

Chapter **5**

Why literacy matters

This chapter explores the case for literacy, especially for youth and adults. It summarizes the foundations of the right to literacy through a review of international agreements, noting that literacy is both a right in itself and an instrument for achieving other rights. The chapter then reviews the broader benefits that result from literacy, in human, economic, social and cultural terms. Since literacy is a key outcome of education, it is difficult to separate the right to literacy from the right to education or the benefits of literacy from those of education.

Literacy as a right

Literacy is a right. It is implicit in the right to education. It is recognized as a right, explicitly for both children and adults, in certain international conventions. It is included in key international declarations.

The 1948 Universal Declaration of Human Rights recognizes the right to education, as do other binding international conventions. These include the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights, both adopted in 1966, which, together with the Universal Declaration of Human Rights, were proclaimed by the United Nations as constituting the International Bill of Human Rights. Other important instruments include the 1979 Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) and the 1989 Convention on the Rights of the Child (CRC).¹

The 1975 Persepolis Declaration, the CRC and CEDAW further recognize literacy, rather than just education, as a right. The 1960 Convention against Discrimination in Education (CDE) specifically tackles the issue of those who have not attended or completed primary education. The Persepolis Declaration states: 'Literacy is not an end in itself. It is a fundamental human right' (UNESCO, 1975a). Both the CRC and CEDAW refer to the promotion of literacy and the eradication of illiteracy. For example, Article 10(e) of CEDAW, which entered into force in 1981, recognizes the right of adults to literacy, calling on parties to ensure that men and women have 'the same opportunities for access to programmes of continuing education, including adult and functional literacy programmes'. The CRC characterizes literacy as a basic skill to which children are entitled and stresses the need to rid the world of illiteracy (UNHCHR, 1989). A strategic objective of the 1995 Beijing Declaration and Platform for Action is to 'eradicate illiteracy among women'. The CDE directs states to 'encourage and intensify by appropriate methods the education of persons who have not received any primary education or who have not completed the entire primary education course and the continuation of their education on the basis of individual capacity' (UNESCO, 1960). The CDE further mandates increasing opportunities for literacy via continuing education.

There is considerable pressure for a renewed emphasis on literacy as a right. The Hamburg Declaration states under Resolution 11: 'Literacy,

broadly conceived as the basic knowledge and skills needed by all in a rapidly changing world, is a fundamental human right' (UNESCO, 1997). The UNESCO round-table report *Literacy as Freedom* recommends that literacy be understood within a rights-based approach and among principles of inclusion for human development (UNESCO, 2003c).

Less clear than the right to literacy has been the understanding of literacy in these various conventions and declarations. Couching the right mainly in terms of eradicating illiteracy, as in CEDAW and the Beijing Declaration, implies the equivalence of literacy with knowledge or of illiteracy with ignorance. Where literacy as a right derives from the right to education, it is seen more as a set of skills that constitute *fundamental or basic education*, as the CDE implies. From the founding of UNESCO, the term 'fundamental education' has signified the skills of reading, writing and calculating, with a heavy emphasis on reading and writing (UNESCO, 2003d). While numeracy is usually mentioned alongside literacy in legal instruments, the word 'literacy' itself is generally limited to reading and writing skills. General Comment 1 of the CRC (Article 29), for example, establishes that 'basic skills include not only literacy and numeracy but also life skills' (UNHCHR, 1989). In this context, 'literacy' means reading and writing only. The World Declaration on Education for All (Jomtien, Thailand, 1990) in Article I.1, includes 'literacy, oral expression, numeracy, and problem solving' as essential learning tools that comprise the basic learning needs of every person (UNESCO, 1990).

Key to the interpretation of literacy as reading and writing skills is the issue of the language in which one learns to read or write. The right to learn a language is quite different from the right to learn *in* that language. Article 27 of the ICCPR sets forth the right of persons belonging to minorities to use their own language; this would mean at least the right to speak minority languages in private. International law makes clear that the state has the right to determine official languages, which will rarely if ever encompass all or most minority languages. Public education may well be provided in a variety of languages beyond the official ones. In Namibia, for example, the national literacy programme has three stages, the first two in mother tongue and the third introducing basic English, so that learners with different levels of literacy can be accommodated. Where public education is

Literacy should be understood within a rights-based approach and among principles of inclusion for human development

1. See Chapter 1 of the 2003/4 Report for a detailed discussion of the right to education.

provided only in the official language, the ICCPR stresses, the state should recognize the right to establish private schools to assure 'the possibility of pluralism in education' and avoid state monopolization. The increasing emphasis on bilingual formal education (Box 5.1) has also influenced adult and youth programmes in the non-formal sector.

