

AMERICAN INSTITUTES FOR RESEARCH®

CRITICAL REVIEW OF PRIMARY EDUCATION IN INDIA

November 30, 2004

Produced for

General Electric Foundation 3135 Easton Turnpike Fairfield, CT 06828

Produced by

American Institutes for Research 1000 Thomas Jefferson Street, NW Washington, DC 20007

[&]quot;American Institutes for Research" is a registered trademark. All other brand, product, or company names are trademarks or registered trademarks of their respective owners.

CRITICAL REVIEW OF PRIMARY EDUCATION IN INDIA

November 30, 2004

Produced for

General Electric Foundation 3135 Easton Turnpike Fairfield, CT 06828

Produced by

American Institutes for Research 1000 Thomas Jefferson Street, NW Washington, DC 20007

ACRONYM LIST

AIR American Institutes for Research
BILT Ballarpur Industries Limited

BMC Brihan Mumbai Municipal Corporation CAL Computer Assisted Learning Program

CAP Child and Police Project
CCS Community Cottage Schools

CREDA Centre for Rural Education and Development Action

CRS Catholic Relief Services
CRY Child Relief and You

CSR Corporate Social Responsibility

DfID Department for International Development

DPEP District Primary Education Program EDC Education Development Center

GE General Electric
GOI Government of India

HIVOS Humanist Institute for Cooperation with Developing Countries

ICDS Integrated Child Development Services

ILO International Labor Organization IMRB Indian Market Research Bureau

IPEC International Program on Elimination of Child Labor

MVF Mamidipudi Venkatarangaiyya Foundation

NCLP National Child Labor Project

NCRI National Council of Rural Institutes

NFE Non Formal Education

NGO Non-governmental organization

NORAD Norwegian Agency for Development Cooperation

ODA Official Development Assistance (Japan)

SC/ST Scheduled Caste/Scheduled Tribal

SIDA Swedish International Development Agency

SKP Shiksha Karmi Project SMP School Milk Program SSA Sarva Shiksha Abhiyan

UEE Universalization of Elementary Education
UNDP United Nations Development Program
UNFPA United Nations Population Fund
UNICEF United Nations Children's Fund

VEC Village Education Committee

CRITICAL REVIEW OF PRIMARY EDUCATION IN INDIA

EXECUTIVE SUMMARY

American Institutes for Research November 30, 2004

The General Electric (GE) Foundation is initiating an approach to accelerate significant and sustainable improvement in school readiness, academic achievement, and workforce readiness for under-represented and disadvantaged groups in countries around the world. As the next step in the planning process, the Foundation has invited the American Institutes for Research (AIR) and the Education Development Center (EDC) to conduct critical reviews of educational support activities in China, India, and Mexico related to the three focus areas. Specifically, the Foundation is seeking to learn what practices have the best evidence of sustained effectiveness in improving access and achievement for under-represented and disadvantaged individuals. AIR's scope of work was to review of the research base for effective practices in primary education in India.

Among the 159 documents that AIR identified initially for this review, 67 contained information about specific interventions that support primary education in India, and 46 of those documents use at least some evidence to examine the effectiveness of educational interventions. Interventions cluster broadly into three categories: those that support educational access, those that support improvements in educational quality, and those that simultaneously promote access and quality.

Project staff evaluated the effectiveness of each project in the sample based on 1) the quality of the available information about each project and 2) the relative success of the project in attaining each measure of success. Effective interventions were then grouped by their ultimate goals—either to improve educational access or quality—and ranked in terms of the extent to which they met the criteria (i.e., common elements) that the GE Foundation has set for future investments.

Following are the primary findings from the research literature on effective practices.

ACCESS TO EDUCATIONAL OPPORTUNITIES

➤ Effective child labor interventions coordinate directly with communities and government schools. Successful programs using these interventions have a very strong focus on sustainability. Projects scale down and terminate direct activities when communities deemed "child labor free" have a supportive culture of education where all school aged children are enrolled in school. Interventions to mitigate child labor can be adapted to target specific groups such as working girls and children working in cities or rural areas and have been effectively replicated in a wide range of communities.

- ➤ By providing intensive academic instruction to predominantly out-of-school children, bridge programs have been successful in mainstreaming these children to the formal school system. These interventions have been adapted to address the needs of particular groups of children such as girls and minority groups and have been successfully replicated by various projects in many different communities.
- ➤ Teacher recruitment and training of local community members as parateachers—locally hired individuals without formal teacher training—has a positive effect on building local capacity and encouraging communities to take ownership of educating their youth. These interventions have been successful at expanding access to education for children in isolated and underserved communities, particularly in increasing access to girls when recruited parateachers are women.
- Interventions that focus on building infrastructure and providing resources have been very successful in increasing access to education in areas that are especially rural. There is, however, a need for additional and improved resources in classrooms in terms of desks, blackboards, books and other teaching and learning materials.
- Residential camps offer a comprehensive approach to addressing the needs of out-of-school youth by providing room and board, counseling and health services, and basic education and extracurricular activities for children. Successful residential camps transition children into formal school setting. There is, however, a need for improved continued support for campers once they leave the residential programs. In some cases, campers flourished in the supportive holistic camp learning environment only to later face challenges reintegrating into their homes, communities, and succeeding in formal schools.
- Alternative education programs provide educational opportunities to students otherwise denied access to formal schools. Successful alternative education programs that are able to provide quality education to pupils, however, require a comparatively large investment of resources. Setting up a fully functioning school with appropriate infrastructure, staff, curriculum, and teaching and learning materials is a relatively costly and time-intensive process.

IMPROVING EDUCATIONAL QUALITY

- The use of parateachers is a cost-effective strategy for improving pupil learning outcomes. Short-term training for parateachers allows rapid deployment, and can accommodate the often high levels of turnover among parateachers. The local relevance of parateachers hired from within the community is an advantage to the model. Moreover, parateachers may be used for remedial tutoring programs, to staff nonformal education centers, or to assist teachers in government schools. The flexibility of parateacher interventions allow for easy replication across urban and rural contexts as a means of increasing access *and* improving quality. Small inputs from corporate funding could generate broad learning impact.
- Computer assisted learning programs are a growing but still nascent trend. Because of the technology inputs required, there is use for corporate and other outside resources. Computer assisted learning models, however, are still considerably more expensive than other strategies for improving pupil learning and have not demonstrated any substantially greater educational gains.

CRITICAL REVIEW OF PRIMARY EDUCATION IN INDIA

American Institutes for Research¹ November 30, 2004

I. Introduction

INVESTING IN EDUCATIONAL OPPORTUNITIES AROUND THE WORLD

The General Electric (GE) Foundation is initiating an approach to accelerate significant and sustainable improvement in school readiness, academic achievement, and workforce readiness for under-represented and disadvantaged groups in countries around the world. Recently, for example, the Foundation initiated a three-year pilot project to promote healthy lifestyles, employability and community engagement for young people in India and Mexico. It has also established a partnership with UNICEF to support early childhood development projects in China and Mexico.

As the GE Foundation expands its international portfolio, it has expressed a strong desire to make investment decisions based on a comprehensive understanding of the greatest challenges facing educational systems, the best evidence of effective practices, and careful consideration of strategic opportunities to leverage private-sector resources. To inform the decision-making process, the Foundation hosted a series of meetings in 2004 with international educational experts and commissioned the TCC Group to conduct a preliminary study of education in China, India, Mexico, and Hungary (with regard to the Roma population there) to identify an investment framework, leading researchers, and model programs. Outcomes from meetings and the TCC Group's education scan indicated numerous opportunities for financial support in the target countries in three focus areas: 1) school readiness, 2) primary education, and 3) transitions from school to the workforce.

As the next step in the planning process, the GE Foundation has invited the American Institutes for Research (AIR) and the Education Development Center (EDC) to conduct critical reviews of educational support activities in China, India, and Mexico related to the three focus areas. Specifically, the Foundation seeks to learn what practices have the best evidence of sustained effectiveness in improving access and achievement for under-represented and disadvantaged individuals. Key questions to be addressed include the following:

Goals and Metrics: What are appropriate goals and quantitative metrics by which to
measure success? What are possible processes to evaluate progress and outcomes of
individual sites, an overall funding initiative, and a set of efforts in-country or globally?

¹ Authors of this report include Jennifer Anderson, Cory Heyman, Jane Schubert, Heather Simpson, and Aashti Zaidi from the American Institutes for Research, as well as Marlaine Lockheed, independent consultant. We would also like to acknowledge the important contributions of Sangeeta Dey and Nandini Prasad, from the REACH India project, and colleagues from Nirantar who facilitated data-collection activities in India.

- Implementation: What guidance does the literature provide on the drivers and leverage points (community, NGOs, schools, government, etc.) for maximum impact? Who are the stakeholders to include and how; what commitments or prerequisites need to be in place for significant and sustainable success? What is necessary to make improvement efforts scalable?
- *Ineffective Practices and Minefields*: What are the ineffective practices that have <u>not</u> had significant impact or are approaches to avoid? What are the controversial issues or other considerations to be aware of?
- *Potential Partners and Benchmarking*: What organizations—including those in-country—are the most effective leaders on these issues? What are other companies or major funders doing in this arena? What are the gaps?
- *Resources*: What level of investment over what time period would be required to have the desired impact?
- *Corporate Roles*: What guidance does the research provide on effective roles for outside volunteers (e.g., GE employees and retirees, GE executives, etc.); or other ways to leverage corporate expertise (change management, HR processes, measurement, etc.)?

REPORT OUTLINE

This report summarizes AIR's review of the research basis for effective practices in primary education in India. It examines efforts to create engaging and rigorous learning environments for children, increase school retention, increase the relevance of the curriculum and teaching methods, and give pupils the foundations for continuing success in education and into the global workforce. It also examines the extent to which educational practices increase opportunities for and culture of girls entering, staying in, and succeeding in school and preparing for the workforce, rather than dropping out of school or staying in the home environment.

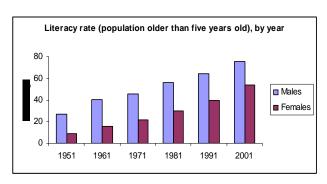
The review begins with an overview of primary education in India (Section II). It describes the size and structure of the system, trends in enrollment, and large-scale strategies that have been adopted to improve access and quality of schooling and alternative forms of educational service delivery. Next, Section III explains the research methodology used to conduct this study. This includes data collection and analysis strategies as well as a synopsis of the information used to generate empirical findings. Section IV draws on AIR's experience in implementing educational projects in other countries as well as findings from the Indian research literature to suggest guidelines for the GE Foundation when considering investments in educational projects in India. These considerations are tied directly to the Foundation's key questions about educational investments.

Last, Section V presents AIR's research-based findings about effective interventions in primary education in India. Findings are grouped in two clusters: 1) interventions that promote educational access for disadvantaged groups and 2) interventions that promote educational quality. Interventions with sufficient empirical information are described in detail and ranked in terms of their demonstrated effectiveness. Interventions that seem promising but for which sufficient information is not available are then summarized briefly.

Three case studies of successful educational projects are included as an Annex.

II. PRIMARY EDUCATION IN INDIA

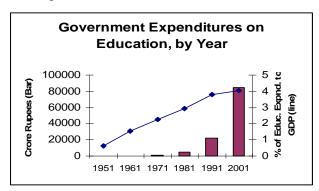
India is a nation of more than one billion citizens (1,086,600,000 in mid-2004), second in the world only to China.² India's population growth rate of 1.7 percent translates to an additional 18 million people each year, including an additional 3.8 million children ages 5-14, roughly elementary school age. Ensuring the health and well-being of a nation this size is an ongoing challenge for the states and Government of India (GOI), yet India has achieved substantial improvement in the social and economic development of its citizens over the past



Source: Government of India, Department of Education

50 years. Life expectancy at birth for an average Indian nearly doubled between 1951 and 2002, increasing from 32.1 to 63.7 years. The share of Indians living below the poverty line has dropped from 44 percent in 1980 to 26 percent in 2001. The literacy rate increased steadily from 18.3 percent in 1951 to 52.1 percent in 1991 and sharply to 65.4 percent in 2001.

The greater increase in literacy rates over the past decade is a consequence both of broad economic changes in the 1990s and of increased GOI commitment to primary education, beginning with the



Source: Government of India, Department of Education

National Policy on Education in 1986, and followed by several large, centrally-sponsored programs to support primary or elementary education development. Government expenditures on education have increased dramatically, to reach about 4 percent of GDP in 2001, which includes 1.1 percent on primary education and 1.5 percent on elementary education. Primary schools are universally available, and gross primary enrollment rates exceed 90 percent for both boys and girls.

United Nations Development Program, *Human Development Report 2004: Cultural Liberty in Today's Diverse World* (New York: UNDP, 2004). Web site: http://hdr.undp.org/reports/global/2004/.

² Population Reference Bureau, *World Population Reference Sheet* (Washington DC: Population Reference Bureau, 2004). Web site: http://www.prb.org/pdf04/04WorldDataSheet_Eng.pdf.

³ Planning Commission, GOI, *10th Five Year Plan* (2002-2007) (New Delhi: Planning Commission, 2002). Web site: http://planningcommission.nic.in/plans/planrel/fiveyr/10th/default.htm;

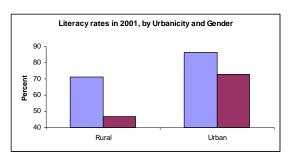
⁴ Elementary education in India includes primary education (typically classes I-V) and upper primary or middle education (typically classes VI-VII).

⁵ United Nations Educational, Scientific, and Cultural Organization (UNESCO), *Education for All: The Year* 2000 *Assessment Report, India* (2000). Web site: http://www2.unesco.org/wef/countryreports/india/contents/html.

⁶ An estimated 95 percent of the rural population has a primary school within one kilometer of their home, and about 85 percent of the population has an upper primary school within 3 kilometers. UNESCO (2000).

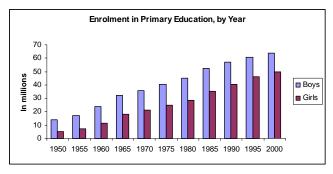
⁷ UNESCO, "Online Database of Education Statistics" (Quebec, Canada: UNESCO Institute for Statistics). Web site: http://www.uis.unesco.org.

Despite these gains, immense challenges remain in the effort to ensure all citizens basic levels of quality education. Substantial interstate, rural/urban, gender and ethnic differences remain in school participation. According to recent statistics, net primary enrollment rates vary by 58 percentage points across states. In addition, literacy rates are 21 percentage points lower for rural children compared with urban children, 21 percentage points lower for females compared with males, and 10 percentage



Source: Government of India, Department of Education

points lower for scheduled caste/scheduled tribal (SC/ST) pupils compared with non-SC/ST populations.^{8,9} Moreover, data for 1996-97 indicate that approximately 26 percent of the pupils who enroll in primary school drop out before class V. 10 The Ministry of Human Resource Development reports that of the 200 million children in the elementary (6-14) age group, 25 million do not attend school. 11 A recent GOI publication reports a net elementary enrollment rate of 60.3 percent.¹²



Source: Government of India, Department of Education

The Universalization of Elementary Education (UEE) ranks highest among the educational priorities of the GOI. Indeed, India's longstanding commitment to the ideal of UEE was reinforced by the 86th Amendment to the Constitution, making free and compulsory education a fundamental right of all children ages 6-14 years. In addition, under its current five-year plan (2002-2007), the GOI has established ambitious goals for accelerating

economic and social development throughout the country as it aims to move from "an agrarian economy into a modern multi-dimensional economic power-house and a traditional stratified society into an egalitarian society through consultative politics." Through its current programs, policies, and plans for the future, the GOI has made explicit its recognition that improving and enhancing education is central to reaching these national goals.

Achieving these goals will require more than the efforts of the Government of India alone, as education is one of the Constitutionally established concurrent responsibilities of both central government and the 32 states and union territories, as well as, since 1992, of district level selfgoverning bodies, known as panchayats. 14

⁸ UNESCO (2000).

⁹ A. Shariff, *India: Human Development Report*. New Delhi: National Council of Applied Economic Research (1999). ¹⁰ UNESCO. 2000.

¹¹Web site: www.education.nic.in.

¹² Department of Education, Selected Educational Statistics 1997-98 (New Delhi: Ministry of Human Resource Development, Government of India, 1998).

¹³ GOI, 10th Five Year Plan, p. 9.

¹⁴ The 73rd constitutional amendment authorized states to establish a three-tiered (village, block and district) governance structure of locally elected bodies – the panchayati raj institutions – and to transfer to these bodies from state government agencies the authority for certain areas, including elementary education.

Over the past decade, the GOI has developed a process for working cooperatively with states to improve both the quality and the quantity of primary education. Under the largest of the sponsored programs, the District Primary Education Program (DPEP), the GOI helped states and districts extend and improve primary education through the construction of 63,000 schools enrolling an additional 30 million children, construction of over 800 block and 6,000 cluster resource centers for inservice training of teachers, and provision of other inputs at the school level. Total resources expended in this effort exceeded \$1.3 billion for primary education in 270 low literacy districts of 18 states. This also boosted the learning achievement of pupils in participating districts for both mathematics and language.

\$6.2 billion for Primary Education in India: Major National and State Primary Education Programs and Incremental Cost Estimates, 1980s-2000s

1980s

Operation Blackboard. (1987-2002 Rs. 3,552 crore or approximately \$1.2 billion) Provided grants to states to construct an additional classroom and post an additional teacher in 523,000 single-teacher schools and to purchase a standardized package of teaching materials.

