2 *Social exclusion and barriers to girls' schooling*

Girls from ethnic communities face double exclusion—first as members of excluded minorities and second as excluded groups in developing countries that tend to disproportionately discriminate against females. Understanding the patterns of social exclusion across countries from multiple perspectives is crucial for identifying successful interventions. Multiple exclusion, based on both immutable and variable factors, is particularly relevant to education in developing countries, where children from excluded groups face many legal, household, social, and classroom impediments that affect their enrollment and achievement in school.

Multiple sources of social exclusion

Exclusion arises from multiple sources, some endogenous and some exogenous. Social exclusion from immutable factors—such as gender, ethnicity, or race—contributes to low educational participation for girls and sub-group members. Social exclusion from external factors—poverty, for example—not only contributes to low educational participation, but also to a cycle of exclusion based on poverty. Concatenating factors of exclusion lead to what is often called "multiple exclusion."

In developed countries, socially excluded populations are typically minorities. This is not the case in many developing countries, where the poor, the culturally and geographi-

cally isolated, and linguistic and ethnic minority groups can represent a majority of the population. Whether a majority or a minority, excluded groups suffer from lower educational participation, attainment, and achievement.

Long-term, self-imposed separation into self-contained clans, such as the Hmong in Southeast Asia, explains some exclusion. But exclusion in many parts of the world also stems from the lower status of excluded groups, leading to derogation and discrimination that denies opportunities and limits improved livelihoods. In some settings, a backlash by excluded groups has led to separation and rejection of dominant values, further distancing the possibility of assimilating into the mainstream culture. In others, communal violence erupts when excluded groups vent their anger at the dominant group.

Girls in excluded groups often suffer disproportionately from multiple sources of exclusion because gender is one of these sources. So girls living in impoverished families and in ethnic or linguistic "minority" communities that are remote from urban settings will require extra effort to bring them into the education mainstream.

What is exclusion?

Social exclusion sidelines certain groups, denying them social rights and protections that should be extended to all citizens (box 2.1). The term "social exclusion" emerged in Europe, following the perceived failures of the welfare system in the face of persistent poverty and slow economic growth in the early 1990s. It parallels concern in the United States in the late 1970s regarding the emergence of an underclass that appeared unable to climb out of poverty. Social exclusion aligns with Sen's (2006) characterization of group identity and the distance between the dominant group and others.

People who are socially excluded receive inadequate support from public institutions. Their opportunities are constrained because mechanisms and institutions exclude them. Although social exclusion is not synonymous with poverty, it is closely tied to the notion of poverty, bridging exclusion of certain groups and the concept of inequity (Loury 2000). Exclusion limits opportunities for marginalized groups through social isolation, limited access to education, and discrimination in schools and the labor market, all of which create an uneven playing field.

Social exclusion of an underclass emerges in heterogeneous, stratified societies that encompass a variety of ethnic groups, languages, and customs. Where subsistence agriculture predominates, geographic isolation effectively cordons off certain groups from mainstream society. Indigenous tribes in parts of the Amazon basin, for example, have only recently begun to interact with national governments and commercial interests, while environmental survey officials and gold miners encroach on their territory. But such geographical isolation is increasingly rare. More common is exclusion of specific groups that live within larger societies.

Box 2.1. What form does exclusion take?

Several factors can define excluded groups:

- Stigmatization by recent historical trauma at the hands of the majority population—a recent history of slavery (blacks in Brazil, Cuba, and the United States), indigenous groups dispossessed of their homeland (for example, native peoples in Canada), or outcasts who have been long time victims of economic and social discrimination (Roma in Europe, Dalits in India, blacks in South Africa prior to 1980).
- Ethnic differences, including groups differentiated by color, language, and religion as well as "tribes," "races," "nationalities," and "castes" (Horowitz 1985).
- Low status, because excluded groups are "ranked" in value below the majority population in the social hierarchy (for example, blacks were ranked lower than whites in South Africa during apartheid and in the southern United States before World War II; Roma, or Gypsies, are ranked lower than majority populations in Eastern Europe; "Dalits" are ranked lower than upper castes in India). In many cultures, women hold a lower social status than men.
- Involuntary minority status in the population.

Social exclusion sidelines certain population groups. It restricts excluded groups' economic mobility and prevents them from receiving the social rights and protections meant to be extended to all citizens. Discrimination by the dominant population effectively excludes these groups from mainstream activities, such as education and employment. In some cases, those who are socially excluded also face other exclusions that reduce their status and acceptance in society. Cultural differences, isolation, and even poverty can exacerbate discrimination and marginalization from the dominant population.

Source: Meerman 2005.

Ethnic populations or people whose mother tongue is not an official national language often remain outside the mainstream economy and society. Their identity comes from the ethnic group, not that of the larger society (Sen 2006). Laos, for example, has 50 ethnic groups, many speaking different languages. India's 573 tribal groups, which remain relatively isolated geographically, speak more than 270 languages. In Cameroon 280 languages are spoken, and in Central and South America, more than 350.

In many parts of the world, exclusion derives from colonization. The legacy of dominance over indigenous peoples created the excluded groups of Aborigines in Australia, First Peoples in Canada, Maori in New Zealand, and Native Americans in the United States. In much of Africa, borders were drawn arbitrarily by colonial powers, creating countries where the excluded group can be larger than the dominant group. The Hutus in Rwanda, for example, outnumber the Tutsis. Where significant ethnic and linguistic diversity has resulted from the cobbling together of nations, exclusion

has occasionally erupted into civil conflict, as in Sri Lanka. In other cases, exclusion has led to genocide, as in Darfur and Rwanda.

Many "voluntary" immigrants share characteristics with excluded groups—stigmatization, membership in an ethnic minority, low status—following immigration, but their motivation to assimilate is different from that of other excluded groups. In part, because they perceive these characteristics as temporary, their tolerance for marginalization is greater. Immigrants or guest workers, such as Asians in Australia, Turks in Western Europe, or Caribbean blacks in the United States, for example, perceive both their low status and the discrimination they face as temporary costs of migration that can be overcome through hard work and education. Indeed, in the United States immigrants on average reach economic parity with the majority population within two to four generations; short-term discrimination is perceived as a small price to pay for economic opportunity (Ogbu 1991). However, some "temporary" immigrants or guest workers in Western Europe have become members of excluded groups largely because temporary immigration became permanent residency with limited integration.

In contrast, indigenous peoples and racial groups are involuntary minorities brought into society through slavery, conquest, or colonization. These groups compare themselves to the dominant group and attribute their lower status to being part of a disparaged minority group with limited if any opportunity for upward mobility. They view their situation as permanent and institutionalized and discrimination an inevitable part of their circumstances (Ogbu 1991).

Most of the children who are excluded from school in the developing world come from involuntary minorities. These are children whose parents differ from the dominant class, race, and ethnic group and who have historically been marginalized in their own societies. These children often adopt the expectations of their parents (Ogbu 1991).

Poverty both creates and is created by social exclusion. Loury (2000) points out that social exclusion focuses on the distributional aspects of poverty. Sen (1997) demonstrates how widespread unemployment, a major source of poverty, fuels inequality and social exclusion based on race or gender. Stewart (2001) points to the neglect of "horizontal inequalities" or the neglect of equality across groups, which reduces social welfare and inhibits individual welfare by placing restrictions on individuals within groups. She reviews the economic, social, and political disadvantages of certain groups in nine countries, including indigenous groups in Mexico, Afro-descents in Brazil; Fijians in New Zealand, and blacks in the United States, and shows their similarities in disadvantage and marginalization. Her horizontal inequity examples from the developing world highlight the plight of socially excluded groups.