Many documents, including the Persepolis and Hamburg Declarations, allow for an expanded interpretation of literacy beyond the skills of reading and writing. Literacy can include access to scientific and technical knowledge, to legal information, to means of enjoying the benefits of culture and to the use of media, both for those seeking greater access and those with no access (Organization of American States, 1948; United Nations, 1995; UNHCHR, 1969). Literacy is also interpreted as a foundational, universal life skill for those in adverse circumstances; for example, Article 22 of the Convention relating to the Status of Refugees guarantees refugees the 'same treatment as is accorded to nationals with respect to elementary education' (UNHCHR, 1951). As a tool, literacy has the potential to meet people's most vital needs and to stimulate social, cultural, political and economic participation, especially on the part of disadvantaged groups. Emphasis on inclusive lifelong educational provision reflects the international community's recognition of the universal human need for and right to literacy (UNESCO, 1975*b* and 1997).

An additional noteworthy trend concerns literacy in relation to technology, civic engagement and lifelong learning. UNESCO's Babel Initiative seeks to encourage information dissemination, placing particular emphasis on the potential of communication technologies to maintain and advance cultural and linguistic diversity (UNESCO, 2005*a*). The United Nations Development Programme (UNDP) asserts that possessing knowledge, having access to resources for a decent standard of living and participating in community life constitute basic capabilities for human development (UNDP, 2004*a*). Access to these tools, skills and resources lends greater assurance to the development of literacy. Literacy is inextricably linked to a process of continual education or lifelong learning.

Finally, literacy has been recognized not only as a right in itself but also as a mechanism for the pursuit of other human rights, just as human rights education is a tool for combating illiteracy.

Box 5.1 The right to choose the language of learning

UNESCO promotes bilingual education not only because it encourages multilingualism but also because it permits children from minority and indigenous groups to learn alongside those of majority groups (UNESCO, 2003*a*). Promoting bilingual education is not the same as saying there is a *right* to either bilingual education or mother tongue education, however; these are keenly contested issues, upon which international treaties are much more circumspect. The two main treaty provisions relating to linguistic rights in education are Article 14 of the 1995 Council of Europe Framework Convention for the Protection of National Minorities and Article 28 of the 1989 ILO Convention 169 concerning Indigenous and Tribal Peoples in Independent Countries. The latter states:

- Children belonging to the peoples concerned shall, wherever practicable, be taught to read and write in their own indigenous language or in the language most commonly used by the group to which they belong. When this is not practicable, the competent authorities shall undertake consultations with these peoples with a view to the adoption of measures to achieve this objective.
- Adequate measures shall be taken to ensure that these peoples have the opportunity to attain fluency in the national language or in one of the official languages of the country.
- Measures shall be taken to preserve and promote the development and practice of the indigenous languages of the peoples concerned.

The Vienna Declaration and Programme of Action calls on states to eradicate illiteracy, linking such efforts to greater respect and protection for human rights and personal liberties; it also emphasizes the use of human rights-informed education as a means of combating illiteracy (UNHCHR, 1993). Particularly significant in this respect are the rights of women, who currently constitute the majority of the world's illiterates.

The benefits of literacy²

The rationale for recognizing literacy as a right is the set of benefits it confers on individuals, families, communities and nations. Indeed, it is widely reckoned that, in modern societies, 'literacy skills are fundamental to informed decision-making, personal empowerment, active and passive participation in local and global social community' (Stromquist, 2005, p. 12). As Chapter 1 noted, however, the benefits of literacy ensue only when broader rights and development frameworks are in place and operating effectively. Individual benefits, for example, accrue only when written material is available to the newly literate person, and overall economic benefits only when

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2. This section is based on the following papers, commissioned for the Report: Cameron and Cameron (2005), Farah (2005), Patel (2005), Robinson-Pant (2005) and Stromquist (2005).

The successful completion of adult literacy programmes yields benefits similar to formal schooling

there is also sound macroeconomic management, investment in infrastructure and other appropriate development policy measures. Similarly, certain benefits, such as women's empowerment, will result only if the socio-cultural environment is accommodating of them.

The extent to which literacy has negative effects is keenly contested and has more to do with how literacy is acquired than with literacy itself – an important reminder that benefits also depend on the *channels* through which literacy is acquired and practised. Some channels can have effects that some consider detrimental. For example, the forced acquisition of literacy in official languages can lead to the loss of oral languages. Literacy programmes and written materials can be a mechanism to indoctrinate people to participate uncritically in a political system (Graff, 1987a). Complex value judgements are involved here, which this Report points out but does not enter into.

Providing a systematic, evidence-based account of the benefits of literacy is not easy, for several reasons.