<u>District Institutes of Education and Training</u>. Financed creation of rural preservice and inservice teacher training institutions (no cost data)

<u>Total Literacy Campaign.</u> Provided grants to districts administrations to organize intensive campaigns to promote literacy (no cost data)

Minimum Levels of Learning. Initiated a national R&D program to develop basic competencies in language, mathematics and social and environmental studies to be taught in the primary grades (no cost data)

<u>Lok Jumbish</u>. (Rs. 5 billion or approximately \$166 million)

<u>Uttar Pradesh Basic Education Project</u> (\$163 million). Supported construction and renovation of schools, teacher inservice training, and instructional materials.

<u>Bihar Primary Education</u>. (Rs. 3.6 billion or approximately \$180 million). Supported construction and renovation of schools, teacher inservice training, and instructional materials.

1990s

<u>DPEP I, II and III</u> (\$1.3 billion). Supported construction of 2000 new schools, 25,000 additional classrooms in existing schools, repairs of 18,000 schools, and 800 block and 5,500 cluster resource centers for inservice teacher training, in 270 low-literacy districts in 18 states.

<u>Andrha Pradesh Primary Education Project.</u> (\$137 million) Supported 80,000 teachers in 3,000 teaching centers in 23 districts.

<u>National Program of Nutrition to Primary Education</u>. (1995-2003 Rs. 8,700 crore or approximately \$2.5 billion) Supports 110 million children in primary education.

<u>Janshala.</u> (\$20 million) Supports Village Education Committees, Mother-Teacher Associations, Parent-Teacher Associations in 20,000 schools in 30 districts in 9 states.

2000s

<u>Kasturba Gandhi Balida Vidyalaya</u>. Supports capital and recurrent costs for 750 residential schools for SC/ST/OBC, minority girls at the elementary level.

<u>Sarva Shiksha Abhiyan</u> (\$3.4 billion; Rs. 4,187 crore in 2001-03 or approximately \$ 1 billion). Supports construction of new schools, salaries of new teachers, teacher inservice training, free textbooks in 576 districts in 28 states and UTs.

Source: Government of India, Department of Education Annual Report 2002-3 and World Bank, India Elementary Education Program Project Appraisal Report.

	Number of states	Number of districts	Closing date	IDA Amount (\$
				million)
DPEP I	7	42	June 30, 2003	260.3
DPEP II	(7) + 5	92	June 30, 2003	425.2
DPEP III (Bihar and	2	17	September 30, 2004	152.0
Jharkhand)				
Andhra Pradesh	1	14	March 31, 2004	137.4
(under APERP)				
Rajasthan DPEP I	1	10	December 31, 2004	85.7
UP DPEP III	1	42	September 30, 2005	182.4
Rajasthan DPEP II	1	9	December 31, 2006	74.4
Total	18	226		1317.4

World Bank-Financed District Primary Education Projects¹⁵

This approach is now being applied to improving the quality of the entire elementary education system through the Sarva Shiksha Abhiyan (SSA) program. Key components of the program include appointing and educating teachers, qualitative improvements in elementary education, provision of teaching learning materials, construction and staffing of block and cluster resource centers for academic support, integrated education for the disabled, and distance education. The program has a special focus on the education of girls, scheduled castes, schedules tribes, and other children in difficult circumstances.

The scale of elementary education in India is so vast that efforts to achieve UEE will also, of necessity, be vast and will require substantial national, state and local commitments. A review of the levels of support to primary education from international sources demonstrates that comparatively Herculean efforts are required: \$1.3 billion for the DPEP and \$3.5 billion for the SSA program, as the most recent examples of efforts to improve access to and retention in

elementary education for underserved groups. However, 2002 census data indicate that access to primary education may be less of an issue in urban areas as indicated by the percentage of the population that is literate. This appears true for GE Foundation target areas, which are located in Bangalore, with 87 percent literacy, Hyderabad, with 79 percent literacy, and Gurgaon, with 88 percent literacy.

Percent of Population that is Literate. Ages 7+, 2001 100% 90% 83% 80% 60% 40% 20% Male Female Male Female Male Female Male Female National Hvderabad Gurgaon

Source: Government of India, Office of the Registrar General

Smaller efforts targeted at quality improvements in basic education have been found to be effective and may provide a

window of opportunity for the GE Foundation. A focus on quality is also consistent with earlier analyses of the comparative costs of addressing issues of access and quality. In 1997 a World Bank book estimated that the cost of improving the quality of existing primary schools in India would amount to only about 30 percent of the cost of expanding the primary education system to cover all

1

^{*} In addition to these 18 states, districts in West Bengal are financed by DfID. Post DPEP I and II, remaining states and districts in DPEP include Bihar, Jharkhand, Andhra Pradesh, Rajasthan, Uttar Pradesh, Uttaranchal, financed by the Bank; Gujarat financed by the Netherlands; and West Bengal and Orissa financed by DfID.

¹⁵ World Bank, *Implementation Completion Report (IDA-26610) on a Credit in the Amount of SDR 180 Million to India for a District Primary Education Project* (Washington, DC: Human Development Sector Unit, South Asia Region, 2003).

children ages 6-10 and only about five percent of maintaining a primary education system for all children. All available evidence indicates that improving education quality is the surest route for reaching new economic and social development goals, particularly for the underserved.

TRENDS IN EDUCATIONAL INTERVENTIONS

Other priorities in the effort to provide education for all include eradicating illiteracy, meeting the educational requirements of children with special needs, enhancing access to early childhood care and education centers, improving education for women's equality, improving vocational education, and ensuring that the educational needs of scheduled castes, scheduled tribes, and other minorities are met. Continued attention needs to be paid as well to vulnerable and urban disadvantaged children such as street children, working children, homeless children, children of commercial sex workers, and disabled children. Slums form the principal setting for the urban vulnerable, and often such settlements are by-passed by government programs and services.

Special focus is being paid to vocational education as the GOI strives to reach its goal of an annual economic growth rate of eight percent during the current five-year period. Currently India's employment growth rate is lower than its labor force participation rate. While 43.6 percent of the population makes up the labor force, only 41.6 percent is employed. Even if India's economy were to reach the eight percent growth rate, it still would not be able to provide enough employment opportunities for the number of people entering the workforce. Part of the GOI's strategy to combat this problem is to encourage individual entrepreneurship and self-employment and to improve vocational education to provide individuals with the skills needed for these activities.

At present only a small percentage of India's children are benefiting from services aimed at early childhood care and school readiness. The major provider of early childhood care and education in India is the GOI's Integrated Child Development Services (ICDS) scheme. This scheme presently reaches 15.8 million children in 35 states, or approximately 17.8 percent of the three to six year-old children in India.¹⁸

Finally, despite its efforts, the GOI still has not been able to reach its goal of allocating six percent of national income to education. In response the government has initiated the Bharat Shiksha Kosh scheme to receive donations, contributions, or endowments from individuals, corporations, central and state governments, non-resident Indians, and people of Indian origin.

¹⁸ GOI, 10th Five Year Plan.

¹⁶ Marlaine Lockheed and others, *Primary Education in India* (Washington, DC: World Bank, 1997).

¹⁷ United Nations Development Program and Planning Commission, Government of India, *India National Human Development Report: 2001* (New Delhi: Planning Commission, 2002). Web site: http://planningcommission.nic.in/reports/genrep/nhdrep/nhdreportf.htm.

THIRD-SECTOR PARTICIPATION IN EDUCATION

NGOs and NGO Strengthening

The GOI has further stepped up efforts to engage both NGOs and the private sector in improving Indian education. Recognizing the need to engage multiple partners in the goal of educating all of India's youth, the GOI is seeking initiatives that can bring private resources to help government schools, private schools, and computer education. Since the 1980's, the primary education sector in India has opened up both to external and non-governmental involvement and assistance on a large scale.

NGOs in India have worked in collaboration with the government at the state and national levels. For most, their efforts are focused on supplementing rather than substituting for government schemes and initiatives. A large number of NGOs are involved in implementing non-formal education programs to meet the educational needs of out-of-school children. Many of these organizations continue to focus on traditionally underserved groups.

The 1990s witnessed the increasing involvement of international agencies in the educational sector in India. These include multi-lateral agencies such as UNESCO, UNDP, UNICEF, the World Bank, and the Asian Development Bank. There have been bilateral grants awarded from a number of agencies including the European Commission, DfID, SIDA, NORAD, HIVOS Netherlands and Japan. In fact, large programs such as the DPEP are being supported and funded jointly by several of these agencies.

A recent attempt to bolster the NGO sector is the USAID-sponsored REACH India project. Funded through the Educational Quality Improvement Program, REACH India is a four-year, \$20 million cooperative agreement to support the government education sector by promoting and SSA interventions with civic NGOs for the most vulnerable populations in six targeted urban and rural areas. REACH is helping to strengthen the managerial capacity and technical expertise of the NGO infrastructure.

Corporate Involvement

The corporate sector is also investing resources to improve education in India, especially as more and more firms engage in corporate social responsibility (CSR) activities. Between May and October 2003, the Social and Rural Research Institute, a special unit of Indian Market Research Bureau (IMRB), polled 536 companies across India on their CSR activities. Twelve percent of those companies responding to the poll conduct education activities and 34 percent cite children as being a target group for most of their significant CSR activity. There are several examples in India of corporations that have established foundations for their philanthropic work similar to the GE Foundation. These include the SNS Foundation, Dr. Reddy's Foundation, and Infosys Foundation.

Corporations that are involved in education include both domestic firms and multinationals. Contributions take the form of monetary donations and funding of programs, as well as volunteer

support for mentoring children, volunteer teaching, computer instruction, program organization, and the hosting of field trips for underprivileged children, to name just a few. The corporate sector supports a broad range of programs and activities benefiting street children, child laborers, disabled children, and other disadvantaged or underprivileged children. Examples of corporate sponsored programs include reading and library construction programs, computer-assisted learning, pre-school programs, mobile classrooms, school construction and infrastructure improvement, and support to homes and centers catering to abandoned, orphaned, or street children. Many corporate offices or facilities choose to support the local schools in their area.

GE is already an active player in education, with GE Elfun chapters around the country making valuable contributions to improving education. In fact, GE Elfun chapters have created partnerships with several of the projects reviewed in this study. The Delhi Elfun chapter, for example, has supported Mobile Crèches programs in Gurgaon, mentored street children at PRAYAS homes, and provided education, mentoring, and life skills instruction to children in two SNS Foundation learning centers. In Bangalore, GE Elfun volunteers are working on projects focused on computer literacy and education for disadvantaged and disabled children, and in Hyderabad Elfun volunteers are helping to educate blind and intellectually impaired children.

The GE Foundation India is also active in supporting education, having already awarded scholarships to 82 pupils across 26 institutes amounting to US \$405,000. The GE Foundation additionally supports CRY (Child Relief and You), Kalakar Trust for Special Education, Sumangali Seva Ashrama, The Richmond Fellowship Society (India), Rebekah Ann Naylor School of Nursing at the Bangalore Baptist Hospital, Spastics Society of Karnataka and Mumbai-based Vinimay Trust.

Following are examples of existing corporate involvement in primary school interventions.

Corporation	Area of activity	Description
Citigroup	Street children	Citigroup is partnering with Akanksha in providing education to a group of street children
		(ages 5-18) in an Akanksha Centre in Mumbai. Under the 'Sponsor a School Programme,'
		Citigroup is associated with Akanksha by adopting a center financially. Besides financial
		support, Citigroup employees and spouses are encouraged to get involved through direct
		volunteer teaching, celebrating special occasions with the children, mentoring, purchasing
		artwork and products made by the children and making donations in kind.
	Fundraising and	Citigroup has entered into collaboration with Akshara Foundation to support and work
	awareness	primarily towards achieving Universalisation of Elementary Education for all children in
	building	the age group of 3-11 years old in Bangalore city. Citigroup forwarded an Akshara mailer
		to all its Suvidha account holders during the month of Feb 2002, and the response was
		tremendous and favorable. Citigroup had also opened an account in favor of Akshara and
		displayed posters in all ATM counters. The aim is to create, generate and sustain awareness
		amongst all the citizens for wider participation in achieving the goal. Akshara`s program
		has the scope to involve and encourage volunteers from the Bangalore branch.
	Education for	Citigroup is supporting Pratham to build a primary education initiative for economically
	underprivileged	underprivileged children in Chennai. This includes a Reading Program (2 months duration)
	children	for those ages 6-14 who are below the expected level of competency, while all children 3-
		14 will be covered in the Library Program. Other interventions include regular workshops
		(story-telling, math workshops, reading sessions), Computer Assisted Learning, and bridge
		courses for out-of-school children and working children.

Corporation Area of activity	Description
--------------------------------	-------------

HSBC	Street children	HSBC has been associated with Future Hope since its inception in 1991 and has been helping the organization through regular donations. The main objective of this organization
		is to provide basic necessities, such as care, food, shelter, education and medical aid to the street children of Kolkata, to ensure that they have a better future. Initially it started as a
		'Home' for street children and eventually grew into a school.
	Child labor	HSBC Data Processing (HDPI), Hyderabad is supporting the Satya Sai Vidya Mandir
		school – a small school in Hyderabad, set up by volunteers with the objective of persuading
		parents to keep their children out of child labour. The children receive some form of
		education, with a view to entering them for formal exams and transitioning them into
		mainstream schooling. Apart from donating computers and funds, HDPI's training staff
		developed a structured program for employees to take advantage of the nine hours
		community leave allowance, which all employees are granted to deliver tuition to the volunteer teachers at the school. In their spare time, HDPI staff volunteer take the children
		on trips to the zoo.
	Support to	HSBC supports SOS Children's Village in Faridabad. SOS-India's mission is to provide
	abandoned and	abandoned and orphaned children with a family, a home, an education and a steady
	orphaned	foundation for an independent life. It works under the umbrella organization, SOS
	children	Kinderdorf International. The village in Faridabad, Delhi provides shelter to 130 children,
		ranging from newborns to teenagers. They live in ten homes, each headed by a "Mother",
		with other boys and girls who all grow up together as siblings. The village is spread over
		approximately 5 acres of land and has a kindergarten, library, playground and necessary
	Support to	infrastructure to support residential staff. HSBC supports the Naya Prayas Project. Started in 1993 with a non-formal education
	underprivileged	centre for neglected children facing severe economic and emotional crisis, Prayas meets the
	children	basic needs of the children - care, protection, education, recreation, health care, nutrition
		and vocational training. Nearly 350 children, half of whom are girls, between the ages of 5-
		14 years, have been enrolled here with the objective of ensuring that they are finally
		admitted to formal schools run by the government or public charitable institutions and to
		save them from the vortex of child labour. With help and support from HSBC, Prayas
	G	succeeded in placing 70% of its children into government schools in 2001.
	Support to abandoned and	HSBC Software Development (HSDI), Pune supports Preet Mandir, a charitable trust working for abandoned children in the age group of 0 to 6 years. The children, either
	orphaned	abandoned or given away to Preet Mandir by relatives who cannot maintain them, are
	children/	supported with shelter, food and basic education until they can be rehabilitated through
	Computer	legal adoptions in India or abroad. HSDI has set up a Computer Assisted Learning Centre
	assisted learning	for children between 3 and 6 years old. The program at the Learning Centre will cover a
		wide range of subjects including Computer based learning, arts, crafts and mathematics.
Cummins	Education of	School on Wheels: Against the notion of standard schools with buildings and
Diesel India	street, slum,	infrastructure, CDIF helped the noble cause of taking the school to the doors of the street,
Foundation	construction site children	slum, and construction site children with no means of entry into formal school education.
	Cilidieii	The school tries to teach the children formal education with the help of audio visual mediums in the fields of environment, cleanliness, pollution, population, etc.
Caterpillar	School	One of the major initiatives taken by the Company is in the field of education. Recognizing
India Private	establishment	the need for grooming today's children as tomorrow's responsible corporate citizens, the
Limited		company established a school in 1990 near the factory premises. This English Medium
		Higher Secondary School, Chellammal Vidyalaya, imparts quality education, not only for
		the benefit of employees' children, but also for children from nearby villages. This school
		has facilities for education up to 12th Std and currently has on the rolls 1000 students. The
		Company has provided the entire infrastructure, facilities and subsidized transport facility.