Some countries have experienced a backlash from historically excluded groups, who aggressively reject mainstream values and substitute their own set of priorities—"minority values" that challenge majority behaviors. Excluded groups confront explicit and implicit discrimination as a way to build self-esteem, establish identity, and challenge the dominant expectations that together compromise learning, reduce social acceptance,

and restrict upward mobility. But this may lead to self-defeating behaviors, particularly among the young. Sowell (1994) and Loury (2000) contend that group culture among American blacks (the refusal to "act white") devalues education and helps explain economic disparities between blacks and white. Similar behavioral responses of excluded groups, including rejection of education and other trappings of the majority group, have been observed among Jamaican immigrants in the United Kingdom (Modood 2005), the Roma in Eastern Europe, Aborigines in Australia, and, until recently, the Maori in New Zealand (Ringold, Orenstein, and Wilkens 2003; Ringold 2005). Some of these responses may reflect discriminated groups' efforts to forge a separate identity.

Alternatively, excluded groups may accept the dominant group's low esteem for them, lowering their own expectations for success and impairing their behavior in deference to the majority group (Ridgeway 1997a, 1997b). Steele and Aronson (1995) and Aronson and others (1999) argue that excluded groups may experience higher levels of anxiety in certain situations, arising from a fear of being discriminated against on the basis of stereotypes, and that this "stereotype threat" can lower their performance.

Whether members of an excluded group accept or reject the values of the dominant group, the consequences for their children's performance in school are severe. They are most severe when the children suffer from multiple sources of exclusion.

Measuring exclusion

Measuring exclusion allows comparisons and analysis to be made across and within groups. At the national level, ethnicity, language, location of residence, and other defining characteristics of particular communities can be identified and the degree of difference or heterogeneity measured. Such data provide a basis for defining and comparing conditions, opportunities, and achievements across groups.

From a policy perspective, such data are key. Rioting in France in 2005 and the plight of the Roma in Eastern Europe suggest inequities, but remedial measures are stymied because of lack of data with which to assess the problems, compare performance with majority populations, or track progress of excluded groups. In contrast, in the United States, disaggregated data permit tracking of educational enrollment, attainment, and achievement across ethnic and income groups. These data can be used to target policy initiatives and programs.

Some recent household surveys in developing countries capture ethnic distinctions. These data have been used to demonstrate the disadvantages facing indigenous groups in education (Hallman and Peracca forthcoming; King and van de Walle forthcoming; Hall and Patrinos 2006; van de Walle and Gunewardena 2001; Stash and Hannum 2001). They provide the basis for defining areas for public intervention.

Measurement offers the first step toward addressing social exclusion. Measuring exclusion at the national level is difficult, and differentiating countries by their degree

of exclusion remains a challenge. In many countries, information on population groups does not exist or data are too old to be usable for policy analysis. Alesina and others (2003) have attempted to capture the degree of heterogeneity of countries by looking at ethnic and linguistic fractionalization. Ethnic fractionalization refers to racial and linguistic characteristics, taking into account physical attributes, social conventions, and accepted social definitions, including self-identification. Linguistic fractionalization is compiled separately from any racial or physical characteristics and reports the shares of languages spoken as "mother tongues" using census data. The data of Alesina and others cover 650 ethnic groups in 190 countries and 1,055 linguistic groups.

Both ethnic and linguistic heterogeneity, which tend to be highly correlated, are high in some of the poorest countries (table 2.1). Where both are high, as in Indonesia, Pakistan, and Uganda, the challenges of socializing children and building a nation-state with common objectives and goals are great. Although education offers an important tool for building trust across disparate groups, extending schooling to all groups in society can prove an economic and social challenge, particularly in socially and ethnically mixed populations. Indeed, 68 percent of all out-of-school children live in the highly linguistically fractionalized countries (UNESCO 2004). In contrast, where both ethnic and linguistic heterogeneity are low, as in Bangladesh, the Republic of Korea, and Tunisia, nation building can occur more smoothly.

Most developing countries are highly heterogeneous, outnumbering highly

Table 2.1. Ethnic and linguistic heterogeneity in developing countries and transition economies

	Ethnic fractionalization		
Linguistic fractionalization	Low[a]	Medium[b]	High[c]
Low[a]	Albania, Antigua and Barbuda, Argentina, Armenia, Azerbaijan, Bangladesh, Barbados, Burundi, Cambodia, Chile, China, Comoros, Costa Rica, Democratic People's Republic of Korea, Egypt, Honduras, Hungary, Kiribati, Lebanon, Lesotho, Marshall Islands, Poland, Republic of Korea, Russian Federation, Seychelles, Slovak Republic, Swaziland, Tunisia, Tuvalu, Uruguay, Vietnam, Western Samoa	Brazil, Croatia, Dominican Republic, Jamaica, Jordan, Mexico, Nicaragua, Romania, Saint Vincent and Grenadines, Syria, Turkey, Venezuela	Bolivia, Colombia, Ecuador, Guyana, Libya, Madagascar, Somalia, Trinidad and Tobago

Table 2.1. Ethnic and linguistic heterogeneity in developing countries and transition economies (continued)

Linguistic fractionalization	Ethnic fractionalization		
	Low[a]	Medium[b]	High[c]
Medium[b]	Papua New Guinea, Paraguay, Saint Lucia, Solomon Islands, Tonga, Vanuatu	Algeria, Belarus, Botswana, Bulgaria, Czech Republic, Estonia, Fiji, Georgia, Guatemala, Iraq, Latvia, Lithuania, Macedonia FYR, Mauritius, Moldova, Mongolia, Morocco, Myanmar, Oman, Palau, Panama, Sri Lanka, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, Zimbabwe	Kyrgyz Republic, Mauritania, Peru, Suriname
High[c]	Philippines	India, Lao People's Democratic Republic, Nauru	Afghanistan, Angola, Belize, Benin, Bhutan, Bosnia and Herzegovina, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Guinea-Bissau, Indonesia, Iran, Kazakhstan, Kenya, Liberia, Malawi, Mali, Micronesia, Mozambique, Namibia, Nepal, Niger, Nigeria, Pakistan, Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Thailand, The Gambia, Togo, Uganda, Zambia

a. Fractionalization score of less than 0.3.

b. Fractionalization score between 0.3 and 0.6.

c. Fractionalization score of 0.6 or higher.

Source: Alesina and others 2003.

homogeneous ones by about three to two. Among homogeneous developing countries, about one-third are very small, with populations of less than 1 million (see table 2.1). Most children in developing countries will live in heterogeneous societies.

While hetereogeneity is often the consequence of former colonial status, it can also reflect voluntary migration and involuntary resettlement. Encounters with people from different ethnic or linguistic groups become more likely with economic development, social change, and urbanization. These encounters provide opportunities for a dominant group to judge a nondominant group against its own standards—and find it wanting. This leads to the emergence of socially excluded groups in many developing countries. Once confined to certain regions or self-contained communities, these groups now participate in a wider society dominated by unknown, mistrusted "others," who denigrate them for being different. Unless countered, this denigration leads to poverty, discrimination, and inequality in access to services.

Schools can play a special role in counteracting the negative effects of a heterogeneous society. Properly designed, schools can promote tolerance and build trust among ethnic and linguistic groups (Heyneman 2000). But building trust is a challenge, because distrust of others is a central feature of traditional societies (Putnam 1993; Inkeles and Smith 1974). Unfortunately, schools can also reinforce negative stereotypes and exacerbate differences.

Exclusion and the demand for schooling

Exclusion leads to lower parental demand for schooling and to inadequate and substandard public supply. Parents want to keep children home for many reasons, from general resistance to change, to a desire to retain a separate ethnic identity, to disinterest in what schools have to offer. Some parents identify discrimination and mistreatment by schools and teachers as a reason to keep their children out of school (Ringold, Orenstein, and Wilkens 2003; Narayan 2000). Direct and opportunity costs, lack of employment opportunities upon graduating, and low returns to those who have attended school also keep excluded children out of school.