- Most research has not separated the benefits of literacy per se from those of attending school or participating in adult literacy programmes. More generally, there is a 'tendency to conflate schooling, education, literacy and knowledge' (Robinson-Pant 2005).
- Little research has been devoted to adult literacy programmes (as opposed to formal schooling) and existing studies focus mainly on women; the benefits of acquiring literacy in adulthood are thus less clearly established than those of acquiring cognitive skills through education in childhood.
- Research has focused on the impact of literacy upon the individual: few authors have examined the impact at the family/household, community, national or international level.
- Some effects of literacy, e.g. those on culture, are intrinsically difficult to define and measure.
- Literacy is not defined consistently across studies and literacy data are frequently flawed.³

This section thus briefly rehearses the benefits of education in general⁴ and, whenever possible, examines the specific benefits of adult literacy programmes. The limited available evidence suggests that, as far as cognitive outcomes are concerned, the successful completion of adult literacy programmes yields benefits similar to formal schooling. A qualification is that few rigorous assessments of adult literacy programmes in

terms of cognitive achievement have been made; nor, usually, has there been any attempt to assess how long effects last after programmes end (Oxenham and Aoki, 2002). Providing such evidence clearly should be a research priority. In addition, adult literacy programmes can produce more adult-specific outcomes, such as political awareness, empowerment, critical reflection and community action, which are not so much identified with formal schooling. Indeed, learners' statements on the benefits of participating in adult literacy programmes include the positive experiences of the process and the social meeting space of literacy groups.⁵ Less measurable benefits such as these are about human development dimensions, including social cohesion, social inclusion and social capital.

The benefits of literacy can be conveniently, if arbitrarily, classified as human, political, cultural, social⁶ and economic.

Human benefits

The human benefits from literature are related to factors such as the improved self-esteem, empowerment, creativity and critical reflection that participation in adult literacy programmes and the practice of literacy may produce. Human benefits are intrinsically valuable and may also be instrumental in realizing other benefits of literacy: improved health, increased political participation and so on.⁷

Self-esteem

There is extensive reference to the positive impact of literacy on self-esteem. Improved self-esteem has been reported in studies of literacy programmes in Brazil, India, Nigeria, the United States, and several African and South Asian countries.⁸ A review of forty-four studies on the behavioural changes involved in literacy training (Bown, 1990) also provides many examples. Statements such as 'I have more self-confidence', quoted by Canieso-Doronila (1996) in a study of the Philippines, are typical.

Empowerment

Literacy may empower learners – especially women – to take individual and collective action in various contexts, such as household, workplace and community, in two related ways. First, literacy programmes themselves may be designed and conducted so as to make participants 'into authors of their own learning, developers of their own knowledge and partners in dialogue about

3. See Chapter 7 for an extensive discussion of literacy data.

4. A principal source for the benefits of education is Hannum and Buchmann (2003).

5. See, for instance, Robinson-Pant (2005) and Stromquist (2005).

6. 'Social' as used here includes health and education benefits, also discussed in Chapter 1 (education) and Chapter 3 (HIV/AIDS).

7. See Drèze and Sen (2002, pp. 38-41) for a fuller discussion of the intrinsic value and instrumental roles, both individual and social, of health and education, which applies as well to literacy.

8. See, in particular, Young et al. (1980, 1994), Bingman (2000), Greenleigh Associates (1968), Beder (1999), Stromquist (1997), Egbo (2000), Farrell (2004), Abadzi (2003b) and Lauglo (2001).

limit situations in their lives' (Easton, 2005). Second, literacy programmes can contribute to broader socio-economic processes of empowerment, provided they take place in a supportive environment. Recent evidence exists for Turkey, Nepal, India and Bolivia (respectively, Kagitcibasi et al., 2005; Burchfield, 1996; Dighe, 2004; and Burchfield et al., 2002b).⁹ Many learners of both genders surveyed in Namibia – explaining why they wanted to be able to read and write letters, deal with money and master English – mentioned a wish to be self-reliant and to exert control over everyday-life situations, citing, for instance, 'keeping secrets' and 'not being cheated' (Lind, 1996).

Political benefits

The empowering potential of literacy can translate into increased political participation and thus contribute to the quality of public policies and to democracy.

Political participation

The relationship between education and political participation is well established. Educated people are to some extent more likely to vote and voice more tolerant attitudes and democratic values (Hannum and Buchmann, 2003). Participation in adult literacy programmes is also correlated with increased participation in trade unions, community action and national political life, especially when empowerment is at the core of programme design. For example:

- An adult literacy programme set up by workers at a Brazilian construction site increased participation in union activities (Ireland, 1994).
- Literacy programme participants in the United States reported an increase in community participation (Greenleigh Associates, 1968; Becker et al., 1976) and were more likely than non-participants to register to vote, though they did not actually vote more than non-participants (Boggs et al., 1979).
- Literacy programme graduates in Kenya participated more in elections and local associations than did illiterates (Carron et al., 1989).
- Women who took part in literacy programmes in Turkey voted more and participated more in community organizations than did illiterate women (Kagitcibasi et al., 2005).
- Among Nepalese women, those who had spent two years in state-run literacy programmes demonstrated more political knowledge than

those not in the programmes and were more likely to believe they could serve as political representatives (Burchfield et al., 2002a). On various measures of political participation, the more intense participation in a literacy programme was, the larger the proportion of women reporting changes in their political attitudes, except as regards voter registration (Table 5.1). Much the same results held for NGO-run programmes in Bolivia (Burchfield et al., 2002b).

