PRIVATE EDUCATION IS GOOD FOR THE POOR

A Study of Private Schools Serving the Poor in Low-Income Countries

JAMES TOOLEY
& PAULINE DIXON

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Executive Summary

Many observers believe that the private sector has very little to offer in terms of reaching the United Nations Millennium Development Goal of "education for all" by 2015. Private education is often assumed to be concerned only with serving the elite or middle classes, not the poor. And unregistered or unrecognized private schools are thought to be of the lowest quality and hence demanding of detailed regulation, or even closure, by governmental authorities.

Our findings from a two-year in-depth study in India, Ghana, Nigeria, and Kenya suggest that these conclusions are unwarranted. Private schools, we argue, can play—indeed, already are playing—an important, if unsung, role in reaching the poor and satisfying their educational needs.

The first component of our research consisted of a systematic census and survey of all primary and secondary schools, government and private, in selected low-income areas. The second component examined a stratified random sample of between 2,000 and 4,000 children from each of those areas. Tests in mathematics, English, and (in Africa) one other subject were administered. Children and teachers were also tested for their IQ, and questionnaires were administered to students, parents, teachers, and school managers or headteachers.

In each area, we found the majority of schoolchildren attending private schools. In the areas officially designated as "slums" of three zones of Hyderabad's Old City, we found 918 schools, of which only 35 percent were government schools, fewer than the 37 percent of unrecognized private schools. In total, 65 percent of schoolchildren in those low-income areas attended private unaided school. In the Ga District of Ghana (the low-income suburban and rural area surrounding the capital city of Accra) we investigated 779 schools in the same way, finding that only 25 percent were government schools and that 64 percent of schoolchildren attended private school.

In the "poor" areas of three local government districts (one rural, two urban) of Lagos State, Nigeria, we found 540 schools, of which 34 percent were government, and the largest proportion, 43 percent, were private unregistered. An estimated 75 percent of schoolchildren were enrolled in private schools.

We also conducted research in the small shanty town of Makoko, in Mainland, Lagos State, and in the slum of Kibera, Nairobi, Kenya (reportedly the largest slum in sub-Saharan Africa). In both cases, the large majority of poor children attended private, not public, school. Moreover, in Kenya we were able to observe the impact of free primary education on enrollment. Despite the fact that huge increases in enrollment have been noted in government schools by commentators, our research suggests that, at best, children appear to have transferred from private to government schools. Given the advantages of private schools and problems found in government schools, that may not be to their advantage.

In each location, the private schools are run largely by proprietors, with very few receiving outside philanthropic support and none receiving state funding. Roughly equal numbers of boys and girls attend private unaided schools, which have better pupil-teacher ratios, higher teacher commitment, and sometimes better facilities than government schools. A significant number of places in private unaided schools are provided free or at reduced rates to serve the poorest of the poor.

The raw scores from our student achievement tests show considerably higher achievement in the private than in government schools. In Hyderabad, for instance, mean scores in mathematics were about 22 percentage points and 23 percentage points higher in private unrecognized and recognized schools, respec-

tively, than in government schools. The advantage was even more pronounced for English. In all cases, this achievement advantage was obtained at between half and a quarter of the teacher salary costs.

Our research indicates that a great success story is taking place, usually beneath the government's radar. The mushrooming private schools, if noticed at all by the authorities and development experts, are assumed to be educationally inadequate. Our research shows that this assumption is false. Moreover, because so many children are in unrecognized private schools that do not appear in government statistics, achieving universal basic education—the United Nations Millennium Development Goal of "education for all"—may be much easier to reach than is currently believed. In Lagos State, for instance, including enrollment in private unregistered schools would reduce the percentage of out-of-school children from 50 to 26 percent.

Certainly, the private schools for low-income families could be improved even further by creating revolving loan programs to help infrastructural investment or, following the private schools' own example, creating targeted voucher programs to enable the poorest of the poor to attend private schools. But above all, the existence and the contribution of private schools to "education for all" is a cause for celebration.

Introduction

Can private education help meet the educational needs of poor children in low-income countries? To some observers, this question may seem strange. Private education is most often perceived to be for the elite and middle classes, not the poor. However, there is a growing body of evidence that challenges that conception.

The *Oxfam Education Report* (the handbook of the major international aid agency, Oxfam International), for instance, reports that "the notion that private schools are servicing the needs of a small minority of wealthy parents is misplaced," and that "a lower cost private sector has emerged to meet the demands of poor households."[1] Research in Haryana, India, found that private unrecognized schools "are operating practically in every locality of the urban centers as well as in rural areas" often located adjacent to a government school.[2] Reporting on evidence from the Indian states of Haryana, Uttar Pradesh, and Rajasthan, researchers noted that "private schools have been expanding rapidly in recent years" and that they "now include a large number of primary schools which charge low fees," in urban as well as rural areas.[3] Serving the poor of Calcutta, there has been a "mushrooming of privately managed unregulated pre-primary and primary schools."[4]

In Uganda and Malawi, private schools have "mushroomed due to the poor quality government primary schools,"[5] and in Kenya "the deteriorating quality of public education . . . created demand for private alternatives."[6] In sub-Saharan Africa and Asia generally, "the poor and declining quality of public education has led to growing numbers of parents sending their children to non-state schools" and in south Asia "this amounts to a mass exodus."[7]

In India and Africa, private schools for low-income families seem to be flourishing. Why do poor parents send their children to private unaided schools when government schooling is available, usually free of charge? Several reasons have been given to explain this mushrooming of the private school sector. Those reasons include the deterioration of government schools, the lack of government schools, and (in India) the desire of parents for instruction in English.

Researchers reporting on private and public schools in northern Indian states describe the "malfunctioning" of public schools for low-income families.[8] The schools suffered from poor physical facilities and high pupil-teacher ratios, but what is most disturbing is the low level of teaching activity taking place. When the researchers called unannounced on a randomly selected sample of schools, they found "teaching activity" going on in only half of the schools. In fully 33 percent, the headteacher was absent. Significantly, the low level of teaching activity "has become a way of life in the profession."[9]

These problems, the researchers note, were not found in the private schools serving poor and low-income families. In the great majority of those schools there "was feverish classroom activity." So much so that the majority of parents reported that "if the costs of sending a child to a government and private school were the same, they would rather send their children to a private school."[10] The deterioration of government school standards has been attributed to the lack of teacher accountability, strong unions (which contribute to teacher complacency and lack of motivation to teach), poor facilities, high pupil-teacher ratios, and poor management.[11]

Furthermore, in a number of countries, public schools have limited spaces because government spending has not kept up with an increase in the number of school-aged children. In Nigeria "the inadequacy of the infrastructural facilities to cope with the very rapid rate of expansion in student enrollment is a major

source of crisis in the education system." In the 1990s "very few new classrooms were built to accommodate the extra three million pupils."[12] In Tanzania "as in many low-income countries, excess demand was sufficient to stimulate the growth of a large private education sector."[13]

Finally, the demand for private schools has increased in India because private schools often, ostensibly at least, provide instruction in English, which parents regard as desirable. In most government schools, lessons are taught in the State language, and English doesn't become a subject until approximately the fifth grade.[14]

But are parents correct in their belief that private schools are superior to government schools? According to two studies, the evidence from Africa is mixed, with one study showing higher academic achievement for private schools[15] and another showing lower achievement.[16] However, neither study looked specifically at private schools serving low-income families. Several studies have compared the relative performance of private unaided, private aided, and government schools in India—but again none has specifically looked at schools for the poor, and all appear to have considered only recognized private schools.[17] A study in urban Lucknow, Uttar Pradesh, found that, after controlling for background variables, students in private unaided schools scored higher on standardized tests in mathematics than did children in the other school types. When the cost per unit gain in achievement was computed, private unaided schools showed higher achievement results for less than half the cost of government schools.[18] Similarly, a study in Tamil Nadu found that students in private unaided high schools performed better than those in government schools in English and mathematics.[19] Children attending private unaided schools in Madhya Pradesh outperformed children attending government schools in math and Hindi: "management-type—government or private—emerges as the most significant factor influencing learner achievement."[20]

However, until now the quality of private schools serving low-income families has been unknown, because no quantitative research has been carried out in private schools in low-income areas. It has simply been assumed that the quality of the unrecognized private unaided schools that are serving the poor across Africa and Asia is low.

The *Oxfam Education Report*, for instance, notes that although "there is no doubting the appalling standard of provision in public education systems," this does not mean that private education is necessarily better.[21] As far as private schools for the poor are concerned, they are of "inferior quality;" indeed they "offer a low-quality service" that is so bad it will "restrict children's future opportunities." The report concludes, "Surprisingly, in view of the confident assertions made in some quarters, there is little hard evidence to substantiate the view that private schools systematically outperform public schools with comparable levels of financial resources."[22]

The *United Nations Human Development Report 2003* makes precisely the same claim.[23] Similar claims of the low quality of the unrecognized private schools come from other sources, including a study from Calcutta, which found that: "the mushrooming of privately managed unregulated pre-primary and primary schools . . . can have only deleterious consequences for the spread of education in general and that among the poor in particular."[24] The quality of education in private schools is "often suspect."[25]

Significantly, none of these sources offers detailed evidence for the assertion of low quality in unrecognized private schools; indeed, the claim is precisely that no quantitative evidence is available. Poorer achievement has been assumed, in part because of the low-quality infrastructure in the schools, and because such schools often have untrained and low-paid teachers. The "unrecognized" or "unregistered" schools are unregulated by the state and are perceived to be of minimal quality. But does being unregulated make for lower quality in the schools? In addition to answering this important question, our research examined the exact extent to which private unaided schools serve the poor and the relative quality of the private schools compared with government schools.

Overview of Research

The current research project, which ran from April 2003 to June 2005, was a large international undertaking, with parallel research going on simultaneously in India, Ghana, Nigeria, and Kenya.[26] The research had two major components. The first included the administration of a Census of Schools in selected low-income regions and a Survey of Inputs to these schools. The second component compared student achievement in a random sample of government and private schools as well as the financial resources available to both types of schools. This report presents the results of this research under the following headings:

- What Are the Nature and Extent of Private Education for the Poor?
- How Many Schools Are There and What Proportion Is Private?
- What Is the Proportion of Pupil Enrollment in Private Education?
- How Did Free Primary Education Impact Enrollment?
- How Do Private and State Schools Compare?
- How Well Do Children Achieve?
- How Well Are Private Schools Funded and Do All Pupils Pay Fees?

1. What Are the Nature and Extent of Private Education for the Poor?

Research Countries and Method

The following section reports the results of research on private education in selected low-income areas within Ghana, Nigeria, Kenya, and India. All of the chosen countries were rated in the lower half of the Education Performance Index, indicating that those countries are where educational needs are not being met by government systems.[27] The four countries were chosen for a mixture of practical and research reasons.

We were particularly interested in Kenya, where free primary (elementary) education had just been introduced. Specifically, we wanted to know how the introduction of free public education affected private schools for the poor, should they be found to exist. Here we looked at the slum of Kibera, reportedly the largest slum area in sub-Saharan Africa.[28]

Nigeria was chosen because it is the country with the largest population in sub-Saharan Africa, and its significance to the continent's future is clear. We selected three local government areas for study—one from each of the three senatorial districts making up Lagos State: Surulere, Kosofe, and Badagry. Surulere and Kosofe are urban; Badagry is rural. We also separately looked at the urban shanty town of Makoko.[29]

We had conducted research earlier in Hyderabad, India, were familiar with the terrain, and had many contacts in both the government and the private sector, so it seemed sensible to continue the project there. Here, we covered three zones in the Old City: Bandlaguda, Bhadurpura, and Charminar.[30]

Finally, because of a chance meeting at a conference with the Ghanaian minister of education, we were invited to conduct our research in Ghana as well. We conducted our research in the Ga district, which surrounds the country's capital city of Accra.[31]

In India, we followed the usual definition of school management type as being of three kinds: government, private aided, and private unaided.[32] Government schools are totally funded and managed by some level of government, state or local. Private aided schools are privately managed but have teacher salaries paid for by the government. Other expenses are partly funded privately and partly by the government. Private unaided schools are entirely privately managed and privately funded. Private unaided schools are of two types: recognized and unrecognized. Recognized schools have purportedly met the regulatory requirements of the state. Unrecognized schools are in effect operating in the informal sector of the economy. They either have not applied for recognition or have not succeeded in gaining recognition from the government.

In the African countries, we distinguished between two types of schools, government and private. Government schools receive all of their funding from the state. In some cases they may have private management.[33] Private schools are both privately managed and privately funded. Private schools are again of two types. Registered private schools are those that have, purportedly, met state regulations and been inspected. Unregistered private schools are those that either have not applied to be registered or have not (yet) been said to have met those regulations.

The first part of our research used a Census of Schools and a Survey of Inputs that aimed to discover the extent of private schools in selected low-income areas and to compare their inputs with those of public schools serving the same populations. This information was used as the basis for the second part of our study that dealt with student

According to Oxfam International, the notion that private schools are servicing the needs of a small minority of wealthy parents is misplaced.

achievement. That aspect of the study aimed to explore the relative achievement of pupils in private and public schools in low-income areas by testing a stratified random sample of private and public school students in key subjects. We also gave questionnaires to pupils, parents, teachers, and school managers. Information obtained from the questionnaires allowed us to control for relevant background variables.

