# Entrepreneurial Approaches to Education for the Poor

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#### Overview

The paper tries to capture the research and understanding along with innovations and policy reforms in assuring quality school education to all, with a particular focus on the poor. The scope is global but the problems and innovations in India get more weight in the document.

It begins with quantitative and qualitative narration of the two most fundamental problems in the education of the poor: Access and the quality. The problem of access is of 'can't afford;' and the problem of quality is 'not worth the time, particularly of the poor.' The access problem is further compounded along the gender, caste, and physical and mental disability lines. Even when the Millennium Development Goals of enrollments are met, the quality of overall learning achievements is poor across the developing world. The quality of state schools is particularly low.

Recent research documents the flight of the poor from state schools to 'budget' private schools. On the one hand, governments are incapable of improving state schools, largely due to the power of teacher unions, and on the other hand, their regulatory systems are stifling private initiatives, condemning most private schools to illegal/informal status where they are unable to access formal capital to expand. The continuing decline of the quality of the state education system has led, by default, to one of the highest levels of privatization of education in the developing world. The proportion of students in private schools in urban areas of many states in India is higher than that in any developed country.

Private 'edupreneurs' are serving as safety valve to the failing state education systems. In any efforts to assure quality education to the poor, their role must be understood and appreciated. The first three sections then deal with the problems of access and quality and the duality of private edupreneurs. The next two sections suggest possible solutions through the use of technology and recent local experiments in innovations and policy reforms. The last section considers the particular challenge of introducing entrepreneurship education within the school life of students, an issue especially relevant for the poor in the developing world.

It is hard to escape the conclusion that the role of the government in education is to liberate the supply side, fund the demand of the poor, and monitor the access and quality of education. Let the private initiative and entrepreneurship—for profit and non-profit—govern our schools. Scholarships, education vouchers, and loans would offer the same freedom of choice to the poor as the rich enjoy today. An unshackled and competitive market for education would prepare students to lead a productive and meaningful life.

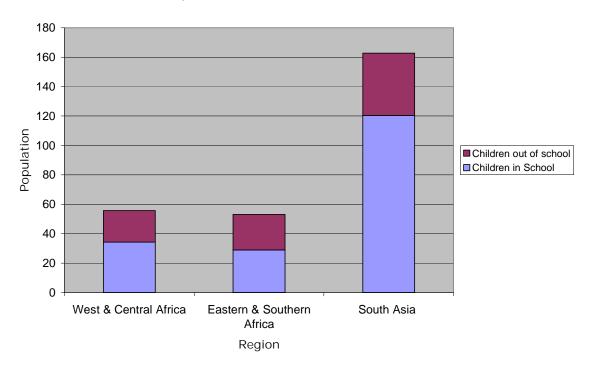
#### Section 1

## Access to Education

Access to education continues to be a problem in many parts of the developing world. Girls are especially lagging behind in this regard, with gender disparity being greatest in the Middle East, North Africa and South Asia. International organizations and governments are channeling considerable amounts of resources towards the cause, however many poor are opting out of government schools because of inferior quality. The role of private schools in improving access to education for the poor is scarcely appreciated by governments and donor agencies.

### Section 1 (a): The Numbers' Game

Around the world about 115 million children are out of school. One out of every two, three, and four primary-level child is out of school in West & Central Africa, Eastern & Southern Africa, and South Asia, respectively. In Latin America and Caribbean 5% of primary level children are out of school. The same is true of Sri Lanka and Maldives. Globally more than one in 10 children is completely excluded from education. And if the current trends continue every second child in Burkina Faso, the Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Mali, Sierra Leone and Somalia will grow up without any education (UNESCO 2005a).



Graph 1: Children Out of School (Millions)

UNICEF and Government of India claim that 29.9 million (2001-02) and 23 million (2003) children of schooling going age are out of school, more than 20 percent of the cohorts. However, the NGO Pratham (2005) found that in rural India 6.6% of primary-school-age children are out of school. According to another study, by Social and Rural Research Institute (2005), the all India figure is less than 7%.

Interestingly both the Pratham and SRI study rely on household survey, while the other reports are based on school survey. Hence one plausible explanation of the discrepancy is that UNICEF and Government of India exclude the private unrecognized schools in their studies. A substantial portion of the children that the government claims are out of school may in reality be in private unrecognized schools. Tooley and Dixon (2005)

found that in Hyderabad (India) there is roughly the same number of children in unrecognized private schools as there is in government schools. Private unrecognized schools are playing a significant role even in other countries like Ghana, Kenya and Nigeria.

Moreover, some government schools in India have been found guilty of jacking up enrollment figures so that the schools retain government funding and teachers are not transferred. In Maharashtra, education inspectors found that there were more than 1.2 million 'ghost children', amounting over 17% of the total number of students in schools. The schools had kept the names of people who had died, some who were married and had children themselves. "This means that in 2005-2006 alone the state squandered over Rs 7.25 billion on elementary schooling of children who never existed" (OneWorld South Asia 2006).

If the enrollment numbers in state schools are artificially inflated and less than 7% of the primary-level children are out of school, then the actual scale of private education must be even higher than what most studies stipulate.

Section 1 (b): The Private and Public Cost of School Education

According to a study by UNESCO (2005a) a large portion of children who left school in Nepal (42.4%), Bangladesh (69.9%), Uganda (49.7%), and Zambia (53.3%) was because of the 'lack of money for school expenses', 'need to earn money' or the 'need to work at home'. Thus both direct and indirect costs of education are often unsustainable for the poor.

Thus the introduction of free primary education has been an important political agenda in many states of Africa: Kenya, Malawi, Uganda, Tanzania and Zambia have abolished at the least all tuition fees. However the sudden increases in enrollments have impacted quality severely. In Kenya enrollment increased by 1.3 million in one year. Uganda abolished fees in 1996, and three years later Bundibugyo district had 209 pupils for every classroom. In 2005, it had three students per textbook (The Economist 2006a).

However, the free government education is not entirely free. In Kerala, for example, the cost borne by parents in educating a child in a government school is about US\$13 per annum at the primary level (Nair 2004). Dmiri and Sharma (2006) found that in Sanjay Colony, Delhi, students who were in government schools had to spend more on private tuition fees compared to students in private schools, due to inferior quality of education in the former. Household expenditures on education in countries where education is officially 'free' are considerable. The share of households in the primary and secondary education expenditures is 42% in Jamaica, 33% in Philippines, 30% in Chile, 24% in Indonesia, and 21% in Colombia (UNESCO 2005c).

The Government of India spends close to 4% of the GDP on school and college education. The data on per child expenditure however are difficult to find. Cursory surveys suggest that in Mumbai, Delhi, and Chandigarh, each child in primary school costs the government about Rs. 5000 (US\$110) annually (Banerji 2000; Veetil 2005; Jayaram 2005). The government spends about Rs. 9000 per child in upper primary, and Rs. 11,000 per child in New Delhi Municipal Council schools which cater to all classes from I to XII (Veetil 2005). The per student expenditure at the secondary level in Chandigarh is above Rs. 14,000 (Jayaram 2005).

The resources allocated per student in government schools may be far more than these figures indicate, for two reasons. One, as mentioned before, schools at times inflate the number of children enrolled. Two, government schools have a high level of student absenteeism. If both these factors are taken into account, the actual expenditure on every government student may be 1.5 to 2 times greater than the above figures.

Though the cost that parents bear is indeed an important factor, pumping more money in government education would not necessarily improve the provision of education. Research shows that some of poorest parents, from Lagos (Nigeria) to Hyderabad (India), in the world choose to send their children in private schools because of the inferior quality of education in government schools (Tooley and Dixon 2005).

"In Rafiq Nagar (Mumbai), 17 percent of the children of primary school age go to schools other than municipal schools. In this locality the average monthly household expenditure is around Rs. 2,000. One unusual and rather innovative family sent their son to municipal school in the morning – so that he could get the mid-morning snack and the free textbooks – and a neighborhood private school in the afternoon" (Banerji 2000). Children aged 10 – 12 sort out garbage to earn money just enough to watch a movie, primarily because "the prospect of going to school, sitting in a crowded room and listening to a boring teacher does not appeal them.... a large part of the blame for so many Indian children being out of school rests on the school system rather than on family poverty" (Banerji 2000).

