. In rural villages, the CHV is usually the only person with training in modern health practices.

Because village women are reticent to discuss health issues such as family planning and prenatal care with men, female CHVs are particularly valuable. The CHV training program requires literacy skills, and this makes finding women to serve as CHVs difficult. The literacy rate for women in rural Nepal is extremely low, and many villages have few literate women; therefore, most CHVs have traditionally been men. In 1989, the Ministry of Health addressed this problem by recruiting and training approximately 27,000 illiterate female CHVs.

Their lack of literacy skills left these CHVs at a disadvantage in carrying out their responsibilities, which included record-keeping of deaths, births, and illnesses in the village. Moreover, they could not benefit from existing in-service opportunities to further their learning, and many felt that they were less effective because of the low literacy skills of the women in communities where they worked. At the time, the Ministry was receiving technical assistance from a USAID-funded project managed by John Snow Inc (JSI). JSI asked World Education to help redesign the CHV training so that it could be used with illiterate women.

In response to this situation, the goal of the HEAL project was to produce, within each village, groups of women who were literate and well educated about the behaviors that would lead to better health for themselves and their families. Within each group would be a CHV and between 10 and 25 village women. The program would directly affect this group, but they would also serve as role models for other women and as an effective channel of communication to all village women. The objectives of the HEAL project were to:

- Increase the literacy skills and health knowledge of village women, particularly CHVs, young women, and expectant mothers;
- Increase the commitment and effectiveness of the female CHVs by increasing the community's recognition of them;
- Increase women's understanding and use of health services provided by the CHV and other health workers in their areas; and
- Provide a viable project model for health education and adult literacy that supports both Ministry of Health and Ministry of Education goals and that can be expanded to serve CHVs and women in other areas of the country.

Based on the need expressed by CHVs for literacy instruction and the existence of a proven method for providing literacy education to adults, JSI approached USAID in 1991 for funding to conduct a project that would provide a 21-month course of literacy and health education to female CHVs and the Mothers' Groups (each CHV works with a group of mothers in her village) members with whom they work in one district in Nepal. The HEAL project received funding and began operation in October 1991, with World Education subcontracted to implement the literacy classes and develop supplementary health materials. In the first year of the project (1992), 50 classes were started in 49 sites around Raksirang and Palung health posts in Makwanpur district. In the second year of the project (1993), 27 classes were started around Ambhanjhang health post. In total, almost 2,000 women had access to participation in the project. The project included a rigorous evaluation that looked at the efficiency and impact of these classes, in order to make a decision about the feasibility of expanding the program. World Education managed the implementation and evaluation of the project.

The HEAL project developed a model that has three phases: a basic literacy course, a postliteracy course, and a continuing-education program, described below.

**Basic Course.** The six-month basic literacy course uses the *Naya Goreto* materials. In HEAL, the *Naya Goreto* curriculum is supplemented by 12 half-hour lessons on specific health topics, including oral rehydration, birth spacing, and immunizations. The CHV organizes the classes and recruits the participants. A local teacher or health post staff member is recruited as a supervisor who visits each class twice a month to provide support and technical assistance to the facilitator and to teach the supplementary health lessons during these visits. The CHV, who is usually a participant in the literacy class, plays a special role as an aide to the facilitator, helping to make arrangements and encourage the women to attend class.

Twelve times during the basic course, supervisors come to the class and present a lesson on an important health topic. As much as possible, the participants are active learners and, for example, would practice making oral rehydration solution, rather than being lectured on how to do it. During these sessions, women are able to use the new vocabulary they have learned. Since the supervisor is usually a village health worker or health post staff person, and almost always a man, he is the kind of person women will have to deal with to improve their family's health. So these sessions are important both for the information participants hear and the interaction with healthcare workers they practice.

**Postliteracy.** The literacy teacher encourages participants who complete the basic course, and other village women who are already literate (as a result of schooling), to attend a three-month postliteracy course, which meets three times per week for two hours per class (approximately 75 hours of

instruction). Classes in this phase usually begin in late November and continue to late February. (The timing of classes is designed to work around planting, harvesting, and monsoon seasons.)

The postliteracy course is taught by the facilitator who taught the basic course and uses a 94-page text, *Diyalo* (Light), that focuses entirely on health topics including AIDS, nutrition, first aid, family planning, and sanitation. *Diyalo* uses the same format (comics, stories, exercises, and participatory activities) as the basic course materials and the same participatory process of involving the participants in discussion and presentation. Supervisors visit the classes, and the CHV continues to play an assistant role in the postliteracy phase, helping to facilitate small-group work or assist the facilitator with teaching.

***Continuing Education.*** After the first two phases are completed, there is a 12-month continuing-education program during which the CHV and the class participants attend their once-a-month Mothers' Group meetings (approximately 25 hours of instruction). During these meetings the participants read and discuss a series of 12 health education booklets developed specifically for HEAL. Each booklet is 24 pages long, with stories in a comic-book format. Topics include the village health service system, Vitamin A and nutrition, latrines, and prenatal care. The CHV runs these meetings, using the continuing education materials as a starting point for discussion and health education.

### ***Developing the Materials***

The HEAL supplementary, postliteracy, and continuing-education materials were developed to follow the same format as the basic literacy materials. After the first pilot classes were completed, the materials-development team conducted focus groups with participants who were asked specific questions about their understanding and enjoyment of the materials. The team discovered that lessons with humor and animation in the illustrations and writing (e.g., fish talking together about how their pond gets dirty and that's unhealthy) were among the most effective in helping participants understand health concepts.

The team wanted to add the women's own voices into the material, both to foster their writing abilities and to represent their perspective. The continuing-education materials contain writings from women who became literate in the adult literacy program. With help from UNICEF staff, three three-day workshops were held for groups of 10 to 18 women who had participated in the basic literacy course and scored well on the test. During the workshop, these women produced stories, poems, and songs on health topics such as Vitamin A and nutritious foods, pneumonia, hygiene and sanitation, and latrine-building. When preliminary drafts were done, the women worked with a local artist to draw illustrations to accompany the writings. The output from these three workshops was then augmented by the World Education writers to include exercises and activities to round out each lesson. The names of the women who participated in writing each piece appear in the final version of the continuing-education booklet at the end of their story or poem.

Based on reports by World Education and UNICEF staff who facilitated the learner-generated materials workshops, and by feedback from the women who participated in them, these workshops had a great impact on the confidence and writing ability of the women. At the start of the three days, the women expressed doubt and disbelief that they would be able to write anything, but at the end of the workshop they professed great pride in their accomplishments. Interviews indicate that these women now feel a greater sense of inclusion in the project, and that other participants are quite impressed to see their fellow learners' names listed as authors in their continuing-education books.



## *Preparation for Classes*

The HEAL activities began with a survey of potential sites for classes. Project staff selected and trained two surveyors to determine appropriate areas for implementing the project, based on recommendations by district health and education officers. They selected areas where there had previously been no literacy course offered by either government or NGOs and where there were at least 20 illiterate women interested in attending the course.

After sites were selected, project staff held a one-day orientation for district health and education staff who would be involved in the project. At this orientation, the project objectives and design were presented. Soon after this orientation, CHVs from the selected sites attended a three-day orientation to the project, the first day of which also served as an introduction to the project for supervisors. At the orientation, CHVs participated in practice classes so that they would have the experience to better convince village women that the classes were worth attending. After the orientation, CHVs returned to their villages to talk about the project and motivate women to attend the course. At this time, together with the women in their Mothers' Group, project staff asked the CHVs to identify and nominate potential class facilitators to the project staff. CHVs attended another orientation before the continuing-education phase of the project to introduce them to the materials they would be using in their Mothers' Group meetings.

Once CHVs and Mothers' Group members had nominated potential facilitators from their villages, project staff then recruited and selected facilitators and supervisors for each class from this pool. Both facilitators and supervisors had to pass a written test to show that they had adequate literacy skills, and an oral interview to determine if they were appropriate for the respective tasks. Project staff chose one facilitator for each class, and one supervisor to oversee five classes.

Project staff then trained both supervisors and facilitators for their roles before the start of the basic course. Supervisors attended a 5-day training, and facilitators attended a 12-day training. Project staff introduced both groups to the materials and course design, principles of adult learning, and objectives of the project. Supervisors had a chance to practice teach the 12 supplemental health lessons that they would provide during the basic course, and facilitators received a guidebook for teaching the course. Supervisors and facilitators also received additional training before the postliteracy phase of the project.

Project staff gave each class five kerosene lanterns, since the facilities where classes were held might not have had other sources of light. A number of sites had problems with lanterns (breakage, accessibility of kerosene, etc.), but in most cases, women ultimately worked together and developed strategies for sharing responsibility to overcome difficulties with lighting. Each participant received her own copies of all materials (basic course, postliteracy course, and continuing education readings), a pen, and a notebook.