Sending children to school entails a high opportunity cost without clear returns to the family, particularly in subsistence societies. Indeed, the need for child labor is the single most important reason for not sending rural children to school in developing countries, especially among the poorest families (Basu and Tzannatos 2003). Sending children to school means losing labor.

Recent research underscores the salience of safety factors in keeping girls out of school. Parents may want their daughters in school but worry about their safety away from home, traveling to and from school (Kim and Bailey 2003; Mbassa Mednick 2001; Mgalla, Boerma, and Schapink 1998; Ohsako 1997). Distance poses particular problems for girls in secondary school, when they become targets for rape and abduction,

which is not only traumatic for the girls, but often compromises the social status of their households and their acceptance in the community. As demand for girls' education increases, reservations about safety could undermine the efforts of both households and governments in meeting that demand.

Reaching isolated groups in most societies tends to be costly, and as a lower public priority, the supply of schools and teachers tends to lag, which reinforces low demand. The direct costs of primary school—in the form of school fees, family contributions, and unofficial fees—can represent a high share of poor families' disposable income (Bray 1996; Kattan and Burnett 2004). These expenses can prevent families from enrolling their children in school (Kudo 2004; Narayan 2000). For the excluded, who typically have low incomes and limited demand, such charges can prove insurmountable. Other costs of education (school uniforms, textbooks, transportation) can also represent significant barriers. These costs may be particularly high for girls because of their lost household labor and the costs associated with safety en route to and at school (Birdsall, Levine, and Ibrahim 2005).

Families may have a preference for educating boys over girls, given better labor market opportunities for boys and the fact that girls in many societies are "married away," joining the husband's family and no longer providing for or living with their own families. The general preference for boys found among most excluded groups in developing countries adds to the disadvantage experienced by girls.

Most excluded groups are poor, in part because of lower economic returns to education. Excluded groups' educational attainment remains well below that of the majority population. Exclusion and gender discrimination lead to lower returns to almost all investments in comparison with similar investments aimed at the majority population, for several reasons. First, excluded groups tend to suffer multiple forms of discrimination. This lowers their economic and social status, which in turn shapes their attitudes toward education and reduces their motivation to learn. Second, expectations of limited economic returns to education among excluded groups reduce demand for education, particularly for girls, because women face greater labor market discrimination than do men. Third, the quality of public programs, including education, directed at marginalized groups tends to be inferior to those aimed at majority populations. Fourth, lack of role models and preschool preparation place excluded children at a distinct disadvantage when entering school, further reducing their motivation. Poor progress, high costs of schooling, and higher opportunity costs of sending children to school also make these children more likely to drop out. Thus even in countries where there are few structural barriers to girls' schooling, girls from excluded groups face clear disadvantages in enrollment and completion.

Public policies and funding favor the majority; limited voice and political representation reduce the attention afforded excluded groups. Indeed, with few exceptions, excluded groups have little say in the content, approach, or methods of teaching or in the selection or oversight of teachers. Because excluded groups by definition remain

outside the mainstream, they do not participate in civic activities and have little if any knowledge about education. Public leaders marginalize their needs. Indeed, evidence for the United States shows that more ethnically fragmented communities are associated with less efficient provision of public goods, lower participation rates in social activities, and less trust within the community (Alesina and others 2003). All of these factors reduce access, participation, and performance.

The excluded suffer not only from inaccessible schools, but also from discriminatory treatment when they reach schools, which leads to dropout and to lower learning. A multi-country study estimates that the combined effects of gender, immigrant status (a proxy for exclusion), and isolated residence lowered mathematics scores a staggering 35 points, equivalent to one-third of the difference between the highest scoring country and the international average (Woessmann 2000). In a study of preschools in Kenya, Vermeersch and Kremer (2005) find that scores on both oral and written measures of learning were lower in classrooms in which ethnic heterogeneity was greatest.

Low returns to education exacerbate low demand. Using household surveys, Zoninsein (2001) estimates what the gains in GDP in Latin America would have been if excluded groups (indigenous peoples and black Afro-descendents) had had the same education, productivity, and earnings as whites. He concludes that the racial and ethnic exclusion have cost Bolivia 36.7 percent of GDP, Brazil 12.8 percent, Guatemala, 13.6 percent, and Peru 4.2 percent. The losses stem from differences in years of schooling and mean earnings between whites and excluded populations, controlling for age and gender.

At the household level the incomes of excluded groups consistently lag behind those of majority populations in most countries, except in Africa, where minority tribes can dominate, as in Rwanda and Malawi. Studies of Eastern Europe (Ringold, Orenstein, and Wilkens 2003), India (see India National Sample Survey at www.censusindia.net), Laos (King and van de Walle forthcoming), Latin America (Hall and Patrinos 2006), South Africa (Mwabu and Schultz 1998), and Vietnam (van de Walle and Gunewardena 2001) reveal significant gaps in average incomes between dominant and excluded groups.

In Latin America indigenous people and racial minorities earn less than white nonindigenous workers with the same educational attainment. Average incomes of indigenous men are 44–65 percent below those of nonindigenous men. The ability to climb out of poverty is hindered by restricted income-earning possibilities, which reduce the returns to education (Hall and Patrinos 2006).[1]

1. Hall and Patrinos (2006) find that disparities in educational attainment and location of residence best explain wage differentials across racial and ethnic groups. Average marginal returns across all groups for primary education are 7.8 percent, with the highest returns in Brazil, at 14.0 percent for primary education, 9.6 percent for secondary education, and 17.4 percent for tertiary education. Trends in the 1990s show a decline in the returns to secondary education and a rise in the returns to higher education. The increasing number of workers with secondary education could explain part of the decline, although Chile and Uruguay, both with relatively high-quality schooling and growing numbers of trained secondary school graduates, did not see returns fall. Duryea, Jaramillo, and Pages (2003) speculate that maintaining academic quality may have helped maintain rising wages for secondary school graduates.

In Peru nonindigenous white workers have higher average earnings than indigenous workers, after controlling for individual and household characteristics (Nopo, Saavedra, and Torero 2004). Being from a disadvantaged group raises the probability of being and staying poor; the combination of discrimination, lack of skills, and reliance on subsistence agriculture often pushes excluded groups deeper into rural poverty.

Earnings of excluded women trail those of excluded men and majority men and women. In Latin America the gender gap in earnings is closing, but indigenous females remain the most disadvantaged in every country in Latin America (Duryea, Jaramillo, and Pages 2003; Hall and Patrinos 2006). In countries with the largest indigenous or racial groups (Bolivia, Brazil, Guatemala, Guyana, and Peru), nonindigenous white men remain the best endowed with assets. The gender gap in income among indigenous peoples and people of African descent significantly exceeds the gender gap among nonindigenous white populations in Latin America (Hall and Patrinos 2006).

In 2001 Afro Brazilians earned half the average per capita income of white Brazilians. Although just 45 percent of Brazil's population is black, blacks represent 62 percent of poor households. Discrimination explains the 11 percent gap in white-black wages in the formal sector and the 24 percent gap among the self-employed. No social mobility appears to have taken place in Brazil, with income growth strongly correlating with initial income levels. White men remain the most privileged and black women the least so, a finding consistent with previous quantitative and qualitative evidence (Mario and Woolcock forthcoming; Narayan 2000).[2]

Excluded groups not only earn less, their ability to improve their (relative) economic circumstances is also more limited. For example, positive benefits from macroeconomic growth affect these populations less, due largely to their isolation, while the negative effects of economic decline tend to persist longer (Hall and Patrinos 2006).

Demand for education—or even the willingness to permit excluded children to attend school—is tied to expected returns. Parents who believe that education will yield long-term returns are more willing to send their children to school. The lack of returns can prove discouraging to households and communities, and it can lead to withdrawal from schooling. This is already occurring in some high-income OECD countries, as disadvantaged groups increasingly believe that discrimination undermines the value and returns to education. Policymakers and donors require a sound understanding of the returns to education in order to shape policies and interventions to rectify or compensate for impediments.