There has been a rapid expansion of private schools in many poor localities. Gurucharan Das (2006a) points out that even Holland, which has always believed in giving choice of private and public schools to its children as a matter of state policy, has got a private school share of 68%. This Dutch level has already been exceeded in six states of India. Whereas in Chile and Holland the government pays parents to send their children to private schools, it has happened spontaneously in India because government schools have poor quality and do not offer English medium education.

### Section 1 (c): Gender Dimensions

Though the importance of female education in itself and towards the achievement of developmental goals is well understood, globally 61.6 million girls of primary school going age are out of school, accounting for 53% of total children out of school. The greatest gender disparity in education is found in Middle-East and North Africa followed by South Asia. Of the 80 countries surveyed by UNESCO (2005b) only 16 have more boys that are out of school than girls.

In India, at the primary stage, the Gross Enrollment Rate for girls is 74, compared to 80 for boys (Government of India 2002). The Gender Parity Index (GPI) for elementary education was 0.89 in 2005 compared to 0.87 in 2003. There is also considerable gap in GPI in government and private schools at 0.91 and 0.71 respectively (Mehta 2006). The variety of incentive schemes runs by the government to encourage participation of girls are at least partially responsible for higher GPI in government schools. If private unrecognized schools are also included in the study, the gap in GPI between private and government schools is likely to reduce, as their proximity to residence allows greater opportunity for female students.

According to UNESCO (2005b), domestic responsibility, social norms that discourage female autonomy, unfavorable school environments, direct costs of education, lack of female teachers and lack of gender-awareness of teachers are some of the primary reasons for reduced female participation in education. There are also instances of violence against girls in and on the way to school. Action Aid International (2004) states that in South Africa "girls face the threat of multiple forms of violence at school... (including) rape, sexual abuse, and sexualized touching or emotional abuse in the form of threats of violence... highly sexualized verbal degradation in the school environment".

Female participation in education is further reduced in conflict zones. According to the UNICEF (2006) only one in 10 refugee girls of school age attends school.

#### Section 2

# Quality of Education

I have never let my schooling interfere with my education.

Mark Twain

The separation between access and quality is to a great degree artificial, and serves to reduce quality to a secondary level. After all how we can say a child has access to education, if in the five primary years, she does not learn to even read and write her own name.

Student performance in government schools in many developing countries is very poor. Teacher absenteeism and poor teaching are important reasons for low attainment of students. A revamping of recruitment and remuneration process of teachers is necessary to improve the plight of students.

The two approaches to judge quality often conflict: the inputs approach and the outcomes approach. The inputs—physical infrastructure, teacher qualifications, hours of schooling—are easy to measure and so have been the primary focus of the discourse on quality. The learning outcomes in terms of the mastery of the curriculum or of skills and competencies to lead a productive and purposive life should actually be at the center stage. However, the physical infrastructure in many developing nations is in dismal state, and even basic facilities like sanitation and drinking water are not available in schools. Some schools do not even have a building.

Lastly, state dictated course content is often irrelevant to the life experiences and livelihood opportunities of the poor. As education fails to serve its purpose, frustration among students leads them to drop out of the system.

### Section 2 (a): Quality: In the Eye of the Beholder?

The quality of education, though critical in many respects, is discussed in few international declarations on education (including the Millennium Development Goals). With millions of children out of school, their focus is usually on access. However, the issue of access and quality are not as distinct as often thought. Poor quality of education is an important reason for reduced access in many parts of the world.

The inputs view of quality focuses on educational infrastructure and study materials and teacher qualifications. In many parts of the developing world education infrastructure is either non-existent or in a deplorable state. In the SACMEQ (Southern and Eastern African Consortium for Monitoring Educational Quality) studies the average child was in a school with 8.7 of the 22 desirable school resource items. In Malawi the figure was as low as 4.3. On an average 10% of the pupils lacked a place to sit, with the figure being 45% in Zanzibar" (UNESCO 2005c).

A survey on infrastructure in elementary schools in India, about 10% of government schools in India have only one class room. And 90% of these single classroom schools are in rural areas (The Hindu 2006a). In Delhi a 100,000 children are in schools with no drinking water, 160,000 in schools with no electricity, and 175,000 in schools with no toilets. The government has also failed to devise strategies to extend educational facilities to children with special needs (Times of India 2006).

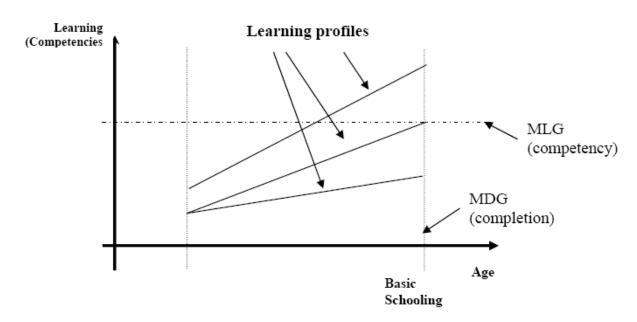
Private schools also tend to have poor infrastructure due to financial constraints. Overall there seems to be little difference in the composite infrastructural index between private and public schools (Kremer et al. 2006).

#### Section 2 (b): Student Performance

Government schooling system has been an abysmal failure if judged by the student achievement in some basic skills like reading and writing. According to Pratham's (2005) study on learning achievements of students of class IV in India, 65% of government schools students did not get minimum pass marks. In Mumbai, 25% of all children in third and fourth standard cannot recognize letters and 35% cannot recognize basic numbers (MIT Poverty Action Lab 2006).

According to Filmer, Hasan, and Pritchett (2006) "even in countries meeting the MDG of primary completion, the majority of youth are not reaching even minimal competency levels, let alone the competencies demanded in a globalized environment." Mexico has reached the MDG—but 50 percent of youth are not minimally competent in math and 91 percent do not reach a global standard. In Andhra Pradesh (India) 88% of  $3^{rd}$  to  $5^{th}$  standards could not do single digit subtraction. In Indonesia, where primary completion is nearly universal 47% of 15-19 year olds could not answer the question "56/84 = ..." correctly. There is a wide gap in educational quality amongst children in OECD and

developing countries. The average mathematics score among students in Brazil was equal to the lowest scoring 2 percent of Danish students. The average science score among students in Peru was equivalent to that of the lowest scoring 5 percent of US students. International organizations and governments in marching towards the MDG are leaving behind the students themselves!



Graph 1: Millennium Learning Goals vs Millennium Development Goals

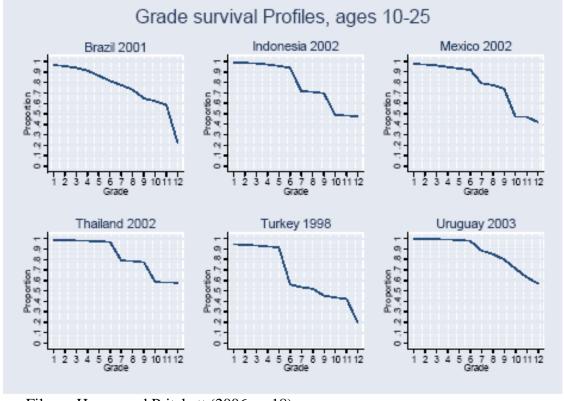
Source: Filmer, Hasan, and Pritchett (2006, p. 5)

Filmer et al (2006) argue a case for Millennium Learning Goals instead of Millennium development Goals. As illustrated by the above graph, even those students who may complete minimum stipulated years of education often do not acquire minimum competencies. This is because their learning curves are not steep enough.

Also, those who enroll do not stay in school for long. The national dropout rates in India are considerably high. Our of every 100 who enroll, about 70 dropout by class 8 and only around 5 enter the higher education stage (Raina 2006). Planning Commission reports the rate is even higher amongst Muslims, where 90% of them drop out by the time they reach high school. The report also dismisses the assumption that a vast majority of Muslim children study in Madrasas, stating the figure to be only 1-3% (Choudhury 2006).