Corporation	Area of activity	Description
Gujarat	Infrastructure	Strengthening and supporting village schools and anganwadis and providing teaching aids,
Ambuja	and materials	material, furniture, sports equipment, and in some cases undertaking the renovation of
Cement	support to schools	schools.
		Twenty-five village schools in and around Kodinar in Gujarat and Chandrapur in
		Maharashtra covering thousands of children, have been involved in educational workshops
		and training sessions on environmental awareness. Collaboration has been established with
		3 Zilla Parishad schools at Chandrapur. Adequate infrastructure, nutrition, capacity
		building and extra curricular activities have all been focused on as part of this program. In
		Ropar, the Ambuja Manovikas Kendra provides quality education to 50 intellectually
		challenged children. It also conducts on-going workshops for parents of these children, to
Forbes	Pre-schools,	equip them to cope with their children's condition. Forbes Marshall has begun several innovative initiatives, which supplement the regular
Marshall	teacher training,	school program that the children from the urban slum would go to. Besides this, they are in
Warshan	non-formal	the midst of a 3 year program with the schools that lie around the factory – where there is a
	education,	3 pronged approach – working on attitudinal change with teachers and parents, imparting
	libraries	teaching methodologies and creative techniques on using low cost education materials to
		teachers and working on issues with the students themselves – e.g. how better to
		concentrate, issues of discipline in school; additional training on maths and English.
		Support is also given to two "Gammatwadis or fun preschools" at both Forbes Marshall
		factories where children learn through the play way method. This gives them an ideal
		foundation to introduce them to school.
		"Akanksha" (meaning hope in Hindi) is an after school program where English is taught to
		young children, along with an emphasis on building confidence and inculcating good
		values in them. These programs are taught in a fun way – and are a change from the dreary routine the children are used to. Attendance is incredibly high for the two Akanksha centers
		that Forbes Marshall sponsors – each centre has about 50-60 children coming everyday for
		2 and a half hours. Forbes Marshall also works with a group of young children who are
		unable to go to school, due to family exigencies and conduct a Non Formal Education class
		at Kasarwadi (within the slum they live in) where literacy in Marathi is the aim. Some of
		these children (and their mothers) have gone on to sit for the government based exams.
		Circulating libraries function for both women and children where a librarian goes door-to-
		door issuing books to slum children and women, is a very popular program. This also
		provides an additional source of income to women from the slums – there are incentives
		also built in to this program. To encourage reading habits, supportive programs are organized on Sundays and holidays. Presently about 750 books are being read per month.
		organized on Sundays and nondays. Freschity about 750 books are being read per month.
		A partnership with the local municipal authorities (the Pimpri Chinchwad Municipal
		Corporation) was also established and at their request, Forbes Marshall has provided an in-
T. C.	T '1 '	service training program for 99 balwadi (preschool) teachers.
Infosys	Libraries,	The Infosys Foundation believes that every school should have sufficient resources to
Foundation	classroom construction,	acquire knowledge. The Shalegondu Granthalaya (A Library for every school) program has been extremely successful since its inception in 1997-98, in helping schools in villages set
	education	up their own libraries. It is the dream of the Foundation that one day every school in the
	centers	country will have a library of its own. Employee volunteers in Maharashtra and Orissa
		coordinate the project and the 2222nd library was recently set up. The Foundation has
		donated Rs 5 lakhs for the construction of Shisuvihar for the Vidyalaya Gurukula which
		works to improve the lot of destitute children. Yet another initiative of the Foundation is a
		classroom under construction in a tribal area near Pune, Maharashtra.

Corporation	Area of activity	Description
Ballarpur	Mainstreaming	The Bilt Pratham project is the Bilt support to the cause of primary education at the
Industries	out-of-school	national level. The project is still active in the six cities of Maharashtra i.e. Amravati,
Limited	youth	Aurangabad, Nagpur, Nasik, Solapur, Thane and in city zone of Delhi. The motto of "every
(BILT)		child in school and learning" has been achieved to a great extent in the areas that the
		project has spread to. The focus of the project is to bring school drop-outs into the formal
		schooling system and the program in this year has reached out to more than 30 thousand
		children and has been effective mainstreaming children who were out of schools into the
		formal schooling system with the help of bridge courses.
		The Bilt Pratham project is based on two programs:
		1) Balsakhi; (Child Friend) Program to support learning of children in schools; assists
		newly mainstreamed children and potential dropouts to help increase retention.
		2) Bridge Courses: Classes to prepare out-of-school children to enroll in formal school.
Standard	Pre-schools	The Bank has made a three-year commitment to Pratham to contribute necessary funds
Chartered		towards the running of 50 balwadis (pre-primary schools) per year. Standard Chartered is
		the largest donor and supporter of the Balwadi program and the bank is now exploring the
		possibility of taking on the role of the 'Leading Organisation' in this ward. Standard
		Chartered India has increased involvement with Pratham, to embrace not only donations of
		funds, but also the inclusion of need-specific contributions, with the Bank donating old
		computers and furniture for the Mahila Mandals during the Pratham Mumbai Initiative in
		2001.
	Education of the	In 1995, during the visit to India of Chairman Sir Patrick Gillam, the Bank undertook
	blind	sponsorship of the refurbishment of the central hall of the Victoria Memorial School for the
		Blind in Mumbai. The school required nearly five years to complete the renovation project,
		due to the meticulous care with which the renovation to an 86-year old Heritage building
		needed to be carried out. The hall, now complete and known as the Standard Chartered
		Hall, was inaugurated by Dr. P. C. Alexander, Governor of the state of Maharashtra, in
		January 2001.
	Street children	Prem Dan is a charity run by Sister Felicity Morris, which has three learning centers for
		children forced into living on the streets. The Bank committed an annual donation for a
		period of five years towards the Education and Nutrition Programme for the
		underpriviledged children in Mumbai. The children covered under program are provided
		with a wholesome mid-day meal and are given free tuition classes to help them cope with
		their studies. This program has helped the children because they leave their homes early
		morning and return home only in the night for their supper. The program supports around
		572 children in four local schools in Mumbai.
	Education of the	The Bank is a strong supporter of the Central School for the Education of the Deaf - a
	deaf	registered society and public charitable trust founded in 1966. Its prime concern is to
		rehabilitate profoundly and severely deaf children by providing model teaching and
		training facilities, both in English and Marathi. In doing so, the School also endeavors to
		bring vocational and other employment opportunities, which would otherwise be denied to
		them, within the reach of deaf children. The Bank provides ongoing assistance to the
		School, through cash donations, as well as the Standard Chartered Income Fund, in which
		the Bank's donations and the School's own funds are invested with interest returns funding
		the School.
Tetra Pak	School milk	The idea behind School Milk Program is to deliver tasty, nutritious and safe milk using
India Pvt.	program	Aseptic Technology. The School Milk Program (SMP)is exclusively designed for
Ltd		addressing these health and nutrition needs of school going children. The program
		encourages milk consumption.

Corporation	Area of activity	Description
Tata	Computer	In an arrangement with the BrihanMumbai Municipal Corporation (BMC), Tata Infotech
Infotech	education	holds computer classes for underprivileged children after school hours. Some of the
		computer education programs being undertaken by Tata Infotech:Mumbai:
		One thousand, four hundred and thirty-nine BMC school students are being imparted basic
		computer education in partnership with the NGO Each One Teach One, at the BMC school,
		Tata compound, Andheri.
		Tata Infotech has launched a 'Train The Teachers' program for BMC school teachers in
		partnership with the BMC. One hundred eighty BMC teachers from 80 BMC schools are
		trained at education centers.
		Tata Infotech has helped to set up and run a computer center to impart computer education to the street children of Vatsalya Foundation (Vatsalya is an NGO, which runs a shelter for
		street children). The Tata Infotech Education Services Division has designed the
		curriculum and the Customer Support Services Division of Tata Infotech has installed the
		computer infrastructure. A Tata Infotech group of volunteers will impart computer
		education initially, after which the trained Vatsalya staff will take over the activity.
		Street children at Vatsalya take counsel from a professionally trained clinical psychologist
		from the Tata Infotech HR department The counseling sessions aim to make the children
		better citizens by delving into behavior patterns and addressing their emotional needs. The
		sessions help mainstream the children so that they can compete with their contemporaries
		in society.

Source: Information, much of which is verbatim, is from a variety of websites that describe corporate responsibility.

III. RESEARCH METHODOLOGY

DATA COLLECTION

Findings in this critical review are based on an extensive search of the academic and professional literature on effective educational practices in Indian primary education. The task to collect source documents was designed to be broad and comprehensive: to collect as many documents from as many sources as possible about interventions to support basic education. Given the wide-sweeping approach to data collection, there should not be any systematic bias in the kinds of documents included in this review. Although the resultant collection of studies cannot possibly be exhaustive of the vast literature in India, it was extensive and should largely reflect the publicly-available literature on effective educational practices in India.

In Washington, DC, AIR staff conducted a literature search of research reports from international organizations such as the World Bank and UNICEF. Washington-based staff also worked with colleagues in the REACH India project and a local non-governmental organization (NGO) called Nirantar to collect project descriptions and program evaluations. Nirantar is a well-established women's resource center in India with substantial field experience on gender and education in various parts of the country. Nirantar staff members have substantial knowledge about GOI-, NGO-, and donor-sponsored efforts to improve primary education in India. Similarly, REACH maintains background information about NGOs that apply for grant funding, including portfolios of past project activities and evaluations.

Project staff and consultants collected information on effective practices over an eight-week period, with frequent communication between Washington- and India-based staff to discuss and refine the scope of data collection efforts. The task was to collect as much information about projects around the country that support primary education, with a particular geographic focus on Bangalore, Gurgaon, and Hyderabad, municipalities of specific interest to the GE Foundation. Project staff collected reports from REACH India files, libraries, implementing organizations, book stores, and government officials. In total, project staff identified 159 documents, 67 of which are directly related to 47 unique interventions, activities, or projects. Given that some documents report on more than one project, two reports were available on average per activity.

DATA ANALYSIS

Washington-based staff organized information about program descriptions and evaluations into a master database. They organized information into the following categories:

- *Project information*, including contact information about project implementers, project description, locations of project implementation, implementing partners, project sponsors, and target groups and ages;
- *Key questions* that the GE Foundation has posed about interventions examined in this review and *common elements* to examine across countries and topical areas;

- *Indicators of project success*, including the extent to which interventions create engaging learning environments, increase the relevance of education, give pupils the foundations for success, increase educational opportunities for girls, and improve the educational environment to be more conducive for girls' success;
- Cross-reference of interventions employed in each project; and
- *Monitoring reports/evaluations*, including bibliographical information collected about respective projects, data collection and analysis methods, and study outcomes.

The database fields under the Monitoring and Evaluation tab are based on a conceptual framework for analyzing the quality of evidence related to educational effectiveness. Project staff members have used the framework in two ways. First, they have used it to evaluate the effectiveness of each project in the sample. This includes an analysis of 1) the quality of the available information about each project and 2) the relative success of the project in attaining each measure of success. Second, the framework makes it possible to identify exemplars of effective educational practices. Analytical results are described in section V.

EMPIRICAL DATA ABOUT EFFECTIVE EDUCATIONAL INTERVENTIONS

Among the 159 documents identified initially for this review, 67 contained information about specific interventions that support primary education in India. Interventions tended to cluster broadly into three categories: those that support educational access, those that support improvements in educational quality, and those that simultaneously promote access and quality. Following is a list of intervention types that emerged from the review, the number of studies that described the intervention, and the extent to which interventions were designed to address educational access and/or quality.

Intervention	Number of Studies	Goal of Intervention
Bridge courses	16	Access
Family outreach	16	Access
Curricular reform	16	Quality
Non-formal educational approaches	15	Access
Professional development for teachers	15	Access, Quality
Improving enrollments and mitigating child labor	13	Access
Classroom supplies and materials	13	Access, Quality
Professional development centers	13	Quality
Advocacy	11	Access
Parateachers	9	Access, Quality
Instructional practices	9	Quality
School staffing	8	Access
Construction and renovation	7	Access
Child care services	6	Access
Needs assessments	6	Access, Quality
Contact and coordination centers	6	Quality
Night shelters	4	Access
Remuneration for school staff	4	Access
Computers and computer education	3	Quality
Peer networks	2	Quality
HIV/AIDS education	2	Other

Intervention	Number of Studies	Goal of Intervention
Pupil assessments	1	Quality
Professional development for school principals	1	Quality
Awards to successful schools	1	Quality
Condom distribution	1	Other

Staff identified 25 interventions that emerged in the research literature. Bridge courses, outreach to families, and curricular reform were the three interventions described most often. HIV/AIDS education and the distribution of condoms were two interventions cited that did not fall easily within the access or quality clusters.

Among the 67 documents that described specific educational interventions, 46 used evidence to examine project effectiveness. These included at least some discussion of data sources, description of data analysis, and reporting on study outcomes. The following tables summarize the sources of data, analytical techniques, and outcomes associated with these studies.

Data source	Number of studies
Secondary data	39
Interviews	20
Surveys	18
Focus groups	12
Pupil assessments	10
Site visits	10
Observations	5

Data analysis	Number of studies
Descriptive statistics	45
Qualitative review	13
Inferential statistics	6

Study outcomes	Number of studies
Improved access to schooling	37
More teachers/better teaching	23
Increased pupil achievement	18
Better family/community outcomes	16
Increased pupil retention	15
More community involvement	9
Improved physical infrastructure	9
More resources available	6
Higher pupil completion rates	5
Increased gender equity	5
Higher pupil self-esteem	2

Most studies relied on at least some information from other sources, secondary data, to determine project effectiveness. Other common data sources included interviews, surveys, and focus groups. Fewer than one in four evidence-based studies referenced pupil assessments as data.

The most common analytical technique used to examine project effectiveness was descriptive statistics, including counts of enrollment, retention, and completion rates. Thirteen studies used qualitative information from interviews and focus groups, and only six studies attempted to use inferential statistics to examine the relationships between educational interventions and outcomes, including pupil achievement.

In terms of study outcomes, the majority of studies report on the effects of projects in improving access to schooling and other educational services. In addition, nearly half of the evidence-based studies report on increases to the teaching force, including teaching assistances, parateachers, and formal teachers, as well as changes in teaching practices. Other common outcomes described in studies include changes in pupil knowledge and cognitive ability, changes in pupil retention in school or alternative educational programs, changes in community involvement and support for education, and increases in school buildings or the quality of educational facilities.

IV. CONSIDERATIONS FOR FUTURE INVESTMENTS

This section presents a broader perspective for the GE Foundation to digest the detailed information on specific interventions in the following section about specific research findings. This perspective provides a context to enrich the dialogue about how and where the Foundation considers investing its human and financial resources in targeted areas of India to improve the primary school experience of underrepresented and disadvantaged groups. It draws on knowledge and experience from working in other developing countries to improve the access and quality of primary school education and refers to the findings from the selected document review of effective practices within the broader context. The text uses the key questions presented by the Foundation as well as its inventory of common elements of interest across its future efforts.

GOALS AND METRICS

Taking an evidence-based approach to decisions about educational investments is an important strategy for increasing the likelihood of future success. This critical review of the research literature, however, has uncovered substantial gaps in empirical data about effective practices. For example, very few studies about primary education include cost data that respond to questions about per-pupil investments or rates of return. The absence of such data can make it difficult to make reasonable comparisons among investment options.

Attention to technical rigor in designing and using evaluation and measurement is often quite limited in service delivery programs. The inattention given to collecting information about program implementation and outcomes is one of the most neglected elements of program implementation. In expanding its international grant-making portfolio, the GE Foundation has an opportunity to make a difference with a rigorous and thoughtful process that not only measures outcomes but systematically examines the implementation process so as to connect project activities with outcomes.

Appropriate goals may be both short- and long-term. Short-term goals may examine the extent to which necessary inputs are available and appropriate for a program, determine that the conditions for implementation are present (e.g. infrastructure, personnel, and materials) and ensure that a process has been clearly articulated and a timetable developed to implement the process. Long-term goals specify what the program hopes to achieve, such as increased achievement levels in specified content areas, targeted number of girls completing the primary cycle, and targeted number of dropouts returned to a formal schooling.

As the GE Foundation discerns investments in sustainable development, one of the contributions it can make is to integrate multi-method measurement designs that inform a variety of stakeholders (e.g. parents, community members, and local educators) about the progress of the implementation and the outcomes of the efforts. Examples of the types of measures useful for examining the processes and outcomes include performance tests (e.g., criterion-referenced or curriculum-based tests of content such as reading, maths, speaking, writing, science); observations of the learning experience (e.g. how pupils and teachers use instructional materials) and the learning environment;

interviews with teachers, head teachers, and parents; and focus groups of diverse stakeholders to gain perspective on a specific intervention. Some of these data-collection activities are described in India's research literature on educational interventions.

Success in primary education is perhaps ideally measured by the actual learning achievement of pupils as well as the share of primary-aged pupils who complete at least five years of education. Gender and social achievement gaps may also be measured. Over the past decade, India has increasingly moved to monitor the learning achievement of primary pupils, first through the regular, sample-based, monitoring of achievement in reading and mathematics for pupils in classes II and IV, and second through broader program of testing at the end of the primary stage. Responsibility for assessment of learning typically rests with state education agencies, while schools and communities are increasingly responsible for monitoring child school attendance. A nationwide household survey was completed in 2003 to count the number of primary school-age children out of school.

Interventions that are implemented in such a way as to permit comparisons should be evaluated through the use of tests and measures of schooling participation: attendance, repetition, and completion. The review of interventions undertaken in this study show that some interventions are being evaluated rigorously, while others—most often national programs, where comparison groups are not available—rely heavily on monitoring, rather than evaluation, methods.

A number of large interventions assisted through bilateral and multilateral donors in India have used measures of learning achievement to evaluate impact. In many cases (e.g., DPEP I), no comparison groups were utilized; progress was measured against baseline measures. National programs, of necessity, lack comparison groups, and changes over time are typically the only suitable measure. Attribution of causality remains an issue in evaluation designs lacking comparisons, however. Quasi-experimental evaluation designs, capitalizing on natural variation across schools or other units of aggregation (districts, for example) yield some information about effectiveness of programs. For example, evaluations of the nationally implemented Operation Blackboard program in India showed positive effects associated with school participation.