Gender, exclusion, and the supply of schooling

Low-quality inputs to schools and perceptions of the irrelevance of schooling further reduce the willingness of parents to send their children to school. In some cases parental

2. Mwabu and Schultz (1998) find mixed returns to education in South Africa.

participation in schooling in the past has not translated into an increased willingness to send children to school (for example, the Roma, Dalits, and some African Americans in the United States). Quality matters. Poor-quality schools, maltreatment in school, and low expectations of teachers lower demand among excluded groups. While incentives such as scholarships and other interventions may be able to break the cycle of resistance to school, low demand and inadequate supply reduce the opportunity for and interest in schooling for households and students.

A multitude of supply factors result in excluded girls never enrolling or dropping out of school early. Legal and administrative barriers typically affect the supply of schools and hence participation in schooling. Overt discrimination by a dominant group can affect the opportunity to learn, reducing both participation and performance.

Legal and administrative barriers

Legal and administrative barriers are usually overt, visible, and amenable to direct political and management action. While changing laws and regulations does not necessarily translate into behavioral change within households or schools, an appropriate regulatory framework is a necessary precondition for making changes at these levels. Experience from developed countries highlights the force of legislation and the application of existing laws in reducing barriers to equitable education (Hochschild and Scovronick 2003).

Legal barriers are not the main source of exclusion in education. Laws requiring discrimination, such as the apartheid laws in South Africa, have largely disappeared, and more than 90 percent of countries have legally binding rules requiring children's school attendance (UNESCO 2002; Benavot 2002). By 2002, 77 countries guaranteed free and compulsory education for all children, and another 29 had made strides in this direction (table 2.2).

Laws in some countries still limit access to education, however. Thirty-seven countries provide free and compulsory education only to citizens or legal residents, thereby excluding children of guest workers. Another 43 have no national or constitutional guarantees regarding education (Tomaschevski 2001). Others provide for education that is separate and possibly unequal for children of migrants or guest workers, on the assumption that their presence in the country is temporary and the children will be returning to their home country. Although laws can be, and are, disregarded, a legal framework that ensures education for all is important. The global consensus regarding basic education for all provides a strong impetus for eliminating remaining legal barriers in education.

Table 2.2. Prevalence of guaranteed free and compulsory education

Countries that guarantee free and compulsory education (77)	**Countries with partial guarantees (29)**
Albania, Algeria, Argentina, Australia, Austria, Azerbaijan, Barbados, Belgium, Belize, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Canada, Cape Verde, Chile, China, Colombia, Congo, Costa Rica, Croatia, Cuba, Denmark, Ecuador, Egypt, Estonia, Finland, France, Georgia, Germany, Ghana, Haiti, Honduras, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Macedonia FYR, Madagascar, Malta, Mauritius, Mexico, Moldova, Netherlands, Norway, Palau, Panama, Paraguay, Peru, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Rwanda, Saudi Arabia, South Africa, Spain, Sri Lanka, Suriname, Sweden, Switzerland, Tajikistan, Thailand, The Gambia, Trinidad and Tobago, Tunisia, Ukraine, United Arab Emirates, United Kingdom, Uruguay, Venezuela, Yugoslavia	Bangladesh, Belarus, Benin, Bhutan, Cameroon, Comoros, Guinea, Guinea-Bissau, India, Iran, Iraq, Israel, Maldives, Micronesia, Monaco, Mongolia, Myanmar, Namibia, Nepal, Nigeria, Pakistan, Saint Kitts and Nevis, Sierra Leone, Sudan, Tanzania, Togo, Uganda, Uzbekistan, Zimbabwe
Countries in which guarantees are restricted to citizens or residents (37)	**Countries with no national guarantees (43)**
Armenia, Bahrain, Cambodia, Chad, Cyprus, Czech Republic, Democratic People's Republic of Korea, Dominican Republic, El Salvador, Equatorial Guinea, Greece, Grenada, Guatemala, Guyana, Hungary, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Libya, Luxembourg, Malawi, Mali, Morocco, New Zealand, Nicaragua, Philippines, Qatar, São Tomé and Principe, Seychelles, Slovak Republic, Slovenia, Syria, Turkey, Turkmenistan, Vietnam, Yemen	Angola, Antigua and Barbuda, The Bahamas, Botswana, Brunei Darussalam, Burkina Faso, Burundi, Central African Republic, Côte d'Ivoire, Djibouti, Dominica, Eritrea, Ethiopia, Fiji, Gabon, Indonesia, Jamaica, Kenya, Kiribati, Lao People's Democratic Republic, Lebanon, Lesotho, Liberia, Malaysia, Marshall Islands, Mauritania, Mozambique, Nauru, Niger, Oman, Papua New Guinea, Saint Lucia, Saint Vincent and Grenadines, Samoa, San Marino, Senegal, Singapore, Solomon Islands, Swaziland, Tonga, Tuvalu, United States of America, Vanuatu, Zambia

Source: Adapted from Tomaschevski 2001.

Gender barriers

Some administrative rules specifically affect girls. Within countries, educational administrative rules and practices can erect significant barriers to school participation.

Some of these rules appear to be gender or culture neutral, but a closer inspection shows that they are not. While national educational rules are often disregarded at the local level, their enforcement can block school participation, principally by affecting the supply of schools available for girls and members of sub-groups. Two important administrative rules affect girls' participation in school: specifying the number or "gender" of schools that communities must provide for primary students and expelling pregnant and married girls from school.

Single-sex schools. In many countries the requirement to provide single-sex schools, common in the Middle East and South Asia, often restricts the supply of schools for girls. Some communities disregard the rule prohibiting girls from attending boys' schools and allow very young girls to attend school with their brothers; young boys are also allowed to attend all-girls schools with their sisters. But girls in these communities are rarely allowed to continue schooling alongside boys beyond the first few grades. A survey of schools in 12 rural villages in Pakistan found that only 36 percent of girls enrolled at boys' schools were actually attending school, compared with 88 percent of girls enrolled at girls' schools (Sathar and others 2003). Without a girls' school in the community, girls are excluded from formal schooling. Differences across communities in willingness to educate girls alongside boys determines which regulations create the greatest barrier to girls.

Expulsion of pregnant girls. One of the main reasons why girls leave school in Africa is marriage or pregnancy. In many countries in Africa pregnant girls are routinely expelled from the formal education system. If they are allowed to rejoin the formal system after they give birth, they are required to return to a different school (Wilson 2004). Boys responsible for pregnancies are not dismissed from school. Although the Forum for African Women Educationalists has exposed this practice and the African Charter on the Rights and Welfare of the Child contains language recognizing pregnant girls' rights to education, countries vary widely in compliance. Although allowing girls to remain in or return to school does not deal with the underlying causes of teenage pregnancy, it could improve the lives of the affected girls.

Language barriers

In many countries the language of instruction in primary schools is a national or regional language, even though large shares of the population speak a different mother tongue. The cognitive demands on children who are required to learn multiple languages are substantial and contribute to barriers to schooling (Abadzi 2006).

Bilingual education programs are widely agreed to be the preferable approach for integrating nonnative speakers into the mainstream language (Hochchild and Scrovor-

nick 2003). But even in developed countries few school systems have the resources to hire bilingual teachers. Hence children are often expected to "transition" to the dominant language without any pedagogical support.

Rules regarding the language of instruction often disproportionately affect girls, particularly in communities that seclude women. In these communities girls may lack the opportunities that their brothers have to learn the language of instruction before entering school (Benson 2005).