Moreover, a number of children repeat classes. Government of India (2005) Analytical report on Elementary Education defines efficiency as the number of years necessary to graduate a particular stage as a proportion of number of years actually taken by the pupil. The all India coefficient of efficiency was found to be 87.8%. Bihar (48.8%) and Rajasthan (59.5%) had far lower coefficients of efficiency. Thus in Bihar students took

twice the prescribed time to complete elementary education. In Senegal 14% of the primary school pupils repeat grades. Chad, Comoros, Gabon, Madagascar, and Rwanda have more than a quarter of the pupils repeating classes (UNESCO 2005c).



Graph 2: Grade survival Profiles

Source: Filmer, Hasan, and Pritchett (2006, p. 18)

Section 2 (c): Quality of Teachers: What Relation to Learning Outcomes?

Parents have for many years felt that good teachers are important for the education of their children, however the degree to which teachers influence learning outcomes is not well established. A 1966 publication of Government of United States of America titled *Equality of Educational Opportunity* concluded that quality of teacher has little impact on student performance, and that wealth, health and family background were far more important factors. However recent research by economists like Steven Rivkin, Eric Hanushek, and John Kain "shows that high quality instruction throughout primary school could substantially offset disadvantages associated with low socio-economic background" (Gryphon 2006).

UNESCO (2005c) highlights the lack of 'qualified' teachers in government schools of developing countries. In Tunisia only 14% of teachers at the primary level have tertiary education and less that 10% of the teaching force meets even the low minimum standard of lower secondary in Benin or Burkina Faso. Countries like Angola, Chad and

Namibia fall short of standards set at the upper secondary level. In Botswana, Kenya and Zambia almost the entire teaching force reaches the upper secondary standard. In Brazil the distribution of trained teachers is highly inappropriate as parts of the country with large proportion of first generation learners have the least proportion of qualified teachers.

Discussions on teacher qualification often assume that they would be reflected in the classroom performance. Such an assumption is fallacious for a variety of reasons. First, there is little evidence to suggest that a tertiary level degree is related to improved teacher performance in the class. "The specific attributes traditionally thought to be associated with teacher quality turn out to be poor predictors of teaching success" (Gryphon 2006). Second, teaching requires certain skills which are unascertained by these degrees, and recruitments based on the degrees lead to a situation of adverse selection for government schools. Third, "there is ample research evidence to indicate that teachers and students who share a common primary language, cultural understanding and experiences may be better able to develop interactive subjectivity necessary for effective mediation" (Pandey 2006). Fourth, in many developing nations teacher absenteeism is severe. In India it was found that more 'qualified' (degree or experience) teachers are more likely to be absent (Kremer et al. 2006).

A World Bank study found that 45% of teachers in Ethiopia had been absent at least one day in a week, with the figures in Uganda and Zambia being 26% and 17% respectively. 25% of teachers at India's government primary schools are absent from work on any given day, and only 50% of those in school are engaged in teaching activity. The figures of teacher absenteeism in Peru, Ecuador, and Uganda are 11%, 14% and 27% respectively (UNESCO 2005c). In India only 1 in 3000 head teachers has ever fired a teacher (Kremer et al. 2006).

Some argue that salaries should be increased to encourage teachers to improve their performance. The National Education Association (USA) advocates a minimum starting salary of US\$40,000 for its members to help attract and retain good teachers. The argument however does not stand the test of reason. UNESCO states that "teachers earning are often insufficient to provide for reasonable standard of living" (UNESCO 2005c).

In fact raising overall salaries may have the opposite effect in "a poorly screened system, in which applicants are chosen without regard to ability, the most capable candidate is no more likely to be hired than any other applicant" (Gryphon 2006). In fact excess increases in pay, by creating a gulf between private and public remuneration, would make teaching posts primary means of doling out political patronage. According to a study by Kingdon (2006) "there is no significant payperformance relationship in unionised schools".

It is necessary to reform the structure of compensation in government schools. In India salaries of permanent government teachers are well above the market rate, and hence there is an unproductive burden on education expenditures. Public school teachers earn over seven times and about three times as much as a teacher in private unrecognized and private recognized school, respectively (Pritchett and Murgai 2006). 'High salaries with zero accountability' for teachers of government schools is a principal reason for poor quality of education.

"Teachers in India are strikingly well-paid and they are strikingly badly paid. That is, the level of average compensation of teachers is very high, but at the same time every element of the system of compensation seems almost designed to eliminate any element of accountability—so teacher pay is extraordinarily badly structured to produce desirable educational results." (Pritchett and Murgai 2006)

Teacher salaries account 89% of the expenditure on primary education in developing countries (Kingdon 2006), and often union dictated teacher salaries prove to be a deterrent to education progress in these regions. In the Russian Federation and South East Asia, cuts in government expenditure on education during economic downturn drought about a reduction reduced construction of school and study material for students; there was no change in teacher salaries (UNESCO 2001).

Moreover, since teacher salaries are high, the governments are unable to hire more teachers. In Bihar over "27% of schools ... have a single teacher handling over a 100 students" (The Hindu 2006a). Rural private school teacher salaries are about 1/5<sup>th</sup> of their government counterparts which allows them to have a lower teacher-pupil ratio (Kremer et al. 2006). Though class sizes are much higher in government schools, the average cost per student is more than double compared to a private school (Pritchett and Murgai 2006).

The 'Balsakhi' program implemented in India by Pratham hired trainers who did not meet government qualifications to become teachers at low salaries to train those students in classes III and IV, who had not attained the basic skills of class I and II. "In Mumbai it raised the chances of fourth-year pupils grasping first-year maths by 11.9 percentage points. It improved their chances of mastering second-year literacy by 9.9 percentage points" (The Economist 2006a). There was significant improvement in the performance of the targeted children, that too at a cost of merely US \$2.25 per child per annum" (MIT Poverty Action Lab 2006).

UNICEF guided an interesting project called Mobile Women Teacher Training Program in Pakistan, to train village girls who were class 8 pass, to create a pool of trained teachers. About 3,300 girls in remote rural areas of Balochistan (Pakistan) have been

trained (UNESCO 2005c). The program was able to create a pool of capable teachers at a very low cost.

#### Women Teachers and Girl Education

With significant gender disparity in educational attainment in the world, the role of women teachers is of great importance. According to a report by UNICEF (2006), parents feel more comfortable sending their girls to schools with at least one women teacher, and mothers feel more comfortable discussing the progress of their child with them. They also serve as role models for girls, and children grow up more sensitive to gender issues if there are both male and female teachers teaching together.

The issue has been understood by the governments in South Asia, where there is significant gender disparity. During 1980s and 1990s, they all have empathized increasing of number of women teachers in their policy documents (Nepal Education Regulation; National Education Policy of Pakistan; New Education Policy, Government of India). However, in 1998 only about  $1/3^{rd}$  of the teachers in India and Nepal were females. There are far fewer women teachers in rural as compared to urban areas. In rural areas of Nepal only 18% of teachers are females, compared to 51% in urban areas (UNESCO 2005c). "As many as 33% of schools that impart elementary education did not have female teachers despite that fact that Operation Blackboard has a provision for a large number of female teachers" (The Hindu 2006a).

### Section 2 (d): Relevance of School Curricula

The importance of the school curriculum lies in its customization to particular needs of students and communities. Children who come from fishing, farming or tribal communities find the course content to be alien to their ways of life. Acharya (2006) speaks of a girl from a fishing community: "If she ventured to speak about the fish, about the typhoon, about their life when the fish is scarce, the teacher response was: 'you are only fit to break fish heads'. Her knowledge and questions were not considered important". Such children eventually drop out of the system.

The official curricula are based on the assumption that each child would enter higher education, however "of a hundred children admitted to class one, one could safely assume that seventy would not pursue even secondary education" (Raina 2006).

The Report of the Working Group on Adolescents of the Planning Commission (2006) makes a poignant commentary on school education:

"As a result of an irrelevant and poorly designed curriculum, a large proportion of children drop out before they complete elementary school.

Most children who drop out are from disadvantaged families and failure in school draws them deeper into the "nexus of disadvantage"... The present curriculum continues to load students with the 'burden of non-comprehension', and expects them only to passively receive and regurgitate information... The curriculum is far removed from the realities and complexities of life of most children, and compels them to uncritically accept inane facts as 'valuable' knowledge. Adolescents, who are being shaped by nature to critically challenge accepted views, tend to easily reject such schooling, both in terms of its 'irrelevant' content and its pedantic teaching methodology. There is nothing in the school curriculum that deals with the life-skills for adolescents that can help to empower them, and there are no links at all with the world of work."