One key caveat must be made about the results that follow. Although we are sure that all private recognized/registered, private aided, and government schools were found (as they were checked against government lists), we cannot be certain that all unrecognized/unregistered schools were located, because there were no official lists with which to compare our findings. So the data here must be taken as indicating a lower bound on the numbers of private unrecognized/unregistered schools and, hence, of private enrollment.

Until now the quality of private schools serving low-income families has been unknown.

How Many Schools Are There and What Proportion Is Private?

In India, Nigeria, and Ghana, we were interested in the same major issues—the proportion of children in private and government schools, gender issues, the respective teacher-pupil ratios, the age of schools, and management of private schools. In Kenya, we were only looking at a small sample of government schools on the periphery of the slums compared with a large number of private schools within the slums, so it was not statistically viable to make comparisons or to generalize about the overall enrollment in private and government schools. The same was true of the smaller study in Makoko, Nigeria.

In the study locations in India, Nigeria, and Ghana, government schools were found to be in a minority. In Hyderabad, of the 918 schools in the low-income area schools, 34.9 percent (320 schools) were government, 5.3 percent (49 schools) private aided, and 59.8 percent (549 schools) private unaided. Of those, the largest number were unrecognized (335 schools or 36.5 percent of the total), while 214 private unaided schools were recognized (23.3 percent of the total). Hence, not only are government schools in the minority, there also were more unrecognized private unaided schools than government schools.

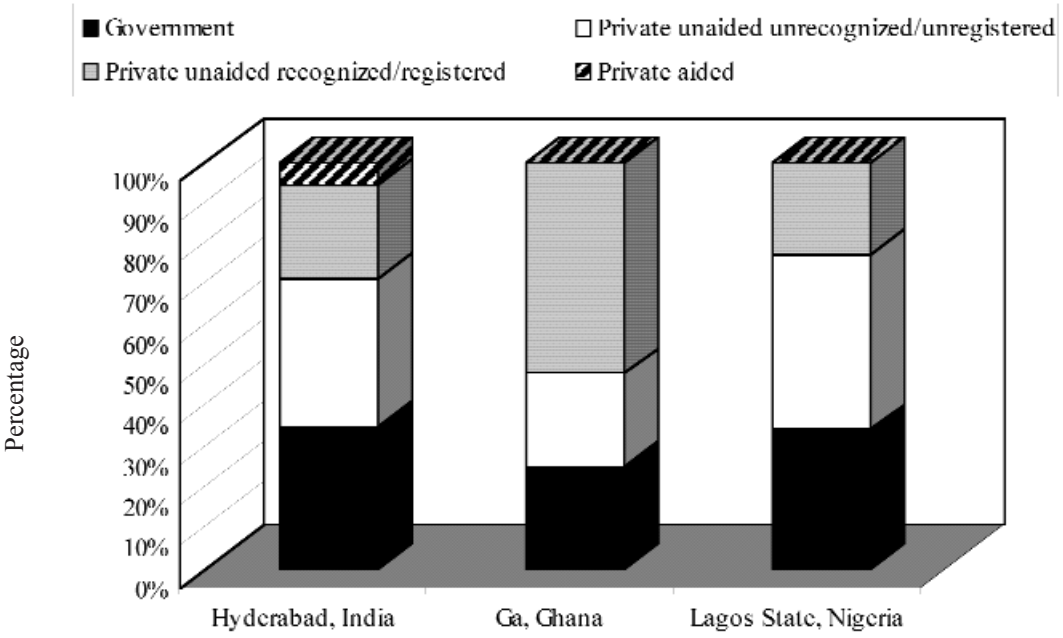
Of the 779 schools in Ga, 25.3 percent (197 schools) were government and the rest—74.7 percent of the total (582 schools)—were pri-

Table 1.1
Number and Proportion of Schools, by School Type

	Hyderabad, India		Ga, Ghana		Lagos State, Nigeria	
	Number	%	Number	%	Number	%
Government	320	34.9	197	25.3	185	34.3
Private Aided	49	5.3	0	0	0	0
Private Unaided Unrecognized/ Unregistered	335	36.5	177	22.7	233	43.1
Private Unaided Recognized/ Registered	214	23.3	405	52.0	122	22.6
Total	918	100	779	100	540	100

Source: Census of Schools data.

Figure 1.1
Proportion of Schools, by School Type



vate (unaided) schools. That is, the large majority of schools were private unaided. Of those schools, the largest number were registered (405 schools or 52.0 percent of the total), compared with 177 unregistered (22.7 percent of the total). There also were almost as many unregistered private unaided schools as there were government schools.

In Lagos State, of the 540 schools in the low-income areas, 34.3 percent (185 schools) were government and the rest—65.7 percent of the total (355 schools)—were private unaided schools. That is, a large majority of schools were private. Of those schools, the largest number were unregistered (233 schools or 43.1 percent of the total), compared with 122 private unaided schools that were registered (22.6 percent of the total). Hence, there were more unregistered private unaided schools than government schools. These results are summarized in Table 1.1 and Figure 1.1.

What Is the Proportion of Pupil Enrollment in Private Education?

In the low-income areas of India, Ghana, and Nigeria that we studied, a majority of school children were either calculated or estimated to be in private (unaided) schools.

In Hyderabad, 262,075 children attended 918 schools. Breaking this down by school type, 24.0 percent of children were at government schools, 11.4 percent at private aided schools, 41.5 percent at recognized private unaided schools, and 23.1 percent at unrecognized private unaided schools. That is, there were roughly the same number of children in unrecognized private schools as in government schools. In total, 65 percent of children attended private unaided school; that is, a large majority of the children in the low-income areas of Hyderabad were attending private unaided schools.

In Ga, 161,244 children were in 779 schools. Breaking this down by school type, 35.6 percent of children were at government schools, 49.1 percent at registered private unaided schools, and 15.3 percent at unregistered private unaided schools. In total, 64.4 percent of children attended private unaided school; that is, a large majority of the children in the low-

A large majority of the children in the low-income areas of Hyderabad were attending private unaided schools.

There are significantly more children in school than is recorded in official statistics.

income areas of Ga were attending private unaided schools.

In Nigeria, our Census of Schools gave enrollment figures only for the private schools, so the numbers given here are estimates. Using the official Lagos State Ministry of Education figures for primary school enrollment in 2002–03, we found that the proportions of children in government and private registered schools were 38 percent and 62 percent, respectively (451,798 in government and 737,599 in private registered schools).[34] Our own census figures showed that the proportion of children in private unregistered primary schools was 78 percent of the number in private registered primary schools. If the proportions in the three local government areas included in our study were similar to the state as a whole, we would find a total of 577,024 children in unregistered private schools across the state (i.e., 78 percent of 737,599). Combining those figures gives the estimated percentage of pupils enrolled in the three school types across Lagos State. If these estimates are correct, about 75 percent of school children are in private schools, with a greater proportion in private unregistered than in government schools (33 percent compared with 26 percent). These data are summarized in Table 1.2.

Based on our surveys of schools in the Kibera slum of Kenya and the Makoko shanty town in Lagos, we can make some comments about those two places as well. In Makoko, Nigeria, the team found 30 private primary schools.[35] There were also three government primary schools situated on the edge of Makoko. Total enrollment in the 30 private primary schools was reported to be 3,611, with government primary school enrollment reported as 1,709. In the government schools, it was reported that some children came from outside Makoko, although no proportion was given. In the private schools, all children came from within Makoko. It should also be noted that we didn't necessarily find all the private schools within Makoko. Thus, our count of 68 percent of school children in Makoko attending private school should be considered a lower bound.

In Kibera, Kenya, we found 76 private primary and secondary schools, enrolling 12,132 students (excluding nursery students), together with 59 nursery-only schools. These figures did not include "nonformal education" centers that are also prevalent. In the five government schools that were reported to serve children from Kibera, we found a total of about 9,000 children. It is not known how many

Table 1.2
Number and Proportion of Pupil Enrollment, by School Type

	Hyderabad, India		Ga, Ghana		Lagos State, Nigeria (estimate)	
	Number	%	Number	%	Number	%
Government	62,839	24.0	57,374	35.6	451,798	26
Private aided	29,976	11.4	0	0.0	0	0
Private unaided unrecognized/ unregistered	60,533	23.1	24,738	15.3	577,024	33
Private unaided recognized/ registered	108,727	41.5	79,132	49.1	737,599	42
Total	262,075	100%	161,244	100%	1,766,421	100%

Sources: Census of Schools data and Lagos State Government (2004) Report from Lagos State to the Joint Consultative Committee on Educational Planning (JCCEP) Reference Committee on Educational Planning Holding at Owerri, Imo State, between April 18–23, 2004, Ministry of Education, Alausa, Ikeja.

Table 1.3
Gender of Pupils, by School Type

	Hyderabad, India		Ga, Ghana	
	% boys	% girls	% boys	% girls
Government	42.8	57.2	50.5	49.5
Private aided	43.1	56.9	—	—
Private unaided unrecognized/ unregistered	48.2	51.8	49.4	50.6
Private unaided recognized/ registered	50.5	49.5	50.2	49.8
Total	47.3	52.7	50.2	49.8

Source: Census of Schools data.

were from the slum areas, but comments from headteachers suggested about half. Hence, it is clear that if children from Kibera go only to either the private schools in the slums or the government schools on the periphery, a large majority—perhaps 70 percent—of school children from this slum attend private schools.

Gender of Pupils

From information given by the headteachers or school managers, we calculated the percentage enrollment of girls and boys in Hyderabad and Ga. In Hyderabad, there were more girls than boys in school overall (52.7 percent compared with 47.3 percent). The highest proportion of girls was in the government schools (57.2 percent), compared with 56.9 percent in private aided, 51.8 percent in private unaided unrecognized, and 49.5 percent in private unaided recognized. That is, although the private unaided schools had roughly a 50:50 split between girls and boys, boys were more likely to go to private unaided school than to other schools.

In Ga, the split was more or less 50:50 in all school types—although the highest percentage of girls was in private unregistered schools. In the smaller-scale Nairobi study, the private schools again showed nearly equal numbers of boys and girls: in Kibera the figures were 6,212 boys (51 percent) and 5,920 girls (49 percent). These data are summarized in Table 1.3.

Official versus Actual Enrollment

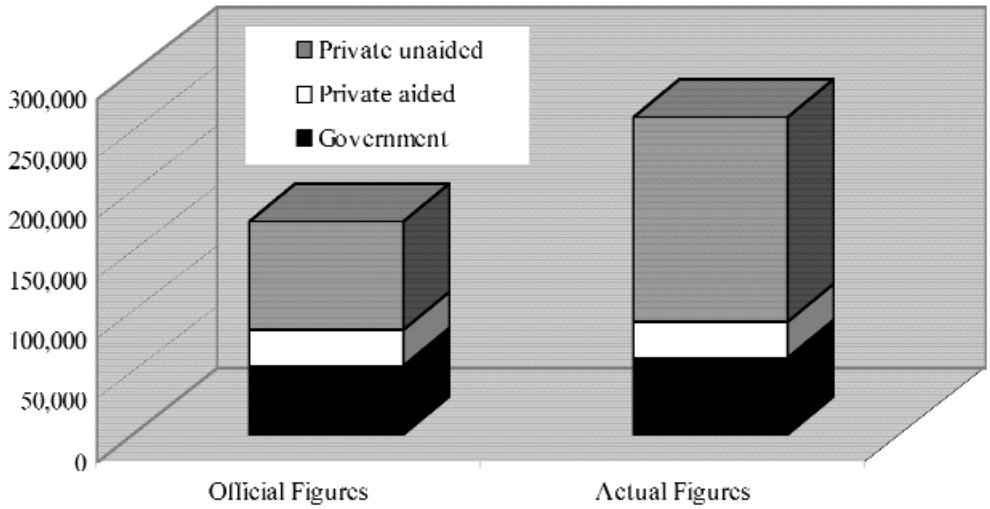
The fact that so many children go to private unrecognized/unregistered schools that are entirely "off the state's radar," has implications for the official figures for the number of children out of school. This means that there are significantly more children in school than is recorded in official statistics.

In the slum areas of three zones of Hyderabad, we found 79,851 students in private schools that were not on government lists—around 30 percent of the total number of school children in those areas (see Figure 1.2).

But recent official government figures suggested that for the 35 zones that make up Hyderabad District, 129,000 children are out of school, which is 15.4 percent of the 837,212 school-aged children (aged 5 to 15) in Hyderabad.[36] It is likely that many of those children were located in the three zones we surveyed as we chose them because they were reportedly some of the poorest neighborhoods. If all of the out-of-school children were in the zones we surveyed, this would

Nigeria's task of achieving "education for all" may be considerably easier than is currently anticipated.

Figure 1.2
Hyderabad, India—Official versus Actual Enrollment Figures



Kibera, Kenya, had a pupil-teacher ratio of 60:1 in government schools, compared with 21:1 in private schools.

reduce the number of out-of-school children to about 49,000—the balance being accommodated in private unrecognized schools that are missed in official figures. Instead of 15.4 percent out of school, the figure would be sharply reduced to only about 6 percent (see Table 1.4).

More realistically, if some of the officially "out-of-school" children are spread over the 32 other zones, the actual figure of out-of-school children would be even lower. It is surely easier to bring 6 percent of children or fewer into school than it is to bring 15 percent. India's goal of achieving "education for all" may thus be much easier to reach than official sources claim.