Even when teaching takes place in a local language, instructional materials may not be available in all mother tongues. The lack of relevant instructional materials puts some children at a considerable disadvantage. India, for example, with more than 1,000 languages and dialects, guarantees children the right to be educated in their mother tongue for the early primary grades, and most states publish textbooks in multiple languages (World Bank 1997). But according to the World Bank (1997),

> …textbooks in minority languages often arrive late or not at all. In most states, textbooks are first prepared and printed in a predominant regional language, and work on versions in minority languages often begins only after the majority language version has gone to press…. Yet states rarely purchase textbooks in a minority language from neighboring states in which that language holds majority status. For example, Andhra Pradesh struggles to produce a limited quantity of books for its Tamil-speaking children, even though neighboring Tamil Nadu produces the bulk of its books in Tamil. (p. 174)

In Morocco the official language is Arabic, but 30–50 percent of the population speaks one of three main Berber languages at home. Most instruction in Morocco is in Arabic at the primary level and in Arabic and French at the secondary and tertiary levels. Textbooks, however, are available only in Arabic and French (box 2.2).[3]

In Latin America significant shares of children in Bolivia, Guatemala, Mexico, and Peru speak indigenous languages. Many of these countries have begun to introduce mother tongue education in the early grades and to provide textbooks in indigenous languages. Performance of some indigenous children is improving (discussed in chapter 3).

Lack of schools in remote communities

Many of the world's poor people live in rural areas, where distance to school remains a highly constraining factor for school participation. In an extenstive review of research, Lockheeed and Verspoor (1991) conclude that "the single most important determinant of primary school enrollment is the proximity of a school to primary-age children"

3. As of the 2005/06 academic year 317 primary schools started giving their first-year students lessons in the Berber language, fulfilling a promise made nearly 10 years ago by the late King Hassan to bring Berber into the classroom.

Box 2.2. Schools that fail Tashelhit-speaking Berbers in Morocco

In 2001 the Tashelhit-speaking Berber people in a remote rural village in Morocco worked hard to get a government school. Men toiled for weeks in the hot sun to create a flat platform on which a proper building could be constructed. Eventually, government workers arrived with cement and rebar. Up went the schoolhouse, with a toilet, glass windows, desks, blackboards, and a coat of shocking pink paint. The villagers were exuberant—even more so when the matriculating class received backpacks filled with school supplies. Finally, the government schoolteacher arrived. She was pious, wearing her scarf tight around her head at all times, and monolingual, an urban Arabic speaker who made no attempt to speak Tashelhit. The children could not understand anything she said. For the schoolteacher, Tashelhit was beneath consideration. She told people that Tashelhit was a language scarcely better than the babble of children. The school materials, designed for urban students, were entirely in Arabic and relied on pictures of things unfamiliar to rural children—crosswalks and refrigerators, streetlights and modern ovens. Enthusiasm for school quickly faded, and beatings were administered for lack of comprehension, absenteeism, and tardiness. The teacher became frustrated, extending her vacations, canceling school, and shortening the school day. Written school reports went home to parents who could not read them. The teacher asked for a transfer, and the students were released for the summer, having lost an entire school year.

Source: Crawford 2001.

(p. 146). Recent studies confirm this observation.

In a study of 22 countries, Filmer (2004) finds a strong negative correlation between the distance to a primary school and primary school participation of both boys and girls from the poorest 50 percent of households in about one-third of the countries.[4] King and van de Walle (forthcoming) find that distance to school is negatively related to school enrollment in Laos. The effect of having a school in the community is twice as large in rural areas than in urban ones, and the effect is much larger for girls than for boys. Lloyd, Mete, and Grant (forthcoming) report a strong positive effect of having a public school in a village in Pakistan on the probability of girls 10–14 being enrolled in school. Bilquees and Saquib (2004) find lower dropout rates for rural girls in Pakistan when the school is located less than 2 kilometers from the home.

Children are much more likely to attend schools located in their own village. For example, a school mapping study in Chad finds that enrollment increased sharply the closer the school was to the village, with gross enrollment rates of about 55 percent in villages that had schools compared with 35 percent in villages where schools were located up to 1 kilometer from the village and less than 10 percent in villages where schools were located more than 1 kilometer from the village (Mulkeen 2005). In Lesotho 69 percent of children who have never been to school live more than 30 minutes

4. Distance reduces girls' participation in Burkina Faso, Central African Republic, Chad, Haiti, Madagascar, Mali, Niger, and Zimbabwe. It reduces boys' participation in Benin, Burkina Faso, Central African Republic, Chad, Dominican Republic, Haiti, Madagascar, Mali, and Niger.

from a school (World Bank 2005a, cited by Mulkeen). Distance to school increases the opportunity cost for school attendance and the security risk to children walking to school.

Distance to a secondary school is also important in determining a child's educational attainment because it signals the opportunity for advancement. But many rural communities lack secondary schools. One study of rural schools in Mexico estimates that proximity to a secondary school increased attainment by more than one full year. The average number of years of schooling completed was 6.3 years for children living more than 3 kilometers from a secondary school, compared with 7.4 years for children living within 1 kilometer of a secondary school (Raymond and Sadoulet 2003).

Formal schooling is often associated with physical buildings in fixed locations. Yet children in remote communities, children of migrant workers, and children from nomadic communities, such as the Roma, may be underserved by schools in fixed locations. Distance education programs and traveling teachers have been tried as a means of reaching distant and migratory communities. Flexibility in providing access through distance programs and even mobile classrooms would open access to these children.

Selection examinations and tracking

Where the number of secondary school places is limited, examinations are often used to track and select the students who can enroll (Kellaghan and Greaney 1992; Binkley, Guthrie, and Wyatt 1991). In Algeria the number of students allowed to pass the primary school leaving examination in the mid-1990s was the same as the available number of places in lower secondary schools. In Tunisia in the mid-1990s a selection examination at the end of grade 6 combined with student grades determined which students were allowed to proceed to grade 7 (Lockheed and Mete forthcoming). In Jamaica efforts to equalize the share of male and female students at higher levels of education have led to reverse discrimination, whereby higher test scores are required for girls than for boys (Bailey 2004). In other countries opportunities for postcompulsory levels of education differ for boys and girls, and access is governed by examinations that allocate available places.

In recent years significant progress has been made in lowering examination-based administrative barriers in many countries by eliminating presecondary selection examinations. Selection examinations have the potential to exacerbate gender and ethnic differences in educational attainment, if test performance is lower for girls and other groups. Some research in the United States and India suggests that performance on tests is lower when "stereotype threats" are activated in the testing situation, as discussed below (Steele and Aronson 1995; Hoff and Pandey 2004, 2005).

Tracking students by ability often results in the separation of minority and majority children. While most segregation in the United States is attributable to residential

segregation, a significant share of segregation in secondary school is related to ability grouping. A higher share of African Americans and children from homes in which English is not spoken are identified as "academically handicapped" and hence placed in separate schools or, more often, classes. A recent review of this literature observes that separating students by tracking leads to racial segregation (Conger 2005). In some states the practice has been challenged in court, and several school districts have been ordered to discontinue tracking. Tracking is common practice in developing countries. Roma children, for example, are often tracked into "special schools" for handicapped children.

Poor quality of schooling

Given the value of child labor in household production, sending children to school can be viewed as not worth the effort when the quality of the school is poor. There is little evidence on the quality of all-girl schools or schools attended by children of excluded groups. But there is considerable evidence on the quality of schools for poor people in developing countries: the schools are poor. Education services for the poor are weaker than education services for the more advantaged (World Bank 2004). The quality of the school affects learning, progress, and completion.

Good schools share many common features: a commitment to learning that is reflected in the knowledge and experience of the teachers and principals, the amount of time the school is open, the teaching methods, the richness of learning materials, and the safety and security of the school and its environs (Levin and Lockheed 1993; Scheerens 1999). Schools for poor people in developing countries often are of much lower quality than schools attended by the nonpoor. Teachers are less qualified and often less likely to come to work, fewer hours of instruction are offered, teaching methods emphasize rote learning more than investigation, textbooks and instructional materials are less likely to arrive on time (or to arrive at all), and the physical infrastructure of the school is more likely to lack electricity, water, sanitary facilities, and other basic features of a school.