STRATEGIES AND PROGRAMS

Within the global context, the implementation of national policies promoting access has fallen short of expectations and has resulted in donors such as the World Bank to fund initiatives focused on accelerating access rates. Nations identifying basic education as a priority are developing national policies for providing universal access to all school-age children. Increasing access to education is often coupled with a tension between quantity and quality—the challenge of providing quality education to increased numbers of pupils. Quantity addresses the need to have pupils enter and move through a system while quality addresses what pupils know are able to do, and how they use their educational experience outside of the schooling environment. The assumption and hope is that as a consequence of schooling, school leavers will be able to function in their own behalf and in behalf of the civil society.

The strategies presented below in the section, "Research on Effective Educational Interventions," offer creative ideas for consideration. One characteristic of effective strategies for increasing

educational access is the connection between the program and a component within a larger system. For example, one program focusing on the educational needs of child laborers is successful in removing children from labor situations and enrolling them into formal schools by working with state governments and schools. In another situation, young people participate in out-of-school programs to accelerate learning of the approved curriculum to return to government schools. Another characteristic of successful interventions appears to be working individually with young people to provide personal attention and support to help them succeed.

In general, the strategies cited in this review target groups that are underserved by formal education such as children of poverty, children who live outside of a home, child laborers, and females. Providing safe spaces and supportive environments where children can experience positive learning activities is important for returning the underserved children to school. Successful interventions have drawn upon the local communities for infrastructure and instructional supplemental resources and additional human resources to assist with providing for the educational needs of children in the community. Interventions of this sort have the potential for making a difference at the local level with community stakeholders.

IMPLEMENTATION

One of the most important but least acknowledged factors linked to the success of program interventions is implementation. It is a critical link between a well designed program or policy and the outcome of that activity. The steps required to connect a program and an outcome vary by size, complexity, and other factors. With each step along the path to program success is an opportunity to disconnect thus compromising the potential success of the project. However, the dialogue about implementation is absent from most educational debates and the information available detailing evidence of successful and not as successful implementation of policies is scarce.

One of the critical characteristics of implementation that is beginning to receive attention is the capacity to manage the implementation of an activity. Some successful programs recognize the benefits of increased capacity in this area and are seeking training for managers in things such as fiscal accountability, personnel development, and project documentation. It is essential that local staff be entrusted with managing the implementation of a program—a role that typically results in personal ownership of the ideas.

Another critical component of successful implementation is the accuracy of the assumptions made by the implementers. Common among failed programs is that the policy or program developers assume certain conditions to be in place (e.g. stable environments, availability of resources, and trained staff) that simply are not available. Flexibility in implementation linked to insight and skills required of managers is crucial when mitigating the effects of inaccurate assumptions. It is important to build into program designs checkpoints throughout the implementation to take stock of effective and ineffective practices so corrective action may be taken.

The proximity of successful and effective strategies to the learner and the learning environment merits consideration in future programs. Examples of interventions in close proximity of the leaner and learning environment include community groups whose focus is school improvement ranging from resources to building blocks, residential facilities that provide a safe learning environment,

and direct support to the non-educational needs of children. It is important to remember that some children may be precluded from participating in learning because of factors in their personal circumstances over which they have no control (e.g. family illness and the unavailability of parents or other adults as role models).

While funding and monetary resources are components of effectiveness of programs in India, so too is community support. National government awareness campaigns such as the total literacy campaign was important in setting the conditions for implementing the DPEP program. DPEP implementation was further facilitated by an administrative structure that enabled resources to reach schools and teachers. In addition, teacher isolation, an issue in one- and two-teacher schools, was addressed by the establishment and operation of block and cluster resource centers that supported the ongoing in-service training of teachers, as well as peer learning.

INEFFECTIVE PRACTICES AND MINEFIELDS

Lessons learned from experiences of programs that have not reached the desired goals and outcomes are helpful in choosing investments. Knowing the context and circumstances leading to less successful results of an intervention is extremely important. For example, to judge a teacher training program as ineffective without knowing something about the characteristics of the participants, the characteristics and skills of the instructor, the way in which materials were used in the learning situation, and the learning environment in which the program was implemented may result in a potentially effective program being discounted for the wrong reasons.

When designing new activities, building in the requisite knowledge to determine the factors around which a program is designed and implemented will advance the knowledge about the success or failure of a program. As is the case with regard to the available literature on primary education in India, information about effective practices is generally more readily available than information about ineffective practices. Further investigation with direct implementing institutions would be important to inform the process. Activities such as site visits, interviews, and focus groups can provide invaluable information about ineffective practices and minefields.

POTENTIAL PARTNERS, CORPORATE ROLES, AND BENCHMARKING

Working collaboratively is now common currency within development. Various combinations of partners function well together. Examples include donors with host country governments, NGOs and donors, private enterprise with education activities, and foundations with local education activities. Support for stakeholders outside the formal system is important in fulfilling the national interest of providing basic education to the entire eligible population.

Most large bilateral and multilateral donors to education in India have been supporting large centrally- and state-sponsored primary education improvement programs. These include UNDP, UNICEF, UNFPA, ODA, DfID, Swedish SIDA, Norway, and the World Bank. Within this context, the opportunity for smaller partners is great, as the thrust of the large programs is to support local school improvement efforts. Literally hundreds of small, local NGOs are working on behalf of education for the disadvantaged in India.

There are opportunities for collaboration between foundations and local communities. Potential roles for support from foundations include such things as providing one-on-one mentoring and/or tutoring of children who need to strengthen knowledge of content and learn good study habits, working with parents and other community members to increase their capacity to provide tutoring support to children, helping organize and staff "study centers" so that children have a place to complete their homework or have a place to read, and helping parents and teachers learn how to use locally available materials for instructional resources.

RESOURCES

As mentioned previously, the total resources required for both expanding the primary education system while improving its quality are enormous, and best addressed by the national and state governments of India. However, opportunities for more modest investments exist and are best realized when working in alignment with national and state and local programs. Some areas that could benefit from GE Foundation involvement are

- Management support to district and panchayat societies charged with responsibility for implementing the SSA program;
- Management support to village education committees (VECs) and other local bodies responsible for primary education;
- In-service training of teachers (through block and cluster resource centers) in specialized technical areas, such as science, technology, and computers;
- Technical support is developing science curricula; and
- "Adopt a school" programs in the geographical areas in which GE is working.

V. RESEARCH ON EFFECTIVE EDUCATIONAL INTERVENTIONS

INCREASING ACCESS: EVIDENCE BASED INTERVENTIONS

SUMMARY OF CONSIDERATIONS FOR FUTURE INVESTMENTS:

This section is intended to guide the GE Foundation as it considers the array of interventions that work towards increasing access to primary education in India. Based on this review, the following interventions have provided some evidence of effective outcomes, are comprehensive in approach, and focus on building local capacity:

- > Effective child labor interventions coordinate directly with communities and government schools. Successful programs using these interventions have a very strong focus on sustainability. Projects scale down and terminate direct activities when communities deemed "child labor free" have a supportive culture of education where all school aged children are enrolled in school. Interventions to mitigate child labor can be adapted to target specific groups such as working girls and children working in cities or rural areas and have been effectively replicated in a wide range of communities.
- > By providing intensive academic instruction to predominantly out-of-school children, bridge programs have been successful in mainstreaming these children in to the formal school system. These interventions have been adapted to address the needs of particular groups of children such as girls and minority groups and have been successfully replicated by various projects in many different communities.
- > Teacher recruitment and training of local community members as parateachers has a positive effect on building local capacity and encouraging communities to take ownership of educating their youth. These interventions have been successful at expanding access to education for children in isolated and underserved communities. These interventions have been particularly successful in increasing access to girls when recruited parateachers are women.
- Interventions that focus on building infrastructure and providing resources have been very successful in increasing access to education in areas that are especially rural. There is, however, a need for additional and improved resources in classrooms in terms of desks, blackboards, books and other teaching and learning materials.
- Residential camps offer a comprehensive approach to addressing the needs of out-of-school youth by providing room and board, counseling and health services, and basic education and extracurricular activities for children. Successful residential camps transition the children into formal school setting. There is, however, a need for improved continued support for campers once they leave the residential programs. In some cases, campers flourished in the supportive holistic camp learning environment only to later face challenges reintegrating into their homes, communities, and succeeding in formal schools.
- Alternative education programs provide educational opportunities to students otherwise denied access to formal schools. Successful alternative education programs that are able to provide quality education to pupils, however, require a comparatively large investment of resources. Setting up a fully functioning school with appropriate infrastructure, staff, curriculum, and teaching and learning materials is a relatively costly and time-intensive process.

Enrollment data suggest that India has made substantial progress in expanding access to primary education. However, there continues to be heterogeneity in the access to education for females and other socially disadvantaged groups and gaps continue to persist in education outcomes—between boys and girls, between the poor and the poorest, and between children from minority social or religious groups and other children.

The data also suggest that enrolling pupils is not enough. Keeping children in school continues to be a serious problem. Attendance continues to remain spotty and children continue to drop out of

primary schools at high rates. Some of the reasons cited for this include socioeconomic or cultural reasons, a lack of adequate infrastructure, a shortage of teachers, and poor or inconsistent quality of education. Unfortunately, regular information on the drop out and retention of children is not collected regularly in all states. This is further complicated by the fact that many states follow a *de facto* policy of social promotion at the primary level. As reported by the Government of India, the dropout rate for 1997-98 was 25.8 percent.¹⁹

This section discusses interventions that attempt to expand access to education opportunities. While most of these interventions occur within the formal school system, there are also examples of innovative and successful interventions occurring in non-formal environments.

Within the formal schooling system, programs are focused on several different approaches. Such approaches work to increase enrollment, retention, and completion rates of primary school age children ages by 1) mitigating child labor, 2) recruiting teachers, and 3) building infrastructure.

Some project interventions focusing on access are designed to offer supplementary education to address the needs of children who have never gone to school. These interventions take place outside of the formal school system, though many of them link with the formal system at important transition points. For example, some interventions are designed to help prepare pupils to enter into the formal school system. Examples of these interventions include 1) bridge programs, which literally try and bridge the gap between non-formal and formal schools, 2) residential programs, that place pupils in intensive residential programs in order to speed up their learning process, and 3) alternative education programs.

The first half of this section will describe the formal and non-formal interventions for which substantial evidence for their success is evident in the available monitoring and evaluation reports, annual reports, descriptive studies, and various other publications. The interventions are ranked based on the quality of outcome-based information available in the literature, the comprehensiveness of their approach, their focus on building capacity, and providing transition points for children from early childhood education to primary education and from primary education to secondary education. Ideally, information about the relative efficiency of each intervention (e.g., comparisons of program costs and number of children served) would also be included, but such information is not readily available.

The last part of this section provides details on other promising interventions addressing access in primary education. While the interventions identified do not have the same level of available research on their outcomes as those mentioned above, these interventions show a certain innovative promise and could potentially be of interest to the GE Foundation.

¹⁹ UNESCO, *Education for All: The Year 2000 Assessment Report, India*, (2000). Web site: http://www2.unesco.org/wef/countryreports/india/rapport_2_1.html

1. Mitigating Child Labor

Overall enrollment rates for primary school age children in India continue to increase. However, substantial gaps remain for some groups. There continue to be wide disparities between boys and girls, poor and less poor children, SC/ST children and other groups, and rural and urban children. Children involved in the child labor market generally have very limited access to education opportunities. Various interventions are addressing the education needs of child laborers. One project, in particular, demonstrates that by designing interventions for the particular needs of child laborers, large-scale and sustainable change in the educational landscape can be achieved.

M. Venkatarangaiyya Foundation

The M. Venkatarangaiyya Foundation (MVF) has two interconnected goals: abolishing child labor and providing educational opportunities for child laborers. The MVF child labor project emphasizes collaborating with the state government to strengthen government schools rather than creating alternative avenues of non-formal education for these children. MVF has four main strategies: 1) taking children out of the workplace, 2) advocating to children and families about the importance of primary education, 3) working to promote self reliance and confidence in children so they are able to mainstream into formal schools, and 4) closing the achievement gap between child laborers and school-going children through bridge courses and summer programs. The project identifies and negotiates with formal schools to enroll young children and provides intensive bridge programs and summer courses for older children to help transition them from work to school. The project also provides trained parateachers to formal schools to assist with the resulting increase in class size. The MVF model has been adopted and replicated by a number of government and NGO agencies to tackle the pervasive problem of child labor.

MVF activities, which began in 1990 in three villages in Andhra Pradesh, had expanded to 1,500 villages by 2001. In 400 of these villages, every child between the ages of 5 and 11 is enrolled in school. Another 168 villages have been deemed entirely "child labor free." Based on several evaluation reports, MVF has removed nearly 150,000 children from work and placed them in formal schools. Another 4,000 bonded child laborers were released from their work and enrolled in schools.

In their qualitative research, MVF found that poverty is not the primary motivating factor for children to work. They also report that parents do not always depend on their children's earnings for a living and are willing to make adjustments to send their children to school. These two discoveries coincide with MVF's goal of facilitating capacity-building within villages, enabling direct project work to decrease in villages over time, while being sure that they have promulgated the importance of primary education as a continuing community goal.

-

²⁰ Wazir, R, No to Child Labor, Yes to Education: Unfolding of a Grass Roots Movement in Andhra Pradesh, EPW Review of Labor (2002).

2. Bridge Programs

Bridge programs target out-of-school youth and often use intensive, condensed curricula that help prepare children to enter formal schools in age-appropriate classes. Some bridge programs are specifically designed for particular groups of children such as child laborers, girls, or SC/ST children. Communities working with some projects identify and provide space for the bridge programs in homes or community centers. Others use formal school facilities after regular school hours to take advantage of classrooms, playgrounds, and other infrastructure already available.

Mahita Project

The Mahita Project works in 82 urban slums of Hyderabad and Ranga Reddy district in Andhra Pradesh. The project has set up bridge programs to provide education to primary school-age and adolescent girls. Mainstreaming these children into regular schools is a goal of the project. A unique feature in their program is the phonetic curriculum used to teach Urdu literacy and social awareness. In classes, key terms in Urdu are taught and then used as stepping stones to lead to the instruction of large issues. Adolescent girls also receive livelihood skills including computer training that was identified by the project as being in high demand for the target population. Mahita's goals are to promote girls' education, particularly for those girls engaged in child labor; impart livelihood skills to adolescent girls; and empower females to enhance their social status and decision making abilities.

3. Recruitment of Teachers and Parateachers

According to recent statistics from the Government of India, there are 3.18 million teachers in primary schools in India. However, the distribution of teachers, like of schools, is not even across and within states. Rural areas suffer from a substantial shortage of teachers. There is a lack of facilities to train rural teachers and a lack of resources from the state governments to fund the adequate number of teachers.

Increasing the numbers of teachers in the field can lead to better teaching in the classroom. Several research studies confirm that adding teachers to the classroom or school leads to improved teaching standards. Field observations concur that teaching standards tend to be lower in single-teacher schools, of which there are a substantial number in India. A report from 1987 finds that 40 percent of the primary schools in nearly 578,000 villages had only one teacher per school.²²

Several NGOs and state government initiatives have been developed to address the needs of one-teacher schools. Many of the initiatives have been designed to draw upon the available community resources—often unemployed women or youth—to function as parateachers. These parateachers are paid a fraction of what regular teachers earn and have an array of roles within the classroom. They conduct classes when the regular teacher is unavailable, they provide additional support to struggling pupils, and assist with administration. In certain cases, the parateacher functions as the

²² Ibid.

.

²¹ Ministry of Human Resource Development, Department of Education, *Selected Education Statistics 1997-98*, (New Delhi: Government of India, 1998)

primary classroom teacher, providing instruction to pupils on a regular basis. Following is a summary of two projects that, based on available evidence, have been particularly innovative and successful in recruiting such teachers.

Shiksha Karmi Project

The Shiksha Karmi Project (SKP), which was funded initially by the Swedish International Development Agency (SIDA) and now through the Department for International Development (DfID), is designed to extend universal primary education by addressing the problem of teacher absenteeism, low enrollment rates, inadequate access and high dropout rates in remote and socioeconomically disadvantaged communities. SKP provides training to teams of "local educational workers" to function as parateachers. These individuals need only minimum qualifications and receive a 45-day intensive training and periodic in-service training. The project functions on several key assumptions: 1) a Shiksha Karmi (parateacher) drawn from the local community can be trained to work effectively to reach children in his or her community; 2) providing intensive and ongoing training can compensate for the lack of more formal qualifications; 3) education must have local support and ownership to effectively meet the needs of the children within that community. As of January 2003, SKP was being implemented in 31 districts with a total enrollment of 114,509 girls and 145,640 boys. The total number of Shiksha Karmi's working in the field number 1,893 women and 6,863 men.

Based on evaluation data from three reports, SKP has been successful in retaining pupils and in increasing their academic achievement. Retention data collected over four years (1989-1993) suggest that SKP was able to retain more pupils to complete class I through class V. Although retention rates are lower for girls than boys, both showed sustained increases over a period of four years. Evidence from community data gathering suggests that the dropout is most severe through class II, and that the dropout rate is closely related to age, with nearly 80 percent of sampled dropouts having entered school at age eight or older. The most common reason cited for pupil dropout was economic necessity. For girls, domestic responsibilities and their perceived vulnerability around puberty were cited as primary reasons for dropping out. In some cases, the Shiksha Karmis go to girls' homes to pick them up and escort them to school. The report finds that this additional support increased girls' attendance.