In some states, like Maharashtra, government education system has also been damaged by linguistic chauvinists. Government schools in most states are required to use the local language as the medium of instruction, often with the injunction that English should be taught as a second language only after the primary level. An education department study in Maharastra found that almost "300,000 Marathi medium students in class V did not know how to write a simple line in English" (Chatterjee 2006). The Marathi schools did not have English as a language despite the fact that majority of the parents want their children to learn English.

#### Section 3

## The Role of Edupreneurs

Let the subsidy be made available to parents regardless where they send their children--provided only that it be to schools that satisfy specified minimum standards--and a wide variety of schools will spring up to meet the demand. Parents could express their views about schools directly, by withdrawing their children from one school and sending them to another, to a much greater extent than is now possible.

Milton Friedman (2004)

Private education is serving the poor in many parts of the developing world, and hence contributing towards the achievement of the Millennium Developmental Goals. However, these entrepreneurs face stiff regulations in most nations and are often deprived of recognition by the government on grounds of lack of required level of infrastructure. It is absurd that those who live in congested slums with little sanitation or drinking water facilities should be discouraged from educating themselves in schools, which do not have large enough playing fields or libraries with certain minimum number of books. Despite such rigidities imposed by regulations and lack of capital, edupreneurs are playing a critical role in educating the poor around the world.

Section 3 (a): Private Schools for the Rich and the Poor

Some believe that the private sector has little to contribute to the achievement of MDGs because it would tend to exclude the poor. However, research illustrates that such a conception is completely unfounded. In some of the poorest parts of the world, ranging from Nigeria (Lagos), India (UP, Delhi, Haryana, Hyderabad), Kenya, Ghana and China, private schools are playing a significant role in educating the poor (Tooley and Dixon 2005; Bhargav 2005).

The Oxfam Education Report says '...the notion that private schools are serving 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'. (Tooley and Dixon 2005). The mean monthly fee in Hyderabad (India) in recognized private unaided schools is Rs. 95.60 per month, compared to Rs. 68.32 per month in the unrecognized schools. At 4th grade, the same figures are Rs. 102.55 and Rs. 78.17 respectively.

Bhargav (2005) found that private unrecognized schools in Sangam Vihar (Delhi) cater to students whose parental income is in the range Rs. 2000-5000. The parents are largely daily wage laborers such as masons, factory workers, domestic helpers and rickshaw drivers. The average monthly fee ranges from Rs.70 to Rs.120 for Nursery, with an increment of about Rs.10 per class. These schools also provide uniforms and other study materials at market prices, which is useful to parents who often lack time or necessary knowledge to procure such materials themselves.

Moreover, though many of these schools run on commercial principles, they offer concessionary seats to exceptionally bright students or those in financial need. This also helps them improve their image in the immediate community. In Hyderabad, out "of a total of 43,852 children attending the private unaided schools, 2,978 were given free seats and 4,768 had concessionary seats" (Tooley and Dixon 2005).

Interestingly Kerala (India), where the Left parties have strong presence, provides an interesting perspective on the role private entrepreneurs in education. Kerala has the highest proportion of private primary schools (60% in rural areas) in the country. Many of these are aided by the government, which allows citizens to choose equally between private and state schools. The government provides the highest number of scholarships and transport subsidies that enlarge school choice. Moreover the competition for the soul has compelled the Christians, Hindus, and Muslims to run schools. So it not so much the Left politics, but the private management and competition that has given Kerala the highest literacy rate in India (Shah 2000).

In South Africa, though the government spends "over 20% of national budget on education, the old government schools attended by the vast majority of black is letting them down." As a result a number of modest fee charging private schools have come up, and proportion of blacks in private schools has risen from 36% in 1990 to almost 60% in 2006. The "majority of the black state schools still perform badly, despite lots of

government spending on everything from classrooms to textbooks. The hardest part is to improve the quality of teachers..." (The Economist 2006b).

## Section 3 (b): The Extent of Private Schooling

Though the private sector is playing an important role in education, it is not reflected in government surveys, which are completely oblivious to the existence of private unrecognized schools. In fact in Delhi, the Directorate of Education considers them to be mere coaching centers and not schools.

Data from Social and Rural Research Institute (2005) household survey reveals that in six major Indian states the share attending private schools is more than the share of private schooling in Netherlands (68%), only in two states (Assam and West Bengal) is the share of private schooling less than in Chile – a country that privatized schooling in 1981 (Pritchett and Murgai 2006).

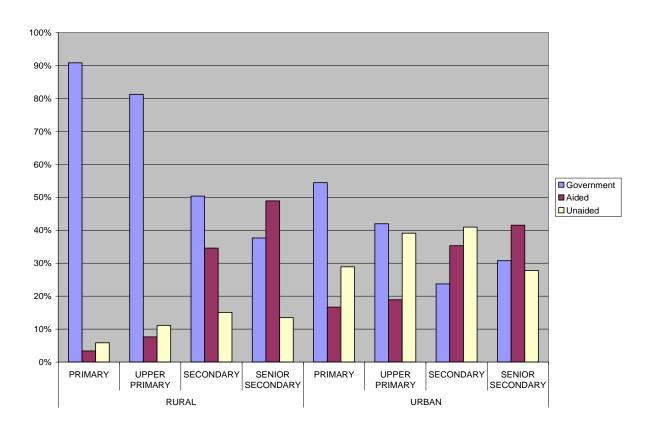
Tooley and Dixon (2005) found that in Hyderabad over 3/4ths of the children were in private schools; and that "there are roughly the same number of children in unrecognized private schools as there are in government schools." Similarly in Ga (Ghana) and Lagos (Nigeria) over 15% and 33% of the students were found to be enrolled in private unrecognized schools. According to the National Institute of Educational Planning and Administration 2/3rds of children in urban regions of the three largest states of India (Maharashtra, Uttar Pradesh, and Tamil Nadu) are in private schools (Das 2006b).

Table 2: Management-wise break-up in areas studied by Tooley (2005)

|  | Hyderabad, India |        | Ga, Ghana |        | Lagos State,<br>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<br>unrecognised/<br>unregistered | 60,533           | 23.1%  | 24,738    | 15.3%  | 577,024                            | 33%  |
| Private unaided<br>recognised/<br>registered     | 108,727          | 41.5%  | 79,132    | 49.1%  | 737,599                            | 42%  |
| Total  | 262,075          | 100.0% | 161,244   | 100.0% | 1,766,421                          | 100% |

Also, private schools seem to have been growing at a fast pace in recent years, Kremer and others (2006) in their study on public and private schools in rural India found that nearly 50% private schools in the sample were established five or fewer years before the survey, and nearly 40% of private school enrollment is in these schools. Indians are finding solutions to their problems without waiting for the state. Traditional thinking in

their top down approach regard the poor as victims and even a part of the problem, but in reality they are actively finding solutions for themselves. There is entrepreneurial creativity amid poverty, and they are providing quality education with minimal resources (The Economist 2004).



Graph 3: Management-wise break-up of Enrollment in Schools

Source: Seventh All India Education Survey

# Section 3 (c): Attitudinal and Regulatory Hurdles

Despite the vital role of private unrecognized schools in educating the poor, they are under constant threat of the state. In Andhra Pradesh the state government upon realizing the existence of over 10,000 private unrecognized schools, has order them to seek recognition or face punitive action as per the Andhra Pradesh Education Act. The government claims that these institutions lack infrastructure and basic facilities, and its main concern is the safety of the students. Under the guise safety, the government is attempting to negate the choice of the tens of thousands of parents who have opted for these schools because of the superior quality as compared to government schools (Reddy 2005).

In 2003 the Haryana Government decided that the private unrecognized schools should register with the government within a year, and then the government would consider

these institutions for permanent recognition. The government wishes to safeguard the service conditions of the employees as per the Haryana School Education Rules (The Tribune 2003). In Punjab and Tamil Nadu the government has shut down a number of private unrecognized schools (The Hindu 2004). The Karnataka Government did not allow the student in private unrecognized schools to take the class X board examinations in 2005 (Seshagiri 2005). In many states there are number of bureaucratic procedures to transfer a child from an unrecognized to a recognized school.