Less knowledgeable teachers

Studies of teacher quality have focused on such proxies for quality as teacher salaries, formal qualifications, and experience. Such indicators are often weakly associated with student achievement, and they capture neither the quality of teaching nor the quality of teachers' knowledge (Behrman and Birdsall 1985; Hanushek 2003).

Empirical studies of the effects of teacher knowledge, as measured by tests, show more consistent effects on student performance than do teacher education, experience,

or salary (table 2.3). In the United States among the 41 estimates for which teacher test scores were available 37 percent reported a statistically significant positive effect on student achievement. By comparison, statistically significant positive effects of teacher education were found in only 9 percent of the 170 estimates, and teacher salary was found to be positively associated with student performance in just 20 percent of 118 estimates (Hanushek 2003).

A recent multi-country study finds a strong positive relationship between the formal education of teachers and the math and science achievement of students, subjects for which teacher knowledge can be built in formal education (Woessmann 2000). Hill, Rowan, and Ball (2005) examine the effect of teachers' use of mathematical knowledge in largely minority classrooms in the United States. They find that for each standard deviation in teacher knowledge, children's scores on math tests rose by one-half to two-thirds of a grade-month. "Knowledgeable teachers can positively and substantially affect students' learning of mathematics, and the size of this effect…is in league with the effects of student background characteristics" (396). Students of teachers who know more and use this knowledge in the classroom perform better than other students.

Less evidence is available on developing countries, but a 1994 review reports that in all studies for which this factor was tested, teachers' measured knowledge was positively associated with student achievement (Fuller and Clark 1994). Test scores of teachers in Belize (Mullens, Murnane, and Willett 1996), Brazil (Harbison and Hanushek 1992), India (Kingdon 1998), Indonesia (Ross and Postlethwaite 1989), and the Philippines (Tan, Lane, and Coustier 1997) show that teacher knowledge contributes to student achievement, independent of other teacher and student effects.

Teachers in rural schools often lack a strong foundation in the subjects they teach. A study in rural India found that only half of the grade 4 teachers tested could correctly answer 80 percent of the questions on a grade 4 test of mathematics knowledge (Bashir 1994). In many developing countries people become teachers because they fail

Table 2.3. Effect of teacher quality on student performance in the United States

Variable	Number of estimates	Percentage statistically positive	Percentage statistically negative	Percentage statistically insignificant
Teacher education	170	9	5	86
Teacher experience	206	29	5	66
Teacher salary	118	20	7	73
Teacher test scores	41	37	10	53

Note: Figures based on 376 production function estimates for the United States.
Source: Hanushek 2003.

to obtain places in more competitive and desirable faculties, such as engineering or medicine. Teaching is viewed as a last resort. Because rural posts are viewed as highly undesirable, they are often filled by the least qualified new teachers.

The effectiveness of teachers in rural schools may also be compromised by their unfamiliarity with the language their students speak at home. Teachers who cannot communicate with their students cannot be effective. Students who speak a nonstandard mother tongue are at a disadvantage.

Less instructional time

Instructional time is often limited in urban areas as a consequence of multiple shifts and in rural areas as a consequence of teacher absenteeism. The effects on children are severe, as the amount of instructional time has consistently been found to correlate with student learning (Millot and Lane 2002; Woessmann 2000). In urban schools in Egypt multiple shifts resulted in loss of instructional time (Lloyd and others 2003). Crowded schools with split shifts in Africa provided 30 percent fewer instructional hours to students (Abadzi 2006, citing Kim 1999). Abadzi (2006) finds significant differences in Bangladesh, Honduras, and Mali between the number of hours in the official school year and the actual number of hours that schools were in operation. Amadio (1997) and Millot and Lane (2002) find substantial differences between actual and official instructional hours in Egypt, Lebanon, Morocco, Tunisia, and Yemen. In Bangladesh teachers assigned to rural schools typically arrive two hours late and teach for only two hours, effectively cutting learning time by 50 percent (Tietjen, Raman, and Spaulding 2003).

Teacher absenteeism is a major cause of reduced instructional time (Benavot 2004). A cross-country study of teacher absenteeism, observed through unannounced visits to about 100 randomly selected schools per country in seven countries, finds wide variation in teacher absenteeism, with an average of less than 20 percent of teachers absent in Ecuador and Peru compared with an average of 51 percent of teachers in India (Chaudhury and others 2005; figure 2.1). India's high rate of teacher absenteeism is an outlier—more than 13 percentage points higher than the next highest country. But high levels of teacher absenteeism are evident in other countries. In Kenya 57 percent of students surveyed in 39 schools reported a teacher absence the previous week (Lloyd, Mench, and Clark 2000). In 12 villages in the Northwest Frontier and Punjab of Pakistan, teacher absenteeism in public schools averaged 14 percent. The figure was much lower in boys' schools (11 percent) and private coeducational schools (9 percent) than average. These figures, while high, represent a significant decline in absenteeism in Pakistan, from an average of 20 percent in 1997 to 12 percent in 2004 across all schools (Sathar and others 2005).

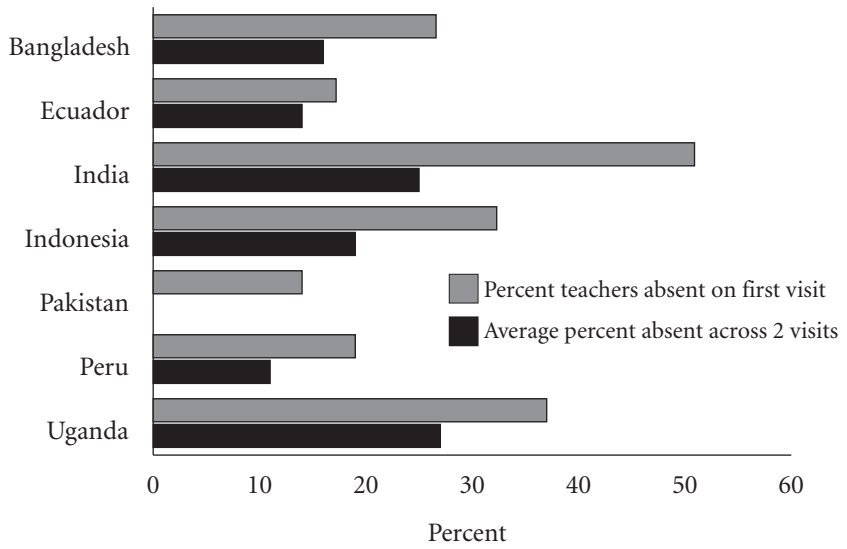
Teacher absenteeism correlates with some school and community factors. Ab-

senteeism is lower among female teachers, among teachers born in the district where the school is located, among teachers who work in schools with better infrastructure, and among teachers of children whose parents are more literate (Chaudhury and others 2005). In rural schools in Pakistan girls' enrollment and attendance are higher at schools in which the teacher lives in the community (and therefore is more likely to come to school) (Lloyd, Mete, and Grant forthcoming).

Absenteeism provides a window into the degree to which schools and teachers actually instruct children. In Zambia student learning suffers as a consequence of teacher absenteeism, due largely to illness and death in the family (Das and others 2005). In Indonesia higher teacher absenteeism is correlated with lower fourth-grade student performance on mathematics (but not dictation) among a representative sample of government schools in eight provinces, controlling for household characteristics, teacher quality, and school conditions (student-teacher ratios, presence of latrines).