In villages with so few resources, efficient materials delivery and planning by project staff, coupled with women's own initiative and motivation to solve logistical problems, are critical to success. Orientation, training, and logistical support help to ensure that everything and everyone is in place and ready when the classes begin, and it reduces the real possibility of obstruction that might lead to failure early in the project.

## ***Coordination***

Throughout the project World Education staff made field visits and filed reports, supervisors filed reports, and stakeholders held regular meetings at both the national and district level. The project's governing board, which included representation from all the institutions involved, held national-level meetings approximately three times per year. The governing board's responsibility was to set policy and make broad recommendations about project design. District-level meetings were held bimonthly to gauge the project's progress and uncover problems, and to make decisions about day-to-day implementation of the project in the field. In addition, these meetings ensured that officials from all cooperating agencies were involved in project decisions and informed of progress. The project evaluation indicated that these meetings were very important to the success of the project, because they provided a vital communication link between important stakeholders.

Project staff gathered additional formative evaluation information about the project's progress through questionnaires filled out after each phase by key people involved in the project, and conducted focus groups with a sample of participants and CHVs to get feedback on project implementation and class quality. Finally, a sample of participants was given literacy and health knowledge tests after the first two phases of the project to determine achievement. Project staff also gathered summative evaluation information through testing and interviews with all interested parties at the end of the project.

## ***Cost***

The total cost of this project had a set of recurrent costs for program implementation and another set of development costs specific to the project, including the design of materials, consultant fees, international travel, and project coordination. The recurrent program implementation costs fell into two categories: (1) direct instructional and operational costs of running the classes and (2) indirect costs incurred by the agency that implemented the classes. The direct instructional and operational costs included per diem and travel, salary for facilitators and supervisors, and materials (books, lanterns, notebooks, pens, and training materials).

The recurrent costs represent the approximate cost of expanding the program now that the model has been developed. The direct instructional costs for each location totaled \$300 for a basic literacy class, \$130 for a postliteracy class, and \$20 for a continuing education class. Taking into account the drop-out rates, the per-completing participant rate was \$20 for the basic literacy course, \$10 for the post-literacy course, and \$1 for the continuing education phase, for a total of \$31 for the entire course. These costs might go down slightly as the project expands and benefits accrue from the economies of scale in purchasing materials, but the larger project might have a higher drop-out rate as well. The indirect costs incurred by the implementing agency were \$64 per class or approximately \$5 per completing student. These costs could go down with economies of scale as well.

The total recurrent costs for each completing participant are, therefore, approximately \$36, but for each completing woman, another would have received some education as well. Though a few of the dropouts received little in the way of useful education, some acquired more than half of the skills and knowledge of completing students. For comparison, the cost of one child completing three years of primary school (the equivalent literacy skill level) in Nepal is \$132.

## ***Outcomes***

The project evaluation indicated that women who participated in the HEAL program spent about as much time in the program as they would have in less than one year of primary school, but gained skills that would have taken three or four years of primary school to develop. About 75% of the women passed a literacy test after the basic course. Passing represents the equivalent of three years of formal schooling. In addition, there was a statistically significant difference in literacy achievement between a sample of HEAL participants and women participating in the regular six-month basic literacy course. Women enjoyed and appreciated the relevance of learning about health and family planning issues while acquiring reading and writing skills. This was evidenced by their participation. Completion rates for both years of the project held at 66% during the six-month basic course and 81% during the postliteracy course, figures that are high for literacy projects in Nepal. Reasons for dropping out were often unique to women's situations and unavoidable, such as pregnancy, marriage, death or illness of a child or family member, and lack of support from a husband. Lack of desire or even difficulty in attending class was rarely reported as a reason for dropping out.

The evaluation of HEAL revealed changes in women's behavior related to health and family planning programs. Health service personnel, including CHVs, village health workers, health-post staff, and district public health officials agreed that the HEAL project made all their health education, family planning, and primary health care efforts easier. CHVs stated that HEAL women are more likely to come to them for oral rehydration solution (ORT) and now understand better how to prepare and use ORT for sick children. Village health workers report that HEAL women are more proactive in attending and requesting immunization clinics. Almost 60% of the HEAL participants named the CHV or the health-post staff as either the first or second person they would seek advice from during an illness of a family member. By comparison, only 34% of women attending a non-HEAL literacy class said they would seek a health-post staff as first or second recourse, and none of these non-HEAL women mentioned seeking out the CHV.

In terms of health knowledge, the sample of HEAL participants who took an oral interview showed dramatic increases in awareness of ORT, sanitation, AIDS, water-borne illnesses, and first aid. The awareness level of these participants was significantly better than non-HEAL literacy course participants.

In addition to development of health knowledge and literacy skill, participation in HEAL increased women's ability to speak up for themselves, engage in conversation with outsiders, request continued education, form groups, and work for improvements in their communities. As a result of the HEAL classes, the status of women changed in their communities as they became identified as educated and sources of health and family-planning information. These women have become leaders in their communities who can help health and family-planning workers do their jobs more effectively.

## ***Reasons for Success***

The success of the HEAL project is due to a number of factors. First, the project built on existing efforts in both literacy and health. By utilizing the existing *Naya Goretto* curriculum, the instructional package could be developed within a reasonable time and cost. By developing the course around the CHVs, who had already been trained to understand the existing primary health care system, the group in each village

had a female health resource. In addition, the CHV's membership in the group connected it to the formal health service and promotion system.

Second, the instructional design was sound and consistent throughout the three phases, the existing and newly developed materials followed a similar format, and the training design permitted relatively unskilled facilitators to develop confidence in teaching. Little time was available to train and orient facilitators. Facilitators could keep repeating a daily schedule as the class moved through the different lessons.

Third, the supervision system included input and oversight by trained supervisors, most of whom were drawn from the ranks of the health service, thereby ensuring assistance from local-level civil servants who saw the value of the project to their own efforts. This made the program important to the people with whom these women would have to begin interacting to gain greater access to health and family-planning services.

Fourth, the project staff was committed to obtaining continuous input from the various players at all levels and implementing suggestions made for improving the project. Everyone, from women in the classes up through ministry officials, had a role to play to strengthen the project. Paying attention to people at all levels encouraged their help in making the project a success.

Finally, and most importantly, the rural women involved in the project wanted to acquire reading and writing skills and knowledge relevant to their immediate context. The HEAL project answered those needs, reaching women who are among the most difficult for health services to reach.

The HEAL project was built on the assumption that women must be educated so that they can begin to take action on their own to change their lives and to lead other poor rural women in the same direction. Health programs should not wait for the formal school system to solve the female education problem for them. That will take too long. On the other hand, health programs in the Third World are underfunded for the service they need to provide, and they cannot take on the burden of educating all uneducated women. The HEAL project offers an alternative that allows health programs to combine their efforts with a sound basic education for a portion of the female population in a rural village. This group of educated women can act as a leadership group that provides a way into the uneducated female population. More importantly, they can help to advocate for and organize efforts that will supply a basic education to all women in their village.

## **Women's Economic Empowerment and Literacy (WEEL)**

Nepali women play an important role in helping to earn money for their families. In many cases, families do not produce enough food to support themselves over the course of the year. Women's income can thus be essential to help meet their families' basic needs. To contribute to their families' income, many women have small businesses and many others would like to develop one. The success or failure of these enterprises can have a serious impact on the life of the family. It is, therefore, important for women to have opportunities to learn about concepts such as market demand and quality control, and to strengthen their business skills in order to better monitor their accounts and manage their businesses.

In addition to the skills required for running a small business, women need access to financial resources. In rural areas, there are often no mechanisms to help women save or obtain money. In most cases, women in Nepal do not have access to credit from banks. They may obtain funds from village moneylenders, but are often forced to repay the money at excessively high interest rates (60% per annum, according to the WEEL report). One way of ensuring access to low-interest loans for women is for them to join a savings and credit group. Such groups offer the benefit of allowing women to save money that they have earned and to access loans through the group if they require additional resources. Moreover, women's savings and credit groups eliminate the need for reliance on banks, which have typically ignored women, or moneylenders who charge unreasonable interest rates.

Previously, most organizations that have formed women's savings and credit groups have added basic literacy training after the group has begun operating. However, while the organizations provided training on how to start and run a group, they did not provide sufficient literacy training to allow the women to run their groups independently. As a result, setting up accounting systems was difficult and participants often had to rely on an NGO worker, an educated group member, or an educated community member (e.g., a teacher) to keep accounts for the group. In such cases, decision-making can be heavily influenced or controlled by these people. Low-literate participants become dependent on these people and reluctant to handle large amounts of money and the responsibility of being a group member. World Education has found that integrating literacy skill acquisition with development of skills necessary for starting and running an independent savings and credit group helps women to feel more responsibility and ownership of their groups, and to participate in them more actively.