The private schools are even criticized for having provided the affluent an opportunity to leave state schools, and hence reduce the political pressure on government schools to perform. Perception of private schools in education is similar to perception of Wall Mart in poverty alleviation. Although Wall Mart single handedly bring out 38,000 people out of poverty in China each month, few think that Wall Mart has done more for the poor that the Government of People Republic of China or the World Bank (Strong 2006).

## Stifling Regulatory Systems

#### A. Essentiality Certificate: The License

The essentiality certificate is stipulated to avoid proliferation of schools, which could make the existing schools redundant. The government ostensibly assesses the need of the new school over the next 10 years and accordingly frames the number of essentiality certificates to be granted to various districts. This system effectively amounts to the license-permit raj once prevalent in Indian industry.

#### B. Recognition

The tedious process of government recognition of the school often requires payment of large bribes, and many schools serving the poor are simply unable to get recognition despite having the met the requirements. Primary schools in Delhi need to meet the following criteria for receiving recognition from the Municipal Corporation of Delhi (Shah and Mandava 2005).

- 1. Total land area of the school must be 1800 sq. ft.
- 2. There must be a playground on 720 sq. ft. of open, non-constructed area.
- 3. The school must have Classes 1 and 2, each with two sections, and at least one more section another class
- 4. Each section must have at least 25 students
- 5. Maximum number of students allowed per section for:
  - a. Classes 1 and 2: 53 students
  - b. Classes 3, 4 and 5: 56 students
- 6. The total number of classrooms should be equal to the total number of sections in the school with space left for additional three rooms for the Head Master, staff-room and a library of at least 1000 books
- 7. Each classroom must be 150 sq. ft. in area.
- 8. The school has to follow the books prescribed by the National Council for Educational Research and Training (NCERT).

Schools are refused recognition on the grounds of lack of a playground for the children. "There is no scope for expansion as the school is already sandwiched between rows of galis (lanes) with brick houses" (Bhargav 2005). The recognition seems to depend upon the amount you are willing to pay as bribe, and not on meeting the conditions specified under law.

One of the biggest problems of unrecognized schools is that their students are not allowed to appear in the class X and XII board examinations. These schools then tie-up with some recognized school to mitigate this problem. So, for instance, the students studying in unrecognized school A, which has classes I-VIII will be absorbed in class IX by school B which is recognized.

#### Labor Laws:

- (i) Salaries: According to the Delhi Education Act "the scales of pay and allowances, medical facilities, pension, gratuity, provident fund and other prescribed benefits of the employees of a recognized private school shall not be less than those of the employees of the corresponding status in school run by the appropriate authority." The low fees of unrecognized schools make them incapable of paying the prescribed compensation.
- (ii) Hiring and Firing Policy: The Delhi Education Act prescribes that no employee of a recognized private school shall be dismissed, removed or reduced in rank, nor shall his service be otherwise terminated except with the prior approval of the Director of Education, Delhi.

### C. Education is Not to be a Commercial Activity

The schools are to be "run as a community service and not as a business, and that commercialization does not take place in the school in any shape whatsoever" (CBSE Bye-Laws). The Supreme Court in 1993, overruling the Andhra High Court, dismissed the possibility of profit making education institutions (Dixon and Tooley 2003). The Unnikrishnan Judgment of the Supreme Court states: "Education has never been commerce in this country. Making it one is opposed to the ethos, tradition and sensibilities of this nation. The argument to the contrary has an unholy ring to it... (Imparting of education) has been treated as a religious duty. It has been treated as a charitable activity. But never as trade or business."

Due to various regulations, lack of recognition of the school, and because these schools are sometimes built on "illegal" land, the private schools are unlikely to have access to formal credit markets.

#### Section 4

# Technology for Educating the Poor

Government provision of education has meant that over the past century innovation in this sector has been stifled. Hawkins says "if you were to compare the classroom of a hundred years ago with an average classroom today, you would recognize it immediately: students lined up in rows, paper and pencil in hand; a teacher at the blackboard jotting down important facts; students furiously copying all that is written and said, expecting to memorize the facts and spit them out on an exam."

If private initiatives are allowed and encouraged, the potential is unlimited for classroom innovations. Distance education through satellite, television or radio has cost advantage over classroom education. The Hole-in-the-Wall project uses minimally invasive techniques of learning and has demonstrated exciting learning outcomes at low costs.

#### Section 4 (a): Distance Education

Distance education through radio and television has been used in many nations, especially developing countries in their mass literacy campaigns. One of the most famous programs in the history of distance education is *Sesame Street*, produced by Children's Television Workshop in New York. A Hindi adaptation of *Sesame Street*, named 'Galli Sim Sim' has been launched in India (Indiantelevision.com 2006).

Canada employed distance education because of its thinly dispersed population over large landscape. Similar is the situation in many rural areas of the developing world. Some of the findings from the Canadian experience are of relevance to developing nations. First, "students could pace themselves and move the materials more quickly if they so choose" (Cavanaugh 2004). Poor students come from diverse background, some may be earlier drop outs, first generation learners; hence such flexibility may be of great use in educating them. Second, students "reported that they could complete their school work in about three hours per day compared to the five and half hours in a class room setting" (Cavanaugh 2004). Opportunity cost of education is an important issue in for the poor, and any reduction in time necessary for learning may increase student participation. Third, over 90% people surveyed were generally or very satisfied with the quality of education. Quality of education is an important issue in developing countries, and improving teacher performance in class has been a major challenge. Distance education is an alternative, where quality depends on the content and design, rather than thousands of teachers in government schools.

Distance education program can have a cost advantage as compared to classroom education because it strikes at the largest expense in classroom education, i.e. teachers' salaries which account upto 80 percent of the cost. However, content development is considerably more expensive in distance education (Potashnik and Capper 1998)

The most severe impediment to distance education and e-learning is the poor infrastructure in developing nations. In the Philippines, for example, "many public educational facilities are located in remote areas where they do not even have electricity, telephone facility, let alone internet" (Espejo, Mana, and Bato 2003). The government started "Adopt-A-School Program", whereby the private sector is encouraged to provide assistance in terms of information and communication technology, texts books, and other useful materials.

#### Section 4 (b): Hole-in-the-Wall

Minimally Invasive Method of learning relies on developing a conducive environment with adequate level of motivation for children to voluntary for groups and learn together, with minimal or no intervention by a 'facilitator' rather than a 'teacher'. This method relies on innate experimental and inquisitive nature of children.

The Hole-in-the-Wall project relies on minimally invasive methods of learning. Computers, some with internet facilities, were embedded in a brick wall, and set up in

socio-economically backward localities and remote village. The children were free of use the computers as they wished, and it was observed that "even in the absence of any direct input, mere curiosity led groups of children to explore, which resulted in learning" (Mitra et al. 2005). The learning environment is characterized by lack of adult supervision, and children are found to form groups, and help each other learn. There is great flexibility with regards to timings, unlike in schools.

The results of this program are very encouraging. In Madangir (a low income locality in Delhi) some such computer stations were setup. Children tended to work and play at the learning station before and after school, and spend about 1-2 hours per day doing so.

"When internet connectivity existed, the children were interested in reading current news apart from sports news and downloading songs, and accessing games and cartoon sites. For example, they all had read and seen pictures of America vs. Taliban war in Afghanistan.

The children also accessed games at Indiatimes.com site and in the absence of internet connectivity MS Paint was the most preferred application. Children learned Windows Imaging, how to use the calculator, changing the display settings, playing quiz at IIK portal" (Jha

and Chatterjee 2005)

An evaluation was done to measure the impact of the program on children with regards to 'computer skills', 'academic achievement', 'social networking and collaborative techniques'. With regards to computer skills it was found that there is a significant improvement in the performance of the experimental group on the day of inauguration as compared their performance on after six months. There was statistically significant improvement in the performance of the children in Math and English as well. Amongst frequent users, the English scores improved by about 20% points over a period of six months.