- Qualitative studies yield similar results to these quantitative analyses. Literate women in Nigeria, for example, reported being confident enough to participate in community meetings, unlike illiterate women (Egbo, 2000).
- Rural women who participated in literacy programmes in El Salvador claimed a voice in community meetings and several were able to engage in sophisticated socio-political analysis (Purcell-Gates and Waterman, 2000).

The empowering potential of literacy can translate into increased political participation

Table 5.1: Political and community participation and literacy among Nepalese women

	Participation in adult literacy programmes			
	Intensity of participation			Non-participants
	Low	Medium	High	
Political awareness and participation				
Knows national policy on electing women representatives	82	84	95	78
Knows minimum voting age	24	31	41	14
Knows name of member of parliament in their area	24	42	53	19
Knows name of village development committee	84	85	94	94
Has registered to vote	97	95	94	94
Thinks it possible for her to become a local political representative	24	31	35	13
Is interested in becoming a political representative	21	18	20	11
Community participation				
Is a member of a community group	33	40	56	16
Participates in community development activities	12	16	21	12

Note: Each figure represents the percentage of women in each category of participation in adult literacy programmes for whom the statement about political or community participation in the left-hand column is true.
Source: Burchfield et al., 2002a.

Democracy

The expansion of education may contribute to the expansion of democracy and vice versa, yet the precise nature of the relationship between education and democracy remains unclear and difficult to measure accurately (Hannum and Buchmann, 2003). For example, a comparison of countries over 1965–80 and 1980–88 found no impact from expansion of primary and secondary schooling on various measures of democracy,

⁹ It has also been claimed for the Reflect method in Bangladesh, El Salvador, Lesotho and Uganda but the evidence is somewhat contentious (Riddell, 2001).

The more students know about democratic institutions, the more likely they are to plan on voting as adults

controlling for such factors as economic development and ethnic homogeneity (Benavot, 1996). The role of civic education as such is also unclear, although it is typically included in the curriculum of formal schools and adult literacy programmes. The Civic Education Study by the International Association for the Evaluation of Educational Achievement (IEA), covering 14-year-old students in twenty-eight countries in 1999 and 17- to 19-year-old students in sixteen countries in 2000, found that the more students knew about democratic institutions, the more likely they were to plan on voting as adults. The IEA study also found that democratic classroom practices were the most effective means of promoting civic knowledge and engagement among students. It can be surmized, although it has not been established, that the same may be true of literacy programmes for youth and adults.

Ethnic equality

There appears to be no research into the impact on ethnic equality of either literacy or participation in adult literacy programmes. It is probably reasonable to assume, however, that the impact of literacy is likely similar to that of educational expansion, i.e. that it has the potential to benefit disadvantaged ethnic groups but will not necessarily do so. A range of experiences appears to support the statement that 'It is not safe to assume that expansion in access to education will allow disadvantaged minorities to "catch up" with initially advanced ethnic groups, at least in the short run' (Hannum and Buchmann, 2003, p. 11).

- Ethnic disparities in formal education have persisted in Israel, Nepal and China, for example (respectively, Shavit and Kraus, 1990; Stash and Hannum, 2001; and Hannum, 2002). Similarly, education does not consistently reduce ethnic occupational inequality.
- Racial inequality decreased with educational expansion in Brazil for most occupations but increased in the professions and other white-collar sectors (Telles, 1994).
- Rising ethnic disparities in north-west China are explained by rising ethnic differences in education, despite improved educational access for ethnic minorities (Telles, 1994; Hannum and Xie, 1998).

Post-conflict situations

Literacy programmes can have an impact on peace and reconciliation in post-conflict contexts. For example, CLEBA, a Colombian

non-governmental organization providing literacy programmes in Medellín, emphasizes the 'pedagogy of the text' approach, in which learners write texts based on their own experiences. About 900 men and women, who migrated to Medellín from rural communities heavily affected by armed conflict, participated in an adult literacy project whose key themes were citizenship and peace education (ProLiteracy Worldwide, 2004). Mobilizing people's capacity for resilience by having them write down their experiences and share them with others appeared to be a promising approach, helping them come to terms with multiple traumas and shift towards constructive action (Hanemann, 2005b).

Cultural benefits

The cultural benefits of literacy are harder to identify clearly than benefits in terms of political participation. Adult literacy programmes may facilitate the transmission of certain values and promote transformation of other values, attitudes and behaviours through critical reflection. They also provide access to written culture, which the newly literate may choose to explore independently of the cultural orientation of the literacy programmes in which they participated. Adult literacy programmes can thus be instrumental in preserving and promoting cultural openness and diversity. However, 'any effect that literacy may have on the culture (i.e. what people believe and how they do things) of an individual or group will be slow, will not be easily and immediately accessible, and will be difficult to identify as the outcome of a single intervention such as a literacy and adult education programme' (Farah, 2005).

Cultural change

Literacy programmes can help challenge attitudes and behavioural patterns. Indeed, this type of cultural transformation is central to the Freirean approach, which aims to develop skills of critical reflection (Freire, 1985). This approach is often used in conjunction with active 'experiential learning' or learning by doing (Mezirow, 1996). Many programmes also aim to promote values such as equity, inclusion, respect for cultural diversity, peace and active democracy. However, such transformation typically is limited.