Similar calculations can be made for the other countries. For instance, a recent report from the Lagos State Economic Empowerment and Development Strategy estimates that 50 percent of "school-aged" children are out of school, although it doesn't state the ages these cover.[37] In the absence of any better estimates, we can compare these with our estimated figures given previously. If the 50 percent of children out of school applies to primary enroll-

Table 1.4
Hyderabad, India—Official and Estimated Out-of-School Children

	Hyderabad (official figures)	Worst Case Scenario (all out-of-school children in the three zones surveyed)
Total number of school-aged children	837,212	837,212
Number of children in schools	708,212	788,063
Number of children out of school	129,000	49,149
Percent of children out of school	15	6

Sources: Census of Schools data and Azim Premji Foundation Web site, Andhra Pradesh Programmes, www.indiangos.com/azimpremjifoundation/andhrapradesh.htm.

Table 1.5
Lagos State, Nigeria—Official and Estimated Out-of-Primary-School Children

	Official Figures	Our Estimates
Government	451,798	451,798
Private registered	737,599	737,599
Private unregistered	0	577,024
Total	1,189,397	1,766,421
Estimated out-of-school children	1,189,397	612,373
Total school-aged children	2,378,794	2,378,794

Source: Census of Schools data and Ministry of Economic Planning and Budget, "Lagos State Economic and Empowerment Development Strategy," Alausa, Ikeja, Lagos State, 2004, www.lagosstate.gov.ng/LASEEDS/LASEEDS%20DOCUMENT.pdf.

ment, too, we would have the official figures given in the second column of Table 1.5. This would show a total of 1,189,397 out of school, or 50 percent of the total. If we add in our estimates of children in the private unregistered schools, however, this total is sharply reduced to 612,373, or 26 percent of the total school-aged children. These are indicative figures only, given a number of assumptions that may not be correct (e.g., there may be a lower proportion of primary- than secondary-aged children out of school). Nonetheless, it is worth stating that bringing 26 percent of children into school may be much easier than bringing 50 percent into school. Again, Nigeria's task of achieving "education for all" may be considerably easier than is currently anticipated. These findings are surely good news for the international development community.

Private unregistered schools charge fees that are consistently lower than those of registered schools at each level.

Pupil-Teacher Ratios

On the basis of the information about the total number of teachers and pupils in the school given by school managers, we can calculate the average pupil-teacher ratios in Hyderabad and Ga (see Table 1.6). For comparison purposes, Table 1.6 also gives pupil-teacher ratios for the small samples in Kibera, Kenya, and Makoko, Nigeria. Although not statistically significant, these also show the

Table 1.6
Pupil-Teacher Ratios, by School Type

	Hyderabad, India	Ga, Ghana	Kibera, Kenya	Makoko, Nigeria
Government	42:1	29:1	60:1	29:1
Private aided	43:1	—	—	—
Private unaided unrecognized/ unregistered	22:1	21:1	21:1	15:1
Private unaided recognized/ registered	27:1	20:1	—	—
Total	31:1	23:1	—	—

Source: Census of Schools data.

In all of the countries surveyed, we found that a considerable number of places were provided free or at reduced rates.

school choices facing parents in those slum areas.

In Hyderabad, the highest pupil-teacher ratio was in the government (42:1) and private aided (43:1) schools. The private unaided unrecognized schools had the lowest (22:1), almost half that of the government and aided schools. Private unaided recognized schools had a pupil-teacher ratio of 27:1.

In Ga, the highest ratio was again found in the government schools (29:1) compared with 21:1 and 20:1 in the unregistered and registered private schools, respectively. In Makoko, Nigeria, government schools had the highest ratio (29:1) with private unregistered (15:1) about half that ratio. Kibera, Kenya, had the largest disparity, with a pupil-teacher ratio of 60:1 in the government schools, compared with 21:1 in the private schools—nearly three times lower.

Pupil Fees

As part of our research, we asked school managers for their fees, checking these where possible against advertised fee amounts. In Hyderabad, the private unaided schools charge a range of monthly, term, and admission fees. There is a statistically significant difference in the fees charged in unrecognized and recognized schools, with the former consistently lower than the latter at each level. For example, for first grade, average monthly fees in recognized private unaided schools are R 95.60 ($2.20) per month, compared with R 68.32 ($1.57) per month in the unrecognized schools.[38] At fourth grade, the same figures are R 102.55/- ($2.36) compared with R 78.17 ($1.80) (see Figure 1.3).

In Ga, we found a similar picture. Schools there generally charge only term fees. Unregistered private schools consistently charge lower fees than the private registered schools at each level. For example, for nursery, average fees in private unaided registered schools are Cedis 175,380 ($19.38) per term, compared with Cedis 101,685 ($11.24) per term in the private unregistered schools.[39] At fourth grade, the same figures are Cedis 220,898 ($24.41) compared with Cedis 132,263 ($14.61) (see Figure 1.4).

In Nigeria, private schools usually charge term fees. Again, private unregistered schools charge fees that are consistently lower than the registered schools at each level. For example, for Primary 1 class, average fees in private unaided registered schools are Naira 4,064 ($29.72) per term, compared with Naira 2,744 ($20.07) in the unregistered schools.[40] At Primary 4, the same figures are Naira

Figure 1.3
Hyderabad, India—Average Monthly Fees for Private Unaided Recognized and Unrecognized Schools ($ U.S.)

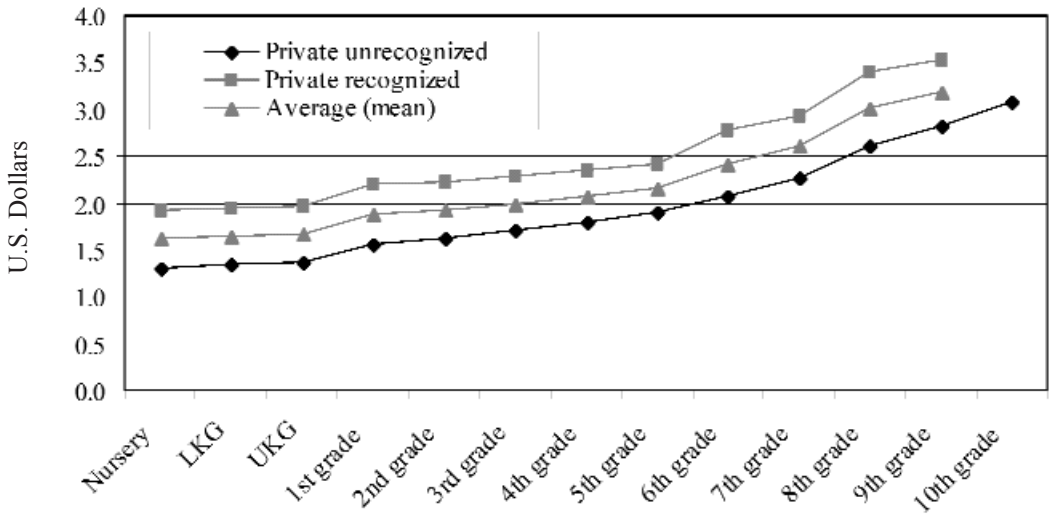
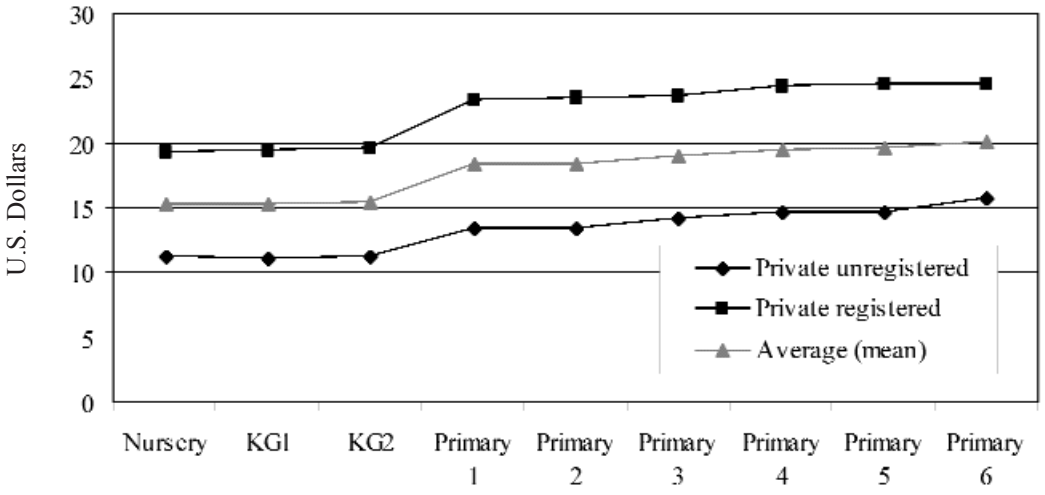


Figure 1.4
Ga, Ghana—Average Term Fees for Private Unaided Registered and Private Unregistered Schools



4,362 ($31.90) compared with Naira 2,993 ($21.89) (see Figure 1.5).

It should be noted that not all children pay these fees. In all of the countries we surveyed, we found that a considerable number of places were provided free or at reduced rates (e.g., to orphans and children from large families).

When Were Schools Established?

A common assumption about—and implied criticism of—private unregistered/unrecognized schools is that these schools are usually newly established fly-by-night enterprises. Our data suggest that this is not true.

For Hyderabad, the average year of establishment for private unaided unrecognized

The funding of schools was predominantly from school fees, not outside philanthropy.

Figure 1.5
Lagos State, Nigeria—Average Term Fees for Private Unaided Registered and Private Unregistered Schools

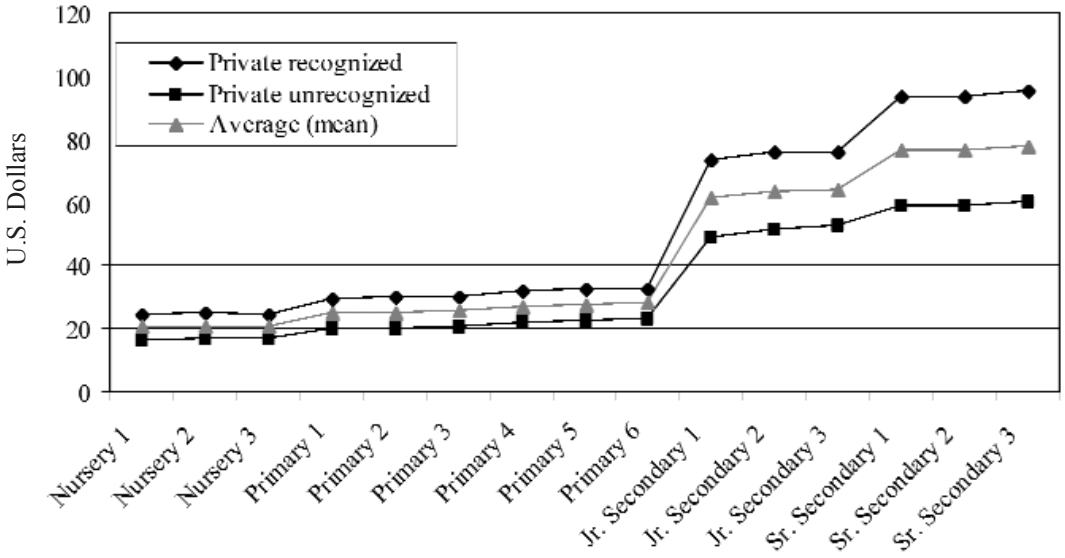


Table 1.7
Average Date of Establishment of Schools, by School Type

	Hyderabad, India	Ga, Ghana	Lagos State, Nigeria	Makoko, Nigeria	Kibera, Kenya
Government	1978 (306)	1979 (118)	1973 (171)	1984 (2)	1978 (5)
Private aided	1950 (46)	—	—	—	—
Private unaided unrecognized/ unregistered	1996 (320)	1998 (139)	1997 (196)	1996 (29)	1996 (76)
Private unaided recognized/ registered	1986 (197)	1995 (187)	1991 (108)	—	—
All	1985 (869)	1992 (444)	1987 (475)	1995 (31)	1995 (81)

Source: Census of Schools data.
The number of schools reporting is shown in parenthesis.

schools was 1996; for private unaided recognized schools the average year of establishment was 1986.[41] In Ga, the unregistered schools' average establishment date was 1998, compared with the registered schools' date of 1995. In Lagos, the average establishment date for unregistered schools was 1997, compared with 1991 for the registered schools. In the smaller studies of Makoko and Kibera, the average date for establishment of the private (unregistered) schools was 1996 for both locations.

Although the unrecognized and unregistered schools are newer than their recognized/registered counterparts (which themselves are newer than the government schools), they are certainly not all recently established. Data about year of establishment are shown in Table 1.7.

A common assumption about private unregistered/ unrecognized schools is that they are fly-by-night enterprises. Our data suggest that this is not true.

Who Manages the Private Schools, and How Are They Funded?

It might be thought that private schools in low-income areas would be predominantly managed by philanthropic or religious organizations and, hence, dependent on philanthropic funding. This turns out not to be the case. As part of our research, we asked private school managers about the management arrangements for their schools, giving them the mutually exclusive options of charitable trust/society or community group, religious organization (church, mosque, etc.), individual proprietors, or commercial company.[42]

In Hyderabad, the results are slightly difficult to interpret because all private schools are legally required to be run by charitable trusts or societies. Proprietor-run schools are technically illegal. If the school managers indicated that their schools were run both by a charitable society and individual proprietors, we listed them as the former. Only if the school managers indicated individual proprietors as the sole management arrangement did we count the schools as being managed by individual proprietors.