Overall in Madangir it was found that there "was no significant difference in the intellectual level but the aspirational level, social competence and achievement (along with general awareness) were all enhanced and these improvements might have been due to collaborative or peer group learning" (Jha and Chatterjee 2005). Girls were seen to playing an organizing role, "throwing off children who had been playing with the machine for a long time and replacing them with quieter ones who had not yet had a turn" (Harvey 2001). The children had also successfully coped with a foreign language as most them speak nothing but Hindi. There was no vandalism or theft either (Harvey 2001).

The Hole-in-the-Wall project has been tested in a number of villages as well, where the villagers see it as a well from which their children are able to draw knowledge. The project has been implemented even in areas as remote as Dras (the second coldest

inhabited place on the planet) and Ladakh at an altitude of over 4000 meters. Solar energy stations were setup to run the computer due to absence of electricity.

### Section 4 (c): Computer Assisted Learning

Computers have the potential to improve educational attainment, both by making schools more attractive, hence increasing student attendance, and by assisting in teaching processes, hence improving learning within schools.

In a computer assisted learning (CAL) program in Vadodra (India), four computers where donated to each municipal primary school. The program provided each child of standard IV computer time of two hours to play educational games related to mathematics. After a year of the program it was found that on the average math scores had increased, and the effect of the program was slightly higher at the bottom of the distribution but persists throughout the distribution. "All interactions between the students and instructors was driven by child's use of various games, and at no did any of the instructors provide general instruction in mathematics" (Linden, Banerjee and Duflo 2003). CAL programs tend to reduce the role of, to some extend even replace, poorly motivated teachers.

World Links for Development Program of the World Bank Institute is aimed at introducing computer technology so to improve classroom teaching. An evaluation of the program found that though computer labs are expensive and time consuming to setup in poor schools, they are effective in improving learning. Muslim girls in some country have found the internet to be a great source of liberty, as they could explore the space unrestricted. The report claims that technology motivates students and energizes classrooms, and one of the impediments to extensive use of computer technology is that many of the ministries of education continue to view computer science as just another subject, and not as a tool to improve overall learning outcomes.

Computers can be used to enable Group Support Systems (GSS) technology which creates a platform for group interactions where the identity of any individual member is not disclosed to other members of the group. It has the potential to reduce *normative influence* in group interactions, whereby individual group members are reluctant to freely express their ideas, "because of the perception that these ideas run counter to those of higher status members or because of the fear that their contribution will be devalued or rejected by others...group members tend to evaluate other group members on the basis of stereotypical performance expectations, which are shaped by external status characteristics" (Klein 2003).

GSS technology may be useful in school which caters to students from diverse backgrounds, including first generation learners, belonging to tribal communities, and others. It may help in reducing dropout rates as students from diverse communities would be able to contribute more through GSS; and when students begin to compare

and contrast their interaction with and without GSS, there may be recognition and reduction in prejudices.

Section 4 (d): Laptops for \$100

Scientists at the MIT Media Lab have designed a laptop that would cost US\$100. These laptops are built to be sturdy, and have a hand crank to generate energy in areas without electricity. The One Laptop per Child Initiative aims to provide laptops to poor children in the developing world so to provide them with a window into the world of learning through independent interaction and exploration.

There are a number of criticisms of the project. One, officials from Africa think that government of poor nations would end up floundering valuable resources on thousands of laptops which would do little to solve education problems of the poor. Two, some argue that far less than \$100 are required to provide children with nutrition, books, and other facilities. Lastly, it is not a market outcome. Government of developing nations would buy these laptops and distribute them. If instead, the government were to provide \$100 worth of education vouchers, it is highly unlikely that parents would buy these laptops.

# Section 5

# Recent Innovations and Policy Reforms Ideas

Overall the section describes a number of innovative schemes and local projects implemented by both governments and private bodies around the world. They highlight some of the many possibilities that exist to improve the provision of education for the poor. The private schemes are of two kinds, some that require government permission or involvement, and others that could run completely independently.

The last two parts of this section cover broader regulatory reforms that should be implemented at a regional or national level, and discuss political strategies for advocacy towards achieving educational reforms.

### Section 5 (a) Government Schemes

Primary Education Stipend Program, Bangladesh

There are over 2.5 million out of school children of the age group 6-10 (as per the estimated of Government of Bangladesh), and about a third of children who enter primary education dropout before completion (Tietjen 2003). The Primary Education Stipend Program (PESP), started by the Government of Bangladesh in 2003, aims to increase enrollment, attendance, and learning outcomes of primary school students by providing targeted stipends to the poor.

All schools in rural areas except non-formal education schools and unregistered private schools are eligible to participate in the program. The School Management Committee with the assistance of head masters are to draw-up a list of poor student on the basis of five criteria:

- a. Children from distressed female-headed households (i.e. destitute widows and divorcees)
- b. Children of day laborers
- c. Children of insolvent artisans/mechanics (i.e. potters, fishermen, blacksmiths, weavers, carpenters, cobblers, etc.)
- d. Children from landless families (i.e. owning less than 0.5 acres of land)
- e. Children of sharecroppers

All beneficiaries of the Food for Education (FFE) and Primary Education Stipend (PES) program were automatically selected for PESP. Each school may propose up to 40% of the enrolled student for the program. The list of proposed stipend recipients will be reviewed and approved by the Upazilla Primary Education Officer and countersigned by the Upazilla Nirbahi Officer.

In order to receive the stipend, selected pupils must maintain 85 percent monthly attendance and attain a minimum of 50 percent marks on the annual exam. And for the schools to continue to participate, it must "demonstrate at least 60 percent pupil attendance, and 10 percent of its grade 5 pupils must sit for the Primary School Scholarship Exam" (Tietjen 2003).

Parents of qualifying pupils receive 100 taka (US\$ 1.45) per month for one pupil and 125 (US\$ 1.81) taka per month for more than one pupil. The stipend is large enough to double the cash incomes of the some of the poorest rural families. There are six designated national banks which disperse the funds on a quarterly basis. The banks issue an identity card to one of the parent, preferably the mother; the card is to be presented for withdrawal of the money from the bank on a quarterly basis

The delivery mechanism is cost effective: it takes Tk 0.04 to deliver Tk 1 of stipend. The cost of running the program is only about 4% of the total amount, that is 96% of the money is given out as stipend.

There are however some problems with the program. First, the probability of receiving the stipend depends entirely on the relative financial position of a student in the school. Hence, some deserving students of poorer areas may be excluded. Second, there are some regions which simply do not have schools, like Chittagong where up to a third of children are not enrolled because of lack of schools (Tietjen 2003).

Education policy and planning occurs in a highly centralized manner. More than half of the primary schools are run by the government, and the private recognized schools are heavily subsidized (Hossain 2004). The community based schools were nationalized in 1973, and all teachers became government employees. Even today over 80% of the salaries of the teachers in private recognized schools is paid by the government. Hossain (2004) states that though there are various kinds of schools, there is little parent choice with the system.

This means that the stipend programs in Bangladesh are basically a demand side intervention, and allow of few of the supply side benefits that an education vouchers program would entail.

### Female Secondary School Assistance Project, Bangladesh

A Female Stipend Program (FSP), targeted at secondary schools girls, and was started by Bangladesh Association for Community Education (an NGO) in some rural districts of Bangladesh in 1982. The project was initially funded by USAID. The program was so successful that in some project areas the enrolment rates doubled and dropout rate fell to less than one third of the previous level. It also increased the age of marriage, which is a great concern in Bangladesh with 75% of girls being married before age of eighteen (Raynor 2006).

In light of the success of FSP, and severe gender disparity in education (in 1991 only 5% of girls in rural areas passed class X) the Female Secondary Schools Assistance Project (FSSAP) was started in 1994, initially for a period of five years.

All girls in rural areas are eligible to participate regardless of their family wealth. Though there is pressure from the donors to target the scheme on the basis of income, the Government of Bangladesh thinks that targeting is too problematic procedurally and too costly administratively.