While variations in instructional time are difficult to measure due to poor reporting, a few studies confirm the relationship between instructional time and girls' participation or achievement. In Egypt girls attending multiple-shift schools with fewer instructional hours were five to six times more likely to drop out before completing lower secondary (preparatory) school than were girls attending a single-shift school (Lloyd and others 2003). In rural India student achievement was higher in schools with more instructional

Figure 2.1. Teacher absenteeism is a serious problem in developing countries



Note: Average for India is for three visits.
Source: Chaudhury and others (2005); Sathar and others (2005).

time. Schools with the highest achievement in one state reported more than 66 hours more instructional time per year than schools with the lowest achievement (World Bank 1997). Less instructional time translates into significantly fewer standard school years completed. The school year in Uruguay is only 455 hours, for example, less than half the standard year of 1,000 hours. Children completing six years of school in Uruguay thus complete the equivalent of only about three standard years of instruction (Motivans 2005).[5]

Fewer textbooks and instructional materials

Schools for poor people often lack basic instructional materials. Textbooks often reach remote schools well after the beginning of the school year—if they arrive at all (Tietjen, Raman, and Spaulding 2003). In Kenya, for example, less than half of seventh and eighth-grade students present in class had the required textbooks (Lloyd, Mench, and Clark 2000).

Availability of books in general poses a challenge to education in the poorest developing countries (figure 2.2). More than half of all sixth-grade students in eight countries participating in the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) sample attended school without books. Providing books in second and third languages, especially those that are tailored to the language requirements of minority groups, is out of the question in settings where there is an overall lack of books.

Even when basic textbooks are available, schools in poor areas often lack other instructional materials. A study of poor districts in India found that while most schools in these districts have sufficient textbooks and learning materials for students, classrooms lack such supplementary materials as teacher guides, dictionaries, maps, globes, and instructional kits (World Bank 1997).

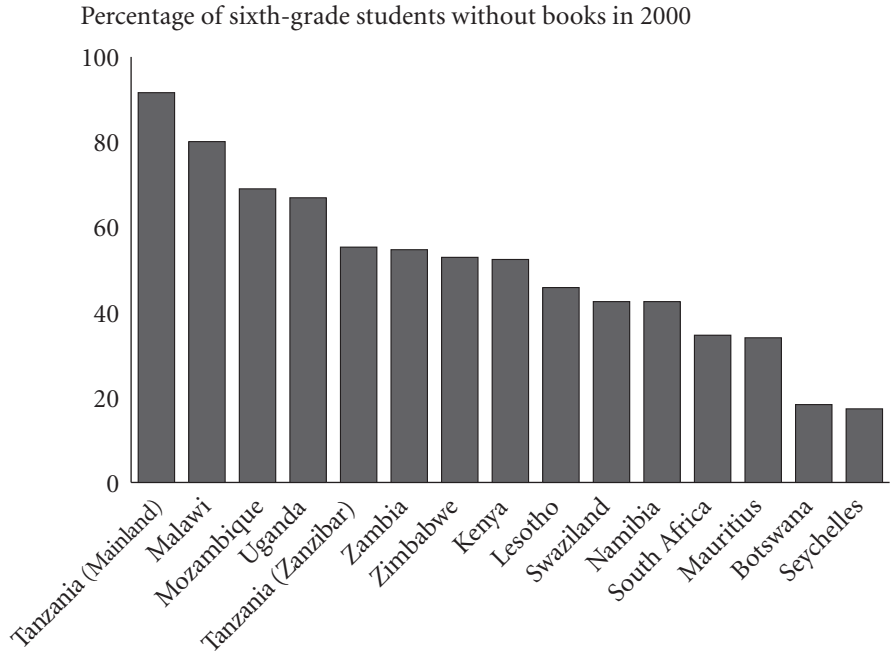
Textbooks and instructional materials are key to both participation and achievement. Increasing the quality of instructional materials boosted girls' participation in Laos (King and van de Walle forthcoming). A multi-country study finds that shortages of instructional materials significantly reduced math and science achievement (Woessmann 2000).

Poor facilities and physical inputs

The physical facilities of schools available to children of the poor are themselves poor. Many lack classrooms, electricity, blackboards, and basic sanitary facilities (Lockheed

5. Because Uruguay has not participated in any international survey of achievement, the effects of less instructional time cannot be estimated directly.

Figure 2.2 Millions of students in developing countries lack textbooks



Note: Data from all countries except Zimbabwe are from SACMEQ II archives (2000). Data for Zimbabwe are based on SACMEQ I archives (1995).
Source: UNESCO (2005), based on Ross and others (2004).

and Verspoor 1991). A study of school facilities in poor, low-literacy districts in eight states in India finds insufficient classroom space for enrolled students (less than 1 square foot per student, on average, against an international standard of about 10 square feet) and less than half of 31 other physical inputs, such as blackboards, safe drinking water, electricity, mats and furniture for students, and library books (World Bank 1997).

Lack of adequate facilities can affect other inputs, such as instructional time provided by teachers. A World Bank study finds that schools with better infrastructure have fewer teacher absences (Abadzi 2006). In Egypt girls are less likely to drop out when they attend schools with better physical facilities (Lloyd and others 2003). In rural Laos the physical quality of the school—with electricity, desks, nonleaking roofs—boosted enrollments of girls, particularly in rural areas (King and van de Walle forthcoming).

Inputs to school quality do not work in isolation. Adding ingredients one by one is not effective in improving student learning achievement. Simply providing textbooks to a randomly selected set of schools in rural Kenya did not increase the learning

achievement of children in these schools (Glewwe, Kremer, and Moulin 2002). Good schools require a range of inputs that work together to boost learning. Ensuring that all these inputs reach schools in poor rural communities has proven difficult, because "leakage" in the flow of government funds to schools is greater for schools attended by poor children (Reinikka and Svensson 2001), and the supervision necessary to encourage "whole school" improvement is missing.

Discrimination and other barriers to the demand and supply of schooling

Unconscious discrimination, stereotypes, and expectations affect opportunities, motivation, and interpersonal behavior. These factors have particularly strong effects on student performance in heterogeneous schools and classrooms. Discrimination can reduce demand by leading families to keep their children out of what they perceive as predatory environments. It also leads to policies that favor households with higher incomes and political clout at the expense of marginalized groups, who are discriminated against both in the aggregate and as individuals.

Discrimination

Excluded children often face discrimination from teachers and classmates. Economists distinguish between discrimination based on preferences (tastes) and discrimination based on stereotyped information about skills and competencies (Arrow 1973; Becker 1971). Both types of discrimination are relevant to decisions made in schools. School administrators may selectively provide resources to schools that serve a particular community, and teachers may call on boys more frequently than girls to answer their questions.

Discrimination based on stereotypes about skills and abilities is widely practiced. Evidence comes from experiments that compare ratings of fictitious resumes and performances by musicians auditioning behind a screen to eliminate cues based on gender or race. Expert judges give higher ratings to musicians they believe are white or men (Ridgeway 1997a). Similarly, teachers subtly discriminate against children of excluded groups or girls based on longstanding stereotypes. In extreme cases this type of discrimination results in harsh treatment of children from excluded groups.

Discriminatory behavior can result in poorer schools for girls and marginalized children. It can also track girls or groups away from certain academic or vocational specializations (Lockheed 1993b). Perhaps most disturbing, discrimination by teachers in the classroom can affect children's opportunity to learn—by seating girls or minority students far from the teacher, by not giving textbooks to these students, by not calling on them in class. In Yemen researchers observed that primary school girls

were typically seated at the rear of the classroom (World Bank 2004). Proximity to the teacher is important in learning; seating at a distance can lower achievement. It is possible that discrimination by the teacher led to the girls' lower performance on a standardized international test of mathematics, on which girls' scores were nearly one standard deviation below those of boys (Mullis and others 2003). In Jamaica children in disadvantaged schools spend instructional time sweeping the schoolyard instead of learning, ostensibly to prepare them for their future role in society (Lockheed and Harris 2005).