For the private recognized schools, it is interesting that 25 (13 percent) listed either individual proprietor or commercial company. This may be how some school managers perceive the situation even though a charitable trust is likely to be officially running the school. Unrecognized schools, however, did not face the same legal inhibition, so it is likely that all 105 schools (34 percent of unrecognized schools) that claim they are run by an individual proprietor really are (see Table

Table 1.8
Management of Private Schools (%)

	Hyderabad, India		Ga, Ghana		Lagos State, Nigeria	
	Private Unrecognized	Private Recognized	Private Unregistered	Private Registered	Private Unregistered	Private Registered
Charitable trust/society or community group	65.3	86.6	18.4	7.3	5.2	4.0
Religious group (church, mosque)	1.0	0.5	—	—	8.2	3.0
Individual proprietor or proprietors	33.8	12.4	81.6	92.7	86.6	91.9
Commercial company	0.0	0.5	0.0	0.0	0.0	1.0

Source: Census of Schools data. Totals may not add to 100 percent due to rounding.

1.8). Note also the tiny number of schools that are run by religious organizations.

Given the difficulty of accurately determining a school's management structure, we asked school managers in Hyderabad a follow-up question: Did the school receive any funds in addition to those from school fees and other income from students? Although half of the private aided schools, as expected, reported that they did receive financial assistance from elsewhere, the vast majority of the private unaided unrecognized (91 percent) and private unaided recognized schools (86 percent) reported receiving no outside funding at all. The income of the vast majority of these schools is made up solely of the school fees indicated in the earlier section. For the minority that do receive outside funding, follow-up conversations with a small number of school managers indicated that some of these funds might come from relatives who work as expatriates in Saudi Arabia and the United Arab Emirates, for instance. Or, indeed, some may have misunderstood the question, indicating that they took bank or informal loans or invested their own personal resources to finance their schools rather than referring to genuine donations from outside.

In Africa, there is not the same legal prohibition against proprietor-run schools. In both Ga and Lagos State, the vast majority (from 82 percent to 93 percent) of both types of private school reported that they were run by a proprietor or proprietors, with unregistered schools showing the largest proportion. Thus, the funding of these schools was predominantly from school fees, not outside philanthropy. Again, religious and charitable organizations were only a small minority of management (see Table 1.8).

2. How Did Free Primary Education Impact Enrollment?

Our process of data collection took place in Kenya about 10 months after the Kenyan government abolished fees in all government primary schools that introduced free primary education (FPE).[43] The introduction of FPE in Kenya generated a great deal of international admiration. Indeed, former president Bill Clinton told a prime time ABC television audience that the person he most wanted to meet was President Mwai Kibaki of Kenya "because he has abolished school fees," which "would affect more lives than any president had done or would ever do by the end of this year."[44] The recent introduction of free primary education provided an additional dimension to our research in Kenya; that is, we also had the opportunity to explore what impact the introduction of FPE had on pupil enrollment in the slum areas.

Official figures suggested a huge increase in enrollment in government schools, including those serving the slum areas. However, no one apparently had investigated the impact on private school enrollment in poor areas. We explored this question in depth by asking owners and managers of private schools how FPE had affected their primary school enrollment.[45]

In Kibera, 69 of the 76 schools served primary school students. However, it turned out that one other school, currently serving nursery and secondary students only, previously had a section of their school that served primary grade students. That section of the school had closed as a result of FPE. Hence we give figures for the impact on 70 schools from Kibera (see Table 2.1). We asked the same question of the government primary schools that we were told served Kibera. These figures enable us to make rough estimates of the net impact of FPE. The figures we found challenge the official picture of dramatically increased enrollment.

It is true that FPE had dramatically increased the number of students enrolled in all five government primary schools reportedly serving Kibera. The total increase reported was 3,296 students. However, of the 70 private schools serving (or previously serving) primary students, FPE led to a net decline in enrollment in 48 schools (69 percent), while the remaining reported that either the student numbers had stayed roughly the same (14 schools, or 20 percent) or school enrollment had experienced a net increase in student numbers since the introduction of FPE (8 schools, or 12 percent).

There are about 8,000 fewer students from Kibera enrolled in primary schools than there were before FPE was introduced.

Table 2.1
Kibera's Net Decline in Private School Enrollment

Category	Increase/decrease in enrollment
Private–straight decline in enrollment	–6,010
Private–initial decline then increase	–939
Private–increase in enrollment	+378
Net increase/decrease	–6,571
Average increase/decrease in 70 schools	–94

Source: Census of Schools data.

It was the more prosperous slum dwellers who were able to afford to send their children to government schools, given their "hidden costs."

Of the 48 schools reporting a net decline in their enrollment, 41 had suffered a straightforward decrease since the introduction of FPE. For some of these schools, the decrease was dramatic—with the largest reporting a 93 percent decline. The total number of children leaving these 41 private schools was reported to be 6,010, with the average decrease per school being 147 children (47 percent).

The remaining seven schools that had suffered a net enrollment decline reported that enrollments were now increasing—either because some parents who had moved their children to the government schools were now returning their children to private schools or were moving their children from private schools that had closed. The total net decline in these schools was 939 students. Finally, eight of the private schools reported that enrollment figures had increased since the introduction of FPE. The net increase in students in those eight private schools was 378 (see Table 2.1).

From these figures, we can compute the total net decrease in the number of students reported to be enrolled in the private schools in Kibera. The results are also shown in Table 2.1. Here we can see that the net decrease in the enrollment in the 70 schools was 6,571, or 94 per school.

Closing Private Schools

In addition to assessing the impact of FPE on private school enrollment, we also asked school owners and managers whether they knew of any private primary schools (or schools serving primary students) that had closed directly as a result of the new FPE policy. We asked school managers for the specific names of any schools that had closed to ensure that school owners and managers were not simply guessing. We then followed up on these reports using the network of the Kenya Non-Formal Schools Association and sent researchers to find and interview the manager/proprietor of the previously existing school. By this means we were able to ascertain the reason for closure and the number of pupils that had been enrolled when the school closed.

A total of 33 private schools were reported by school managers to have closed since the introduction of FPE. We were able to locate and interview the previous managers of 32 of those schools. In the course of our research, we uncovered an additional 3 private schools that had closed since FPE was introduced. The previous school managers of these 35 private schools, reported that 25 of them had closed specifically because of FPE. (Two of the schools had relocated and were still open.) Six of the schools had closed because of demolition work due to the building of a by-pass through the slum, and two closed due to mismanagement or lack of funds unconnected with FPE. In total, 5,691 children had been in these schools at the time of closing with 4,600 in schools that had closed specifically because of the impact of FPE.

Owners of private schools that had closed gave the following statements about what happened to the children who had left their schools:

> Some children joined other private schools and city council schools but others are still at home because of limited chances in the present schools.—William Onyando, Upendo Primary

> A few went to local private schools, a few to city council schools, and the majority are not in school at all.—Jacinta Josephine Kioko, Sacred Heart Primary

> The needy children remained at home; others went to the local private school and some to the local government school.—Stephen Juma Kulisher, Jesus Gospel Church School

> Some joined the city council schools but others did not since they were orphaned and needed special treatment which the city council schools do not provide.—Oscar Osir, Sinai Academy

Table 2.2
Net Increase/Decrease in Enrollment in Kibera since the Introduction of Free Public Education in 2003

Category	Increase/decrease in enrollment
Private–straight decline in enrollment	–6,010
Private–initial decline then increase	–939
Private–increase in enrollment	378
Private–schools closing as a result of FPE	–4,600
Subtotal–net increase/decrease in private schools	–11,171
Government–increase in enrollment	3,296
Total net increase/decrease in enrollment	–7,875

Source: Census of Schools data.

The fact that some of the displaced children enrolled at other private schools in Kibera helps to explain why a few of the remaining private schools experienced an increase in enrollment. However, this cannot account for all the missing children. Some of the preceding comments suggest (although by no means confirm) that those most adversely affected by the introduction of FPE were those orphans previously enjoying free education at a local private school. Following the closure of these schools, such children may have been unable to find a free place at another local private school or been unable to afford the "hidden costs" that are often part of enrolling at a local government school. (Hidden costs may include such things as requirements for expensive school uniforms or parent-teacher association levies.) It may also be the case that all local government schools were already oversubscribed. Very poor children would not be able to afford the transport costs to schools farther away.

Net Impact of Free Public Education on Pupil Enrollment

Table 2.2 gives an estimate of the net decrease in the number of students enrolled from Kibera as a result of the introduction of FPE. In private schools as a whole, our estimate is that enrollment has declined by 11,171 since the introduction of FPE. Set against the increase in government schools of 3,296, this would result in a net decrease in enrollment of primary school children since the introduction of FPE of 7,875. We estimate—and it is worth spelling this out—that there are about 8,000 *fewer* students from Kibera enrolled in primary schools than there were before FPE was introduced. As a percentage of students currently enrolled in primary schools (government and private), this is nearly a 40 percent decrease in enrollment.

There are at least three reasons why this figure may be inaccurate. First, the figure is based on the increase and decline in school enrollment reported by school owners and managers and may be incorrect. The private schools owners may have had some incentive to exaggerate their decline in student numbers, possibly because they thought this would lead to financial or other assistance. Second, we are assuming that all children who have left Kibera private primary schools could have gone only to the five primary government schools bordering Kibera, but they may have enrolled at other government schools, once those bordering Kibera reached capacity. Third, some of the students who left closing private schools could have enrolled in other still functioning private schools, so there may be a small amount of double counting—small, because the net increase in primary enrollment was reported to be fewer than 400.

We may also question why private schools are closing if so few children are transferring to the government schools. To answer that

In Hyderabad, India, the private schools had superior facilities to those of government schools.

In Lagos, Nigeria, private schools were markedly superior to government schools in terms of teaching activity.

question, we might consider that if many private schools are running on a very tight budget, the loss of even a small number of children may make them unviable financially and, hence, force them to close.[46] Indeed, interviews with parents gave the impression that it was the more prosperous slum dwellers who were able to afford to send their children to government schools, given their "hidden costs." It should also be considered that the more prosperous parents may have been the ones who could afford to pay fees on time in the private schools—something that the majority of parents reported not being able to do. So the loss of these parents may have been particularly acute for the private school managers.

If one private school closed, why wouldn't parents send their children to another private school, as there are still plenty of these available? Answering this question requires further research. However, it could be hypothesized that some parents may be reluctant to pay for tuition, given that it is now supposed to be free. Or a parent may have been very happy with a particular private school, but, once that school closed, didn't feel inclined to try another private school out of fear that that school too might close for the same reason. Instead, these parents may have chosen to send their children out to work or back to the rural areas.

Nevertheless, whatever the objection to the precise figures, they clearly point to the need for a more sober assessment of the net impact of FPE on enrollment, taking into account enrollment in private schools for the poor as well as the more customary exercise in examining only government school figures. Even if we have overestimated the number of children dropping out of private schools by a factor of four, our estimates would still mean that the net impact of FPE was precisely the same number of children enrolled in primary school—only that some had transferred from private to government schools.

3. How Do Private and State Schools Compare?

The Survey of Inputs was conducted over the same period as the Census of Schools and by the same research teams. When the researcher visited unannounced and without prior notice to conduct the survey, he or she asked to tour the school. On this school tour, the researcher made a note of the facilities available in the school using a form listing all of the facilities indicated in Tables 3.1–3.13. The researcher also asked to visit the particular primary school classroom that would participate in the survey of achievement (grade/class 4, 5, or 6, depending on the country), during a time when teaching should normally be taking place.[47]

In Hyderabad, India, the results of our Survey of Inputs showed that the private schools (including the unrecognized private schools) had superior facilities to those of government schools. When researchers called unannounced on the classrooms, 98 percent of teachers were teaching in the private recognized schools, compared with 91 percent in the unrecognized private schools and 75 percent in the government schools (see Table 3.1).

Teacher absenteeism was also highest in the government schools. On every input, including the availability of blackboards, playgrounds, desks, drinking water, toilets, and separate toilets for boys and girls, both types of private schools—recognized and unrecognized—were superior to the government schools (see Tables 3.2–3.13). For instance, while 78 percent of the government schools had blackboards in every classroom, 96 percent of the private recognized schools and 94 percent of the private unrecognized schools had blackboards in every classroom. In only half the government schools (52 percent) were functioning toilets provided for children, compared with 97 percent of both recognized and unrecognized private schools.

The private school advantage found in the raw scores continues after background effects are controlled for.

Table 3.1
Teacher Activities of Grade 4/5 Teacher, by Percent in Each School Type, in Three Surveys

	Activity of Teacher	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/ registered	Teaching	97.5	75.0	87.9
	Nonteaching	2.0	19.8	11.1
	Absent	0.5	5.2	1.0
Private unrecognized/ unregistered	Teaching	90.5	66.4	87.0
	Nonteaching	5.5	24.4	12.0
	Absent	4.0	9.2	1.1
Government	Teaching	74.6	56.7	67.3
	Nonteaching	19.7	28.3	24.5
	Absent	5.7	15.0	8.2

Source: Survey of Inputs data.
[a] $\chi^2 = 64.823$, df = 4, Significant, $p < 0.001$.
[b] $\chi^2 = 15.026$, df = 4, Significant, $p < 0.01$.
[c] $\chi^2 = 25.691$, df = 4, Significant, $p < 0.001$.

In Ga, Ghana, teaching commitment was highest in the private schools: 75 percent of teachers in registered private and 66 percent in unregistered private schools. But only 57 percent of teachers in government schools were teaching at the time when researchers arrived unannounced. Teacher absenteeism was also highest in the government schools (see Table 3.1).