- In Uganda, it was observed that the difference in attitudes between participants and non-participants was less than the difference in knowledge (Carr-Hill et al., 2001).

- In Nepal, adult literacy programmes influenced women's attitudes towards family planning and made them more open to speaking up for change. Women's ability to translate their new attitudes into new fertility practices, however, was limited by household structures (Robinson-Pant, 2001).

Both of these studies emphasized the possible impact of adult literacy programmes on gender relations. In Pakistan, women's access to reading and writing resulted in a norm of privacy that had been non-existent in the culture (Box 5.2).

Preservation of cultural diversity

Adult literacy programmes can help preserve cultural diversity. In particular, literacy programmes that make use of minority languages have the potential to improve people's ability to participate in their own culture. This has been observed in programmes whose outcomes included the writing down of folk tales in Botswana (Chebanne et al., 2001), in an Orang Asli community in Malaysia (Chupil, 2003), the Karen in Myanmar (Norwood, 2003), the Limbu in Nepal (Subba and Subba, 2003) and among the Maori in New Zealand (Tarawa, 2003).

The UNESCO Institute for Education has interpreted the 'four pillars of lifelong learning for the twenty-first century', outlined in the report of the International Commission on Education for the Twenty-first Century (Delors et al., 1996), in terms of the human rights situation of indigenous people. The 'four pillars' provide principles that should be followed in the design of carefully planned and culturally relevant adult literacy programmes aimed at contributing to the protection of the cultural rights of indigenous peoples (Table 5.2).

Social benefits

The practice of literacy can be instrumental in people's achievement of a range of capabilities such as maintaining good health and living longer, learning throughout life, controlling reproductive behaviour, raising healthy children and educating them. Improving literacy levels thus has potentially large social benefits, such as increased life expectancy, reduced child mortality and improved children's health. The evidence has often focused on the benefits of education, as opposed to literacy per se, but evidence on the effects of adult literacy programmes is beginning to accumulate.

Box 5.2 Effects of literacy on leisure time and privacy in Pakistan

Once women in Pakistan are able to read and write in Urdu (the national language) and in English, the quality of their leisure time changes and they create a new norm of privacy, according to studies of two different rural communities. Younger women create private time when they can read news, romantic fiction and women's magazines, and write diaries. Reading and writing do not remain mere leisure activities but become means of creating private space, freeing imagination, and engaging in reflection and emotional expression. Through leisure reading and writing, women begin to question, challenge, resist and renegotiate values and their own roles.

Sources: Zubair (2001, 2004).

Table 5.2: UNESCO's four pillars of learning with regard to indigenous peoples

Learning to be: the right to self-definition and self-identification	The right of indigenous peoples to their own interpretation of their history as well as the right to learn in their own languages.
Learning to know: the right to self-knowledge	Indigenous peoples have their own informal learning systems, which are compatible with their livelihood systems. This knowledge has often been denied to them through formal education and the imposition of foreign values on their societies.
Learning to do: the right to self-development	Indigenous concepts of development are inextricably linked to culture, education, environment and self-determination. Sustainable development for indigenous peoples is possible only when indigenous languages and cultures are protected.
Learning to live together: the right to self-determination	This implies the right to be able to organize the relationships between indigenous peoples and the wider society, not on terms defined unilaterally by the dominant society, but on terms defined in consultation with the indigenous peoples.

Source: UIE (1997a).

Health

A growing body of longitudinal research evaluating the health benefits of literacy programmes points to the same impact as that of education, and indeed in some cases, to a greater impact. For example, infant mortality was less, by a statistically significant amount, among Nicaraguan mothers who had participated in an adult literacy campaign than among those who had not, and the reduction was greater for those made literate in the campaign than for those made literate in primary school (Sandiford et al., 1995). Bolivian women who attended literacy and basic education programmes displayed gains in health-related

In Mexico, women with no or low literacy had difficulty following verbal health explanations by medical personnel

knowledge and behaviour, unlike women who had not participated in such programmes; the former group was more likely, for instance, to seek medical help for themselves and sick children, adopt preventive health measures such as immunization and know more about family planning methods (Burchfield et al., 2002b). A survey in Nepal found similar effects but was less able to link these to programme participation, because women in the control group of non-participants, like women in the programmes, had been exposed to radio broadcasts and other health interventions (Burchfield et al., 2002a). In Mexico, women with no or low literacy had the most difficulty following verbal health explanations by medical personnel (Dexter et al., 1998).

Small-scale qualitative studies provide evidence about how literacy affects cultural beliefs that in turn affect health, e.g. concerning female circumcision in Nigeria (Egbo, 2000). Studies indicate, however, that literacy programmes that themselves attempt to transmit health information have not been particularly successful, as the participants value reading and writing over receiving health knowledge (Robinson-Pant, 2005). Behaviour change is more dependent on changing attitudes and values than on gaining new knowledge. Chapter 3 explores the relationship between education, literacy and HIV/AIDS.