So as to receive the benefits of the FSSAP the girls had to meet three criteria:

- 1. Studying in class VI to X
- 2. Minimum 75% attendance
- 3. At least 45% marks in annual school exams
- 4. Remain unmarried till the class X Secondary School Certificate (SSC) exam or turning 18

Eligible girls receive a stipend ranging from US\$ 12 in class VI to US\$ 36.3 in class X. A girl successfully completing all five years leading to the Secondary School Certificate will have received US\$107. On the average the female stipend is about 6 percent of Bangladesh's per capita income. Other than this the schools receive US \$ 1.50-2.00 per semester in tuition fee per student (Khandker, Pitt, and Fuwa 2003; Liang 1996).

The program involves other costs as well. Additional teachers have been hired and infrastructural facilities created to accommodate the increased enrolment. A public awareness program is run to ensure successful reception of FSSAP at the community level. Finally, there are the administrative costs, which account for over 18% of the total cost.

Over 95% of secondary schools in Bangladesh are privately managed by School Management Committee (SMC); they receive about 80% of teachers' salaries as aid from the government. The SMC are to be responsible to the local community, however "in reality once a school is recognized by government, payment of subvention and girls' tuition (as part of the stipend program) to the school generally proceeds automatically regardless of performance or community satisfaction" (Mahmud 2003). The scheme is applicable to all schools including religious schools called Madrassas (Liang 1996). By 1998 almost all of rural schools which cater to girls were participating in the program. These schools have to regularly provide the project offices with information on enrollment, infrastructure, attendance, and examination marks, as per a common format (Khandker, Pitt, and Fuwa 2003).

The Agrani Bank, with its extensive network of branches in rural areas, distributes the stipend. The girls have their own bank accounts, and they collect the stipend on a semi annual basis. If the bank branch is more than five kilometers away, then booths are set up in the school premises to allow for easy withdrawal of the stipend (Mahmud 2003). The schools are paid on a semi annual basis.

According to recent figure the secondary Gross Enrolment rate in 45% for boys and 47% for girls; hence Bangladesh has succeed in attaining Gender Parity in Education at the primary and secondary levels. Similarly according to Maitra (2003) there is no gender differential in primary and secondary school enrolment in Bangladesh, where in the South Asia region there is significant gender differential in the favor of boys. Also girls have a higher probability of continuing education after the age of twelve. The FSSAP has contributed to this goal as the beneficiaries increased from 0.7 million in 1994 to 4.0 million in 2001.

Though there have been increased enrolments, quality of education remains a concern. In 1990 girls were about 30% of those who appeared in SSC exams, they were also 30% of those who passed. However by 2000 girls were about 50% of those who appeared but only 40% of those who passed.

One reason for the deterioration of quality is that enrollments have increased without parallel increase in teachers or infrastructural facilities. Also, the marks based criteria provides an incentive for the schools to inflate the marks so that students continue to receive the stipend, resulting in reduced emphasis on actual learning.

 The Scheduled Caste/Scheduled Tribe Tuition Reimbursement Scheme, Delhi

It is a means-tested scheme for SC and ST students of Delhi who are enrolled in recognised unaided private schools. There is 100% reimbursement of tuition fee, sports fee, lab fee, and other allowed fees, if the annual family income in less than Rs. 48,000, and 75% reimbursement, if the income is less than Rs. 100.000. Students studying in class V to XIII must obtain at least 50% marks, and have an attendance rate of more than 80% (Sharma 2006).

Annual Stipend to Girl Students, Delhi

The scheme was started in 1997-98 to promote education among girls in rural areas and slum clusters. Stipends of Rs 200, Rs 400, and Rs 600 per annum are paid to girl students in primary, middle, and secondary classes, respectively, on passing the annual exam (Veetil 2005).

Conditional Cash Transfer, Brazil

The *Bosla Familia* (Family Grants Program), started in 2004, is the result of consolidation of four cash transfer programs into one, where the recipients have to meet certain education and health related requirements. It is now the largest conditional cash transfer program among the developing nations, involving close to 30 million people. The poor are eligible to receive cash transfers if they meet the following criteria:

- The mother-to-be in the benefiting household must receive full pre-natal care.
- That the children enroll in primary school and prove attendance
- That children receive regular vaccination
- Apni Beti, Apna Dhan (My Daughter, My Wealth) Scheme, India The Chandigarh Administration started the Apni Beti Apna Dhan Scheme in 2005 (The Tribune 2005), whereby Rs. 5000 is deposited in the bank account of newly born girl, and is payable with interest once the girl reaches the age of 18, if she has remained unmarried and attended school.

The Haryana state has also implemented such a scheme, where the amount payable once the child is 18 years is about Rs. 25,000. The schemes alleged to have led to a reduction in female foeticide and infanticide, later marriage, and increased education.

• Subsidized Land in Exchange for Reserved Seats for the Poor, Delhi The Delhi government provides private schools with land at subsidized rates and in the return the schools are supposed to reserve a portion of the seats (about 10-25%) for students from economically disadvantaged groups.

### Section 5 (b) Private Schemes

- Contracting Out of Government Schools In Pakistan management of government schools has been contracted out to private bodies so as to improve their performance. The Agha Khan Foundation has taken the contract for a large number of schools.
- Mobile Women Teachers Training Program, Pakistan UNICEF guided an interesting project called Mobile Women Teacher Training Program in Pakistan, to train village girls who were class 8 pass, to create a pool of trained teachers. About 3,300 girls in remote rural areas of Balochistan (Pakistan) have been trained (UNESCO 2005c). The program was able to create a pool of capable teachers at a low cost.
  - Tamper Proof Camera Experiment, India

Sewa Mandir is an NGO that runs Non-formal education centres in Rajasthan. Faced with the problem of teacher absenteeism, it introduced an innovative monitoring and incentive program. Each teacher was provided with a camera, with which they were to take a photograph of themselves with the students, both in beginning and end of the class. A time and date stamp would automatically appear on the photo.

Each teacher's salary was a function of a valid day attendance; where a valid day is one where there is a five hour interval in the two photographs and a minimum number of students appear in them. The base salary was Rs. 1000 per month for 20 days of work. In the schools with cameras the teachers were paid Rs.50 for every additional day of work, and there was a fine of Rs.50 for each of the 20 days they skipped. The teachers in the control group schools were paid a salary of Rs.1000 flat, and threatened that action could be taken against them if there are to be found absent. The teachers were paid every two months and the film rolls were collected few days before the date of payment.

In a randomised experiment, conducted by Duflo and Hanna (2006) of Poverty Action Lab, 60 such one teachers schools with cameras were compared to a control group of 60 schools. The introduction of the program results in an immediate and long lasting decline in the teacher absenteeism, which was 19% points less in schools with cameras compared to the ones without. The program had a positive effect on learning outcomes as well; test scores in schools with cameras were 0.17 standard deviations higher compared to schools without cameras.

Pay per Letter, Andhra Pradesh

The *Arthik Samata Mandal* (an NGO) has recently started a cash reward educational scheme in Nalgonda District of Andra Pradesh. Members of *Arthik Samata Mandal* visit

select schools of the district every fifteen days, and test the primary school children. For every letter learned by the child, illustrated by both reciting and writing, the child as well as the teacher receive half a rupee.

### Scholarship Program for Adolescent Girls, Kenya

The Girls Scholarship Program was carried out by a Dutch NGO ICS Africa in two rural districts in western Kenya, Busia and Teso. Girl students who entered class 6 were eligible to compete for a performance scholarship. The scholarship was worth approximately US\$38 per winner (more than 10% of the annual per capita income of the region), which covered tuition fees and gave a stipend.

The program's evaluation by Kremer, Miguel, and Thornton (2004) found that girls eligible for the scholarship showed significant gains in exam scores, average gain of 0.17 standard deviations, and these gains persisted even after the competition was stopped. Interestingly improved performance of girls stimulated improvement in the performance of the boys as well. Both student and teacher school attendance increased in the program schools. The program also seems to be cost effective compared to other teacher incentive programs to improve learning outcomes. In Busia district the cost per 0.1 standard deviation gain per pupil was US\$0.71.

#### Balsakhi Program, India

The NGO Pratham hires and trains young women to teach children who have fallen behind the class in basic skills. These tutors do not necessarily have college degree and are paid far less than government school teachers. The teachers were paid Rs 500 per month in the first year of the program; the amount was increased to Rs 750 per month in the following year.