On one indicator (availability of chairs in every classroom) there were no significant differences between school types, with roughly half of all school types having chairs in every classroom. On other indicators, government schools came out best. For example, 97 percent of government schools had desks available for all children, compared with 92 percent of registered private schools, and only 61 percent of unregistered private schools.[48] On other indicators there was little difference between the three school types. For example, blackboards were available in all classes in 98 percent of registered private schools, 92 percent of unregistered private schools, and 98 percent of government schools. Finally, regarding some inputs, private schools came out best. For example, drinking water was available in only 54 percent of government schools but was available in 63 percent and 87 percent of private unregistered and registered schools, respectively (see Table 3.2).

In Lagos, Nigeria, private schools were markedly superior to government schools in terms of teaching activity, with 88 percent and 87 percent teaching in the registered and unregistered private schools, compared with only 67 percent in the government schools (see Table 3.1). There was no significant difference between school types in the availability of blackboards, desks, and chairs. However, a higher number of private schools provided drinking water, fans, tape recorders for teaching purposes, and electric lights in the classrooms than did government schools (see Tables 3.2–3.8). More government schools provided playgrounds (available in 92 percent of government schools, but only 81 percent of private registered and only 60 percent of private unregistered schools). The availability of toilets and libraries was higher in government schools than in unregistered private schools but not as high as in registered private schools (87 percent of government schools provided toilets, compared with 79 percent of unregistered and 99 percent of registered private schools). Libraries were provided in 41 percent of government schools, but only 31 percent of unregistered private schools, with registered private schools doing better than both (75 percent providing libraries).

Table 3.2
Availability of Drinking Water, by Percent in Each School Type, in Three Surveys

	Availability of Drinking Water	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private	Available	99.5	87.4	72.5
recognized/registered	Unavailable	0.5	12.6	27.5
Private	Available	96.0	62.5	48.3
unrecognized/unregistered	Unavailable	4.0	37.5	51.7
Government	Available	57.5	54.1	47.4
	Unavailable	42.5	45.9	52.6

[a] $\chi^2 = 215.023$, df = 2, Significant, $p < 0.001$.
[b] $\chi^2 = 50.358$, df = 2, Significant, $p < 0.001$.
[c] $\chi^2 = 17.173$, df = 2, Significant, $p < 0.001$.
Source: Survey of Inputs data.

Table 3.3
Availability of Blackboards, by Percent in Each School Type, in Three Surveys

	Blackboard Availability	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	96.4	98.2	100
	Unavailable	3.6	1.8	0
Private unrecognized/unregistered	Available	93.6	92.1	99
	Unavailable	6.4	7.9	1
Government	Available	78.1	97.9	100
	Unavailable	21.9	2.1	0

Source: Survey of Inputs data.
[a] $\chi^2 = 53.617$, df = 2, Significant, $p < 0.001$.
[b] $\chi^2 = 10.265$, df = 2, Significant, $p < 0.01$.
[c] $\chi^2 = 2.748$, df = 2, Not Significant, $p > 0.05$.

Table 3.4
Availability of Desks in Every Classroom (%)

	Desks in every classroom	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	63.3	92.2	99.1
	Unavailable	36.7	7.8	0.9
Private unrecognized/unregistered	Available	31.3	60.9	96.6
	Unavailable	68.7	39.1	3.4
Government	Available	1.9	97.2	99.4
	Unavailable	98.1	2.8	0.6

Source: Survey of Inputs data.
[a] $\chi^2 = 230.453$, df = 2, Significant, $p < 0.001$.
[b] $\chi^2 = 88.721$, df = 2, Significant, $p < 0.001$.
[c] $\chi^2 = 4.929$, df = 2, Not significant, $p > 0.05$.

Table 3.5
Availability of Chairs in Every Classroom (%)

	Chairs in every classroom	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	81.2	52.8	83.5
	Unavailable	18.8	47.2	16.5
Private unrecognized/unregistered	Available	70.6	50.0	85.0
	Unavailable	29.4	50.0	15.0
Government	Available	7.0	50.3	83.2
	Unavailable	93.0	49.7	16.8

Source: Survey of Inputs data.
[a] $\chi^2 = 365.852$, df = 2, Significant, $p < 0.001$.
[b] $\chi^2 = 0.335$, df = 2, Not significant, $p > 0.05$.
[c] $\chi^2 = 0.227$, df = 2, Not significant, $p > 0.05$.

Table 3.6
Availability of Fans in Every Classroom (%)

	Fans in every classroom	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	57.9	12.0	62.6
	Unavailable	42.1	88.0	37.4
Private unrecognized/unregistered	Available	39.3	3.6	38.3
	Unavailable	60.7	96.4	61.7
Government	Available	5.7	0.7	12.1
	Unavailable	94.3	99.3	87.9

Source: Survey of Inputs data.
[a] $\chi^2 = 171.517$, df = 2, Significant, $p < 0.001$.
[b] $\chi^2 = 20.614$, df = 2, Significant, $p < 0.001$.
[c] $\chi^2 = 68.573$, df = 2, Significant, $p < 0.001$.

Table 3.7
Availability of Tape Recorders in the School (%)

	Tape Recorders	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	53.3	6.0	30.8
	Unavailable	46.7	94.0	69.2
Private unrecognized/unregistered	Available	37.1	2.2	13.7
	Unavailable	62.9	97.8	86.3
Government	Available	5.7	0.7	2.3
	Unavailable	94.3	99.3	97.7

Source: Survey of Inputs data.
[a] $\chi^2 = 150.017$, df = 2, Significant, $p < 0.001$.
[b] $\chi^2 = 8.155$, df = 2, Significant, $p < 0.05$.
[c] $\chi^2 = 32.718$, df = 2, Significant, $p < 0.001$.

Table 3.8
Availability of Electric Light in Every Classroom (%)

	Electric light in every classroom	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	60.2	58.1	86.9
	Unavailable	39.8	42.1	13.1
Private unrecognized/unregistered	Available	45.4	23.6	58.1
	Unavailable	54.6	76.4	41.9
Government	Available	11.1	23.9	33.3
	Unavailable	88.9	76.1	66.7

Source: Survey of Inputs data.
[a] $\chi^2 = 147.680$, df = 2, $p < 0.001$.
[b] $\chi^2 = 60.881$, df = 2, $p < 0.001$.
[c] $\chi^2 = 73.905$, df = 2, Significant, $p < 0.001$.

Table 3.9
Availability of Own Playground (%)

	Own Playground	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	52.8	82.1	81.1
	Unavailable	47.2	17.9	18.9
Private unrecognized/unregistered	Available	34.9	66.4	60.2
	Unavailable	65.1	33.6	39.8
Government	Available	39.2	95.0	92.4
	Unavailable	60.8	5.0	7.6

Source: Survey of Inputs data.
[a] $\chi^2 = 16.658$, df = 2, $p < 0.001$.
[b] $\chi^2 = 37.448$, df = 2, Significant, $p < 0.001$.
[c] $\chi^2 = 55.140$, df = 2, Significant, $p < 0.001$.

Table 3.10
Availability of Toilets for Children (%)

	Toilets for Children	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	97.4	90.5	99.1
	Unavailable	2.6	9.5	0.9
Private unrecognized/unregistered	Available	96.6	59.2	78.9
	Unavailable	3.4	40.8	21.1
Government	Available	51.9	62.7	86.7
	Unavailable	48.1	37.3	13.3

Source: Survey of Inputs data.
[a] $\chi^2 = 249.132$, df = 2, $p < 0.001$.
[b] $\chi^2 = 53.049$, df = 2, Significant, $p < 0.001$.
[c] $\chi^2 = 23.198$, df = 2, Significant, $p < 0.001$.

Table 3.11
Availability of a Library for Children (%)

	Library	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	32.7	26.8	74.7
	Unavailable	67.3	73.2	25.3
Private unrecognized/unregistered	Available	10.7	7.4	30.7
	Unavailable	89.3	92.6	69.3
Government	Available	1.0	7.9	40.7
	Unavailable	99.0	92.1	59.3

Source: Survey of Inputs data.
[a] $\chi^2 = 114.255$, df = 2, $p < 0.001$.
[b] $\chi^2 = 27.379$, df = 2, Significant, $p < 0.001$.
[c] $\chi^2 = 45.790$, df = 2, Significant, $p < 0.001$.

Table 3.12
Availability of Computers for Children (%)

	Computers for Children	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	49.7	37.2	69.1
	Unavailable	50.3	62.8	30.9
Private unrecognized/unregistered	Available	13.2	12.0	32.6
	Unavailable	86.8	88.0	67.4
Government	Available	1.6	3.3	2.9
	Unavailable	98.4	96.7	97.1

Source: Survey of Inputs data.
[a] $\chi^2 = 201.228$, df = 2, $p < 0.001$.
[b] $\chi^2 = 60.486$, df = 2, Significant, $p < 0.001$.
[c] $\chi^2 = 115.791$, df = 2, Significant, $p < 0.001$.

Table 3.13
Availability of Television and/or Video for Children (%)

	Television and/or Video	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/registered	Available	30.3	8.7	25.8
	Unavailable	69.7	91.3	74.2
Private unrecognized/unregistered	Available	4.9	2.4	10.1
	Unavailable	95.1	97.6	89.9
Government	Available	4.8	0.8	0.0
	Unavailable	95.2	99.2	100.0

Source: Survey of Inputs data.
[a] $\chi^2 = 99.767$, df = 2, $p < 0.001$.
[b] $\chi^2 = 12.045$, df = 2, Significant, $p < 0.01$.
[c] $\chi^2 = 35.148$, df = 2, Significant, $p < 0.001$.

4. How Well Do Children Achieve?

The salaries in government schools were more than three times higher than in private unrecognized/ unregistered schools.

How do government and private schools compare in terms of pupil achievement? We explored this issue by examining pupil achievement in primary schools in a single class or grade (4, 5, or 6), using tests in English, mathematics, and (in Africa) one other subject, depending on context, together with other cross-sectional data collected from the school and families. This section describes the methodology used to collect student achievement data and presents the results of the student achievement tests.

Method

Because unrecognized or unregistered private schools are not on any government lists, we used the list of schools obtained from our earlier Census of Schools as the basis for selecting schools for the second part of our research on student achievement. The student achievement data have been analyzed for Hyderabad, India; Ga, Ghana; Lagos State, Nigeria; and Nairobi, Kenya.[49] In the Indian study, we excluded the small number of private aided schools. As mentioned earlier, these made up only about 5 percent of the schools in Hyderabad, so were too small in number to be a viable option for most children. In the African studies we included all school types.

A stratified random sample of 2,000 to 4,000 students was selected in each country for study. Schools were sorted by size and school type so that each sample included a roughly equal number of students in each school type: private unregistered/unrecognized, private registered/recognized, and government.[50] Table 4.1 shows the number of government, private unrecognized/unregistered, and private recognized schools in each country.

Questionnaires were prepared by the research teams in each country and modified to suit local conditions. The questionnaires were designed to collect information about variables known to be related to student achievement and school effectiveness. Questionnaires were prepared for the students and families of the students, as well as teachers and school managers or headteachers. The class/grade 4, 5, or 6 teacher was asked to fill out the questionnaire.

The core curriculum subjects of mathematics and English were tested in all countries—English being at least one of the official languages in each country studied. Use of public examination scores was not a viable means of assessing student achievement, as

Table 4.1
Schools in Stratified Random Samples, by School Type

	Hyderabad, India	Ga, Ghana	Lagos State, Nigeria	Nairobi, Kenya
Government	44 (28.8%)	37 (27.0%)	40 (25.0%)	12 (15.0%)
Private unrecognized/ unregistered	64 (41.8%)	47 (34.3%)	67 (41.9%)	68 (85.0%)
Private recognized/ registered	45 (29.4%)	53 (38.7%)	53 (33.1%)	—
Total	153 (100%)	137 (100%)	160 (100%)	80 (100%)

Government schools have considerably higher levels of financial resources than do their private school counterparts.

the reliability of those scores has been questioned, particularly in India, where widespread mass cheating, leakage of exam papers, tampering with results, and other unethical practices have been reported.[51]

All tests were reviewed by panels of teachers drawn from private and government schools to ensure that each test reflected material that should be known to the appropriate grade children in both private and government schools.[52] To control for innate ability, all children were tested for their IQ using the Raven's Standard Progressive Matrices test.[53]

To minimize problems with cheating, we created a test booklet that contained the three tests in a different order and distributed these so that children would not be sitting next to a student taking the tests in the same order. The Raven's Test, however, had to be taken by all students in the classroom at the same time. In that case, at least two researchers were sent to each class and were instructed to make sure that no cheating took place between children and to ensure that no teacher entered the class at any time to help children.[54] Children's desks were arranged so that they were sitting apart from each other. After the Raven's Test (which took a maximum of 45 minutes) children were given a short break and a snack, and then they were given the test booklets. The three tests took about an hour and a half to administer altogether, and children worked through the tests at their own pace. They were told that they could move on to the next test in their booklet when they had finished the previous test but were instructed to do so by the researchers if more than 30 minutes on each test had elapsed. All children were given a pencil, eraser, and ruler, partly to ensure that they had these implements, but also as a reward for taking the tests.