Reproductive behaviour

The negative correlation between education (in particular that of females) and fertility is well established. It was demonstrated by Cochrane (1979) and Wheeler (1980), and has consistently been reported since in studies both within and between countries. For example, studies based on Demographic and Health Surveys find that, on average, a 10% expansion in the primary gross enrolment ratio (GER) lowers the total fertility rate by 0.1 child and a 10% increase in the secondary GER by 0.2 child (Hannum and Buchmann, 2003, p. 13). However, there is much debate about how this correlation arises and the extent to which it is causal. The mechanisms whereby education may reduce fertility include its effects on women’s autonomy, infant mortality and child health, spouse choice, marriage age, female employment outside the home and the costs of educating children.

Some of the same mechanisms may also apply to adult literacy programmes, depending on participants’ age. Unfortunately, however,

little research into the impact of adult literacy programmes on fertility has been done.

Education

Literacy has important educational benefits. These were largely discussed in Chapter 1, where the interconnectedness of all six EFA goals was established, in particular the fact that parents who themselves are educated, whether through schooling or adult programmes, are more likely to send their children to school and more able to help the children in the course of their schooling.

It used to be thought that literacy contributed to the development of abstract reasoning. This now appears less likely. Studies in Liberia, Morocco, the Philippines and the United States indicate, rather, that abstract reasoning is the result of formal schooling (respectively, Scribner and Cole, 1981; Wagner, 1993; Bernardo, 1998; and Heath, 1983). In general, ‘the effects of literacy are more likely to be determined by formal schooling, socialisation, and the cultural practices of a particular society than by literacy per se’ (Patel, 2005).¹⁰ However, literacy does help people understand decontextualized information and language, verbal as well as written.

Gender equality

Most literacy programmes have targeted women rather than both sexes, limiting the ways in which gender equality can be addressed holistically and directly through the programmes themselves. The programmes have thus tended to concentrate specifically on women’s inequality rather than gender equality. Participation in adult literacy programmes does enable women to gain access to and challenge male domains by, for instance, entering male-dominated areas of work, learning languages of power previously associated with men (where only men had access to formal education) and participating in household finances. Examples of elite languages newly available to women include English in Uganda and ‘posh Bangla’ in Bangladesh (Fiedrich and Jellema, 2003). In some Bangladesh households, literacy has enabled women to become involved in the financial management of the household, previously controlled by men (Maddox, 2005). In India, an evaluation of a literacy programme using the Total Literacy Campaign approach showed that ‘women learners had a strong desire to learn. They liked to go to the literacy classes because this gave them an opportunity to meet others and study collectively. Thus, literacy classes

10. This finding raises important questions about the design of adult literacy programmes, where it is deemed desirable for such programmes also to develop abstract reasoning.

provided women with a social space, away from home' (Patel in UNESCO, 2003c, p. 142). Many women have reported that acquiring literacy and attending a class is in itself a threat to existing gender relations (Horsman, 1990; Rockhill, 1987).

Literacy programme participants can gain more voice in household discussions through their experience of speaking in the 'public' space of the class, though this may vary according to context and the kind of decisions involved. Detailed case studies reviewed by Robinson-Pant (2005) indicate that, while a newly literate woman may be able to decide whether to send her daughter to school, for example, she may not feel able to assert herself regarding family planning. Similarly, women may become aware of further education possibilities or of information about AIDS prevention through literacy programmes but still find it difficult to make actual changes in the household. The same social barriers that kept these women from attending school in the first place may, for example, impede their access to education beyond literacy programmes. There are, however, many instances of social mobilization due to literacy programmes' tackling of gender issues at the community level, including campaigns against men's alcohol use in India (Dighe, 1995; Khandekar, 2004) and the use of legal measures to address abuse (D'Souza, 2003; Monga, 2000).

Economic benefits¹¹

The economic returns to education have been extensively studied, especially in terms of increased individual income and economic growth.

Economic growth

Education has been consistently shown to be a major determinant of individual income, alongside professional experience. While the number of years of schooling remains the most frequently used variable, recent studies tend also to use assessments of cognitive skills, typically literacy and numeracy test scores. These studies show that literacy has a positive impact on earnings, beyond the impact of the quantity of schooling; studies of the impact of adult literacy programmes are much rarer, however. The relationship between educational expansion and economic growth in the aggregate has proven surprisingly difficult to establish, for several reasons. Hannum and Buchmann (2003), in their literature review, propose that the apparently inconsistent findings may result from the 'difficulty of distinguishing the effects of growth on education from the

effects of education on growth, and the possibility that other factors drive both educational expansion and economic growth.' Krueger and Lindahl (2000) suggest that the issue has more to do with measurement errors in education data and with the time horizon: they show an increase in schooling having no short-term impact on growth, but a statistically significant effect over the longer term (ten to twenty years). Several studies nevertheless find that economies with a larger stock of human capital or rate of human capital accumulation do experience faster growth.¹² An influential paper by Pritchett (2001), however, concludes that educational expansion has failed to contribute to economic growth owing to the lack of an adequate institutional environment.