Shikshanchal

Shikshanchal started in 1999 with the goal of increasing access to pre-primary and primary schools. Thirty-two Bodhshalas or Shikshanchal schools were opened in the Thanagazi Block in the Alwar district of Rajasthan in villages that did not have a school within a one kilometer radius or in areas where the formal schools reported low enrollment rates due to children involved in carpet weaving activities. Parateachers in the community are recruited and trained to work in the centers on six-month rotations. These parateachers are required to attend 45 days of training and receive visits at least twice a month from local project management for monitoring and technical assistance.

-

²³ Govinda, R., *India Education Report: A Profile of Basic Education*, (New Delhi: Oxford University Press, 2002).

While initially the project's effectiveness was hampered because of insufficient space for the education centers, once that issue was resolved the project had positive impacts. An evaluation conducted in 2002 showed positive impacts of the Bodhshalas on pupil enrollment (especially for girls) and retention rates. Approximately 51 percent of the pupils in the Bodhshalas are girls and 55 percent of the pupils are from scheduled castes or scheduled tribes. In villages with pre-primary schools, enrollment into primary school was significantly higher than those without pre-primary school services. In 2000, 41 percent of the population aged 5-14 was enrolled in school. After two years of implementation, enrollment of the eligible population had increased to 76 percent. Of the enrolled children, 93 percent of the boys and 83 percent of the girls admitted to the Bodhshalas remained enrolled in school.

4. Building Infrastructure/Providing Resources

Empirical studies suggest that there is a strong demand for primary education in India and that parents would like to send their children to free and well functioning schools close to their homes. In an effort to respond to this demand, interventions designed to expand the quantity of school facilities by building new schools and classrooms, improving existing infrastructure and providing resources for the schools and classrooms are improving access to education.

The network of available primary schools in India has grown over the last decade. According to data from the Government of India, there were a total of 560,935 schools in 1990, and by 1997 there were 610,763. It is further estimated that 95 percent of the rural population has access to a primary school within one kilometer of their home and about 85 percent has access to an upper-primary school within a radius of three kilometers. In remote regions of the country or in particularly socio-economically disadvantaged areas, however, there continues to be a shortage or even absence of available schools. The rapid large scale school infrastructure expansion has resulted in the creation of schooling facilities with widely varying quality in terms of available resources—desks, chairs, blackboards, textbooks, and notebooks—which continues to be a problem in many schools. Various projects have focused their efforts on building these schools and providing necessary school and classroom resources for teaching and learning.

Shikshanchal

In addition to training local community members to function as parateachers in classrooms, the previously mentioned Shikshanchal project also builds schools where they were previously unavailable or inaccessible. Once the Bodhshala, or school, is built, the project provides the instructor with furniture and classroom supplies ranging from blackboards and desks to pencil sharpeners and erasers. Extracurricular equipment for sports, arts and crafts supplies, and a first aid kit are also provided.

Initial data provided by the project find that the Bodhshalas in concrete buildings (in comparison with *kaccha* buildings such as thatched huts, and tents) have an average class size of 57 pupils per room. In 75 percent of these classrooms, there are 20 or 30 pupils per available instructor. The

_

²⁴ Ministry of Human Resource Development, Department of Education. 1998. Selected Education Statistics 1997-98. New Delhi: Government of India

project has shown a considerable positive impact on the enrollment and retention of both girls and boys. Enrollment rates for 2002 are reported to have been 76 percent which was an approximate 35 percent increase in two years. While girls continue to drop out at higher rates than boys (17 percent compared with seven percent), the majority of pupils remain in the Bodhshala or transferred to another school.

5. Residential Camps

Residential camps for out-of-school youth act much in the same way as the bridge programs to address the needs of out-of-school children—increasing their foundation for basic education and helping transition them into the formal school system. Some residential camps specifically target girls to increase equity of education in communities. The camps focus on providing safe learning environments stressing comprehensive approaches to educating the pupil. The residential camps provide room and board, counseling and health services, basic education, and extracurricular activities for children. There were instances where the short-term residential camps had limited success in transitioning children into the formal school settings. In some cases, although the campers flourished in the supportive holistic camp learning environment, some pupils faced challenges reintegrating into their families and communities once they were out of the camp and had a hard time succeeding in formal classroom settings.

Baljyothi Project

The Baljyothi project, working in Hyderabad, Andhra Pradesh, has organized residential camps for 9-14 year-olds who have never attended or dropped out of formal schools. The six-month residential camps focus on providing a safe and supportive learning environment and developing the education skills needed to prepare pupils to enter the classes IV and V in formal schools. The project has successfully mainstreamed nearly 1,700 children into the formal school system.

6. Alternative Education Programs

Alternative education programs are very similar to schools in the formal system in that they are self-contained with a facility, staff, and curriculum, and serve multiple levels of pupils. In general, alternative schools have been established in isolated communities where children do not have access to formal schools as well as in underserved communities where there are a substantial number of out-of-school children. Some projects recruit and train local community members to act as teachers in the schools. These teachers are offered remuneration by the project; some earn their service charges in form of the modest tuition fee charged to the pupils. Several projects develop their own curriculum and teacher training programs.

Getting Children Out of Work and Into School Project

The Centre for Rural Education and Development Action (CREDA) and UNDP Getting Children Out of Work and Into School Project, funded in part by the Norwegian Agency for Development Cooperation, the United States Agency for International Development, and IKEA, has set up community cottage schools (CCS) to cater to out-of-school youth and working children. These

non-formal schools follow the Indian government's Non-Formal Education (NFE) pattern and syllabus, compressing five years of primary education into two. Ideally, pupils who complete the program enter Class VI in government schools.

In 1998, 5,000 children had been enrolled CCS schools. By 2000, only eight had dropped out of the program. Since 1998, approximately 12,000 children have been mainstreamed into formal schools. According to one report, *Coping with Challenges and Making a Difference: CREDA's Recent Achievements*, CREDA has instilled in its community cottage school pupils a sense of commitment to education, evidenced by alumni expressing a desire to become teachers, or who are now instructors in CCS schools. Another study, *CREDA: Mobilizing Child Labour for Primary Education*, states that CREDA has been successful in its goal of enrolling and maintaining children, notes however that the quality of education in CCS schools is low. Some possible reasons cited for the low quality include challenges attributed to compressing five years of instruction into two, the low resource base for CCS schools compared to government schools, and unmet training needs of teachers.

Other Interventions to Consider for Investment

As mentioned in the introduction, the two interventions highlighted below are worth introducing even though the available research is limited. Such interventions were not always accompanied by evaluation reports, and if they were, the information was primarily descriptive or anecdotal. It is important to note, however, that some of these programs may not have the funding to carry out formal evaluations since they are usually implemented by non-governmental organizations on a smaller scale.

The two interventions that fall into this category include home support services and leveraging social capital. The first of these, home support services, focuses on the holistic growth of children by nurturing their physical, educational, and emotional needs. Leveraging social capital, on the other hand, is a way to facilitate long-term change by involving different social institutions in the process of change and holding them accountable. In both of these examples, the interventions are implemented with a comprehensive approach—with a focus on capacity building—and engage children outside the formal schooling system.

Home Support Services: CINI Asha and the Rainbow School

For out-of-school children, receiving an education offers the opportunity for a better life. It is for this reason that so many projects work hard to offer alternative education services to these children or to mainstream them into formal schools. A child's development, however, includes intellectual, physical, and emotional growth. For the most disadvantaged populations, supplementary support is often needed in all of these areas. Frequently, education is a secondary need that follows more pressing concerns for food, shelter, and protection. Offering these non-educational support services is crucial to allow children to fully benefit from the educational support that they do receive.

Street children and children living is slums and squatter colonies are the major beneficiaries of home-support services offered at facilities such as shelter homes, drop-in centers, and halfway homes. Specific home support services may include shelter, meals, counseling, and health care

facilities. Most organizations or projects reviewed indicate that such non-educational support is part of a larger goal of providing education to children. It is difficult to determine from the literature whether the home-support services offered by organizations mark an innovative trend, or if the many other studies on alternative education programs simply do not highlight the non-educational support services provided. Certain services such as night shelters are usually capital intensive. The data indicate that smaller NGOs may not have the resources to offer such services.

There is strong anecdotal evidence that suggests that comprehensive home-support services are benefiting children. While data are sometimes available on numbers of children served, it is impossible to connect this in any meaningful way to the numbers of children mainstreamed or completing alternative education programs. Furthermore, this would only point to success in impacting children's educational growth and would not speak to the other goals of assisting children's physical and emotional development.

One study of the *CINI Asha* program, described below, suggests that the addition of home-support services was in many cases prompted by an expressed need of the children. This simply emphasizes the fact that multiple support services are needed if the most disadvantaged children are to benefit from educational offerings. Given the strong anecdotal evidence that children benefit from these services, and the fact that the cost of providing certain important services such as night shelters and halfway homes is prohibitive for many smaller NGOs and groups, provision of these home-support services may be a particularly helpful investment target for corporate funders.

Two projects warrant attention for their comprehensive services. The first, the street children program of CINI Asha operates in 13 municipal wards of Kolkata. Night shelters meet children's immediate needs by providing safe shelter at night (particularly important for girl children), along with food, counseling, bathing, locker, and recreational facilities. Drop-in centers serve as an initial contact point for children and the project. These centers serve as motivational centers, providing bridge course education, counseling, food, storage, and bathing facilities.

CINI Asha also offers halfway homes where high-risk children can stay temporarily and prepare for the rigor of disciplined home or hostel life. Outreach clinics are another important service, offering accessible health care to children and their communities. Sick bay facilities provide ill children with a safe place to rest, a good diet, doctor's care, and the care of 'homemothers'—women who are hired to provide maternal support to children. Finally, a range of HIV/AIDS programs such as outreach clinics, peer education, and a toll-free hotlines provide children necessary support to protect them from this disease. In 2000, 326 boys and 110 girls used CINI Asha's night shelters. Four hundred and ninety-five children were admitted to the sick bay in 1999-2000.

The *Rainbow School*, located within the Loreto Day School of Kolkata, successfully demonstrates comprehensive child support on a smaller scale. The Rainbow school offers a pupil-to-pupil tutoring program, in which pupils enrolled in the formal all girl's Loreto Day School serve as individual tutors for street children (known as "rainbows") who come in to the school. All Loreto pupils in classes V and above are required to tutor for 90 minutes per week, and these assignments are scattered throughout the week such that there are always tutors available for the rainbow children who come in during the day. The Rainbow School strategy is to provide street children

with a flexible, personalized learning process that is complemented by home support facilities. One-on-one tutoring by Loreto School pupils is geared toward eventually mainstreaming pupils within the Loreto School or other formal schools.

Most of the rainbow children are girls, though boys are allowed up to a certain age. The Loreto School and its facilities are known within the local community to be a safe haven for girl children on the street. Street children who participate in the school's tutoring program (and those who have been successfully mainstreamed into government schools) are provided facilities to clean and press their clothes, facilities to bathe, places to safely store their personal belongings and money, and a place to sleep at night. Emotional support is also provided to the children. As Sister Cyril, director of the Loreto Day School, has explained, every child is offered a hug at the end of the day, even those who may have been reprimanded earlier in the day.

Leveraging Social Capital: Child and Police Project

As respected members of the community, the police have a distinct advantage in educating and gaining the support of other key stakeholders such as parents, local businessmen, and the industrial community. Engaging the police as partners can improve the efficacy of many awareness and mobilization activities. For example, a common practice among community-level interventions is to contact and meet with parents and local employers to make them aware of the importance of sending children to school. When the police are the ones to convey this message it can hold greater authority. Police can also be useful in the tasks of ensuring children remain in school or learning programs, tracking down drop-outs, and reuniting children with their families after the completion of residential camps.

It is important to qualify that these positive effects of police participation are drawn from a single case study, the *Child and Police Project* (CAP) in Hyderabad, Andhra Pradesh, which has received a great deal of praise from major international donors. Given that in many communities, the police have not historically been a cooperative force it is easy to assume that police involvement could be as problematic as it could be helpful. Still, internal descriptive data from the CAP project suggest the approach of police cooperation in project activities has proved decidedly beneficial. Furthermore, CAP has received favorable reviews from supporters such as UNDP, and a USAID representative is quoted as saying that the Child and Police Project is "the diamond in USAID's crown of partnership with India to eradicate child labor."

Run by the Dr. Reddy's Foundation, the Child and Police project works in partnership with the Andhra Pradesh State Police and the Andhra Pradesh Education Department to mobilize at-risk youth into bridge school camps and to ultimately mainstream them into government schools. Throughout the mobilization process, the police play important roles in identifying at-risk-youth and hosting community meetings that build awareness of the child labor problem. Police work to convince parents to send their children to the bridge camp and help to move the children to the bridge camp. Beyond their involvement with the bridge camps, the police participate in many other important ways, notably in advocacy campaigns wherein they have produced music cassettes and television programs to raise public awareness about children's rights and the protection of at-risk children.

In the case of the CAP project, partnerships with police represent a creative use of an underutilized stakeholder group. The presence of police in most communities also allows for the replication of effective models. This has been true for the CAP model, which has been replicated in other states and countries, such as Nepal, through the networking capacities of the National Police Academy and Police Chiefs' conferences.

IMPROVING QUALITY IN PRIMARY EDUCATION

SUMMARY OF CONSIDERATIONS FOR FUTURE INVESTMENTS:

This section is intended to guide the GE Foundation as it considers the array of interventions that work towards improving the quality of primary education in India. Based on the literature review, it appears that these interventions have provided some evidence of effective outcomes, are comprehensive in approach, and focus on building local capacity:

- The use of parateachers—locally hired individuals without formal teacher training—is a cost-effective strategy for improving pupil learning outcomes. Short-term training for parateachers allows rapid deployment, and can accommodate the often high levels of turnover among parateachers. The local relevance of parateachers hired from within the community is an advantage to the model. Moreover, parateachers may be used for remedial tutoring programs, to staff nonformal education centers, or to assist teachers in government schools. The flexibility of parateacher interventions allow for easy replication across urban and rural contexts as a means of increasing access *and* improving quality. Small inputs from corporate funding could generate broad learning impact.
- ➤ Computer assisted learning programs are a growing but still nascent trend. Because of the technology inputs required, there is use for corporate and other outside resources. Computer assisted learning models, however, are still considerably more expensive than other strategies for improving pupil learning and have not demonstrated any substantially greater educational gains.

Concurrent with the need to guarantee that children have access to basic education is the need to ensure that the education provided leads to improved pupil outcomes. Indeed, an important goal of education is to impart skills and competencies that empower children to reach their fullest potential. At the primary level, instruction is geared toward helping pupils meet locally appropriate standards of literacy, numeracy, and oral expression. Efforts to improve quality in primary education often focus on the educational inputs that effect pupil performance, such as curriculum, instruction, materials, and improvements in the learning environment.

In India, there has been a sustained push toward improving learner achievement by enhancing the quality of primary school education provided to children. According to the World Bank, children who reach the final year of primary school have often mastered less than half the required curriculum. As a result, the National Policy on Education (1986) places special emphasis on improving the quality of primary education. This has taken three main forms: 1) improving the quality of school provision by trying to determine basic norms for provision including physical, human, and academic, 2) focus on learning outcomes primarily through the establishment of minimum levels of learning, to be attained by every pupil in the primary system of education, and 3) building the capacity of teachers through a decentralized system of professional development.

²⁵ World Bank. 1996. India: Primary Education Achievement and Challenges. Washington DC: World Bank

Empirical studies suggest that there is a strong demand for primary education in India and that parents would like to send their children to free and well functioning schools close to their homes. Accordingly, there have been government efforts to provide every school with basic infrastructure and human resources. There has been progress on this front, although empirical findings suggest that five percent of primary schools have no classrooms, and another 15-20 percent only have one. In about 40 percent of schools, children do not yet have access to safe drinking water.²⁶

Alongside concerns of improving infrastructure, another issue related to quality is that of the relevance of services provided in primary schools—the curricula, textbooks, and other instructional materials in children's lives. In 1993, the GOI commissioned a report on the state of the curriculum and textbooks in India. The report states

Barring exceptions, our textbooks appear to have been written primarily to convey information or 'facts,' rather than to make children think and explore...The distance between the child's everyday life and the content of the textbooks further accentuates the transformation of knowledge into a load.²⁷

Because discussions about curricula and textbooks are made at a national level, there can be a substantial gap between what is taught in classrooms and the reality of children's lives. Over the last decade, however, there has been a perceptible shift towards decentralizing the decision-making on curriculum adaptation and textbook development from a centralized body to involving more regional and local agencies in the process although this continues to be a rather fragmented process.

Closely tied to the quality of educational services provided to children is the issue of teacher quality and the need to both improve and monitor the quality of instruction. Because teachers have permanent posts and a good deal of bureaucratic protection, they are not always held accountable for their instruction, and as such the incentive structure remains relatively weak.

The range of interventions reviewed in this section reflect these concerns. Quality-focused interventions cover a broad spectrum that ranges from interventions closely linked to the learner, such as teaching practices, to those which more indirectly impact the learning process, such as the organization of community groups aimed at generating educational improvements in schools.

The use of parateachers was the most common intervention reviewed that most substantially impacted the learning process. Tutoring and remedial education programs are also popular, and there is an example the potential benefits of computer-assisted learning. Teacher-related interventions are numerous, from teacher training and professional development efforts, to providing schools with disability resource specialists and the assignment of extra teachers to one-teacher schools. Efforts to develop new curricula are also described in the research literature, such

_

²⁶ R. Govinda (ed.). 2002. *India Education Report: A Profile of Basic Education*. New Delhi: Oxford University Press.