### ***Program Objectives***

WEEL's main objectives are to help women acquire literacy skills and, at the same time, learn skills that will help them improve their economic situation and that of their families. Since its inception, 10,000 women, the majority of whom live in remote hill communities, have participated in WEEL, and 3,000 have graduated from the 21-month course. At the start of the program, most of these women were illiterate. Some were school dropouts, and others were semiliterate, having previously attended literacy classes. From 1995 to 1999, 400 savings and credit groups were established.

### ***History***

During the early 1990s, World Education became interested in the integration of income generation and literacy. At the time, World Education was in the pilot phase of its HEAL project, which helped participants gain both health-related knowledge and reading and writing skills. World Education staff approached the Ford Foundation, which had been interested in helping women improve their livelihoods through formation of community-level savings and credit groups, thus strengthening Nepal's savings and credit movement. In 1994, the Ford Foundation funded an initial two-year pilot project, during which the first version of WEEL's curriculum was created. Ford funded a second pilot project from 1996 to 1999.

At the time that WEEL was launched, World Education had more than 15 years of experience in Nepal designing curriculum and implementing literacy programs; however, the staff was not well versed in the areas of savings and credit group formation and operation, and livelihood improvement. Given this

situation, as well as the belief that the input of multiple stakeholders serves to strengthen any program, World Education welcomed collaboration with Ford Foundation staff, other NGOs, and expert consultants.

Starting in 1996, WEEL staff worked with the Canadian Centre for International Studies and Cooperation (CECI). The Ford Foundation had already been supporting CECI in their work to build Nepal's savings and credit movement and brought World Education and CECI together. CECI has special expertise in savings and credit and experience working with rural producer groups. Both World Education and CECI possessed valuable resources, such as experienced staff, and offered programs that could be linked and complement one another. Both organizations have been committed to developing programs that work toward a common goal: Solid basic education programs that can be linked to larger systemic initiatives. Both organizations agreed that their collaboration would strengthen Nepal's savings and credit movement much faster than if each agency worked alone.

Throughout the development of WEEL, World Education received advice from a range of relevant government departments and NGOs. During the second pilot phase of the project, World Neighbors, another Ford Foundation-funded organization, also collaborated with World Education. With its strength in agro-based livelihoods, the expertise of World Neighbors was a critical partner in the development of appropriate materials for women. Other participating organizations included another international NGO, the United Mission to Nepal, and Nepali NGOs such as the Institute for Integrated Development Studies (IIDS), the Jajarkot Permaculture Program, the Women's Entrepreneurial Association of Nepal, and the Women's Development Division of the Production Credit for Rural Women (PCRW) project (a government program).

By 2001, WEEL staff was providing technical assistance and training to 25 NGO partners to enable them to implement the WEEL program. The staff of WEEL's implementing NGO partners includes people from the community with limited education and local farmers, homemakers, schoolteachers, health-post assistants, and local shopkeepers. The WEEL team has worked closely with its local NGO partners to develop and test its training packages over the last six years. This process has prepared WEEL's partners to implement the program. The specific role of each NGO is determined by its mission, as well as the needs and existing capabilities of groups with which each has worked. NGOs might do marketing, establish links to wholesale buyers, motivate, provide technical training, or design products, such as bags that women can make from hand-woven cloth. Training developed by World Education has helped to develop NGO staff capacity to implement the program.

WEEL eventually operated in 17 districts throughout Nepal: The remote hills of the eastern region, the low-to-mid hills of the central and western regions and in the mid-western and eastern Terai (southern plains) region. From the beginning, the WEEL program has been implemented directly in these areas by local NGOs, who are responsible for the day-to-day implementation of the program.

### ***Program Description***

WEEL is a 21-month educational program that is divided into four phases. Each phase focuses on a different set of topics related to savings and credit and livelihood improvement.

The first phase focuses on literacy and numeracy. In groups of 20–25, women participate in the six-month basic literacy course, taught by a local facilitator. The basic literacy course is supplemented with special materials that introduce the concept of savings and credit group development and the economic role women play in Nepali society. During these first six months, there is a strong linkage between literacy and savings and credit concepts and an emphasis on group development.

WEEL's second phase focuses on building an understanding of how to manage savings and credit. The same local facilitator who taught the basic course usually teaches the three-month postliteracy course. This phase helps women understand the concepts they need in order to form and actively participate in a savings and credit group. The curriculum emphasizes understanding issues related to group management, account keeping, and information about savings and loans. At the end of this phase, groups begin using their savings to provide loans to members, and by that time they are able to manage both the savings and the loans.

The third phase is a continuing-education program that focuses on how women can make decisions about granting loans within their group. Groups meet once a month for five months to read continuing-education books so that they can develop the ability to manage their group funds. Group leaders receive special training so that they can integrate reading into their monthly group meetings.

During the fourth phase, which lasts seven months, women continue to meet and read continuing-education books. Content in this phase focuses on how to assess and improve women's livelihoods. In addition to their group meetings, women also participate in short monthly training sessions facilitated by the group's leaders, supported by a member of the partner NGO. The training sessions help women assess their current livelihood and decide whether to do more of what they currently do, improve what they currently do, or start a new livelihood activity. The training sessions do not provide specific skill training for a particular livelihood. These seven sessions focus on determining how feasible a livelihood activity might be, whether there is a market for the product or service within women's communities, and what skills women might need to undertake or improve a specific livelihood activity. In these training sessions, participants apply the reading, writing, and numeracy skills that they have acquired throughout the program.

The WEEL program stresses the need for women to acquire math skills for problem solving related to their savings and credit and livelihood activities. The staff designed activities to promote this type of skill development, including visits from members of older savings and credit groups, who discuss the importance of math skills for savings and credit and livelihood activities.

WEEL materials and training are divided into three areas: (1) literacy materials and training for the program's participants, (2) guidebooks and training for class facilitators and group leaders who teach the participants, and (3) training for NGO members who run and supervise the program and train facilitators and group leaders. To the greatest extent possible, WEEL materials are written in simple language accessible to literate participants as well as those who complete the basic literacy classes. With the exception of the materials used for the basic literacy phase, all materials and training were developed specifically for the WEEL project.

## *Developing Materials*

At the time World Education became interested in integrating literacy and income generation, its staff was unfamiliar with the area of savings and credit. As staff gained knowledge of the subject, the design for WEEL developed over the course of the project's two phases. Materials evolved based on experience, including input from Indian organizations working in savings and credit, local needs observed by the project's donor, and the needs of women participating in the program. As the program progressed, program content was directed toward women involved in subsistence agriculture because they represent a large portion of the program's target audience.

Throughout the development of the WEEL curriculum, staff used other existing programs as possible models. To tailor the program to its specific objectives, staff contacted organizations that promote savings and credit activities in Nepal and collected information on women's needs, problems, and challenges in running savings and credit groups and in mobilizing savings for their productive activities.

To develop the WEEL curriculum, staff began with a rough outline and added more detailed lesson plans, based on what staff members felt was feasible for the project's potential time frame. Early on, staff determined that WEEL's design needed to be flexible and evolve to meet the needs of participants. The staff concluded that women needed more than could be included in the course originally envisioned (which was limited to basic literacy, postliteracy, and continuing-education books). Staff thus consulted with WEEL participants to gather ideas on how best to deliver lessons on more difficult livelihood concepts. Based on women's responses, WEEL staff decided to do seven one-day workshops during the program's final phase. WEEL staff determined that savings and credit group leaders should take on the major responsibility for these one-day workshops, with NGO support. This would reduce dependence on NGOs and give groups more responsibility for their own learning.

To provide realistic scenarios, staff created lessons using anecdotes from field workers' stories related to the concepts and challenges the women were facing, adding technical information where appropriate. Materials were pretested with program participants to see what they understood, liked, and disliked. In addition, a review panel, which included representatives from several organizations working in livelihood and savings and credit activities, gave feedback on content and language used in the materials. Changes recommended by both the women and the review panel were incorporated and the first draft materials were printed.

During the 1996–1999 phase of the program, each set of program materials was piloted three times. During and after each piloting, WEEL staff solicited feedback from a full range of stakeholders, and the materials were revised and reprinted as necessary. The feedback process included focus-group discussions with a sample of program participants. These women had diverse abilities, thus revealing the range of difficulties participants experienced in reading and understanding the materials. To provide more detailed feedback, WEEL staff selected a limited number of facilitators to review the materials lesson by lesson. Supervisors held discussion sessions with all groups and reported on participant responses. Partner NGO staff gave feedback on the savings and credit groups that emerged from the literacy classes, highlighting challenges the women faced in running the groups themselves.

In addition to these efforts, WEEL staff observed group leaders in training sessions and participants in livelihood workshops to see what participants learned and understood. Staff gathered information



on how women in the groups have been able to apply the knowledge and skills gained through participation in WEEL and used this information in revising the literacy materials and workshops.

### ***Outcomes***

No formal evaluation of WEEL's outcomes has been conducted. World Education staff has obtained information on the impact of the project through meetings with partners, and from staff talking with program stakeholders. The evaluation activities that have taken place have been formative and ongoing and have provided information for making improvements in the curriculum.