Several studies have taken on the difficult task of trying to disentangle the impact of literacy on growth from that of education. Most recently, Coulombe et al. (2004), using data from the International Adult Literacy Survey (IALS)¹³ to investigate the relationship between literacy skills and economic growth, concluded that differences in average skill levels among OECD countries explained fully 55% of the differences in economic growth over 1960–94. This implies that investments in raising the average level of skills could yield large economic returns. Furthermore, the study found that direct measures of human capital based on literacy scores performed better than years-of-schooling indicators in explaining growth in output per capita and per worker.

Other studies that have examined specifically the relationship between literacy and economic growth include:

- Barro (1991), which, using cross-country data for 1960–85, found that adult literacy rates, as well as school enrolment rates, exert a positive impact on growth;
- Bashir and Darrat (1994), which found the same relationship for the same period for thirty-two Islamic developing countries;
- Hanushek and Kimko (2000), which identifies a relationship between student achievement in mathematics and science and economic growth that is consistently strong across thirty-one countries. However, the apparent relationship is reduced: a) when South Korea, Singapore, Hong Kong and Taiwan, with high growth and high scores during the period, are removed from the analysis; and b) in the most recent period when many Asian countries went into a slow-growth phase. This suggests that the overall effect between mathematics and

Literacy programme participants can gain more voice in household discussions through their experience of speaking in the 'public' space of the class

11. This section is based on Cameron and Cameron (2005).

12. See, for instance, Barro (1991), Petrakis and Stamatakis (2002), Poot (2000), Sylwester (2000) and Loening (2002).

13. See Chapter 7 for a presentation of IALS and other literacy surveys.

The average literacy score in a given population is a better indicator of growth than the percentage of the population with very high literacy scores

science achievement and economic growth may not be a causal one (Ramirez et al. 2003).

- Naudé (2004), which, using panel data for 1970–90 for forty-four African countries, found that literacy was among the variables with a positive effect on GDP per capita growth.

Two studies suggest that the impact of literacy on economic growth depends on the initial literacy level. Azariadis and Drazen (1990) found a threshold effect: countries that experienced rapid economic growth based on technology transfers had first achieved a literacy rate of at least 40%, a finding reminiscent of the 1960s economic history studies of modernization.¹⁴ Sachs and Warner (1997) found a statistically significant S-shaped relationship with maximum effect when literacy rates were neither very high nor very low. This suggests that small changes at high and low levels might not affect economic growth, but small changes at the intermediate levels characteristic of many developing countries do have an important effect.

Thus, while there is evidence relating literacy and education to economic growth, the mechanisms are not well explained. Today the contribution of education to economic efficiency lies to some extent in the very nature of the growth process, in which new technology and skilled labour complement each other. Box 5.3 illustrates the importance of literacy for technology transfer and use in the case of Viet Nam. Economies are increasingly based on knowledge and less on physical capital or natural resources, and knowledge is characterized by strong network effects. The more people with

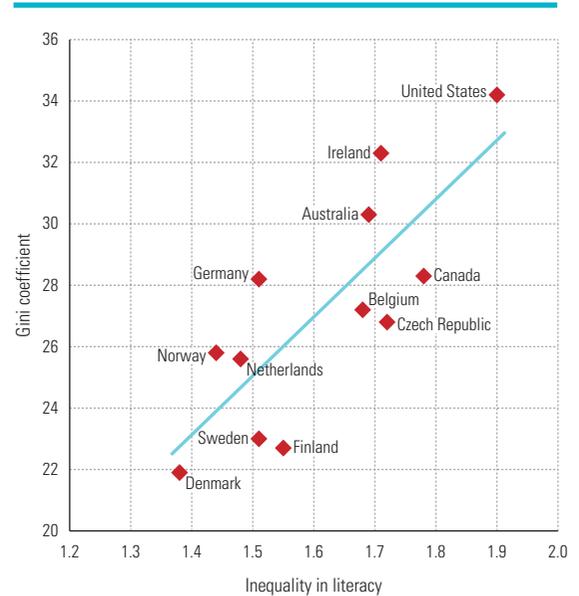
access to knowledge, the greater its likely economic benefits. Thus, the average literacy score in a given population is a better indicator of growth than the percentage of the population with very high literacy scores (Coulombe et al., 2004). In other words, a country that focuses on promoting strong literacy skills widely throughout its population will be more successful in fostering growth and well-being than one in which the gap between high-skill and low-skill groups is large.

Besides its relationship with economic growth, literacy is related to economic inequality, as Figure 5.1 illustrates for twelve countries that participated in IALS: greater disparities in literacy rates between the richest and the poorest deciles are associated with higher degrees of income inequality. This phenomenon may reflect an impact of literacy on inequality, or simply indicate that countries that are less tolerant of economic inequality also tend to have stronger literacy policies benefiting the deprived.