²⁷ As quoted in R. Govinda (ed.). *India Education Report: A Profile of Basic Education*. New Delhi: Oxford University Press.

as efforts to bring activity-based learning materials into the classroom and to make curricula more child-focused, self-paced, and respectful of local languages and contexts.

At the school level, there are interventions working to improve both the physical infrastructure of the school as well as its operation. Provision of books, supplies, and furniture is one way NGOs and corporations are improving school environments. There are also state and national level examples of efforts to provide needed supplies to schools. Creating school-based and mobile reading libraries is yet another strategy to improve educational resources. Projects to improve infrastructure are also common, such as whitewashing of walls, building toilet facilities, and improving water supplies and school grounds. Improved management of school operations is addressed through interventions aimed at building the administrative capacity of school leaders.

One of the most common forms of community-level interventions is the creation of local committees and groups to advance the cause of educational improvement. Aimed to harness the power of collective action, these groups include parent-teacher organizations, mother's groups, and village education committees. Several projects have encouraged the formation of children's groups to allow children to be active participants in the discussion of education. Collective action groups are used to build awareness, to engender community support for education (for example, through resource contributions such as land or materials for schools), and to foster community responsibility and accountability for educational quality. The creation of vigilance committees—persons who monitor whether children are staying in school—is an example of a community assuming responsibility for children's attendance in school.

Improving community educational data resources is another intervention seen at the community level that aims to improve educational quality by better informing stakeholders and decision-makers—such as collective action groups and local governing bodies. One project reviewed in this study holds workshops for the presidents and secretaries of local-governing bodies at the village, block, and district levels. The objective of these workshops is to familiarize these governing bodies with the powers they hold to impact educational quality at the local level through budgetary allocations, repair and renovation of schools, and provision of infrastructural facilities such as toilets and water.

The following discusses quality-related interventions for which there is substantial data on outcomes. As discussed in the research methodology section, one interventions that have been studied with methodological rigor are ranked here. Given the overall paucity of evaluative material available to our study, only two interventions have sufficient data to make informed judgments about efficacy and relevance for GE Foundation investment. These two interventions, parateachers and computer assisted learning, are discussed in rank order of our recommendation. Recognizing, however, that many innovative and ultimately effective interventions do not provide evidence of outcomes, this section also presents various interventions for which we have limited evaluative data, yet are recommended for the Foundation's consideration for their potential for improving educational quality.

1. Parateachers

Parateachers may be defined as individuals without formal education training who are provided rapid or abbreviated instruction to provide educational services to children. As described earlier, parateachers may serve in various capacities in nonformal education centers or in newly created schools in underserved locations. Others are deployed to government schools to ease the burden of increased pupil enrollment due to mainstreaming efforts or to assist inadequately staffed schools. There are also examples of parateachers providing remedial tutoring services to children in government schools.

Such models are normally low cost compared to the hiring of teachers.²⁸ In addition, since most parateachers are locally hired, there is normally a closer link to the community than with teachers hired for government schools. An important principle demonstrated by parateachers projects is that local community members, even if not formally trained teachers, can still have a substantial impact on pupil learning outcomes.

In several ways, use of parateachers has improved the opportunities for and quality of girls' education. This is particularly true in cases where parateachers are used to staff nonformal education programs designed to meet girls' educational needs such as remedial education and flexible learning schedules. Also, a great many of the parateachers programs focus on recruiting local women. Certain studies have emphasized the importance of having female instructors as a way to make girl students and their parents feel more comfortable about the girls being in school.

Balsakhi Program

The Balsakhi Program hires young women from communities to teach basic literacy and numeracy skills to children in government schools who reach class III or IV without having mastered these competencies. Started in Mumbai in 1994 and expanded to Vadodara in 1999, the program has been implemented in 20 cities, reaching tens of thousands of pupils.

The "balsakhis" have the equivalent of a high school degree, and are from the local slum communities in which the schools are located. These instructors receive a standardized curriculum developed by Pratham. They receive two weeks of professional development at the beginning of the year and ongoing reinforcement when school is in session. The program is school-based and uses a pull-out model, meaning pupils are removed from their normal classroom for the remedial tutoring. The typical instructor meets with a group of 15-20 children in the morning for two hours and with another group the same size in the afternoon.

A two-year randomized evaluation of pupils in Mumbai and Vadodara found definite gains in math and language skills as a result of the balsakhi intervention. More than 15,000 children were evaluated during the first two years of the program at the beginning, middle, and end of each

-

²⁸ Cost-savings notwithstanding, in no instance do evaluations recommend replacing teachers with parateachers. Parateachers are most effective as supplementary educators.

school year. A control group was formed from selected pupils in schools similar to the treatment schools, but which had not received the balsakhis through random selection.

The assessment found a substantial impact on learning achievement, one that was stable across years and cities. Learning for the treatment group improved by 0.15 standard deviations in the first year and 0.25 standard deviations in the second year of intervention. Moreover, the intervention had the greatest effect on the lowest-scoring children, or the bottom third of the distribution. This bottom third gained 0.21 standard deviations in the first year and 0.32 standard deviations in the second—suggesting an equalizing effect on pupil achievement.

The balsakhi program is effective at a low cost. Benefits to children are gained through the individualized and non-threatening attention given to them by the balsakhis. By choosing women from the local area as balsakhis, children may feel more comfortable than with teachers who are often from different backgrounds. In addition, the model of using local people with rapid training is easily scalable and transferable to other contexts.

Shiksha Karmi

The Shiksha Karmi project, discussed earlier, is another successful example of a parateacher intervention. Selected from the local communities, two shiksha karmis (educational workers) provide instruction to pupils in one of three types of schools: day schools, schools of convenient timing, and nonformal schools mainly for girls to prepare them for entry into the day schools or the schools of convenient timing. Data from 1998 found that 63 percent of children in the three types of schools were SC/ST, or other backward castes. As noted earlier, sustained increases in retention were seen for both boys and girls over the period 1989-1993.

2. Computer assisted learning

Computers can be an effective tool for teaching and reinforcing basic literacy and numeracy skills among children. Bringing computer technology into the classroom, however, is expensive. While computer learning programs are not uncommon—particularly in urban areas—they remain a distant dream for most primary schools in India. Among materials reviewed in this study, there is a single example of a computer assisted learning program, yet this example contains strong evidence of positive impact on pupil cognitive skills.

Pratham's Computer Assisted Learning Program (CAL) was introduced in half of the municipal schools in Vadodara in 2002-2003. Pupils in project schools were provided two hours of computer time each week during which they played computer games based on the math curriculum of the Vadodara municipal schools. A randomized sample of pupils receiving the CAL program and a control group were test in mathematics competencies at the beginning, middle, and end of the school year. The assessment found substantial improvement in math scores for the CAL pupils over the entire year. Average scores on a 50-point math assessment rose from 14.9 to 29 in the treatment group but only from 15.5 to 25.0 in the control group.

The assessment suggests that computer-assisted learning programs such as this, even with just two hours of exposure per week, can help to reinforce basic competencies taught in the classroom. The

beneficial impact of computers, however, should be qualified in light of the financial resources needed to sustain such projects. Indeed, in comparing the results of the CAL program to the cognitive skills improvements in children participating in a remedial tutoring program, the authors of the study found the CAL pupils scored slightly lower on the same instrument than pupils in the tutoring program. Given the higher cost of the computer learning program, the tutoring program was four times as cost efficient. This information suggests that computer related instructional programs are not the best investment strategy if aiming to generate learning improvements for the greatest number of children. Such programs, however, could be good targets for in-kind corporate donations of computers.

Other Interventions to Consider for Investment

One additional quality-focused intervention is discussed here for the GE Foundation's consideration, despite the dearth of research-based information about its effects.

Creating quality educational data resources within communities

A widespread community-level intervention for improving educational quality is the creation of collective action groups such as village education committees or mother's groups. Unfortunately, the literature offers very little evidence as to the impact of these groups. Studies reviewed contain mostly descriptive information, providing insufficient data on which to judge the impact of collective-action groups. However, there are data to suggest that improved educational data resources can help to increase the efficacy of community-level interventions that involve decision-making.

These data are drawn from a study on *Prajayatna*, the education reform initiative of MAYA, the Movement for Alternatives and Youth Awareness. The Prajayatna program is also formally recognized as the Citizens' Initiative for Reform in Elementary Education, or CIEE. Working in Karnataka, Prajayatna is noteworthy for its methods of providing community members valuable information about the status of education in their community. During the project's initial school information campaign, community volunteers trained by Prajayatna conduct a village-level survey of the educational context, including the status of infrastructure, teacher and pupil data, and existing structures for community participation. Compared to the many baseline studies conducted by projects to inform their activities, the data collected through Prajayatna's comprehensive school and village survey are meant to inform community members and governing bodies.

Once data are collected, Prajayatna holds a Shikshana Grama Sabha, or village education meeting. At these meetings Prajayatna staff facilitate an open discussion on the critical issues pertaining to education in the community as well as the actions that could be taken to address these issues, and the persons who could be responsible for the change. Decisions made at the Shikshana Grama Sabhas are followed up by the school development and monitoring committees (nine member school committees instituted by the State Education Department in 2001) with support from Prajayatna staff.

In 2003, Prajayatna conducted an internal evaluation of the impact of its activities to date. Conducting a survey of project communities, it compared data collected to the information

gathered during the School Information campaign. While the evaluation fails to provide details about the extent of improvement in demonstrated problems, it does suggest that a great number of project communities have witnessed some degree of improvement over the project period. For example, 48 percent of cases of school physical surroundings problems have seen improvement, 48 percent of cases citing problems in the provision of water have seen improvement, and 60 percent of cases where there were problems with school walls have seen improvement. Moreover, in nearly 50 percent of cases in which water and building problems were cited in the school information campaign, decisions made to address such problems were translated into improvements.

The information from Prajayatna suggests that concerted efforts to collect comprehensive community-level education data could boost the ability of collective action groups and governing bodies to positively effect educational improvement. At present, while community education committees and groups are expected to work towards addressing a community's educational needs, often this work is done in the absence of quality data on which to base decisions. Data that do exist are frequently inaccurate and unreliable. Investments in improving educational data resources, similar to the comprehensive educational surveys conducted by Prajayatna, have the potential to bring much added value to existing community-level collective action interventions.

BIBLIOGRAPHY

- Abadzi, H. (2002). *India: Education Sector Development in the 1990s: A Country Assistance Evaluation*. Washington, DC: World Bank Operations Evaluation Department.
- Academy of Management Studies. *Survey of Primary and Upper Primary Private Schools*. Lukhnow: Academy of Management Studies.
- Acharya, J. ed. (1997). *Primary Education in India: A Status Report*. Bangalore: Core Group on Citizen's Initiative on Primary Education.
- AED-BETI (2001). Survey of Primary Private Schools. Lukhnow: AED-BETI.
- Agarwal-Harding, S. (2001). Evaluation of USAID-Funded Girls' Education Activity: WIDTECH Project: Expanding Advocacy for Girls' Education in Uttar Pradesh, India (DAI, AED). Washington, DC: L.T. Associates, Inc.
- Aggarwal, Y. (1999). Options for change: Innovations and experiments in the District Primary Education Programme. New Delhi: Govt. of India, Department of Education.
- Aggarwal, Y. (2001). Regaining Lost Opportunities: The Malaise of School Inefficiency: A study of DPEP Districts in Tamil Nadu. New Delhi: National Institute of Educational Planning and Administration.
- Aggarwal, Y. (1999). Trends in access and retention: A study of primary schools in DPEP districts. New Delhi: Govt. of India, Department of Education.
- Agnihotri, R.K., Khanna, A. L., & Shukla S. (1994). *Prashika: Eklavya's Innovative Experiment in Primary Education*. Bhopal: Ratna Sagar.
- Agnihotri, V. Evaluation in "Prashika": Prathamik Shiksha Karyakram: The Primary Education Programme of Eklavya.
- Akshara Foundation. *In-School Programs*. Akshara Foundation Programs Web site: http://www.aksharafoundation.org/inschool.htm.
- Anandalakshmy, S., & Balagopal, I. (1999). *Site Visit: Mobile Creches at Delhi, Bombay and Pune, India—ECCD at the Construction Sites*. Washington, DC: World Bank, The Consultative Group on ECCD.
- Anandalakshmy, S. & Krishnamury, L. (2002, June). *Nali Kali: An Experience in Lively Education, An Evaluation*. DPEP Karnataka and UNICEF.
- AP Mahila Samatha Society (2004, May 26-28). Unfolding a Quite Revolution: A paper on MS Experiences in Educational Interventions. For CARE India colloquium, Gender and Education: Experiences and Challenges of Programming for Girls' Education.
- Azim Premji Foundation (2004, May). Computer Aided Learning Centres: A Study in Karnataka and Andhra Pradesh Research Report.
- Azim Premji Foundation. Factors Affecting Success in The Learning Guarantee Programme: A Study Report.
- Bah-Laya, I., & Sack, R. (2003). *Implementation Matters: Exploring its Critical Role in Transforming Policies and Investments into results*. A paper presented at the ADEA biennial conference in Mauritius.
- Banerjee, A., Cole, S., Duflo, E., and Linden, L. (2003). *Remedying Education: Evidence from Two Randomized Experiments in India*. Cambridge, MA: Poverty Action Lab.
- Bashir, S. (2000). *Government Expenditure on Elementary Education in the Nineties*. The European Commission.

- Beti Foundation (2004, May 26-28). Looking for a tomorrow... For CARE India colloquium, Gender and Education: Experiences and Challenges of Programming for Girls' Education.
- Bose, S. Review of UNDP Supported Project Implemented by WIDA: Getting children out of work and into schools through education and community mobilization in Dudhari & Kanti Panchayats of Semiliguda Block in Koraput. UNDP India, Children and Poverty, Reports: Reference and Resources Web site: http://hdrc.undp.org.in/childrenandpoverty/REFERENC/REPORTS/REPORTS.HTM.
- Bose, S. *UNDP Supported Project Being Implemented by CSVS: Getting children out of work and into schools through education and community mobilization, Chainpur, District Palamu, Jharkhand.* UNDP India, Children and Poverty, Reports: Reference and Resources Web site: http://hdrc.undp.org.in/childrenandpoverty/REFERENC/REPORTS/REPORTS.HTM.
- CARE India (2004, May 26-28). Background Note: Girls Primary Education Sector. For CARE India colloquium, Gender and Education: Experiences and Challenges of Programming for Girls' Education.
- CARE India (2004, May 26-28). Reading Material. For CARE India colloquium, Gender and Education: Experiences and Challenges of Programming for Girls' Education.
- Catholic Relief Services (2004). India: From Work to School. In *Creating Partnerships, Educating Children: Case Studies from Catholic Relief Services*. Baltimore, MD: Catholic Relief Services.
- Center for Education Management and Development. *Programme for Enrichment of School Level Education: Professional Development Centre Narrative Report, January-December 2003.* New Delhi: Center for Education Management and Development.
- Central Institute of Education (2004). Evaluation of EGS/AS Strategies under DPEP in six states viz. Andhra Pradesh, Gujarat, Kerala, Madhya Pradesh, Rajasthan and West Bengal: Volume I: National Synthesis Report. Delhi: Central Institute of Education, University of Delhi.
- Central Institute of Education (2004). Evaluation of EGS/AS Strategies under DPEP in six states viz. Andhra Pradesh, Gujarat, Kerala, Madhya Pradesh, Rajasthan and West Bengal: Volume II: Appendices. Delhi: Central Institute of Education, University of Delhi.
- Central Institute of Education (2004). Evaluation of EGS/AS Strategies under DPEP in six states viz. Andhra Pradesh, Gujarat, Kerala, Madhya Pradesh, Rajasthan and West Bengal: Volume III: CIE Studies on Alternative Schooling. Delhi: Central Institute of Education, University of Delhi.
- Chavan, M. (2000). Building societal missions for universal pre-school and primary education: The Pratham experience. Paris: UNESCO.
- Chin, A. Can redistributing teachers across schools raise educational attainment? Evidence from Operation Blackboard in India. Department of Economics, University of Houston.
- CINI-ASHA. Adjustments Made by Families of Child Labourers/Potential Child Labourers Whose Children Were Mainstreamed to Formal Schools in Calcutta. Calcutta: CINI-ASHA. Available at UNDP India, Children and Poverty, Reports: Reference and Resources Web site: http://hdrc.undp.org.in/childrenandpoverty/referenc/REPORTS/casha/study.PDF.
- CINI ASHA. Impact of Education in Improving the Quality of Life of Disadvantaged Urban Children in Calcutta: A Case Study. Calcutta: CINI AHSA.
- Das, D. The District Primary Education Programme in Response to the Challenge of Educating Girls.