Once the children had finished their tests, they were then given a break for lunch. In the afternoon, they were given the student questionnaire to complete. The researchers were on hand to answer any questions about the questionnaire. At the beginning of the day, the researchers also gave the class teacher and school manager or headteacher their questionnaires to complete. These were collected by one of the researchers, who sat with them to go over any questions that had not been answered.

One of the researchers also sat with the teacher and told him or her how to take the IQ test—explaining that this test was not just for children. The IQ test was administered to the teacher in exactly the same fashion as to the students. Finally, children were given the parent questionnaire to take home to their parents, with instructions to return it the next day. If they did so, they were told that they would be given some reward, such as a pen or certificate of participation. A researcher then visited the school the next day to collect the parent questionnaires. If any child did not return the parent questionnaire, or if a questionnaire was substantially incomplete, researchers visited that student's home and interviewed the parents, a process which took at least one more month.[55]

The data were analyzed using the Heckman two-stage procedure, to control for the fact that children were not randomly assigned to schools.[56] Other literature and anecdotal evidence have suggested that parents are likely to choose private schools for their boys and/or brighter children, and also that wealthier, better educated parents from higher castes are more likely to choose private over government schools.[57] Once the school choice process was controlled for, the data were subjected to statistical techniques that controlled for other variables such as family background and peer-group effects. These results are currently under peer review and so are not reported here. However, our results so far indicate that the private school advantage found in the raw scores continues after these background effects are controlled for.[58]

Results: Raw Test Scores and Standardized Data

Tables 4.2–4.9 show raw test scores and standardized data for all the subjects tested. The results show a similar pattern of achievement for Hyderabad, Ga, and Lagos State, with slightly different results for Nairobi,

reflecting the differing circumstances under which the student achievement tests were conducted. In Hyderabad, Ga, and Lagos State, all of the private and government schools included in our study were located in low-income areas. In those cases, the data showed that the slightly wealthier and better educated of the low-income families used the private schools. In the Nairobi study, however, the private schools were situated in the slums and served only slum children, whereas the government schools were located on the slum periphery and served middle-class as well as slum children. In that case, the data showed that the poorer and less educated parents used the private schools.

For Hyderabad, mean scores in mathematics were about 22 percentage points and 23 percentage points higher in private unrecognized and recognized schools, respectively, than in government schools. The advantage was even more pronounced for English.

In Ga, the advantage for both types of private schools was smaller but still large in terms of standard deviations, with average math scores being about 5 and 12 percentage points higher in private unregistered and registered schools, respectively, than in government schools. In English, the advantage was about 8 and 14 percentage points.

In Lagos State, the mean math score advantage over government schools was about 14 and 19 percentage points, respectively, in private registered and unregistered schools, while in English it was 22 and 29 percentage points.

In Kenya, private schools performed at about the same level as government schools in all subjects. In math and Kiswahili, the private schools were slightly better, while in English, a small advantage lay with the government schools. But this advantage may be because many of the middle-class children in the government schools pick up English outside of school—through watching television, for example.

Although teacher salaries were found to be considerably higher in government than in private schools, private school teachers were just as satisfied with their salaries.

Table 4.2
Hyderabad, India—Raw Scores

Subject	School Type	Mean % Score	SD*	Cases
Math	Government	39.19	25.95	991
	Private unrecognized	60.82	20.64	1,108
	Private recognized	62.38	21.21	1,161
	Total	54.80	24.83	3,260
English	Government	22.38	20.57	991
	Private unrecognized	53.90	19.79	1,108
	Private recognized	58.69	21.30	1,161
	Total	46.02	25.91	3,260

Source: Survey of Achievement data.
*SD = standard deviation.

Table 4.3
Hyderabad, India—Standardized Scores

Subject	School Type	Mean Score	SD*	Cases
Math	Government	–0.629	1.045	991
	Private unrecognized	0.243	0.832	1,108
	Private recognized	0.305	0.855	1,161
	Total	0.000	1.000	3,260
English	Government	–0.913	0.794	991
	Private unrecognized	0.304	0.764	1,108
	Private recognized	0.489	0.822	1,161
	Total	0.000	1.000	3,260

Source: Survey of Achievement data.
*SD = standard deviation. Scores in this table have been standardized to have a mean of zero and a standard deviation of one.

Table 4.4
Ga, Ghana—Raw Scores

Subject	School Type	Mean % Score	SD*	Cases
Math	Government	56.21	20.09	1,105
	Private unregistered	61.66	18.88	570
	Private registered	68.26	16.63	1,303
	Total	62.53	19.19	2,978
English	Government	58.19	17.11	1,103
	Private unregistered	66.41	17.42	571
	Private registered	71.97	14.76	1,301
	Total	65.79	17.32	2,975
Religious and Moral Education	Government	53.31	17.76	1,117
	Private unregistered	60.34	16.13	590
	Private registered	63.52	14.25	1,315
	Total	59.13	16.63	3,022

Source: Survey of Achievement data.
*SD = standard deviation.

Table 4.5
Ga, Ghana—Standardized Scores

Subject	School Type	Mean Score	SD*	Cases
Math	Government	–0.329	1.047	1,105
	Private unregistered	–0.045	0.984	570
	Private registered	0.299	0.866	1,303
	Total	0.000	1.000	2,978
English	Government	–0.439	0.988	1,103
	Private unregistered	0.036	1.006	571
	Private registered	0.357	0.852	1,301
	Total	0.000	1.000	2,975
Religious and Moral Education	Government	–0.350	1.067	1,117
	Private unregistered	0.073	0.970	590
	Private registered	0.264	0.857	1,315
	Total	0.000	1.000	3,022

Source: Survey of Achievement data.
*SD = standard deviation. Scores in this table have been standardized to have a mean of zero and a standard deviation of one.

Table 4.6
Lagos State, Nigeria—Raw Scores

Subject	School Type	Mean % Score	SD*	Cases
Math	Government	41.27	19.37	735
	Private unregistered	55.48	19.72	783
	Private registered	60.24	19.44	692
	Total	52.24	21.08	2,210
English	Government	42.68	20.03	734
	Private unregistered	64.70	21.38	779
	Private registered	71.83	20.48	688
	Total	59.59	24.04	2,201
Social Studies	Government	58.82	23.38	720
	Private unregistered	71.13	21.51	752
	Private registered	76.13	18.27	661
	Total	68.52	22.42	2,133

Source: Survey of Achievement data.
*SD = standard deviation.

Table 4.7
Lagos State, Nigeria—Standardized Scores

Subject	School Type	Mean Score	SD*	Cases
Math	Government	–0.520	0.919	735
	Private unregistered	0.153	0.936	783
	Private registered	0.379	0.922	692
	Total	0.000	1.000	2,210
English	Government	–0.703	0.833	734
	Private unregistered	0.213	0.889	779
	Private registered	0.509	0.852	688
	Total	0.000	1.000	2,201
Social Studies	Government	–0.433	1.043	720
	Private unregistered	0.116	0.959	752
	Private registered	0.339	0.815	661
	Total	0.000	1.000	2,133

Source: Survey of Achievement data.
*SD = standard deviation. Scores in this table have been standardized to have a mean of zero and a standard deviation of one.

Table 4.8
Nairobi, Kenya—Raw scores

Subject	School Type	Mean % Score	SD*	Cases
Math	Government	69.87	18.34	1,713
	Private	70.72	16.80	1,335
	Total	70.24	17.69	3,048
English	Government	68.00	16.12	1,725
	Private	65.90	16.48	1,318
	Total	67.09	16.31	3,043
Kiswahili	Government	60.97	15.54	1,732
	Private	64.18	15.75	1,342
	Total	62.37	15.71	3,074

Source: Survey of Achievement Data.
*SD = standard deviation.

Table 4.9
Nairobi, Kenya—Standardized Scores

Subject	School Type	Mean Score	SD*	Cases
Math	Government	–0.021	1.037	1,713
	Private	0.027	0.950	1,335
	Total	0.000	1.000	3,048
English	Government	0.056	0.990	1,725
	Private	–0.073	1.010	1,318
	Total	0.000	1.000	3,043
Kiswahili	Government	–0.090	0.989	1,732
	Private	0.115	1.002	1,342
	Total	0.000	1.000	3,074

Source: Survey of Achievement data.
*SD = standard deviation. Scores in this table have been standardized to have a mean of zero and a standard deviation of one.

5. How Well Are Private Schools Funded, and Do All Pupils Pay Fees?

Teacher Salaries

We have seen that, in general, student achievement in private schools serving low-income families is greater than in government schools. Is achievement greater because private schools have greater financial resources available to them?

As part of our research, we tried to obtain information about the financial resources available to the different types of schools, but private school managers were understandably wary of divulging financial details to researchers. However, we were able to gain at least some insight into private and government school financial resources by examining teacher salaries. It should be noted that although teacher salaries are likely to represent the majority of financial resources available to private schools, they do not represent the total level of financial resources going to government schools. In the case of government schools, funds are also used to finance large state and local bureaucracies. Such administrative bureaucracies will be minimal for private registered and recognized schools and nonexistent for private unregistered and unrecognized schools.[59]

Table 5.1 shows average monthly teacher salaries in Hyderabad, India; Ga, Ghana; and Lagos State, Nigeria, as well as the ratio of salaries to those in the private unrecognized or unregistered schools. (The same data are shown graphically in Figures 5.1–5.3.)[60] In all three cases, the salaries in government schools were more than three times higher than in private unrecognized/unregistered schools. In Hyderabad and Lagos State, salaries in government schools were nearly four times the reported private school salaries. Table 5.2 shows the same situation with regard to Nairobi, Kenya, with additional information on the number of teachers surveyed. (The

Table 5.1
Average Monthly Teacher Salaries, by School Type

	Hyderabad, India		Ga, Ghana		Lagos State, Nigeria	
	Average Monthly Salaries of Full-time Teachers (rupees)	Ratio of Salaries to Private Unrecognized Salaries	Average Monthly Salaries of Full-time Teachers (cedis)	Ratio of Salaries to Private Unregistered Salaries	Average Monthly Salaries of Full-time Teachers (naira)	Ratio of Salaries to Private Unregistered Salaries
Government	4,568 ($105.04)	3.86	950,346 ($105.01)	3.39	20,781 ($151.96)	3.71
Private unaided unrecognized/ unregistered	1,182 ($27.18)	1.00	280,333 ($30.98)	1.00	5,598 ($40.94)	1.00
Private unaided recognized/ registered	1,964 ($45.16)	1.66	449,771 ($49.70)	1.60	6,415 ($46.91)	1.15
Total	2,176 ($50.03)	1.84	514,532 ($56.85)	1.84	9,389 ($68.66)	1.68

A great success story is taking place.

same data are shown graphically in Figure 5.3.) Again, the average teacher salaries in government schools were about three times higher than those in private schools. On the basis of the assumption that teacher salaries reflect the majority of financial resources available at the school level, we can say that government schools have considerably higher levels of financial resources than do their private school counterparts.