In India children from lower castes used to be excluded from classrooms—even their shadows were considered "polluting" (World Bank 1997). As Nambissan (1995) notes:

> …the distinct message of social inferiority that is often quite clearly conveyed to [scheduled caste students] by teachers and peers. Personal narratives of [members of scheduled castes] educated just three decades ago offer glimpses of untouchability blatantly practiced in school—scheduled caste students being asked to sit separately from the classmates, refused drinking water or served in broken cups, made to dine separately. For instance, as many as 80 percent of the 1,030 students from Milind College, Aurangabad, who were surveyed in 1971–72 said that they were made to sit outside the classroom during primary schooling because of the practice of untouchability. (p. 20–21)

India has made great strides in rectifying past inequities. Caste remains salient, however (Hoff and Pandey 2005). In the mid-1990s tests of learning achievement in more than 1,200 primary schools in poorer districts found that primary students from scheduled castes and scheduled tribes performed significantly worse than their classmates on math tests in five of eight states and worse on reading tests in three of eight states, after controlling for multiple socioeconomic characteristics (World Bank 1997).

Whether discrimination is conscious and overt or subconscious and subtle, its impact is significant. Discrimination affects the availability of educational goods and resources at the school level as well as educational processes in the classroom. Discrimination can be observed in the amount of government resources that reach excluded groups. Government expenditures on education can be as much as four times higher for children from families in the top 20 percent of the income distribution than for children from the bottom 20 percent. In Guinea, Kosovo, FYR Macedonia, Madagascar, and Nepal more than 40 percent of government spending on education went to the richest quintile of the population, while less than 10 percent went to the poorest quintile (World Bank 2004).

Schools are social contexts; theories that explain differences in performance and interaction in social contexts are important. Two such theories relate to stereotype threats and performance expectations. While much research on both topics has been

carried out in developed countries, recent research underscores their relevance to heterogeneous developing countries as well.

Stereotype threat in performance situations

Girls and minority students often perform poorly on tests of achievement, particularly in junior secondary school (see chapter 3). One explanation for this phenomenon focuses on the testing situation itself, where gender and ethnic stereotypes can be activated, to the detriment of those who feel threatened by the stereotype. This hypothesis has been the subject of dozens of laboratory experiments in the United States on black/white, white/Asian, gender, and social class differences in test performance (Steele and Aronson 1995; Spencer, Steele, and Quinn 1999). In all cases performance declined when stereotypes were activated. For example, the math performance of high-achieving white boys declined when they were told that Asian students usually outperformed whites (Aronson and others 1999). The test performance of high-achieving black students was poorer when they were told the test was a test of ability than when they were told it was a test about problem solving (Steele and Aronson 1995). Activation of the stereotype created higher levels of anxiety in the test takers, distracting them from the task and lowering their performance.

Stereotypes also affect performance in developing countries. One example comes from India, from an experiment carried out by Hoff and Pandey (2004). Low-caste junior high school boys performed as well as high-caste junior high school boys at a task when they were strangers and had no information about one another. When caste was announced, low-caste boys' performance dropped, while that of high-caste boys improved, and the difference became greater when the boys believed success in performance depended on subjective judgments made by the researchers. This suggests that the lower caste children inhibited their own performance in the presence of higher caste children.

Expectations and social interaction in the classroom

Expectations and social interaction also partly explain poor performance (Berger and Zelditch 1985). Research shows that discrimination based on stereotyped beliefs about abilities can be reduced by providing counter-stereotypical information (Aguero 2005). In contrast, discrimination based on more diffuse beliefs about social status is not sensitive to counteracting information (Ridgeway 1997a, 1997b). Excluded children, particularly girls, suffer from this sort of discrimination.

Expectations that create inequalities in social interaction have significant effects on underperformance in the classroom. Educators have long recognized that learning is enhanced through verbal interaction with classroom peers and teachers (Piaget 1926;

Rogoff 1990; Vygotzky 1962). But the heterogeneous classroom presents challenges for both teachers and students, as some children—often girls, students from nondominant ethnic groups, and the poor—remain comparatively silent (Cohen 1982, 1997). Children's participation in learning in the classroom can be constrained by status-based expectations regarding their own competencies relative to those of others in the class (Cohen 1984). Sociologists distinguish between such status-based beliefs, which influence social interaction, and simple discrimination or group identity effects "by the fact that those in the disadvantaged group overcome in-group bias and concede that the other group is more socially worthy" (Ridgeway and others 1998, p. 338).

Excluded groups have lower social status as well as other characteristics deemed undesirable by the dominant society. The generalized expectations about their competencies and abilities affect social interaction (Berger and others 1977; Webster and Hysom 1998; Ridgeway 1997). Teachers' performance expectations are often based on student social status. In a study of 48 primary schools in Minas Gerais, Brazil, for example, teacher expectations about the academic performance of fourth-grade children reflected their biases about gender, ethnicity, and household wealth (de Oliveira Barbosa 2004). Teachers' expectations were higher for girls and lower for black students and students from poorer households; after taking into account actual performance, only teacher expectations in favor of girls remained statistically significant. The authors note that higher expectations for girls may be a consequence of the fact that the teachers are women and that girls' behavior was better matched with the schooling context.

Cohen (1986) and her colleagues show that these expectations lead to differences in opportunities for interaction in school classrooms and hence affect children's opportunity to learn. In the United States "high-status" students talk more than "low-status" students in elementary and middle school classrooms (Cohen and Lotan 1995). Black children exercise less influence over group tasks than do white children (Cohen, Lockheed, and Lohman 1976). In Israel Jewish children from North African backgrounds exercise less influence over group tasks than do Jewish children from European backgrounds (Sharan and others1984). Research in the United States finds that gender is not a salient status characteristic at the primary school level, although it becomes salient among adults (Lockheed, Harris, and Nemceff 1983). Informal observations of schools in developing countries suggest that gender is salient even at the primary school level in some societies.

Other barriers

Many other factors present significant barriers to the multiply excluded. Cultural norms that require the seclusion of girls nearing adolescence or limit cross-sex interaction with nonfamily members contribute to female dropout. Norms that keep girls at home during menses reduce their time in school and lower performance.

In addition, schools catering to excluded groups are often at greater risk from corruption, conflict, and natural disasters. Corruption and mismanagement divert funds from intended uses. Remote rural schools suffer disproportionately. Studies in Ghana, Tanzania, Uganda, and Zambia tracking public expenditures show that an average of just 54 percent of nonwage budgets ever reached the intended schools. Zambia's school grants were an outlier, with a 10 percent leakage rate, particularly given the 76 percent loss documented for other public education transfer programs in Zambia (Reinikka and Svensson 2004). In India in the mid-1990s poor children were entitled to a variety of incentives to encourage school attendance, including shoes, books, and uniforms. One study found that few children actually received these incentives, and many parents did not know they were entitled to them (World Bank 1997).

One country that is trying to deal with the problem of leakage and corruption is Uganda. Expected funds are announced in newspapers and over the radio, and reports of funds received are tacked to school doors, allowing communities and parents to oversee public actions. The results of these efforts have been spectacular, with the percentage of funds received skyrocketing: from 22 percent in 1995 to 82 percent in 2001 (Reinikka and Smith 2004).

Conflict also affects the multiply excluded, with excluded girls often becoming the spoils and victims of war.[6] Horror stories from Darfur underscore the vulnerability of school-age girls to rape and murder during civil conflicts.

Natural disasters, such as earthquakes and floods, often have a disproportionate impact on remote excluded groups, resulting in lengthy school closings or total destruction of schools. The 2004 tsunami that hit Indonesia and Sri Lanka, which disproportionately affected fishing villages, and the 2005 earthquake in Kashmir, which destroyed hundreds of rural villages, are cases in point. The movements of communities away from disaster areas also results in reduced schooling for children.

6. One in three children out of school reside in countries that have experienced conflict in the past decade (International Save the Children Alliance 2006).