- De, A. & Drèze, J. (1999). *Public Report on Basic Education in India*. New Delhi: Oxford University Press.
- Delhi State AIDS Control Society (2003). *DEEPALAYA HIV/AIDS Awareness Project for Street and Working Children: A Report of Annual Evaluation*. Delhi: Delhi State AIDS Control Society.
- Department of Pre-School and Elementary Education, NCERT. *Classroom Processes: A National Picture*. New Delhi, NCERT.
- Devi, U. (2002). Actualising the Right to Education: Participatory Civil Society-led Approaches to Educational Interventions for Girl Child Labourers in India: The Road Ahead. Brighton, UK: IDS, 2002.
- Dhankar, R., and Smith, B. (2002, June). Seeking Quality Education for All: Experiences from the District Primary Education Program. The European Commission.
- Dr. Reddy's Foundation. *Programs: Child and Police Project (CAP)*. Web site: http://www.drreddysfoundation.org/cap_overview.html.
- Dwivedi, P. (1994). *Research Based Intervention in Primary Education*. New Delhi: National Council of Educational Research and Training.
- European Commission. Evaluation of the Program for Enrichment of School Level Education (PESLE). European Commission.
- Gautam, V. (2003, October). A Promising Start: Processes and Intervenitons of the Janshala Programme. New Delhi: Janshala National Office, Department of Elementary Education and Literacy, Ministry of Human Resource Development.
- Government of India. Ministry of Education 2002-2003 Annual Report.
- Government of India. *Bringing Girls Centrestage: Strategies & Interventions for Girls' Education in DPEP*. New Delhi: Govt. of India, Ministry of Education.
- Government of India. (1987). *The Shiksha Karmi Project: Rajasthan, India*. New Delhi: Govt. of India, Ministry of Education.
- Government of India. Sarva Shiksha Abhiyan: A People's Movement for Universal Elementary Education of Satisfactory Quality, (Government of India, Department of Elementary Education and Literacy).
- Government of India. Sarva Shiksha Abhiyan: Framework for Implementation, (Government of India, Ministry of Human Resource Development, Department of Elementary Education and Literacy).
- Government of India. Sarva Shiksha Abhiyan Zila Shiksha Kendra Khargone [M. P.] Annual Work Plan 2004-05. Government of India, Department of Elementary Education and Literacy.
- Guatam, V. (2003, October). A Promising Start: Processes and Interventions of the Janshala Program. New Delhi: Government of India, Department of Elementary Education and Literacy.
- Guatam, S. V., ed. (2003, January-March). *Janshala Newsletter of the Joint GOI-UN System Education Program, Vol VI Issue 1.* Joint Secretary, Department of Education.
- Gulati, K. (2004, May 26-28). Udaan: An accelerated learning program for adolescent girls. For CARE India Colloquium: Gender and Education: Experiences and Challenges of Programming for Girls' Education. New Delhi: CARE India.
- Indian Institute of Education, *Non formal Primary Education Model*. Pune: Indian Institute of Education.
- Indian Institute of Education, *The PROPEL Story: Promoting Primary and Elementary Education*. Pune: Indian Institute of Education.

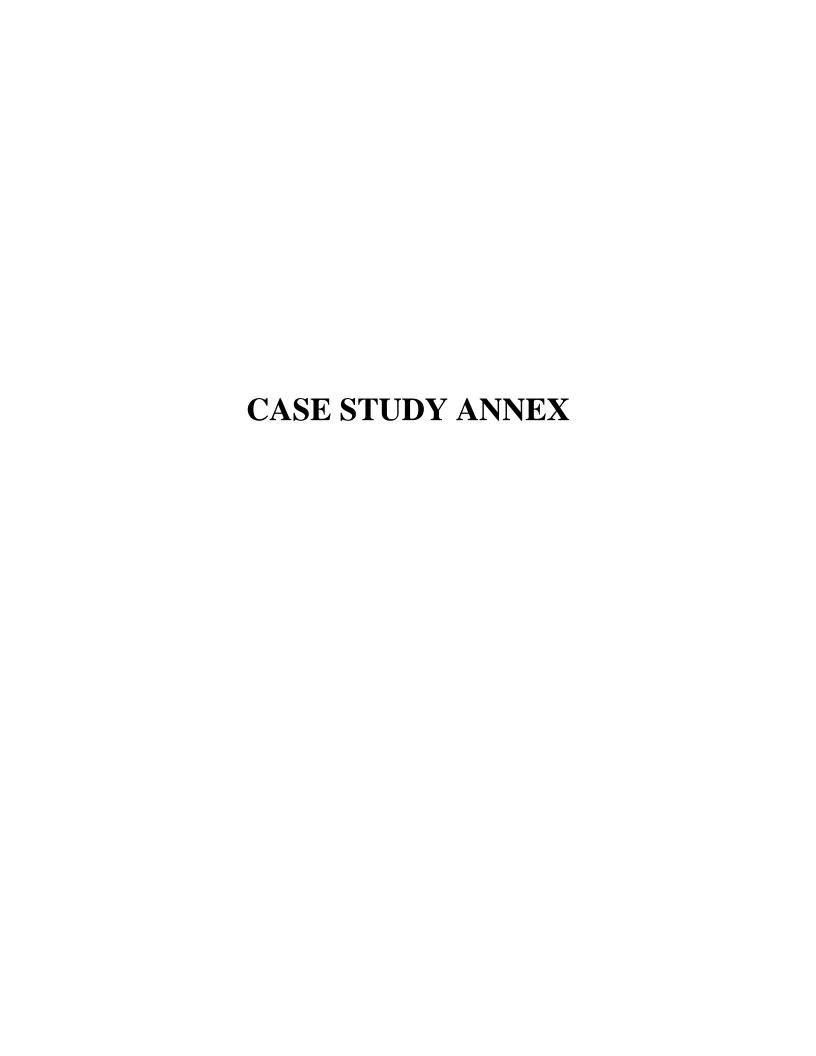
- Jagannathan, S. (2001). *The Role of Nongovernmental Organizations in Primary Education: A Study of Six NGOs in India.* Washington, DC: World Bank Policy Research Working Paper.
- Jain, S. (2003). Gender Equality in Education: Community Based Initiatives in India.
- Jain, S., Mathur, A., Rajgopal, S, & Shah, J. (2002). Children, Work and Education: Rethinking on Out-of-School Children. In Govinda, R., ed. *India Education Report*. New York: Oxford University Press.
- Janshala Programme (2002). *Janshala: Towards empowered community schools*. New Delhi: Janshala Programme.
- Janshala Programme (2002). *Working towards a common goal: Innovations and experiments in Janshala*. New Delhi: Janshala Programme.
- Janshala Programme (2003, September). *Taking Stock: Report of Review Missions of Janshala* (2000-2002). New Delhi: Janshala Programme.
- Jessop, T. *Loreto Day School, Sealdah*. Changemakers Web site: http://www.changemakers.net/journal/99november/cyril.cfm.
- Jha, Jyotsna, and Dhir Jhingran, *Elementary Education for the Poorest and other Deprived Groups: The Real Challenge of Universalisation* (New Delhi: Centre for Policy Research, 2002).
- Jha, J. (2004, February). School Management and Leadership an Analysis of Approaches and Initiatives Under Programme for Enrichment of School Level Education (PESLE).
- Jha, J., Saxena, K.B.C., & Baxi, C.V. (2001, September). *Management Processes in Elementary Education: A study of existing practices in selected states in India*. The European Commission.
- Jhingran, D. ed. (2000, April-June). *Janshala Monthly Newsletter of the Joint GOI-UN System Education Program, Vol III Issue 2*. Joint Secretary, Department of Education.
- Juneja, N. (2001). Primary education for all in the City of Mumbai, India: the challenge set by local actors. Paris: UNESCO.
- Jyotsna, A. (2000). The Evolution of Udaan: The story of development of a residential education programme for girls. Lucknow: CARE-UP.
- Kothari, B., Vijaya Sherry Chand, P. G., & Sharma, R. (2000). *A Review of Primary Education Packages in Madhya Pradesh*. Ahmedabad, Gujarat: Indian Institute of Management.
- Krishnamurti, L. & Anandalakshmi, S. *Nali Kali: Innovation in Primary Education in Karnataka*. Karnataka.
- Kumar, S., Koppar, B. J. & Balasubramanian, S. (2003, August 23-29). Primary Education in Rural Areas: An Alternative Model. *Economic and Political Weekly 38, no. 34, p. 3533*.
- Language Learning in Rishivalley Multigrade Schools. Indian NGOs, Issues: Education Web site: http://www.indianngos.com/issue/education/conference/rishivalley.htm.
- Leclercq, F. (2003, May 10-16). Education Guarantee Scheme and Primary Schooling in Madhya Pradesh. *Economic and Political Weekly*, *38*, *no.* 19, *p.* 1855.
- Lexow, J. & Gunnestad, A. (2000). *PRAYAS: The Centre for Neglected Children and for Juvenile Justice: Mid Term Review.* Oslo: Oslo College/Development Consulting.
- Linden, L., Banerjee, A. & Duflo, E. (2003). *Computer-Assisted Learning: Evidence from a Randomized Experiment*. Cambridge, MA: Poverty Action Lab.
- Lok Jumbish (1997). Lok Jumbish: A movement for universalisation primary education in Rajasthan.
- Lok Jumbish Parishad (1992). Lok Jumbish: The First Report. Jaipur, Rajasthan: Lok Jumbish.
- Lok Jumbish Parishad (2002). Lok Jumbish: The Tenth Report. Jaipur, Rajasthan: Lok Jumbish.

- Mahapatra, A. (1999, July 28-30). The Appropriate Education Programme: The Concerned for Working Children Karnataka, India. For workshop Needs vs. Rights: Social Policy From a Child-Centred Perspective.
- Mahila Samakhya Bihar (2004, May 26-28). Gender and Education: Experiences and Challenges of Programming for Girls' Education. For CARE India colloquium, Gender and Education: Experiences and Challenges of Programming for Girls' Education.
- Mahita (2004, May 26-28). Gender and Education: Experiences and Challenges of Programming for Girls' Education—A Mahita Experience. For CARE India colloquium, Gender and Education: Experiences and Challenges of Programming for Girls' Education.
- Manovikas Kendra (2004). *Annual Report 2003-2004*. Kolkata: Manovikas Kendra Rehabilitation and Research Institute for the Handicapped.
- MAYA (2003). *Prajayatna: Community-owned schools in Karnataka: The new agenda in education reform.* Bangalore: Movement for Alternatives and Youth Awareness (MAYA).
- Mercer, M., Alexander, Robin, Ramachandran, Hariharan, Rao, Padmanabha, and Singh, A. K. (2002, February). Final Evaluation (Part 1) of EC Support to Primary Education in India.
- Mobile Creches, *Programmes: Education*. Web site: http://www.mobilecreches.org/pro_education.htm.
- Mobile Creches (2002). Bachchon Ka Adhikar—Bachpan: Working together for the childhood of migrant children in Dwarka.
- Mobile Creches, Annual Report 1999-2000.
- Mobile Creches, Annual Report 2001-2002.
- Mobile Creches, Annual Report 2002-2003.
- Mohorkar, A. *Khushi Khushi: An experiment in making primary schooling a happy experience.* Sutradhar Web site: http://www.sutradhar.com/features/featuresdetails_6.shtml.
- Mythili, N. (2002, June 15-21). Community pressure for higher quality of education: Rural primary schools in Karnataka. *Economic and Political Weekly, 37, no. 24, p. 2349*.
- M. Venkatarangaiya Foundation, M. Venkatarangaiya Foundation's Experiences in Elimination of Child Labor Through Education.
- Naandi Foundation. *Naandi's Education Initiatives*. Web site: http://www.naandi.org/Education/default.asp.
- Naik, C. (1988). *Developing Non-formal Primary Education: A Rewarding Experience*. Indian Institute of Education, Pune.
- Narayanan, M. (2004, May 26-28). Gender and Education: Experiences and Challenges of Programming for Girls' Education. For CARE India colloquium, Gender and Education: Experiences and Challenges of Programming for Girls' Education.
- National Institute of Administrative Studies (2004). *Learning achievement in Language and Mathematics of primary school children in district Uttarkashi: Midterm Assessment Study of the DPEP 2004.* Mussoorie, Uttaranchal: National Institute of Administration.
- National Institute of Advanced Studies (2002). *Caste, class and school: Tanjavur Local Education Report*. Bangalore: National Institute of Advanced Studies.
- National Institute of Advanced Studies (2002). *Children's double burden: livelihood and schooling in a fishing community: Chirala Local Education Report.* Bangalore: National Institute of Advanced Studies.

- National Institute of Advanced Studies (2002). *Discrimination and deprivation: basic education among the poor: Jaipur Local Educational Report.* Bangalore: National Institute of Advanced Studies.
- National Institute of Advanced Studies (2002). *Marginalised communities and dysfunctional schools: Khategaon Local Education Report.* Bangalore: National Institute of Advanced Studies.
- National Institute of Advanced Studies (2002). *New hope in the hills schooling and the demand for quality education: Jaunpur Local Education Report.* Bangalore: National Institute of Advanced Studies.
- National Institute of Advanced Studies (2002). *Urban poverty and basic education deprivation: Bangalore Local Education Report.* Bangalore: National Institute of Advanced Studies.
- Network of Enterprising Educational Ventures. A Study of Pedagogical Practices and Learning Achievements in Schools: A Qualitative Study.
- Nigam, G. K. (2002). *Data Analysis Report of Shikshanchal Project*. Jaipur, Rajasthan: CARE India.
- Nineteenth Joint Review Mission (2004). *District Primary Education Programme: Part 1: Progress Overview Report.* New Delhi: Govt. of India, Department of Education.
- Nineteenth Joint Review Mission (2004). *District Primary Education Programme: Part 2: State Reports*. New Delhi: Govt. of India, Department of Education.
- Nineteenth Joint Review Mission (2004). District Primary Education Programme: Part 3: State Specific Information on Mission Objective. New Delhi: Govt. of India, Department of Education.
- Operations Research Group (1996). Evaluation of Nonformal Education Programme in Lok Jumbish Project. Operations Research Group.
- Pandey, R. S. (2000). Going to Scale with Education Reform: India's District Primary Education Program, 1995-1999. Washington, DC: World Bank Country Studies, Education Reform and Management Publication Series.
- Parikrma Humanity Foundation. *What we do—Initiatives*. Web site: http://www.parikrmafoundation.org/what_we_do_init.htm.
- Pratichi (India) Trust (2002). The Pratichi India Report. New Delhi: TLM Books.
- Prayas Institute of Juvenile Justice. *Draft Report on Non-Formal Education Curriculum for Street Children in Delhi*. New Delhi: Prayas Institute of Juvenile Justice.
- Rajiv Gandhi Shiksha Mission (2000). From Your School to Our School. Bhopal: Rajiv Gandhi Shiksha Mission, Government of Madhya Pradesh.
- Rajiv Gandhi Shiksha Mission (2001, November). *Universalization of Primary Education State Specific Report November 2001, Madhya Pradesh.* Rajiv Ghandi Shiksha Mission, Bhopal.
- Ramachandran, V. ed. (2003). *Getting Children Back to School: Case Studies in Primary Education*. New Delhi: Sage Publications.
- Ramachandran, V. (2003). *Lok Jumbish—Rajasthan: People's movement for education for all.* New Delhi: World Bank.
- Ramachandran, V. (2003, March 8). Backward and Forward Linkages that Strengthen Primary Education. *Economic and Political Weekly, EPW Special Article*.
- Ramachandran, V. (2002). *Gender and social equity in primary education: hierarchies of access.*New Delhi: European Commission Education Programme Office.

- Ramachandran, V. & Saihjee, A. (2002, April 27-May 3). The New Segregation: Reflections on gender and equity in primary education. *Economic and Political Weekly, 37, no. 17, p. 1600.*
- Ramachandran, V. & Sethi, H. (2000). *Rajasthan Shiksha Karmi Project: An overall appraisal*. Stockholm, Sweden: Swedish International Development Cooperation Agency.
- Ramachandran, V., Sethi, H., & Kaul, R. (2001). *Basic education in India: Advocacy Research Paper commissioned by Care, India.* Jaipur and Delhi: Educational Resource Unit.
- Ranganathan, N. & and Jamini, N. *Teacher Development and Classroom Process in Quality Education Centres: An Observational Report*. Delhi: Centre Institute of Education, Faculty of Education, University of Delhi.
- Rao, V. Partnership of UNDP with IKEA: Education for the Empowerment of Disadvantaged Girls with Special Focus on Adolescent Girls. Available at UNDP India, India Partnership Forum Web site: www.indiapartnershipforum.org/pdfs/undp_ikea.pdf.
- Ray, A. *Rainbow children: dissolving differences*. Available at India Together Web site: http://www.indiatogether.org/2003/oct/chi-rainbow.htm.
- Reddy, V. R. & Rao, R. N. (2003, March 22-August 4). Primary Education: Progress and Constraints. *Economic and Political Weekly*, 38, nos. 12 and 13, p. 1242.
- Reddy, R. V. Note on Strategies for Bringing Children from out of Work into Full Time Formal Day Schools: Universalization of Elementary Education. M. Venkatarangaiya Foundation.
- Rishi Valley Rural Education Project. Available at Mithya Institute for Learning and Knowledge Architecture Web site: http://www.mithya.com/learning/rishi.html.
- Roy, P., (2000). *CINI ASHA*. Available at UNDP India, Children and Poverty, Reports: Reference and Resources Web site: http://hdrc.undp.org.in/childrenandpoverty/REFERENC/CASESTUD/CINIASHA/apr02f.P DF.
- Rural Programme of Concerned for Working Children. *A report on appropriate education programme: Gramashrama*.
- Section for Early Childhood and Inclusive Education, Division of Basic Education, Education Sector, UNESCO (2003). *Early Childhood Care and Education in E-9 Countries: Status and Outlook*. Paris: UNESCO.
- SEWA Academy (2004, May 26-28). SEWA's Third Generation: Self Employed Women's Association. For CARE India colloquium, Gender and Education: Experiences and Challenges of Programming for Girls' Education.
- Sharma, A. & Gopalakrishnan, R. (2003). Education Guarantee and Primary Schooling in Madhya Pradesh: Opinion or Facts? In *Education Guarantee Scheme and Primary Schooling in Madhya Pradesh: A Discussion*. Bhopal: Rajiv Gandhi Missions, Government of Madhya Pradesh.
- Sharma, R. (2002). *External Evaluation of DPEP-I: Maharashtra*. Ahmedabad, Gujarat: Indian Institute of Management Ahmedabad.
- Singh, S., Sridhar K. S., & Bhargava, S. External Evaluation of DPEP-I States: Report on Haryana. Lucknow: Indian Institute of Management Lucknow.
- Sinha, S. Education and the Role of NGOs.
- Sinha, S. (2002) Evaluation Report on CINI ASHA: Urban Unit of Child in Need Institute. GOAL Ireland.