Figure 5.1
Hyderabad, India—Average Monthly Teacher Salaries

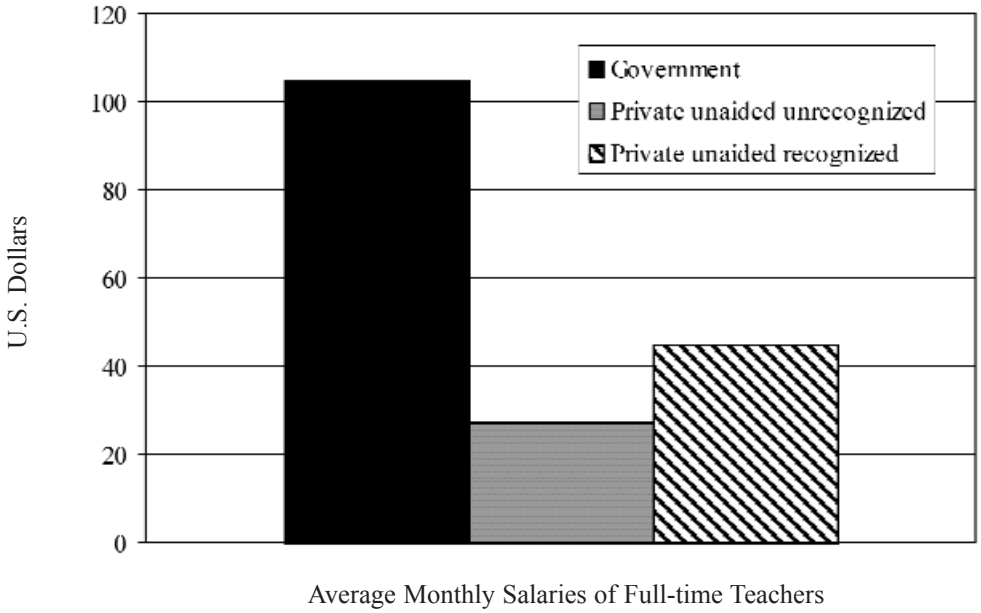


Figure 5.2
Ga, Ghana—Average Monthly Teacher Salaries

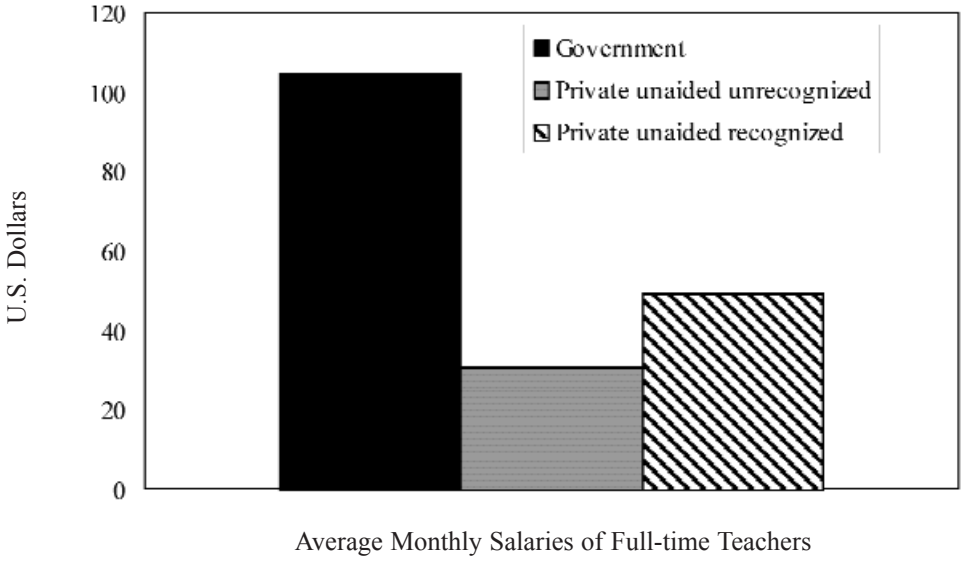


Figure 5.3
Lagos State, Nigeria—Average Monthly Teacher Salaries

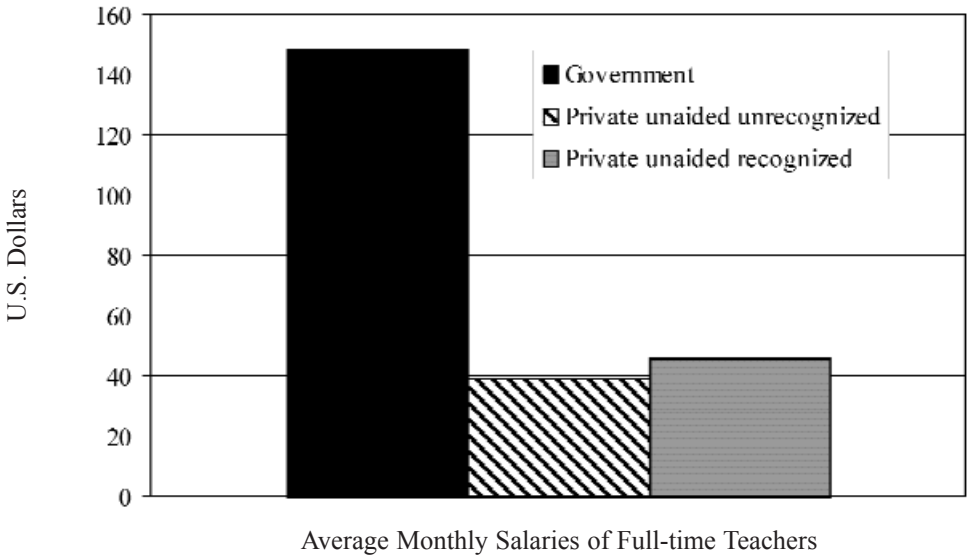


Table 5.2
Nairobi, Kenya—Average Monthly Teacher Salaries in Stratified Random Schools

	Average Monthy Salaries of Full-time Teachers (Ksh.)*	Ratio of Salaries to Private Unrecognized Salaries	Number of Teachers
Government	11,082 ($146.01)	2.97	30
Private	3,735 ($49.21)	1.00	196
Total	4,710 ($62.06)	1.26	226

*$1 = Ksh. 75.9

Given the huge difference in teacher salaries, it is worth reporting on one finding from the satisfaction surveys that were included as part of the teacher questionnaires.[61] Although teacher salaries were found to be considerably higher in government than in private schools, teachers were just as satisfied with their salaries whether they were in private or government schools. The differences were only statistically significant between school types in Ga, Ghana, where government school teachers were most dissatisfied. In the case of Ga, 89 percent of government school teachers said they were dissatisfied or very dissatisfied with their salaries, compared with 73 percent of private unregistered and 52 percent of private registered teachers. In Hyderabad, the vast majority of teachers in both government and private schools were satisfied with their salaries. In Lagos, Nigeria, satisfaction ranged between 46 and 59 percent, although differences between school types were not statistically significant (see Table 5.3).

Roughly equal numbers of boys and girls attend private schools.

Table 5.3
Teacher Satisfaction with Salary (%)

	Salary	Hyderabad, India[a]	Ga, Ghana[b]	Lagos, Nigeria[c]
Private recognized/ registered	Very satisfied or satisfied	88.1	48.1	46.0
	Dissatisfied or very dissatisfied	11.9	51.9	54.0
Private unrecognized/ unregistered	Very satisfied or satisfied	91.9	26.7	50.8
	Dissatisfied or very dissatisfied	8.1	73.3	49.2
Government	Very satisfied or satisfied	88.1	11.1	58.8
	Dissatisfied or very dissatisfied	11.9	88.9	41.2

Source: Satisfaction survey.
[a] $\chi^2 = 0.571$, df = 2, Not significant, $p > 0.05$.
[b] $\chi^2 = 14.184$, df = 2, Significant, $p < 0.01$.
[c] $\chi^2 = 1.332$, df = 2, Not significant, $p > 0.05$.

Children in private unaided schools usually perform better in terms of raw scores than do children in government schools.

Private School Philanthropy

One notable feature of the private unaided schools in our study is that, although they charge fees and are run on business principles, they also offer free or concessionary (reduced fee) seats to some children. We specifically asked questions about this aspect of private school operation on the school and parent questionnaires as well as in interviews with a small number of parents and school managers. Figure 5.4 shows the results for Hyderabad, but similar practices take place in each country.[62]

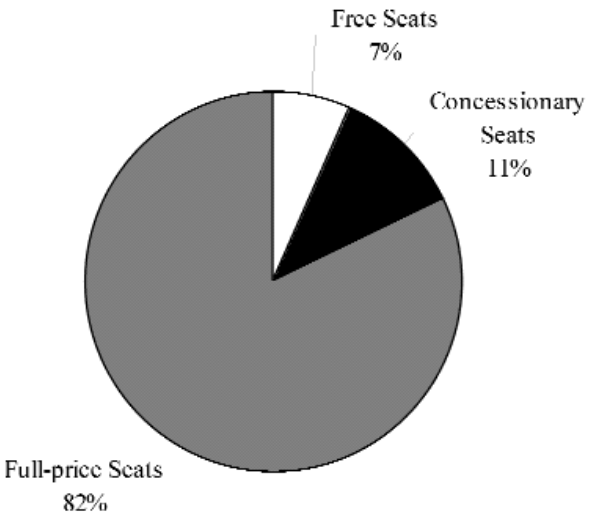
Of those schools giving information, 71 percent of unrecognized and 78 percent of recognized private unaided schools offer free places to some students. Regarding concessionary places, 84 percent of unrecognized and 83 percent of recognized private unaided schools offer them. The total number of free seats given was 2,978 (1,731 in unrecognized and 1,247 in recognized private unaided schools), and the total number of concessionary places was 4,768 (2,992 in unrecognized and 1,776 in recognized private unaided schools).

Out of a total of 43,852 children attending the private unaided schools (i.e., all the schools, including those that don't offer free or concessionary places), 2,978 were given free seats and 4,768 had concessionary seats. That is, at least 6.8 percent had free places, and 10.9 percent had concessionary seats. Altogether, at least 17.7 percent of children in private unaided schools had free or concessionary places provided for them. Note that these figures do not include schools that did not report information, so the results should be taken as a low estimate of the actual number of free or concessionary seats.

Why do private unaided schools offer free or concessionary places? We asked a small number of school managers. Their reasons included such things as the following: "To keep the drop-out rate from increasing." "To help the poorest parents by providing education at the cheapest rates." "To uplift the standard of education by offering services to the poorest in the slum areas." "To help the poor[est] among the poor without any return from them." "To gain a good reputation for the school within the community."

The last answer illustrates that giving free or concessionary places may not only assist those in need but can also be a valuable way of raising the profile and reputation of the school in the community. That is also the case when "very bright" children are assisted. Assisting such children helps the school improve its reputation when exam results are published. Although free or reduced-fee seats may be provided for the purpose of boosting a school's reputation, clearly very poor families are helped as a result.

Figure 5.4
Hyderabad, India—Free and Concessionary Seats in Private Unaided Schools



Conclusions and Implications

Many observers have expressed concern that the mushrooming of private unaided schools in sub-Saharan Africa and South Asia may be undesirable. It is accepted by some commentators that private unaided schools are now widespread in low-income areas such as city slums and villages. But there are worries expressed about the quality of education that is provided in this low-cost sector, for if schools charge such low fees and pay teachers so little, how can they offer a high-quality education?

Concerns are also expressed about the inequity that private education for the poor brings, for as growing numbers of parents take their children from government schools, it is argued that only the poorest are left. This seems unfair to those who are left behind.

Through our detailed two-year research in low-income areas of Hyderabad, India; Ga, Ghana; Lagos State, Nigeria; and Nairobi, Kenya, we have found challenges to all of those assumptions.[63] The major findings of our research are summarized in the following sections.

The Majority of Poor Parents Choose Private Unaided Schools for Their Children

First, we have shown that the private sector is indeed huge, with a large majority of school children—around 65 percent or more—enrolled in private unaided schools. A large proportion of these are enrolled in unrecognized or unregistered private schools—in some cases the same proportion or more as are in government schools. Contrary to some expectations, roughly equal numbers of boys and girls attend private schools—it is not the case that parents send only or mainly their boys to them. The private unaided schools, moreover, have better pupil-teacher ratios, higher teacher commitment, and sometimes better facilities than government schools.

Higher Achievement Is Attained in Private Unaided than in Government Schools

Children in private unaided schools usually perform better in terms of raw scores than do children in government schools in three curriculum subjects, including mathematics and English. Moreover, private unaided schools achieve these results at between half and a quarter of the per pupil teacher cost. Although teachers are paid considerably less in private unaided schools, they are not any less satisfied than their government school counterparts.

Teacher Costs Are Significantly Less in Private Unaided Schools Than in Government Schools

The private unaided school advantage is achieved for considerably less expenditure on teachers—which is likely to make up the majority of recurrent in-school expenditures—than in government schools. In general, the average monthly teacher salary in a government school is between three and four times higher than in an unrecognized or unregistered private school. Despite this, teacher satisfaction with salaries is not lower in private than in government schools and, in many cases, is higher. Apart from teacher salary costs, government schools are supported by a hugely expensive state bureaucracy, which also needs to be taken into account in any comparison of school costs. These additional costs will either be minimal or nonexistent for private schools.

Gender Equity Is Maintained in Private Unaided School Enrollment

In general, roughly half of pupil enrollment in private unaided schools is female—although in the Indian case, because more pupils in

There was a significantly higher level of teaching going on in private unaided schools than in government schools.

The poor are subsidizing the poorest to attend private school.

school are female, boys are more likely to be found in private schools. However, in the African cases, gender equity in pupil enrollment is maintained.

School Enrollment Is Underestimated

Because many children are in unrecognized private schools that do not appear in government statistics, overall enrollment is much higher than official figures suggest. This means that "education for all" may be much easier to achieve than is currently believed. In Hyderabad, the 80,000 children in private unrecognized schools not counted in official statistics could bring the proportion of out-of-school children down from 16 percent to 6 percent or lower. In Lagos State, the existence of private unregistered schools would reduce the percentage of out-of-school children from 50 percent to 26 percent.

Free Primary Education Serves to Crowd Out Private Schools and Does Not Increase Overall Enrollment

In Kenya, we were able to observe the impact of free primary education on private school enrollment in the slums. Despite the fact that huge increases in enrollment have been noted in government schools by commentators, our research suggests that, at best, this additional enrollment is fictitious. Instead, children appear to have transferred from private to government schools. Given the advantages of private schools and problems found in government schools, this may not really be to their advantage.

Better Pupil-Teacher Ratios Prevail in Private Unaided than in Government Schools

Pupil-teacher ratios in unrecognized or unregistered private schools are usually about half those in government schools, although, in the case of Nairobi, they may be a third lower.

More Teaching Is Occurring in Private Than in Government Schools

In all cases, when researchers called unannounced on classrooms, there was a significantly higher level of teaching going on in private unaided schools than in government schools. In Hyderabad, the percentage of teachers teaching in private recognized schools was 98 percent, and 91 percent in private unrecognized schools, compared with only 75 percent in the government schools. In Ga, the parallel figures were 75 percent, 66 percent, and 57 percent.

The Poorest Children Are Given Free or Subsidized Seats in Private Schools

Notwithstanding the fact that private schools depend almost entirely on income from pupils to survive, many offer free or reduced-fee places to those most in need. In Hyderabad, we suggest that nearly one in five of all children in private unaided schools have free or concessionary seats provided for them: 7 percent have free places, and 11 percent have concessionary seats. The poor are subsidizing the poorest to attend private school.

Implications

None of these findings, of course, mean that nothing could be improved in the private sector serving the poor. First, access to private education could be extended even further by building on the initiatives already undertaken by the private schools themselves that offer free and reduced-fee seats to the poorest children. Such informal schemes could be extended and replicated by philanthropists and/or the state so that "pupil passports" or vouchers could be targeted at the poorest children (although there may be dangers of additional regulations that could stifle the growth of private schools if these were administered by the state). With these, many more of the poor could be empowered to attend private unaided schools.