The informal evaluations measured the project participants' ability to save, manage group accounts, make loans, and keep records. Women's literacy and numeracy skills were evaluated with a test at the end of the postliteracy stage. The women also completed a self-assessment of their savings groups as a final activity in the program. In the self-assessment, women discuss and analyze the strength of their group, for example, or the group's independence in decision-making.

The informal evaluations found that linking savings and credit with literacy is beneficial. Literacy training throughout the program helps women begin to build their self-confidence. Literacy skills enable participants to read and write about savings and credit concepts. Participants are able to use their numeracy and literacy skills to keep account books, handle financial transactions, and record decisions. The women can use their reading skills to access information about livelihoods. They can better assess, plan, and manage livelihood activities through the use of reading, writing, and numeracy skills. WEEL participants are able to use newly developed writing and presentation skills to make contact with government and nongovernment organizations, as well as request help from their fellow group and community members. CECI found that WEEL groups understand the savings and credit concepts better, are more transparent in their savings and loaning activities, and keep their books better than many other groups.

The informal evaluations also found that by the end of the four phases of the program, most participants are literate enough to do the following simple tasks: manage accounts, read books, write letters, and follow written instructions. Most participants have become members of savings and credit groups they have initiated. These groups have proper bookkeeping systems in place; participants save on a regular basis; and groups provide loans for consumption needs, emergencies, and productive activities. The participants are able to manage a self-learning process (reading continuing-education booklets during their monthly meetings and conducting their own one-day workshops on livelihoods), and are able to approach other organizations and offices for other forms of assistance. Group members have also begun to engage in more productive activities as a result of taking loans.

### ***Lessons Learned***

The WEEL staff believes that success is partially dependent on linking to partner agencies that serve the goals of the program and needs of the participants. World Education invested considerable time in building relationships with staff of international and national NGOs and government agencies in Kathmandu and in districts where the project was implemented.

The WEEL experience demonstrates that partnerships require commitment and are time consuming. While partners mutually benefit from working together, building a partnership is a challenge. Players can feel threatened by new innovations or different ways of addressing the same issues. Each individual organization may well have its own internal issues to confront, which may affect the partnership. While working with other organizations has created challenges that may not have existed if World Education were working alone to implement the program, partnerships forged by the WEEL team with a variety of organizations have enriched the project and established programs that may continue after the project is ended.

World Education's initial needs assessment focused primarily on the content women needed and the special challenges participants would face as members of a women's savings and credit group. As the project progressed, however, staff found that women had a range of literacy skills. Many women entering the program had participated in a literacy class, were self-taught, had dropped out of school, or had completed either primary or secondary school. Consequently, the literacy approach used in the program had to be adapted to the range of participant literacy skills.

The WEEL staff found that women come into the program with a purpose and use for their new literacy skills and work hard to learn more. Women participating in the savings and credit groups use their literacy skills to manage their groups. They are better at group management than those women who are involved in non-literacy-related groups. While illiterate women often have to rely on literate group members, WEEL participants have become self-sufficient and are taking control of their groups' progress and making decisions on their own.

Finally, implementation of an integrated literacy program like the WEEL project takes time. It has taken a two-year course for women to reach a competent level of literacy abilities and understanding of livelihood and savings and credit activities. While some other organizations build women's savings and credit groups in just six months, such organizations often ignore the literacy and growth needs of the women and the groups. These organizations prefer a more inexpensive program and tend to target the same geographical areas project after project. Although longer and more intensive, the WEEL program may ultimately be more cost-effective. Because the program takes an integrated approach, it gives women and groups a better chance at self-sufficiency and sustainability.

## **Girls' Access to Education (GATE)**

In early 1998, World Education piloted a nonformal education (NFE) program for adolescent girls in Nepal. The Girls' Access to Education (GATE) program serves girls, aged 10–14, who have never entered the formal school system or were forced to drop out due to household responsibilities or other social and cultural constraints. The goal of the program is to provide girls with the opportunity to acquire basic literacy and numeracy skills, with a particular focus on health issues. At the end of the course, if feasible, girls are encouraged to enroll in a primary school at an age-appropriate level. While girls learn how to read, write, and do mathematics, they also learn about nutrition; reproductive health; the consequences of early marriage, early pregnancy, unsafe sex, sexually transmitted infections (STI), HIV/AIDS; and the dangers of trafficking, prostitution, and other forms of abuse. The project has been implemented in eight districts in Nepal.

Although the goal was to enroll all children in school in Nepal, many girls do not have the time or freedom to attend school for a six- or eight-hour day. Girls face a number of barriers to their participation in formal schooling. They are often forced to stay home to care for younger siblings, fetch water and firewood, cook, or do other household chores. In addition to responsibilities at home, the education of girls in Nepal is not viewed as important as education for boys, whose education is considered ultimately more profitable for families. Additional barriers keep many girls from attending school. These include the lack of appropriate facilities for girls in schools, harassment of girls by male educators, and prohibitively long walking distances to school.

However, girls do seem more able to attend nonformal (out-of-school) education classes because they are often held closer to home, for shorter periods of time, and participants are allowed to bring younger siblings (for whom they are responsible) with them to class. World Education's experience is that wherever adult NFE classes are offered, a significant proportion of participants are adolescent, unmarried girls who have missed the opportunity to study in the formal school system.

### ***Objectives***

In addition to linking literacy with health knowledge, an additional objective of the GATE program is to emphasize the importance of girls' schooling and help GATE graduates, whenever possible, enter the formal school system at an age-appropriate level. For girls who are unable to enter school at the primary level, efforts are made to enroll them in a follow-up nonformal education program for adults, such as World Education's Women's Economic Empowerment and Literacy (WEEL) program, which helps women improve their livelihoods and build assets.

Because it has reached epidemic proportions in Nepal, sex trafficking is a particular area of focus in the GATE program. GATE addresses girl trafficking in several ways. The first is by increasing girls' knowledge, awareness, communication abilities, self-esteem, and sense of self-efficacy. Each component of the GATE curriculum focuses on girls' empowerment. Girls learn to take care of themselves and each other. Through a set of learning activities based on several themes related to trafficking and sexual exploitation, they also learn about the dangers of trafficking, prostitution, and other forms of abuse. Second, they learn literacy skills, which increases their chances of returning to school and in turn reduces their chance of being trafficked. Third, the program attempts to raise awareness among parents and other community members in GATE communities about the importance of girls' education and to the destructive consequences of neglect, abuse, and, of course, trafficking and prostitution. Finally, World Education works closely with its partner NGOs, providing them with education, information, and advocacy skills to address trafficking in their own communities. Armed with the new skills and information learned during GATE classes, adolescent girls are better able to develop in a healthy and safe environment, protect themselves against the dangers they face, and explore the possibility of enrolling in the formal school system.

### ***Project Description***

The GATE program consists of nonformal education classes that are held six days a week for two hours each day over nine months. The curriculum covers the following topics: health and sanitation (personal hygiene, immunizations, first aid, diarrhea prevention and treatment, pit latrine use); reproductive health

(bodily changes in adolescence, sexually transmitted disease/HIV/AIDS, early pregnancy, safer motherhood); nutrition (vitamin A, malnutrition, healthy eating habits); environmental health (pollution, safe drinking water, forest conservation); adolescent psychology (peer pressure, counseling services); population and health (family size and family welfare, responsible parenthood, delayed marriage and its benefits); and empowerment (awareness of girls' trafficking, child labor and child rights, importance of girls' schooling, domestic violence, and sexual abuse).

Participants learn through health-focused stories that employ a comic-book format in the primary textbook, *Lalima*, as well as through games, role plays, group discussions, and peer teaching. The GATE program encourages girls to maintain and practice their newly acquired literacy skills through journal writing in books that mix health messages with blank pages. When participants have completed the nine-month program, GATE provides tin trunk libraries, containing over 150 books and magazines on health and development topics, to each class.

Lesson One in the textbook is about personal hygiene. The pictures show different aspects of personal hygiene, while the word *saapha* ("clean") and its syllables are introduced. Class participants then learn another simple word that can be made from these syllables, and practice writing the syllables and words in their textbooks. The pictures serve to stimulate conversation and lead to group and individual learning activities. Later in the curriculum, as participants' vocabulary grow, the key words that introduce each lesson becomes longer and the number of words that can be built from known syllables increases.

In 2000, an antitrafficking component was developed for the GATE program with funding from private foundations and the United States Agency for International Development Regional Anti-trafficking Initiative. The funds were used to pilot a series of nine booklets that deal specifically with the skills girls need to make informed choices about being sexually exploited and being trafficked. There are a variety of issues discussed in the booklets including trust, peer pressure, parental pressure, job offers, risk factors, making rash decisions, self-pity, life in a brothel, protecting oneself, child rights, safe migration, and alternative options.