- Society for Action Vision and Enterprise. *Evaluation of the Role of Village Education Committee* in School Management in Districts Under DPEP in Uttranchal. Lucknow: Society for Action Vision and Enterprise.
- Society for All Round Development (SARD) (2004, May 26-28). Colloquium Paper. For CARE India colloquium, Gender and Education: Experiences and Challenges of Programming for Girls' Education.
- Sood, A. (2003, June 21-27). Himachal Pradesh: Critical Issues in Primary Education. *Economic and Political Weekly*, *38*, *no.* 25, *p.* 2469.
- Smith, S. M., & Parmeshwar, V. S. (2004, January). Center for Women's Development Torpa: Strengths and Challenges in Moving Forward: A Program Evaluation.
- SNS Foundation. *Education Programs*. Web site: http://www.snsf.org/new/education1.htm.
- Srivastava, A.B.L. & Jain, S. (1995). *Study of Retention and Achievement in Shiksha Karmi Schools*. Jaipur: Sandhan Research Centre.
- Swedish International Development Cooperation Agency and the Governments of India and Rajasthan. (1993). Lok Jumbish—Learning Together: A Joint Assessment of Lok Jumbish.
- Thomas, E., Wajih, S. & Shahi, R.P. (2001). Participatory Learning and Action (PLA) Toolkit: Exploring Girls' Education with Communities. Lukhnow: USAID/BETI.
- UNESCO Principal Regional Office Asia and the Pacific (1997). *Pilot Projects for the Promotion of Primary Education and Literacy in Rural Disadvantaged Areas*. Bangkok: UNESCO.
- UNICEF. Facing Challenges in a Global Era: Innovative urban experiences in providing education for disadvantaged children. UNICEF, The New Concept Documentation Team.
- Vasavi, A.R. Exclusion, Elimination and Opportunity: Primary schools and schooling in selected regions of India. Bangalore: National Institute of Advanced Studies, Indian Institute of Science.
- Vijaya Sherry Chand, P.G. (2002). *External Evaluation of DPEP-I: Karnataka*. Ahmedabad, Gujarat: Indian Institute of Management Ahmedabad.
- Wazir, R. (2002). Getting children out of work and into school. Andhra Pradesh: MV Foundation.
- Wazir, R., ed. (1999). *Miles to Go: NGO Responses to the Gender Gap in Basic Education in India*. The Netherlands: Colophon.
- Wazir, R. (2002, December 28). No to Child Labour, Yes to Education: Unfolding a Grass Roots Movement in Andhra Pradesh. *EPW Review of Labour*.
- Wilson, J. D. (2001). *Snapshots of Primary and Secondary Education in Asia-Pacific*. Bangkok: UNESCO Principal Regional Office for Asia and the Pacific.
- World Bank. (1997). Primary Education in India. Washington, DC: World Bank.
- World Bank Human Development Sector, South Asia Region. (2004). *Reaching out to the Child:* An Integrated Approach to Child Development. World Bank.
- World Bank Human Development Sector, South Asia Region. (2003). A Review of Educational Progress and Reform in the District Primary Education Program. World Bank.
- World Bank Human Development Unit, South Asia Region. (2001). Project Appraisal Document on a Proposed Credit in the Amount of SDR 58.5 Million (US\$74.4 million equivalent) to India for a Rajasthan Second District Primary Education Project. World Bank.
- World Bank Human Education Sector Unit, South Asia Region. (1999). Project Appraisal Document on a Proposed Credit in the Amount of SDR 132.3 Million (US\$182.4 million equivalent) to India for a Uttar Pradesh Third District Primary Education Project. World Bank.
- Zutshi, B. (2000). A Situational Analysis of Education for Street and Working Children in India. New Delhi: UNESCO.







Introduction

The Child and Police (CAP) Project in Hyderabad, Andhra Pradesh, was started in 1997 as a joint effort by Dr. Reddy's Foundation and the Andhra Pradesh State Police. The original goal of the project was to rehabilitate child laborers by mainstreaming them into formal education using bridge courses. Today the focus of the CAP Project extends to helping all "at-risk" children receive an education and develop into responsible citizens. According to project documents, "'Children-at-risk' (especially girls) are those working in hazardous conditions, who are deprived of access to education and quality learning, at risk of abuse, violence, physical and moral danger, engaged in anti-social activities and lacking effective parenting and opportunities to develop into responsible human beings."

Strategies and Programs

The CAP Project identifies five main phases in its mainstreaming model. At each phase, CAP engages a variety of stakeholders. Notable among these are police officers (inspectors, sub-inspectors, and constables). Often not considered as main stakeholders in the education process, the police have proven effective partners in the mobilization and mainstreaming process.

Moreover, there are benefits to be gained for the police: They can break negative stereotypes by engaging with the community in a positive manner and garnering community confidence and by focusing on at-risk youth they help to stem the possibility for future delinquency.

The first phase in the CAP process is the pre-survey orientation during which police officers familiarize themselves with the other stakeholders involved in the project and participate in a series of workshops focusing on issues such as children's rights, child protection laws, and the detrimental effects of child labor. During the second, survey phase, communities are identified and police and project staff work to identify at-risk children. The

Contact information:

Child and Police Project
Dr. Reddy's Foundation
Road No.12
Venkateshwara Colony (MLA Colony)
Banjara Hills, Hyderabad - 500 034
Phone: +91-40-55343424 / 23304199 /
23301868

Fax: +91-40-23301085 Email: <u>info@drreddysfoundation.org</u>

survey phase involves approaching parents, children, and employers in the attempt to convince them to send children to the bridge schools. It is here that the authority and respect afforded to the police is beneficial. Police also host community meetings to build awareness about the issue of child labor. The third phase is mobilization, which involves police efforts to convince parents to send their children to the bridge schools, and help to move the children to the schools (in the case of residential camps).

The CAP Project operates bridge camps as well as non-residential bridge schools. The latter were started when it became clear to project staff that parents were reluctant to send their children, particularly girls, away to a residential camp. To meet this expressed need, CAP started non-residential schools, which have proven to be economically viable alternatives to camps. This

fourth phase, or bridge course phase, provides children intense instruction to prepare them for enrollment in government schools four to eight months later, depending on prior literacy skills. At the schools and camps, the police help mentor children, provide discipline, retrieve runaways, and arrange for teachers and volunteers. During the fifth and final phase, children are mainstreamed into select government schools.

An important feature of the CAP Project is the forward linkage it makes with the government schools that enroll the mainstreamed children. Under its School Community Partnership in Education (SCOPE) model, interventions at the individual, classroom, and school level are conducted to support mainstreamed children and to create conditions that encourage attendance and retention. Examples include the formation of class committees and study circles to encourage bonding of mainstreamed children with their new classmates, and the provision of schools with needed infrastructure, innovative teaching methods, and locally appropriate curricula.

The Child and Police project includes many other community-level interventions as well, all aimed at creating a supportive environment for children's education. These include

- Children's councils for promoting children's rights;
- Mothers' committees, consisting of CAP Project mothers working to disseminate strategies and successful practices with respect to family life;
- > Local monitoring committees, consisting of school principals, area inspectors, social workers and parents, charged with sustaining project interventions; and
- A principals' forum, which serves as a testing ground for new ideas to improve learning within schools.

The CAP Project expects that the children's councils, mothers' committees, and local monitoring committees will serve together as the main management structure for sustaining project interventions in the long run. To date, the CAP Project has received investments from organizations including UNICEF, UNDP, USAID, CRY, Aga Khan Foundation, and Plan International.

Outcomes and Results

As of September 2004, the CAP Project has mainstreamed 6,581 children into formal government schools, of which 62 percent are girls. In addition, 10 children's councils, 20 mothers' committees, and 33 local monitoring committees have been created. Just as important, the CAP Project has demonstrated a creative, beneficial, and viable partnership with a government body. The project has received favorable reviews from international supporters such as UNDP. A USAID representative is quoted as saying that the Child and Police Project is "the diamond in USAID's crown of partnership with India to eradicate child labour." Another strong indication of CAP's success is that the model has been replicated in other states and countries, such as Nepal. The sharing of best practices is facilitated by police networks, such as the Andhra Pradesh Police Academy, the National Police Academy, and Police Chiefs' conferences.



Introduction

CINI Asha, a program of the Children in Need Institute (CINI), was started in 1989 to address the needs of children living in Kolkata. CINI's work focuses on improving the quality of life of urban disadvantaged children including street children, child laborers, and children of sex workers. The organization concentrates its efforts on education, health, and the basic need for survival, protection, growth, and development.

Strategies and Programs

CINI Asha supports a number of programs to address the varied and individual needs of different groups of children. The project has a strong focus on providing comprehensive services including education, nutrition, health, and safety.

Services for street children include

- ➤ Drop-in centers that provide nutrition, counseling, health, and education through the bridge course methodologies to runaway and migrant children.
- Night shelters that provide a safe space for street children to sleep. These shelters have shower rooms and lockers along with education, nutrition, counseling and recreation. Providing this service for girls is particularly important reducing the likelihood of various types of abusive situations.
- Halfway houses that create temporary housing for children who have been traumatized and exploited, which attempt to replicate a home environment where house parents provide a caring environment for these children to enable them to be placed in other supportive organizations or reconnect them with their families.
- ➤ Sick bay that provides medical attention to disadvantaged children. Based on figures from 2000, the recurring cost per child per year at the sick bay is IRs. 3,108.
- Monobitan camp and nature park, located outside Kolkata, where CINI Asha organizes educational and holiday camps for urban children. Available facilities include a swimming pool, badminton courts, nature reserve, a multi-purpose hall, open-air theatre, football field and a children's park.

CINI Asha's primary objective for its child-laborers programs is to eradicate child labor from slums and squatter colonies by ensuring compulsory education for every child. Specific programs include

¹ P. Roy, CINI Asha (2000). Web site:

- > Preparatory centers that impart education through bridge programs to mainstream children into formal school. The children receive approximately five to six hours of classes a day in classes no larger than 25 students per teacher. After six months of instruction, the children are grouped according to their level of learning and placed in formal schools.
- Residential camps for bonded child laborers. These camps provide intensive training and counseling to the children and help to acclimatize their families' dependence on child labor. Once the children complete their training they are placed in local schools. Based on figures from 2000, the cost per child in rupees to enroll a child in a residential camp is IRs. 12, 476.²
- > Supplementary coaching centers, based in local communities, that provide educational support and coaching for students who have already been mainstreamed. This program works in close collaboration with the community and local schools.

Because children of sex workers often live in vulnerable and high risk environments, CINI Asha has developed specific programs to address their needs:

- Evening drop-in centers where children are provided a safe space while their mothers earning their living;
- > Coaching centers provide a strong focus on education as well as on providing counseling services and classes in the performing arts; and
- > Special coaching centers are available for older children that provide a more intensive academic support.

Outcomes and Results

CINI Asha demonstrates a comprehensive and innovative approach to providing services to children, without compromising or diluting their focus on education and community mobilization.

Information from five reports indicates that the services provided by CINI Asha are having significant positive outcomes on the lives of children in the Kolkata area. Numbers from January 1999 indicate that 3,170 child laborers had been mainstreamed and continue to attend formal schools.³ Another study finds that as of 2000, a total of 5,600 former child laborers had received services from the coaching centers that provide additional academic support to mainstreamed children. The same study reports that 1,653 children of sex workers received services from CINI Asha from 1997-2000. According to another report, CINI Asha children are more articulate and confident as a result of their programming and take pride that they are regular school-goers. The children are able to play multiple roles successfully, including that of a peer mediator or influencer.5

² P. Roy, *CINI Asha* (2000).

³ CINI Asha, Adjustments Made by Families of Child Laborers/Potential Child Laborers Whose Children Were Mainstreamed to Formal Schools in Calcutta (Calcutta: CINI-ASHA). Web site: http://hdrc.undp.org.in/childrenandpoverty/referenc/REPORTS/casha/study.PDF.

⁴ P. Roy, *CINI Asha* (2000).

⁵ CINI Asha, Impact of Education in Improving the Quality of Life of Disadvantage Urban Children in Calcutta: A Case Study (Calcutta: CINI Asha).

Introduction

The Mamidipudi Venkatarangaiya Foundation (MVF) was established in 1981 to conduct research on social change. In 1991 the Foundation began working to abolish child labor by increasing educational opportunities for all children in three villages in Andhra Pradesh. By the end of 2001, MVF was active in eight districts and 2,500 villages in Andhra Pradesh. MVF has four main focuses: 1) taking children out of the workplace; 2) advocating to children and families about the importance of primary education; 3) working to promote self reliance and confidence in children so they are able to successfully mainstream into formal schools; and 4) closing the achievement gap between child laborers and school-going children through bridge courses and summer programs. MVF has received funding from various sources over the years which include the District Primary Education Program, the Government of India Ministries of Labor and Human Resource Development, the Government of Andhra Pradesh (World Bank Project Velugu), Child Relief and You, International Labor Organization – International Program on the Elimination of Child Labor, the Dutch organization Humanist Institute for Cooperation with Developing Countries, National Child Labor Project, National Council of Rural Institutes, United Nations Children's Fund, United Nations Development Program, Norwegian Agency for Development Cooperation, Azim Premji Foundation, the JRD Tata Trust, Sir Dorbaji Tata Trust, and Catholic Relief Services.

Strategies and Programs

Through its work with parents and communities, MVF has found that poverty is not the primary motivating factor for children to work. They found that parents do not always depend on their children's earnings for a living and are willing to make adjustments to send their children to school. The Foundation has worked extensively with organizing school education committees to help encourage parents to send their children to school, mobilize resources to support education volunteers, and improve school infrastructure.

The Foundation withdraws children from labor situations and enrolls them into schools. It collaborates with the state government to strengthen government schools rather than creating alternative avenues of non-formal education for child laborers. It also identifies and negotiates with formal schools to enroll young children. In many cases, school admission policies do not include space for late starters and are often ill prepared to accept older illiterate children or former drop-outs. MVF provides bridge programs and short- and long-term residential camps to older children who are drop-outs or first time pupils to help transition them from work to the classroom and give them the educational foundation they need to succeed in formal schools. The Government of India has issued an order for schools to accept all children

seeking admission who have been withdrawn from labor situations. The special bridge classes and residential camps are important for this transition. As communities increase the demand for educational opportunities for their children, pressure has been placed on government schools to become more inclusive.

To help alleviate the problems associated with the increasing class sizes, the MV Foundation began a voluntary parateacher program. Members of local communities are recruited and trained and then provide services to local schools. These parateachers help conduct classes when the regular teacher is unavailable, provide additional support to struggling pupils, and assist with administration. MVF has provided 635 voluntary parateachers to formal schools, and PTAs working with the project have provided an additional 505 parateachers to work in the schools.

Outcomes and Results

According to the report, *No to Child Labor, Yes to Education: Unfolding of a Grass Roots Movement in Andhra Pradesh*, in 1999, 80 percent of the villages in which MVF was working reported that every child between the ages of 5 and 11 was enrolled in school. At the time the report was written in 2002, nearly 150,000 children had been enrolled and retained in schools, more than 4,000 bonded child laborers had been released, and 168 villages were declared "child labor free."

The MVF model is recognized as a successful model worth adopting. A number of government and non-governmental organizations have adapted and replicated the MVF model in their efforts to tackle the pervasive problem of child labor. The government of Andhra Pradesh's "Back to School" program has replicated MVF interventions using social welfare hostels to run educational camps for children. Approximately one million children from 34 hostels have been sent to school from the camps. Andhra Pradesh's Department of Women and Child Development used women's training institutes to run camps for girl laborers. Similarly, the Andhra Pradesh Women's Cooperative Finance Corporation has taken the model as a pilot project for child laborers. MVF has been a resource to organizations working to abolish child labor and increase educational opportunities. Members of the Foundation have also provided training and technical assistance to support the Government of India's District Primary Education Program in various states.

The MV Foundation stresses sustainability in the long-term implementation of their interventions. Many communities have accepted the MVF activities and the notion that education is important for children. "Widespread acceptance of the norm that children should be in school and not at work, has meant that the MV Foundation can reduce its role and presence over a period of time. This is perhaps the best guarantee that of the permanence and sustainability of the program in the Raga Reddy district."

-

¹ R. Wazir, "No to Child Labour, Yes to Education: Unfolding a Grass Roots Movement in Andhra Pradesh," *EPW Review of Labour* (2002, December 28).

² R. Wazir, Getting children out of work and into school (Andhra Pradesh: MV Foundation, 2002).