Returns to investment

Whether the returns to investing in adult basic education are higher or lower than those to investing in formal schooling is an important question that remains difficult to answer from

Figure 5.1: Inequality in income and inequality in literacy in OECD countries, 1994–98



Note: The Gini coefficient is an indicator of income inequality. Inequality in literacy is measured by the ratio of the literacy rate for the ninth decile of the income distribution to the rate for the first decile.
Sources: International Adult Literacy Survey, 1994–98; OECD (1999).

14. See, for example, Rostow (1960).

Box 5.3 Investment and literacy in Viet Nam

Low wages combined with high literacy have helped make parts of Viet Nam more attractive than others as investment destinations. An analysis of the country's regional variations in investment and in literacy rates over 1988–93 shows that the two are related. Although Viet Nam has provided basic education to a large proportion of its overall population, training and educational attainment vary among provinces or regions (for example, the South ranks lower than the North). Different parts of the country differ, therefore, in the capacity of their labour forces to participate in the modernized sectors in which foreign direct investment is involved. It appears that for foreign investors in manufacturing the top priority was good infrastructure, but that they remained very sensitive to human capital considerations: projected investment was greatest in the provinces with the highest literacy rates.

Source: Anh and Meyer (1999).

the existing research. In some countries, adults spending a year in a basic education course outperform primary school children from Grades 3 and 4 in standardized tests (Oxenham and Aoki, 2002). Thus, depending on relative costs, adult basic education may well be cost-effective. Indeed, it has been suggested that the level of cognitive achievement of literacy programme trainees is the equivalent of that resulting from four years of schooling (Oxenham, 2003).

A review of four literacy projects in three countries (Bangladesh, Ghana and Senegal) conducted between 1997 and 2002 estimated that the cost per successful learner lay within a range of 13% to 33% of the cost of four years of primary education (Table 5.3). In practice, it takes more than four years to complete four years of primary school in most of these countries, so the actual schooling cost is likely higher. Interestingly, the findings are consistent with, albeit less dramatic than, those comparing the relative costs thirty years earlier during the Experimental World Literacy Programme (UNESCO/UNDP, 1976): in seven out of eight countries, literacy was cheaper per successful adult learner by significant margins, ranging from 85% to 2%; only in one country was primary school cheaper.

The relative returns to investment in primary education compared to other levels of education have been hotly contested in recent years; moreover, the returns to education may have been overestimated. Nonetheless, a recent review of the literature concludes that the effect of education on individual earnings is unambiguously positive and large, relative to returns on other investments (Harmon et al., 2003). One of the rare attempts to estimate the specific returns to adult literacy programmes covers three countries with World Bank-financed projects (Oxenham, 2003). The Ghana National Functional Literacy Program of 1999 had a private rate of return of 43% for women and 24% for men, with social rates of 18% and 14%, respectively; benefits were estimated on the basis of differentials in earnings profiles. A programme in Indonesia produced returns of around 25%, compared to 22% for primary education, though in this case the returns were estimated by measuring the rate of growth of individual income compared to the rate of growth of the cost of training. A Bangladesh programme had an average private rate of return as high as 37%. However uncertain these estimates, they suggest, first, that the investments are productive

Table 5.3: Costs of adult literacy compared to primary school

Country	Cost per successful learner (constant 1996 US\$)	Cost per successful learner as ratio of estimated cost of four years of primary education
Bangladesh	20.40	33.3
Ghana – programme 1	27.59	13.3
Ghana – programme 2	37.07	17.8
Senegal	97.78	15.0

Source: Oxenham (2003).

and, second, that what poor people learn from literacy programmes does help them raise their incomes and move out of poverty. Further insight comes from a study of the effects of adult literacy programme participation on household consumption in Ghana. Programme participation made no difference to households in which at least one member had already had some formal education. However, among households in which no member had any formal education, the difference was dramatic: households with a member in a literacy programme consumed 57% more than those without, controlling for all other relevant variables (Blunch and Pörtner, 2004). In Ghana generally, only the most educated household member's level of education appears to matter for income generation (Joliffe, 2002).

The sparse evidence that exists indicates, therefore, that the returns to investment in adult literacy programmes are generally comparable to, and compare favourably with, those from investments in primary education. In practice, the opportunity cost for a child to attend school is typically lower than for an adult to attend a literacy programme. Yet, the opportunity to realize the benefits is more immediate for an adult who is already in some way involved in the world of work.

Conclusion

As this chapter has shown, literacy is a right and confers distinct benefits, whether acquired through schooling or through participation in adult literacy programmes. Adult programmes appear to yield some benefits, particularly in terms of self-esteem and empowerment, that go beyond those that result just from schooling; the very scant evidence also indicates that adult programmes are as cost-effective as primary schooling, raising important questions as to why investment in adult programmes has been relatively neglected until recently.¹⁵

Adult programmes yield benefits that go beyond those that result from schooling

15. See Chapter 1 for a discussion of the relative neglect of the EFA literacy goal and certain other EFA goals.