## ***History***

The idea for GATE grew out of World Education's HEAL program. Around 1996, staff observed that an increasing number of girls were attending HEAL classes. This situation suggested to staff that a nonformal education program aimed at meeting the health education and literacy needs of adolescent girls would be welcomed by Nepali communities.

World Education staff selected a number of NGOs with which to work on the project. Representatives of World Education and NGOs visited villages in an effort to assess levels of interest, recruit participants, and identify potential facilitators. Program staff hired supervisors and provided training to master trainers who then trained groups of facilitators.

The initial curriculum for the program was taken from the Centre for Development and Population Activities (CEDPA), which had been collaborating on HEAL and already had a ready-to-use curriculum for girls. With guidance and input from government and NGO representatives from the fields of education, health, adolescent development, and psychology, World Education developed and tested

a basic health education curriculum. Staff obtained feedback on the draft curriculum through field-testing and revised the curriculum accordingly.

With funding from a private family foundation in the United States, staff had the resources to support the first two to three years of the program's operation, during which GATE developed and piloted a curriculum. Subsequent private donations allowed the program to continue and expand into additional districts. The program found support with private donors who were interested in developing formal education in Nepal, as well as protecting child rights. In addition, in 2002, the U.S. Department of Labor provided funding to expand the program to reach girls working in difficult labor situations.

Six months into the program's operation, it became apparent that the problem of trafficking was especially pertinent to GATE's target population and their communities. In 2000, USAID provided funding for the development of a set of booklets that covered antitrafficking subject matter. To develop the materials, a World Education staff member with a materials-development background and working knowledge of the girls' trafficking situation in Nepal interviewed experts working in the areas of prevention, rescue, and rehabilitation of girls that have been trafficked. This staff person also went to villages where the GATE program was being implemented and spoke with community members, including the girls participating in the program, their parents, and local community leaders. On the basis of this research in the field, a team of five curriculum development experts prepared the draft materials. Each booklet is presented in a different way. For example, one was written as a poem, another as a comic strip, and another as a story. These materials were introduced to girls once they'd completed their six months of basic literacy training.

## ***Implementation***

To develop the GATE program, World Education adapted the training package from its national literacy program, *Naya Goretto*. As part of this package, facilitators, all of whom are women, receive intensive training throughout the class cycle. This process helped to ensure that facilitators understand and employ nonformal-education methods, that they hold classes on a regular basis, and that they report problems in a timely fashion. In addition, the package provides facilitators with a guidebook that suggests activities and individual reading and writing assignments. The role of facilitators is to work with class participants on a daily basis to help them increase their literacy and numeracy skills, their health knowledge, and their confidence and self-esteem.

In addition to facilitators, the program includes supervisors, selected from among community members, who are trained to provide support to the facilitators throughout the program. They encourage facilitators to perform well, and in some cases, facilitate particular class sessions and administer literacy tests.

In each district, NGOs serve as local implementing partners. World Education provides these NGOs with training, managerial advice, and financial support throughout the project. NGOs conduct follow-up training for local supervisors and facilitators, provide ongoing support to the classes, and report regularly to World Education. In addition, NGOs maintain records of all classes, including participation and drop-out rates, as well as facilitator and supervisor attendance. NGO partners are responsible for identifying and solving problems quickly and efficiently, with World Education assistance, if necessary.

In implementing the program, World Education employs field assistants, assigned in specific districts, to provide ongoing support to classes, facilitators, supervisors, and NGOs. The assistants' role includes helping facilitators with training skills and community relations; assisting NGO staff with report writing, budgeting, and problem solving; and collecting qualitative information from participants about their progress made and any problems encountered in classes. The GATE program coordinator and program officers visit the field regularly and provide support as needed. Finally, each GATE community has created a Class Management Committee, made up of local leaders, schoolteachers, and interested parents. Committee members visit GATE classes regularly and offer suggestions and assistance to improve class attendance and the quality of teaching.

### ***Evaluation and Outcomes***

Since its inception in 1998, the GATE program has provided opportunities to more than 7,500 adolescent girls ages 10–14, who never entered or who dropped out of Nepal's formal school system. GATE staff conducted an evaluation of the program from September 2001 to July 2002. GATE designed the evaluation to assess the impact of their program on: (1) adolescent girls' literacy skills; health knowledge; knowledge of and attitudes about trafficking and other risks to their health and development; self-esteem; and re-enrollment in the formal school system; and (2) GATE communities' commitment to adolescent girls' health, safety, and development, as measured through awareness of the dangers of trafficking, increased willingness to send adolescent girls to school, promote their health, and protect them from being trafficked or otherwise abused. Data for the evaluation was gathered through pre- and post-GATE literacy tests and surveys administered before and after GATE classes to participants and a control group that gathered sociodemographic, knowledge, behavior, and attitudinal information. In addition, staff conducted focus groups with current GATE participants, recent GATE graduates, control groups of adolescent girls, as well as parents, facilitators, supervisors, and other stakeholders in the project. Staff also obtained enrollment and retention data and reviewed participants' journals.

The evaluation showed that GATE participants experienced changes in several areas. With respect to literacy skills, 95% (118 out of 124) of GATE participants who took the final exam passed with a score of 40% or above. GATE participants showed statistically significant increases in their literacy scores. In terms of health knowledge, 66% of GATE participants who completed the course showed a significant increase in health knowledge scores. Over the two phases of data collection, there was a significant increase in the percentage of GATE participants who were aware of girl trafficking (from 70% to 94%). In addition, the number of GATE participants able to indicate specific ways to prevent girl trafficking increased dramatically (from 3% to 59%). GATE participants also made gains in knowledge in the areas of HIV/AIDS awareness, identifying resources to discuss family planning, caring for children with pneumonia, and knowledge of newborn and prenatal nutrition.

While no significant changes in attitude were found among GATE participants regarding age of marriage for young women (approximately 19 years), GATE participants reported that they thought it was important for girls to go to school and could articulate more reasons why this was important. A total of 3,987 adolescent girls participated in 150 GATE classes in the 2001–2002 program cycle. Of these, 90% completed the GATE program and among GATE graduates, 37% had enrolled in the formal school system as of the second week of August 2002. GATE graduates were admitted in classes 1 through 5, depending on their literacy skills. Data on retention was only available in two districts. In Bara, of 129

GATE graduates who enrolled in school, 95% (123) were still enrolled in school the following school year. In Udaypur, the comparable figure was 100% (out of 112).

The qualitative portion of the evaluation revealed girls' opinions about the program, as well as perceived changes among adolescent girls and community members. Current GATE participants reported that the most beneficial lessons included those focusing on trafficking, the benefits of delayed marriage for girls, and the dangers of getting involved in sexual relationships early in life. GATE graduates from 2001 praised the programs' teaching methods, the practical information gained, and the help that their class facilitator had provided them. Participants indicated that the reading, writing, and math skills, as well as the ability to overcome shyness and become confident were the most important changes since starting the GATE program. One class supervisor stated, "Previously when I visited the class, the girls were afraid and shy to speak. Now they come and greet me and complain that they don't have sufficient pencils and paper! They are now able to speak out confidently and are aware that they must study and do something with their lives."

An interesting outcome of increased confidence were the numerous ways GATE participants are now assisting as well as teaching their parents. Girls reported informing their parents about the importance of good nutrition, and about the dangers of smoking. Some reported keeping their fathers' accounts at the family shop, and accompanying their mothers to the market to help them avoid being cheated.

GATE graduates noted changes in the behavior of others toward them. Girls noted that since becoming literate, their parents loved them more, and scolded and beat them less often. Others reported that they faced less discrimination within their homes in terms of workload and food than previously. Additional informants, including GATE facilitators and supervisors, NGO members, district health and education personnel, and other community leaders, reported seeing many changes in GATE graduates and their parents. One informant reported that GATE participants were encouraging their parents to take sick family members to the health post instead of to witch doctors as they had previously done. Another reported that many parents were choosing school over marriage for their daughters at the end of the GATE program. Almost all commented on girls' increased confidence and ability to speak for themselves.

### ***Costs and Sustainability***

Cost per student is \$14.07, based on 27 girls in a class. There are two possible ways to lower this cost: (1) reusing facilitators who have already been trained, which would lower training costs; and (2) gain economies of scale with a larger project that might lead to lower materials costs.

### ***Lessons Learned***

Many obstacles and challenges, financial and other, remain for families considering sending their daughters to school. The experience of World Education suggests the importance of continuing to develop its close relationships with communities and finding ways to assist families who want to send their daughters to school. For girls who are unable to enter the formal school system, efforts should be made to help them continue their learning and development, through additional nonformal education classes, or through skill training and development courses.

Over the course of the GATE program, participating communities organized more activities focusing on girls' safety, health, and development. Such an increase in activities that complement the goals and objectives of the GATE program provides an opportunity for World Education to increase understanding of, and support for, its activities, and build upon the enthusiasm that exists locally. Continuing to build rapport with communities and local community organizations may also help make educational opportunities for adolescent girls sustainable. Parent Teacher Associations, piloted by World Education in two districts in 2003, could be expanded to all GATE districts as a promising opportunity for increasing community involvement in, and sustainability for, girls' education and development.