Private school managers themselves realize that their school infrastructure and facilities can be improved, and many are active in creating private school federations or associations that link together school managers in self-help organizations. Such associations are actively pursuing management and teacher

training and curriculum development, as well as challenging the regulatory regimes imposed by government. They could be supported in their endeavors, perhaps through the creation of a global network of private schools and their associations that would conduct further research and disseminate information about the role of private schools for the poor to opinion leaders and policymakers. Such networks could reward innovation and excellence in the schools and mobilize additional resources to help with improvements.

As a parallel activity to our research in Nigeria and Hyderabad, the research teams have been active in mobilizing resources for the creation of two revolving loan funds to help private schools improve their facilities. Schools are borrowing up to $1,000 to build new classrooms, equip libraries and laboratories, and improve teacher training. Such loan funds could be extended and replicated to enable more children to access education in an even better, safer, and more educationally conducive environment. Other educational services could be offered to help private unaided schools improve and better serve their communities.

Rather than assume that the private unaided education sector is a problem, we should see it as a great strength. It is a dynamic demonstration of how the entrepreneurial talents of people in Africa and India can forcefully contribute to the improvement of education, even for the poor. Its existence and flourishing should be a cause for celebration.

Rather than assume that the private unaided education sector is a problem, we should see it as a great strength.

Notes

1. K. Watkins, *The Oxfam Education Report* (Oxford: Oxfam in Great Britain, 2000), pp. 229–30.

2. Y. Aggarwal, P*ublic and Private Partnership in Primary Education in India: A Study of Unrecognized Schools in Haryana* (New Delhi: National Institute of Educational Planning and Administration, 2000), p. 20. Unrecognized schools are in effect operating in the informal sector of the economy. They either have not applied for recognition or have not succeeded in gaining recognition from the government.

3. A. De, M. Majumdar, M. Samson, and C. Noronha, "Private Schools and Universal Elementary Education," in R. Govinda, ed., *India Education Report: A Profile of Basic Education* (Oxford and New Delhi: Oxford University Press, 2000), p. 148.

4. G. Nambissan, *Educational Deprivation and Primary School Provision: A Study of Providers in the City of Calcutta*, IDS Working Paper 187, Institute of Development Studies, University of Sussex, Brighton (2003), p. 52.

5. P. Rose, "Is the Non-State Education Sector Serving the Needs of the Poor? Evidence from East and Southern Africa," Paper prepared for DfID Seminar in preparation for 2004 World Development Report (2002), p. 6; and P. Rose, "From the Washington to the Post-Washington Consensus: The Influence of International Agendas on Education Policy and Practice in Malawi," *Globalisation, Societies and Education* 1, no. 1 (2003): 80.

6. A. Baurer, F. Brust, and J. Hybbert, "Entrepreneurship: A Case Study in African Enterprise Growth, Expanding Private Education in Kenya: Mary Okelo and Makini Schools," *Chazen Web Journal of International Business* (Columbia Business School), Fall 2002.

7. P. Bennell, *Teacher Motivation and Incentives in Sub-Saharan Africa and Asia*, Knowledge and Skills for Development, Brighton (2004), p. iv.

8. The Probe Team, *Public Report on Basic Education in India* (Oxford and New Delhi: Oxford University Press, 1999), p. 47.

9. Ibid, p. 63.

10. Ibid., p. 102.

11. Nambissan, note 4; The Probe Team, note 8; M. Kremer, K. Mularidharan, N. Chaudhury, J. Hammer, and H. Rogers, "Teacher Absence in India," *Journal of the European Economic Association* 3, nos. 2–3 (2005): 658–67; J. Habyarimana, J. Das, S. Dercon, and P. Krishnan, *Sense and Absence: Absenteeism and Learning in Zambian Schools* (Washington: World Bank, 2004); Aggarwal, note 2; K. Rana, A. Rafique, and A. Sengupta, *The Delivery of Primary Education: A Study in West Bengal* (TLM Books in association with the Pratichi Trust, Delhi, 2002).

12. C. C. Nwagwu, "The Environment of Crises in the Nigerian Education System," *Comparative Education* 33, no. 1 (1997).

13. G. Lassibille, J. Tan, and S. Sumra, "Expansion of Private Secondary Education: Experience and Prospects in Tanzania," *Impact Evaluation of Education Reforms*, Working Paper Series no. 12 (Washington, D.C.: World Bank, 1998), p. 38.

14. Nambissan, note 4; De et al., note 3, pp. 131–50.

15. D. Cox and E. Jimenez, "The Relative Effectiveness of Private and Public Schools: Evidence from Two Developing Countries," *Journal of Development Economics* 34 (1989): 99–121.

16. G. Lassibille and J. Tan, "Are Private Schools More Efficient Than Public Schools? Evidence from Tanzania," *Education Economics* 9, no. 2 (2001): 145–72.

17. Private unaided schools are entirely privately managed and privately funded and are of two types: recognized and unrecognized. Unrecognized schools are in effect operating in the informal sector of the economy. They either have not applied for recognition or have not succeeded in gaining recognition from the government. Private aided schools are privately managed but have teacher salaries paid by government. Government schools are totally funded and managed by some level of government.

18. G. Kingdon, "The Quality and Efficiency of Private and Public Education: A Case Study in Urban India," *Oxford Bulletin of Economics and Statistics* 5, no. 1 (1996).

19. P. Druaisamy and T. P. Subramanian, "Costs, Financing and Efficiency of Public and Private

Schools in Tamil Nadu," in J. B. G. Tilak, ed., *Financing Education in India: Current Issues and Changing Perspectives* (Delhi: Ravi Books, 2003).

20. R. Govinda and N. V. Varghese, *Quality of Primary Schooling in India: A Case Study of Madhya Pradesh* (Delhi: International Institute for Educational Planning, National Institute of Educational Planning and Administration, 1993), p. 265.

21. Watkins, note 1, p. 230.

22. Ibid.

23. United Nations, *Human Development Report 2003: Millennium Development Goals—A Compact among Nations to End Human Poverty* (New York: United Nations Development Program, 2003), p. 115.

24. Nambissan, note 4.

25. Ibid., p. 15, footnote 25.

26. Further research is ongoing in other parts of India and China, which will be reported in a future publication.

27. Watkins, note 1, Appendix 1.

28. In Kenya, we conducted our research in Kibera, the largest urban slum of Nairobi. James Shikwati, director of the Inter-Region Economic Network, Nairobi, was team leader. We also conducted parallel research in the slums of Mukuru and Kawangware in Nairobi, not reported here, which produced similar findings.

29. In Lagos State, the research team leader was Dr. Olanrewaju Olaniyan, of the Department of Economics at the University of Ibadan, Nigeria's premier university. Using official data, Dr. Olaniyan classified areas as "poor" or "nonpoor," with the former featuring overcrowded housing with poor drainage, poor sanitation and lack of potable water, and prone to occasional flooding. We report on our findings from only those "poor" areas. We separately looked at the urban shanty town of Makoko, in the Mainland local government area, where perhaps 50,000 people live, many residing in houses built on stilts sunk into the Lagos lagoon.

30. The three zones of Bandlaguda, Bhadurpura, and Charminar together have a population of about 800,000 (about 22 percent of Hyderabad's people) and cover an area of some 19 square miles. We included only schools that were found in "slums," as determined by the latest available census and Hyderabad municipal guides. These were areas that lacked amenities such as indoor plumbing, running water, electricity, and paved roads. The team leader was S. V. Gomathi, director of the Educare Trust. We are also conducting a parallel study in Mahboobnagar, one of the most impoverished rural areas in Andhra Pradesh. The results of this research will be reported in a future publication.

31. In Ghana, our research was conducted in association with the University of Cape Coast and Educational Assessment and Research Centre, Accra. Dr. Isaac Amuah was team leader. We chose to conduct our research in the Ga district, which surrounds the country's capital city of Accra and is classified by the Ghana Statistical Service as a low-income suburban and rural area. The Ghana Poverty Reduction Strategy Document (GA District Planning Coordinating Unit, 2004) suggests that about 70 percent of the population of 500,000 lives at or below the poverty line. Ga includes poor fishing villages along the coast, subsistence farms inland, as well as large dormitory towns for workers serving the industries and businesses of Accra itself; most of the district lacks basic social amenities such as potable water, sewerage systems, electricity, and paved roads.

32. See, for example, Kingdon, note 18.

33. Many church schools were nationalized in Ghana and Nigeria and operate now as government schools, but with some vestiges of private management under state regulations. These are rather like the Anglican and Catholic schools in the United Kingdom, funded by the state but managed by the church under state regulations.

34. Lagos State Government, Report from Lagos State to the Joint Consultative Committee on Educational Planning (JCCEP) Reference Committee on Educational Planning Holding at Owerri, Imo State, April 18–23, 2004, Ministry of Education, Alausa, Ikeja, p. 29.

35. The research team also found one private secondary school and one nursery school. These were not included in this survey.

36. Data were obtained from the Azim Premji Foundation Web site, Andhra Pradesh Programmes, www.indianngos.com/azimpremjifoundation/andhrapradesh.htm.

37. Lagos State Economic and Empowerment Development Strategy (LASEEDS), 2004, www.lagosstate.gov.ng/LASEEDS/LASEEDS%20DOCUMENT.pdf.

38. $1 = rupees 43.49.

39. $1 = cedis 9,050.

40. $1 = naira 136.75.

41. Note that the surveys were done in late 2003 and early 2004.

42. In Ghana, we combined the first two categories.

43. Free primary education was introduced in January 2003.

44. *The Nation* (Nairobi), November 23, 2004.

45. We intentionally excluded secondary and nursery school students for schools that enrolled these students as well.

46. Many owners of private schools still in operation reported to us that they were finding it increasingly difficult to cope with decreasing student numbers, and several thought that they would be forced out of business soon unless something drastic happened.

47. If there was an assembly or break period, the researcher waited until after these had finished.

48. Many private unregistered schools used wooden combined benches and desktops, which were not classified by the researchers as "desks."

49. Further studies are ongoing in Delhi, India; Mahboobnagar (rural Andhra Pradesh), India; and Gansu Province, China. Results of these studies will be reported later.

50. We grouped schools in each of the three management types into 21 size groups, with the aim of ensuring all school sizes were represented within the sample. In the India, Ghana, and Nigeria studies, we also aimed to restrict the number of children to be sampled in any one school to 30. If classes were larger than 30, the first 30 children (15 boys and 15 girls, or the maximum number of either gender if there were fewer than 15) on the register were selected for testing. Again, this was to avoid the sample being skewed toward pupils from larger schools. The Kenya case was unique in that we had only a small number of government schools, so we had to test larger numbers of children in the government schools to create a large enough sample.

51. Kingdon, note 18, footnote 8.

52. In India, tests in mathematics and English were adapted from standardized tests constructed by NIIT Ltd, Delhi, with advice from the State Council for Educational Research and Teaching (SCERT) in Hyderabad. In the African countries, we used mathematics and English tests developed for USAID by the Educational Assessment and Research Centre (EARC), Accra, Ghana. These tests were modified on the basis of discussions with focus groups brought together by the University of Cape Coast (Ghana), the University of Ibadan (Nigeria), and the Inter-Region Economic Network (Kenya). A third test was used in the African countries as follows: Ghana—a religious and moral education test developed by EARC; Nigeria—a test in social studies was prepared by educators at the University of Ibadan in conjunction with local teachers; and Kenya—a test in Kiswahili was prepared by the Inter-Region Economic Network with local teachers and university experts. All tests were pilot tested with about 80 children chosen equally from private unaided and government schools. The internal consistency reliability of each test was calculated using the Kuder-Richardson 20 (KR20) coefficient, which was high in all cases. In order to have a roughly normal distribution of results, a few questions were omitted, and the modified tests were again tested with approximately the same number of children in different schools and the reliability and distribution checked. None of the children who took part in the pilot testing participated in later tests.

53. This test had the advantage of being symbol- rather than language-based. All researchers participated in a one-day training period during which they were shown the correct procedure for administering the Raven's Test. To ensure that children understood how to take the test, researchers could provide instructions in whatever vernacular language suited the students in question. The first five questions of the test were designed to show whether or not students understood how to take the test. If they did, then they would get the first five questions correct. Researchers were instructed to check that these questions were correctly answered and, if not, to explain again to the children the method for taking the test using the first two questions as exemplars. Any IQ tests that did not have the first five questions correct were discarded in the analysis.

54. If there were additional children in the class who were not tested, they were usually moved to a separate classroom with the teacher.

55. The collected tests were marked by another group of student researchers and all data from tests and questionnaires entered into the Statistical Package for the Social Sciences by the team leaders once the research period had expired. The IQs were normed using Bombay norms published by Delhi psychologists (no African norms were available).

56. In Kenya, it was not possible to conduct this statistical procedure because of the way the government schools were sampled.

57. See, for example, Kingdon, note 18.

58. In the Kenya study, our analysis shows private schools outperforming government schools in all subjects.

59. Data on teacher salaries were obtained from the teacher questionnaires, which were administered to

one teacher in each of the sample schools in Hyderabad, Ga, and Lagos State. In the Nairobi sample, questionnaires were given to an average of about three teachers in each school.

60. These data were collected from one teacher in each of the survey schools.

61. Findings from the satisfaction surveys will be reported in full elsewhere.

62. Of the 109 private unaided schools taking part in our study, 99 school managers gave information about the number of free places, and 86 gave information about concessionary places.

63. Additional studies of other settings are under way or under analysis.

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