#### Section 5 (c) More Ideas

#### Education Vouchers

Though education vouchers have been employed in many countries and most of the evidence favors the introduction of vouchers as a way to break the monopoly of the government on the education of the poor. The Planning Commission has, for the first time, in its Approach Paper on the 11<sup>th</sup> Five Year Plan stated that "there is a feeling that voucher schemes can help promote both equity and quality in schooling in areas where adequate private supply exists".

A pilot voucher project, possibly privately funded, will be useful in understanding the logistics and politics of vouchers.

Targeted Voucher for girls, backward castes, disabled, orphans, and other such groups, may be a useful political strategy as there will be little, if any, political resistance

against helping them. Once the success of education vouchers among any of these groups is documented then it could be extended to others as well.

### Sharing of Scarce Resources amongst Schools

Large schools with good playgrounds, libraries, labs and other infrastructure facilities could share them for free or for fee to smaller schools, which do not have the capital or space to build these facilities on stipulated times and days. Donors could provide support for such sharing.

## Venture Capital or Microfinance Fund

Private schools, both recognized and unrecognized, may be provided with capital for provision of better educational infrastructure and to expand their services. This may be especially useful for the unrecognized private schools that do not have access to the formal credit markets due to their regulatory status.

- Mentoring and Management Training for Edupreneurs Such mentoring programs could help them learn techniques of school administration, management of curricula, students and teachers, and other necessarily skills to successfully run schools.
  - Branding and Franchising of Private Schools

To help the poor parents to select suitable schools, it would be helpful to think of branding private schools through an affiliation system or franchising some of the reputed schools across the country.

## Section 5 (d) Regulatory Reforms

Remove the license-permit raj to expand the supply of education

Decentralise and depoliticise decisions about syllabi, textbooks, and examinations

Grant autonomy to government schools

Link government grants with performance for all education institutions

Transfer management to local governments, communities, and NGOs

Establish independent evaluation, certification, and rating agencies

Declare education an 'industry' so that edupreneurs can access credit and venture capital

### Section 5 (d) Advocacy Campaigns

Legal Support For Unrecognized Schools

An organization may be set up to file public interest litigations (PILs), lobby governments, and mobilize public opinion in the favor of private unrecognized schools. This may be especially useful in countries like India where private unrecognized schools are under constant threat of the state.

- An Association of Unrecognized Schools or Association of Schools that Have Been Refused Recognition
- Association of Dalit Parents or Poor Parents

These types of associations would serve as an effective counterweight to teacher unions and other vested interests opposing educational reforms.

### Section 6

# **Entrepreneurship Education**

Entrepreneurship education, which essentially entails enlightening a student about entrepreneurship as a career option, if not a way of life, has the potential to open up great opportunities for the poor. The entrepreneurship education is prevalent in one form or the other in many OECD countries, but the developing countries lag far behind. There is little entrepreneurship education in schools and social norms encourage the youth to find employment in public or private sector. Self-employment is seen only for those who have failed at everything else. There is an urgent need for an attitudinal change and formal guidance in understanding and valuing entrepreneurship.

### Section 6 (a): Entrepreneurship Education: Does it Create Entrepreneurs?

Entrepreneurship education essentially aims at increasing awareness and acceptance that entrepreneurship is a viable career option. But does entrepreneurship education really contribute towards the making of an entrepreneur? "Empirical learning has indicated that entrepreneurship could be taught, or at least encouraged by entrepreneurship/business education" (Lena and Wong 2004). According to the Consortium for Entrepreneurship Education (n.d.) "individuals who receive entrepreneurship training---at all ages---are more likely to start a business, and, most importantly, to sustain and grow a business." And "there have been indications in the literature that entrepreneurship education and entrepreneurial successes are linked" (Lena and Wong 2004).

Some authors argue that "seeing someone else succeed as entrepreneurs encourages individuals to start a new venture" (Lena and Wong, 2004). Research by Consortium for Entrepreneurship Education shows that 2/3 of American entrepreneurs come from homes where someone has owned a business. For those who do not belong to entrepreneurial families entrepreneurship education may be a complementary factor contributing towards a successful career as an entrepreneur.

Junior Achievement program in the US helps to provide students with life skills for a market economy, and cater to over seven million children every year. In partnership with business and educators the program tries to help young people understand the economics of life. The program essentially aims at teaching students how to be successful in a free enterprise system. The website www.ja.org also provides free material which may be useful for others who are interested in imparting entrepreneurship education.

## Section 6 (b): Entrepreneurship Education: For Whom?

Though students in general are likely to benefit from entrepreneurship education, it is of greater use to those who lack interest in traditional methods of learning and contents of state prescribed syllabi, which may be of little use for their livelihood opportunities. An interesting case is that of Philadelphia's high school systems, where 'at-risk' students enrolled in entrepreneurship education have better attendance, higher grades in Math and English, and are more likely to graduate from school (Consortium for Entrepreneurship Education).

There are two reasons why the poor in developing countries are likely to benefit greatly. First, one of the reasons why the poor drop out schools is that the educational content prescribed by the government has little relevance to their livelihood opportunities. For those who are unlikely to receive tertiary education, to learn how a nuclear reactor works is an activity of little interest. Second, the higher the educational

status, the greater the opportunity cost of self-employment. Due to both these reasons the poor are often self-employed in the unorganized sector.

Zoltan Acs (2006) states that there are two kinds of entrepreneurship: opportunity entrepreneurship and necessity entrepreneurship. Opportunity entrepreneur's vision is to create high growth oriented firms and employ more people, whereas necessity entrepreneurs intend merely to scrap a living out of their work. Due to high levels of bureaucratic barriers and resulting lack of employment in the organized private sector, many amongst the poor are take to necessity entrepreneurship.

This however presents an exciting opportunity for entrepreneurship education. If those who are likely to become necessity entrepreneurs were to undergo entrepreneurship education in their formative years, it may mold the necessity entrepreneurs in more opportunity seeking ones. There is tremendous potential in creating 'necessity cum opportunity' entrepreneurs, and the transformation they may bring about in the lives of many others.

Parents and teachers are the greatest hurdle in entrepreneurship education. In a conversation, Anirban Gupta, who is the founder of 'Driiti', an NGO dedicated to teaching entrepreneurship and helping to set up micro enterprises, said parents and teachers feel that business is for those students who are incapable of becoming doctors or engineers or be employed in government or large companies. Business is viewed as the failure's job. There is also a sense of belief among parents that money can corrupt a child at an early age, and hence the children are prevented from engaging in commercial pursuits. Some parents refer to business as 'dhokha dari' (cheating). However the success of the 1991 liberalization has given birth to entrepreneurial heroes.

# Section 6 (c): Ideas for Introduction of Entrepreneurship

Entrepreneurship in formal education:

In India, for example, this has been pioneered by the Central Board of Secondary Education (CBSE) which introduced 'entrepreneurship' as an optional subject at class XI-XII level in the year 2005. The designing of engaging curricula is of crucial importance. Content that is easily accepted in western nations because of certain underlying social values and history may not necessarily be appropriate for people who come from distinctly different social and cultural backgrounds. Therefore, research and development of course content for entrepreneurship education is an issue of great importance.

Some topics in the course include drawing a profile of successful entrepreneur, studying a small scale unit in the locality to bring out the procedures and processes adopted by the unit to become a feasible business venture, a study of competition in business by choosing two or more rivals in the market or to take the school itself as a case study.

Summer School/Short term Courses:

Short-term modules on entrepreneurship may be used to teach students during their summer breaks. These courses could be for those students who have already dropped out of schools. Various games could be used to teach students about adding value, selling on credit, saving income, and negotiation strategies. The short-term courses may also help in inculcating leadership qualities and successful entrepreneurs within the communities should be invited to participate in the program to serve as role models for students.

Several other ideas have been and could be tried to promote entrepreneurship in schools. Student clubs which also compete across schools is a quicker way to gauge interest of students and schools. A business plan competition has been very successful in business schools. Instead of a new course, the existing courses in language, mathematics, economics, history could be designed to use business terminology and ideas of commerce and competition.

Surveys and research on the perception of parents and teachers towards entrepreneurship should be undertaken. This data would be helpful in identifying groups that would be more receptive towards entrepreneurship education and also assist in designing curricula for attitudinal change.

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