## **Language and Literacy in West Africa**

In a number of developing countries, the movement toward decentralization in education has altered the potential role of parents' associations. In its West Africa programs, World Education works to bring together different actors in basic education to facilitate collective action that transforms the governance of schools and improves instruction and learning in the classroom.

World Education has worked primarily to support the development of village-level parent associations that focus on the development and improvement of primary schools. Over time, and at the request of local nongovernmental agency partners, World Education began developing literacy programs that support the goal of strengthening community participation in education activities.

These programs integrate literacy activities with content supportive of strengthening the educational system. In this model, the subject of the literacy curriculum is parent involvement with the schools, and the curriculum is developed in partnership with sector specialists. In other words, while learning to read and write, literacy program participants are also learning about the management of a parent association and the issues of school quality. These programs:

- Grow out of needs identified by the communities that will use them;
- Have high quality integrated curriculum that use a problem-posing approach and have been field-tested before being finalized for wide distribution;
- Use an activity-based methodology that ensures the participation of all learners;
- Include social negotiation activities that ensure that the program is understood and owned by all involved;
- Provide pre- and in-service training; and
- Incorporate formative and summative evaluation of processes, learning, and long-term outcomes.

In both Mali and Guinea, World Education provides a literacy program—curriculum, materials, teacher training, and management training—to interested villages. The materials, methods, and training developed for each program have grown out of extensive field research and have been revised after testing carried out in collaboration with NGOs, content experts, and village partners. The programs in these two countries share these characteristics, while differing according to the context in which they have been developed.



## Mali

In Mali, World Education's program focuses on issues of access, quality, and equity. Since 1993 it has helped communities in the development of more than 791 new schools, providing access to school to more than 80,000 students who would otherwise not have had the opportunity to attend. The organization also works with existing public schools to strengthen their management committees and to help parents play a more important role in management and issues of educational quality in their schools. World Education community-education activities aim to strengthen the capacity of parents' associations to manage the development of their children's schools and take initiatives to increase the number of girls who have access to education. In 2003, World Education was working with 1,300 parent associations and their association schools, via 14 Malian NGOs.

World Education designed the integrated literacy program to respond to needs identified by the associations and NGOs that work with the associations, and to strengthen the ability of the associations to function as sustainable community organizations and affect the educational quality of their local schools. Specifically, parent associations (PAs) noted the need for literacy among their board and regular members. Among the PAs with which World Education works, approximately 75% of regular members and board members are illiterate. Parent associations also identified the need for literacy for mothers. Only 17% of Malian women 15 and older are literate.<sup>6</sup> Because of the local culture, female board members are often figureheads rather than true participants. Building literacy among female parents increases the likelihood that they will participate more actively in PA activities. Building literacy among PA membership could increase the functioning of the PAs, increase the transparency of their operation, and help prepare future PA leaders.

### Objectives

Since early 1999, World Education has been developing and testing a Bambara-language nonformal literacy program for adults, known locally as *Sanmogoya*, which is taken from a Bambara term that means a person has given a good deal to his or her community. (Bambara is the unofficial language of Mali, spoken by 80% of the population.) This integrated education strengthening and literacy program uses functional content and an activity-based methodology. World Education designed the program to provide basic literacy and numeracy skills while enhancing activities such as parent associations, health center associations, civic groups, and microfinance groups, domains in which World Education has active programs. The more specific aims of the program are to strengthen the ability of parent associations to function as sustainable community organizations, and have an impact on educational access, quality, and equity in their communities. Literacy program participants thus not only gain literacy and math skills, they also learn vital content relative to their daily life, to educational quality and equity, and to the management of parent associations.

### Program Description

The *Sanmogoya* course is divided into basic literacy and postliteracy phases and is taught by volunteer teachers selected from local communities and supervised by parent associations. Materials for the

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<sup>6</sup> 2001 figures from 2003 Human Development Indicators: [www.undp.org/hdr2003/indicator/indic\\_200\\_1\\_1.html](http://www.undp.org/hdr2003/indicator/indic_200_1_1.html).

program include a basic literacy book, a basic math book, enrichment reading (*The Twins*), a postliteracy book, and a postliteracy math book. In addition, there are teacher guides for the basic and postliteracy books.

The basic literacy phase consists of a 250-hour course. Groups of learners are usually comprised of 25–30 men and women. The course includes instruction in reading, writing, and basic math, with content based on topics identified by committees of residents of 12 villages. The materials cover topics such as water, using health clinics, children's vaccinations, traditional versus modern medicine, child safety, choosing appropriate agricultural methods, and deforestation, as well as girls' education and school infrastructure. During the initial six months of the program, the program establishes a strong link between literacy and community-development concepts.

In the basic literacy phase, each lesson begins with analysis of a problem-posing picture. Learners work in small groups, drawing on their own knowledge and experience to resolve the problem presented in the picture. From this discussion, a key word emerges that creates the transition to the literacy portion of the lesson. Learners have an opportunity to practice their emergent literacy skills through a combination of individual, small-, and large-group activities. During this phase, the story of a Malian village family—Sira, Sada, and their children—is introduced.

The time between the basic and postliteracy phases is a bridge phase, during which the program provides each participating village with four copies of a book entitled *Apedugu filaninw* (*The Twins*), which chronicles the lives of twins, separated at birth, who must deal with current issues such as HIV/AIDS and female genital cutting. Through this reading experience, learners have an opportunity to read for entertainment. This phase is aimed at enhancing learners' motivation to continue studying while maintaining their skills.

The goal of the 100-hour postliteracy phase is to allow learners to develop fluency and to increase their knowledge of, and capacity to, participate actively in parent associations. During the 100-hour course the same teachers who taught the basic course now introduce parent-involvement content, which in this case involves the roles and responsibilities of the parent association. Some of the topics are: a village without a parents' association, need for light in an adult literacy program, families resisting sending daughters to school, a school not having any materials (books, paper), and a parents' association not having any literate members. Learners confront educational quality and management concerns while developing fluency in reading and writing, and learning multiplication and division. In addition, they have a chance to work with parent-association documents and learn some relevant accounting practices. Teachers also introduce the use of basic technologies, such as calculators and small scales.

### ***Project Development***

In the late 1990s, World Education became interested in integrating literacy education with its parent association work. At that time, World Education had much experience with literacy in the United States and Nepal, but its Africa offices had little. The Mali office staff decided to invite a U.S.-based literacy division member with expertise in literacy in developing countries to analyze the potential of integrating literacy with its current programs.

A quick analysis of the environment indicated that while the Malian government had an organization responsible for adult basic education, and while many organizations used the materials made available by this organization, the quality was recognized as limited, and little training of high quality was available. A few organizations had made efforts to develop their own approaches to literacy in Mali, most notably Plan International and World Vision, but there still appeared to be room for the development of a literacy program that integrated with World Education's activities in the educational sector.

World Education began to develop its program by first selecting a local literacy coordinator for the program. Staff hired a Malian linguist with experience in language education and a willingness to learn new techniques. A World Education technical consultant on literacy provided him with training and guided the development of the program.

The next step in the development process was to conduct research on issues of local concern. The literacy coordinator interviewed residents of 12 villages to assess their interest in attaining literacy and to learn about their most pressing community issues. In addition, he tested 60 people to get a sense of their literacy skills. Themes from these interviews provided a starting point for the creation of activity-based lessons, which were then tested by staff with two classes of learners.

Once they had developed a full curriculum, World Education invited five local NGOs to pilot the program. Staff organized the formation of a steering committee of NGO representatives to develop ways of managing and sustaining the program at the village level. World Education trained NGO field workers, who identified villages interested in participating, and the program was launched. NGO field workers worked with villages on management of the literacy program and selection of teachers and provided training for teachers. The parent associations assumed management of the literacy programs, in addition to their work with formal schools.

The first three years of the program were developmental. NGO field staff and teachers regularly evaluated materials and teaching methods and revised them accordingly. Staff conducted a formal evaluation of materials and methods, including classroom observations and interviews with learners, and made necessary changes. During a five-day in-service training, the World Education team, NGO field workers, and literacy teachers developed postliteracy materials. These materials focused on issues involved in the management of a parent association and reflected the actual experiences of parent association members. The program continued to be revised including a new math curriculum and methodology, jointly designed by World Education staff from Mali, Guinea, and the United States. Additional materials have been developed collaboratively including materials on HIV/AIDS, a simple grammar book to supplement the postliteracy course, and additional writing exercises for the basic literacy course.

### ***Implementation***

In 2003, World Education's integrated literacy program was implemented in 130 villages in three Bambara-speaking regions in Mali. Participating villages were selected based on need on the part of parents' association members and communities. In addition, NGOs took into account the capacity of parent associations to take on and succeed at the additional task of implementing the program. Fourteen local nongovernmental partners work with participating villages and are responsible for the day-to-day implementation of the program. World Education provides them with training, managerial advice, and

financial support. Their responsibilities include conducting initial and follow-up training for local facilitators; providing ongoing support to the classes; and participating in curriculum development, testing, and revision, as well as evaluation of learners.

Parent associations are responsible for designating two teachers, providing a classroom, and day-to-day management of the program. While World Education makes recommendations for the program, such as holding classes at least four days a week for at least two hours a day, parent associations develop their own policies, such as when and where classes are held, who attends, and what happens when participants are absent.

Teachers for the program are engaged on a voluntary basis. Being identified as literate, going outside the community for training, and being included in a field worker's visit appear to raise the stature of the teacher in the community and make the job appealing. Staff has found that very few teachers have resigned since the program's beginning. Some communities raise some funds for the teacher by charging participants a fee, while others charge fines for unannounced absences as a way to raise funds for teachers. In some instances, the community provides assistance to the teachers with farm work as a reward for their efforts.

Several levels of training are provided in support of the literacy program. World Education staff trains NGO field workers during a two-week in-residence training. These field workers provide training for teachers during a two-week training and visit teachers at least once a month. At the end of each course, a five-day in-service training is provided for NGO field workers and their corresponding village teachers and is designed to respond to teachers' immediate needs.

## ***Evaluation***

Evaluation of the *Sanmogoya* program takes place at several levels. Basic demographic data on learners and scores on pre- and posttests are gathered in partnership with participating NGOs. Basic level evaluation tools test knowledge of letter and word recognition, sentence comprehension, letter and word formation, writing of simple sentences, number recognition, addition, and subtraction. The postliteracy evaluation tests reading comprehension, writing, and the four mathematical operations. Content knowledge was not tested at either level but was evident during group discussions after each phase. The data is used to strengthen the curriculum and training of teachers, provide learners with positive feedback, and provide stakeholders with information on the impact of these courses over time. Parent associations engage in an annual self-evaluation process, which provides information used to design additional training for parent associations and literacy program teachers. During the course of the program, 379 literacy teachers were trained, 24 NGO staff members were trained, and more than 5,500 learners took part in literacy classes.

During its implementation thus far, the integrated education strengthening and literacy program has been effective in achieving its goals of increasing the ability of parent associations to function as sustainable community organizations and have an impact on educational access, quality, and equity in their communities. In addition to smoother technical functioning on the part of parent associations, and more active participation on the part of women board members, the literacy component has served to strengthen communities' understanding of their role in ensuring that quality education is available and that children are supported in learning.

Reports from learners indicate that they are happy with the activity-based nature of the program, the relevancy of its content, and the large and bold-faced type used in the books. Several participants had had previous experience with literacy programs. They indicated a preference for the *Sanmogoya* methods, in particular the use of illustrations to facilitate understanding of concepts and recall of material. Participants' approval of the program has been demonstrated in the high attendance and low drop-out rates.

The positive impact of acquiring literacy experienced by participants takes many forms. For many, becoming literate increases their self-esteem and confidence level in daily life and in situations such as traveling. Several learners noted that they were less likely to get lost in another town, and one noted that she was now able to label her belongings when traveling so that they could more easily be returned to her.

In several cases, literacy acquisition has enabled learners to participate more fully in the financial lives of their families, helping to maintain records of income and expenses. One woman reported that, as a result of becoming literate, she was able to enroll in an income-generation workshop that required literacy and now has her own business. In several instances, participants who had their own businesses were now able to maintain their own financial records and avoid losing money, such as when giving change.

Many participants acknowledge that since participating in classes, they better understand the role and importance of the parents' association in their community. A number of participants also noted being able to assume greater responsibilities within their parent associations, making use of their new skills to maintain financial records and keep meeting minutes, as well as understand school registration information.

For a number of participants, the value of education for children was made clear by their own experience. Many are now helping children with homework or planning to send all of their children, especially girls, to school in the future. In one instance, a young man provided literacy instruction to his younger siblings, who had not attended school and were too young to participate in the program.

Participation in the literacy program has also had health-related benefits for its participants and their families. Several participants reported paying greater attention to the level of cleanliness of their home, as well as to their own and their children's personal hygiene. In addition, one woman noted that she paid closer attention to her children's state of health and would not hesitate to bring them to a health clinic as a result of learning about health issues in literacy classes. She also started using contraceptives after learning about the importance of birth spacing in class. One young man reported wanting to become a health care worker after learning about the importance of immunizations, birth spacing, and AIDS. Although participants had learned about AIDS through health education efforts, such as films and information sessions, as one learner noted, "When we read for ourselves in our own books it made more of an impression." Both men and women noted an increase in condom use as a result of their readings and discussion about AIDS in class.

## **Guinea**

World Education's work in Guinea in the 1990s centered on strengthening parent associations in the region of Mamou. While some NGOs were teaching literacy classes and creating materials, literacy was not offered in any sustainable way. The Education Ministry had its own literacy program; however, it lacked sufficient resources and materials. Given this situation, as well as concerns about the literacy level of parents involved in parent associations, World Education began an experimental literacy program in 1998.

In August of 2001, the Community Participation for Basic Education with Equity and Quality Program (PACEEQ) was launched as an expansion of previous efforts and is expected to continue until August 2005. Based on the strong local interest in educational innovation, the program aims to improve the quality of education at the primary level, and at the same time, address issues of equity (related to gender and urban/rural disparities). Program activities strengthen the ability and institutional capacity of Guinean NGOs to carry out community development activities by way of training and support services. These NGOs in turn work to develop federations of parent associations to allow parents to play a more effective role in the improvement of the quality of their children's education and to strengthen civil society in Guinea. Because of the involvement of World Education, the parents' associations are able to keep viable financial registers and at the same time, come up with strategies to develop their children's education. The parents' associations also plan and direct school improvement initiatives, which had previously been the exclusive domain of school administrations.

### ***Objectives***

In Guinea, World Education is working with NGOs to form and support parent associations, which, in turn, act to ensure that education is available to the children of the community and to improve the quality of that education. One reason for providing literacy training as an integrated aspect of this program is to improve the procedures and transparency of democratic governance of the parent associations. Another reason is to ensure that parent associations do not become the exclusive domain of the educated. The inclusion of literacy also helps get mothers involved in parent associations. Mothers' relation to children and to education is crucial for both current enrollment of children into school—especially of girls—and for future policies and attitudes about the school environment.

The role of PACEEQ is thus threefold. First, the program provides training on literacy techniques to NGO animators and village literacy teachers. Second, it offers support and follow-up, which helps to ensure the quality of literacy training given and successful management of literacy centers. Finally the program includes the conception and development of literacy materials (the facilitator's guide and literacy texts), as well as the development of teaching methods and evaluation tools for learners. Basic reading and math texts have already been produced in two local languages, Pular and Maninka. More materials for the postliteracy phase are underway in Pular. These will also be reproduced in Maninka, Soussou, and Kpele.

### ***Program Description***

The World Education literacy materials focus on parent associations and parent involvement in school. Each lesson starts with discussion about an image that represents a topic. Topics covered in the basic

literacy book include the elements of school infrastructure (e.g., bathroom, water, places for kids to play, books, desks); equity in education (e.g., enrolling and keeping girls in school, the teacher's role in including girls, and giving girls time to study at home); good functioning of the parent association; relations among the school administration, the parent association, and the NGO; children's rights; and understanding HIV/AIDS (prevention, care, and dealing with its impact on schools).

The PACEEQ literacy program is more tightly coupled with the national literacy program in Guinea than is the case in Mali. Participants take a formal test at the end of the year based on materials from the program but the structure and content of the test is taken from the national framework.

### ***Project Development***

In Mali, World Education's work started as strengthening community institutions. Parent associations were one type of institution (along with savings groups, community health, and other civic groups). Because of the variety of projects, World Education began with literacy materials based on the Nepal model, which built basic literacy skills around broad topics of development and postliteracy materials that focused on the parent associations. However, the focus of World Education's work was on educational issues of quality, access/infrastructure (addressed in the basic course), and parent associations (addressed in the postliteracy phase). The literacy program raises the profile of educational issues to more people in the community. In April 2002, World Education brought together teachers, community members, and NGO staff, who wrote literacy materials together.

### ***Implementation***

As in Mali, a parent association owns the literacy program, and literacy program management is included in the associations' self-evaluations. NGO staff also includes a literacy and parent association worker to maintain strong links among the different aspects of the program.

As of the spring of 2003, the program had 132 literacy centers open and operating—12 run by women—and included 258 village literacy instructors. Village literacy instructors are trained through the use of participatory methods including group work, hands-on practice, simulation exercises, brainstorming, individual reflection, open-air discussions, and ice-breaker games. NGO partner staff also attend the trainings in order to serve as literacy specialists who support the work of literacy instructors. Training covers familiarization with teaching materials, alphabets for local languages, teaching methods, lessons plan, simulation of model lessons, general information on the program, and solutions to problems typically encountered at literacy centers.

In some cases, NGO field workers have taught classes because literate community members were not available. Where possible, the NGO teachers have identified promising participants in their literacy classes and have been training them and coaching them to assume teaching duties when they complete the basic course. As of May 2003, NGO field workers had taught 34 classes, and village members, who had graduated from the basic classes, ran 13 classes. While there is a lot of literacy education going on in Guinea (carried out by international NGOs), in most cases teachers are paid. In the World Education model (in both Mali and Guinea), teachers are compensated in other ways. Of 500 teachers involved in the Guinea program over time, only 2 have left, indicating that this approach can be quite successful.

## *Evaluation*

The PACEEQ program offers a certificate of achievement to learners who pass an evaluation at the end of their course. In 1999, evaluations were held at 13 centers in the Mamou region. Of the 178 men who attempted the test, 132, or 74%, passed. For women, of the 64 who were tested, 31, or 48% passed. In 1998, six centers ran classes, with a total of 152 learners attempting the certificate evaluation and 75, or 65% passing. It should be noted that even those who did not receive a certificate of achievement did develop some literacy skills, as well as gain some knowledge of the issues discussed in class. April 2003 data from 82 literacy centers in 3 regions of intervention indicate a completion rate of around 93% of the program's annual target. The average drop-out rate is approximately 7%.

Some insights have been gained as to the nature of the program's impact. A real understanding has developed among all those involved of the additional value of literacy. By being learners themselves, participants understand the experience of their children in a new way. For instance, they see how useful a pen is. They also understand the need for study time, which results in less work time for girls. In addition, once they can read dates in their children's school notebooks, they can ask questions about homework and class activities. The social fabric of communities is also changing as different people take classes. The experience brings together people who don't normally spend time with each other.

Participation in the program has resulted in a number of positive outcomes beyond literacy acquisition. Newly literate men and women in many communities are being elected as board members of parents' associations. In several communities, there have been significant efforts to support girls—as measured by increased enrollment and completion rates—and a lightening of some of their household chores gives them time to study.

In one village, women who attended a basic literacy course decided to mobilize their community to create a school closer to their area so their children would not have to walk as far to attend school. The women formed their own work group to mobilize resources and assist with the gathering of materials (sand and stones), are active members of the board of the local parents' association, and have taken numerous actions to promote the education of the girls in the community. The age limit for pupils starting in the first grade was raised to 12 from 7–10 years to allow girls, who typically start school later than boys, to enroll. Within the community, efforts have been made to lessen the workloads of girls at home by having boys share some of the responsibilities such as gathering firewood and collecting water. The women's work group has raised contributions to support the director of the school in teaching review classes after school for the girls. Classroom enrollment and attendance are showing that the participation of girls, which typically declines after the second year, is at the same level as boys.

## ***✎* Research and Development**

Research in the field of adult literacy is needed in order to: (1) determine the true size and nature of the population that needs these services, (2) determine what constitutes a successful program and how to measure it, (3) articulate the factors that lead to success, and (4) measure the impact on the lives of



participants. Unfortunately, research on adult literacy has not received much funding, and literacy organizations do not have additional resources to support research.

Most literacy statistics on the size and nature of the target population come from government estimates that depend on national censuses and assumptions about the efficiency of the formal primary school system. In some countries, a person who has been to one year of school is considered literate, while in others self-reporting of literacy status is allowed. The Lesotho Distance Teaching Center prepared a simple test of reading, writing, and math and assessed a small but randomly selected sample. This small survey indicated that government statistics were underestimating the size of the illiterate population. Rigorous studies that sampled a country's population would provide much better literacy statistics than the ones that now exist.

One reason funding has not expanded for adult literacy programs in most countries is that previous programs have been judged as failures. Program evaluators should take a close look at existing literacy programs in order to identify an acceptable drop-out rate and level of skill acquisition for different types of programs. Once clear definitions of success are articulated, evaluators can design methods for identifying which programs meet those standards. Clear measures of success will make it possible to identify factors that lead to success.

Most of the existing information about the effectiveness and quality of adult literacy programs comes from evaluations, either internal or external, conducted at the conclusion of projects. These evaluations generally provide information about that particular project and include information on how many people were served, or how efficiently the program managed training, supervision, and administration. A standard framework that focused these evaluations on important elements of a program would provide more useful information. Studies that compare the knowledge, attitudes, and practices of learners who participated in literacy programs conducted under different conditions or by different organizations would also be useful for understanding effectiveness. For example, if teacher behavior were a critical element, data on which kind of training best prepares and supports a teacher to behave respectfully and supportively to students would be very useful. Donor agencies, however, must be willing to support these research costs with the understanding that a small amount of additional resources can provide valuable information that will improve the effectiveness of future programs.

Increasingly, adult literacy providers will be asked to substantiate the impact of literacy on other areas of adults' lives, such as health, family planning, or income generation. Literacy providers should be prepared to report not only knowledge and attitude changes but also actual behavioral changes. This task can be challenging for two reasons. First, literacy providers have long concerned themselves largely with educational outcomes, such as knowledge and skills gained, or even with intent to change practice, but not with actual changes in learners' behavior in either literacy (such as reading habits or use of writing) or in other areas of their lives (such as voting or health care). Second, behavioral changes may not appear immediately after the adult has completed the literacy course. In addition, to determine that a behavioral change is the result of the literacy intervention and not some other factor requires data about a participant's behavior before the literacy course. Collecting such data is ordinarily beyond the scope of literacy project work; however, public health professionals and other types of development workers traditionally focus on behavioral change. Literacy practitioners should consult and collaborate with them in order to make use of reliable

but feasible methods, such as Rapid Rural Appraisal, which might be adapted for use by adult literacy providers.

Researchers should collect both qualitative information (case studies, interviews, focus groups) and quantitative information (literacy achievement scores, knowledge and attitude surveys) to substantiate the extent to which literacy skills and knowledge are acquired and used. Through case studies and surveys with learners or with others in the community who are in contact with adult learners, researchers can gather information about some of the more intangible results of literacy, such as increases in empowerment and self-esteem.

Educators interested in promoting women's education are experimenting with more concrete measures of gauging changes in women's lives as a result of literacy, including using participatory research instruments, which involve women directly in defining the research focus and collecting the data. These methods hold promise for more accurately determining the impact of adult literacy programs for both sexes. However, it is still generally true that funders typically favor quantitative research. The strongest research design is one that incorporates both quantitative and qualitative methodologies.

In research on adult literacy, reliability of data should be the primary concern, rather than the general applicability of the sample. Because of the difficult nature of conducting research in most Third World countries, it is best that research studies are focused on one or two questions and that a limited number of researchers are involved in collecting the data. Longitudinal studies, which look more closely over a longer period of time at a smaller number of subjects, are preferable when assessing the impact of literacy.

Researchers need simple but reliable literacy test instruments that gauge not only reading, writing, and math skills but also knowledge gain, along with some measure of functional literacy skill and usage. A great boon to research would be the use of such an instrument by all literacy organizations within a country so that the results could be compared across organizations. The data from a commonly used instrument would serve, for example, as a touchstone against which innovative programs (for example, those which integrate or link literacy with health, family planning, or income generation) could gauge the additional benefit of such interventions.

## **Conclusion**

There are hundreds of millions of adults who have never gone to school and tens of millions of children who do not attend school or who will drop out before they acquire literacy skills. The size of the illiterate population will probably stay near one billion over the next two decades. The majority of these people can learn to read and write if given an opportunity. The experience in Nepal, Mali, and Guinea described in this monograph shows that such an opportunity can be provided.

The expense involved in providing quality literacy programs in Third World settings is small compared to that of formal education; furthermore, arguments that these resources should be used for the formal school system make little sense because educated parents are the foundation of an effective formal school system. If resources are sufficient to ensure the success of adult literacy programs, those same resources

will contribute to the efficiency of the formal school system, the public health system, family planning programs, and other development efforts. A balanced program that funds research, evaluation, program design, and implementation is needed in every country with high rates of illiteracy if social progress is to move ahead quickly. Donor agencies, even those that do not have education as their focus, should support the development of successful adult literacy programs.

At some point in the next century, the human race will reach a historic milestone: a world in which everyone can read. At the present rate, that time will come well after 2050, but a few billion dollars over the next 20 years could bring that moment into the lifetime of the present generation. The benefits of this acceleration of human progress would be immense. At that time, everyone will be able to read the names of the gods before they die.



## Resources

### Books and Manuals

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[www.ncsall.net](http://www.ncsall.net): Research on adult literacy in the United States

[www.nald.ca](http://www.nald.ca): Research on adult literacy in Canada

[www.nrdc.org.uk](http://www.nrdc.org.uk): Research on adult literacy in the United Kingdom



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