

R | E | S | E | A | R | C | H
Monograph Series

Quality of BRAC Education Programme:
A Review of Existing Studies

Samir Ranjan Nath

Research and Evaluation Division, BRAC

Quality of BRAC Education Programme:
A Review of Existing Studies

Samir Ranjan Nath



Research and Evaluation Division, BRAC

Brac Centre, 75 Mohakhali, Dhaka 1212, Bangladesh
www.bracresearch.org

Quality of BRAC Education Programme: A Review of Existing Studies

Samir Ranjan Nath

*Senior Research Fellow
Research and Evaluation Division, BRAC
nath.sr@brac.net*

August 2006

Research Monograph Series No. 29

Research and Evaluation Division, BRAC, 75 Mohakhali, Dhaka 1212, Bangladesh
Telephone: (88-02) 9881265, 8824180 (PABX) Fax: (88-02) 8823542
E-mail: research@brac.net, Website: www.bracresearch.org

TABLE OF CONTENTS

Acronyms	iv
Acknowledgements	v
Abstract	vi
Introduction	1
The BRAC Education Programme	4
A framework for quality assessment	8
An overview of the research works under review	11
Inputs to the programme	13
Process in practice	22
Outputs of the programme	29
Other components of BEP	38
Summary and concluding remarks	41
References	46
Figure 1	Analytical framework for quality assessment 10
Figure 2	Proportion of BRAC school graduates achieving basic education by year of graduation and sex 31
Figure 3	Percentage of graduates satisfying different skills criteria in ABC test by school type, 1996 31
Figure 4	Mean number of competencies achievement of BPS students by year of graduation 32
Figure 5	Mean number of competencies achievement of BRAC school graduates by school type and sex, 2004 34
Figure 6	Proportion of students enrolled in formal schools after graduating from BRAC schools by year of graduation 35
Table 1	Socioeconomic characteristics of BRAC school students, 1992-1998 15
Table 2	Distribution of coverage of 53 terminal competencies by level of coverage and type of materials 16
Table 3	Teachers in various types of BRAC schools, 2004 18
Table 4	Percentage of graduates satisfying all basic education criteria by school type and year of graduation 30

ACRONYMS

ABC	Assessment of Basic Education
APON	Adolescent Peer Organized Network
AUEO	Assistant Upazila Education Officer
BAPS	BRAC Adolescent Primary School
BEOC	Basic Education for Older Children
BEP	BRAC Education Programme
BPS	BRAC Primary School
BRAC	An NGO
CAMPE	Campaign for Popular Education
DPE	Directorate of Primary Education
EFA	Education for All
ESP	Education Support Programme
ESTEEM	Effective Schools Through Enhanced Education Management
HSC	Higher Secondary Certificate
IDEAL	Intensive District Approach to Education for All
IPO	Input-Process-Output
KK	<i>Kishor Kishori</i>
MDG	Millennium Development Goals
MoPME	Ministry of Primary and Mass Education
NCTB	National Curriculum and Textbook Board
NFPE	Non-formal Primary Education
NGO	Non Government Organization
PACE	Post Primary Basic and Continuing Education
PEDP II	Second Primary Education Development Programme
PEOC	Primary Education for Older Children
PO	Programme Organizer
PRA	Participatory Rural Appraisal
RED	Research and Evaluation Division
RM	Regional Manager
SMC	School Managing Committee
SSC	Secondary School Certificate
UNESCO	United Nations Educational Scientific and Cultural Organization
USA	United States of America
WCEFA	World Conference on Education for All

ACKNOWLEDGEMENTS

My colleague Mr. Goutam Roy assisted me through collecting a number of information for this monograph. My Director Dr. Imran Matin extensively reviewed the earlier version of the monograph and made several critical comments. BRAC's development partners including the Canadian International Development Agency (CIDA), the Royal Netherlands Embassy (RNE), and the Royal Norwegian Embassy (RNorE) provided written comments and suggestions. The researchers in RED who did all the research works during last 18 years and made this review report possible. I am grateful to all of them.

ABSTRACT

Considering an input-process-output (IPO) framework of analysing quality of education this report reviewed all the 140 studies conducted in the Research and Evaluation Division of BRAC during the last 18 years. The review work aims to explore the quality of BRAC Education Programme (BEP). More than 80% of the studies are on children's and adolescents' education programme. Thus, the findings on these two school programmes can easily fit into the IPO model. The findings reveal that quality of such school programmes was satisfactory compared to the mainstream primary education. Research on other components of BEP also showed positive effect on the subjects. However, the IPO model could not be used for these components due to unavailability of adequate research output. More research on these components need to be done. Some of the limitations of the studies are also indicated. Finally, we suggest that at least one study on each of the components of BEP be carried out following the said analytical framework during phase IV of BRAC Education Programme.

INTRODUCTION

On achieving the primary school enrolment rate at a certain level (86% according to *Education Watch 2005* database) with gender parity, Bangladesh is now emphasising on completion of the full cycle of quality primary education for all children. Such activities are consistent with that of the international goals and targets on Education for All (EFA) including the Millennium Development Goals (MDG)¹.

The net enrolment rate among primary school aged children has increased by over 25 percentage points during the last 15 years – from about 60% in 1990 to 86% in 2005. However, the quality of education did not improve much. A number of examples can be cited here. Firstly, 30-35% of the enrolled children dropped out before completing the full cycle probably due to poor quality of education. Secondly, those who completed the full primary cycle, achieved on average less than 60% of the terminal competencies and one-third remained semi-literate or non-literate (Nath and Chowdhury 2001, Ahmed *et al.* 2003). In some cases the quality deteriorated due to lack of proper attention and capacity to improve quality. Rapid increase in enrolment leading to shortage of classrooms and qualified teachers, and monitoring and supervision problems were some of the realities in this regard.

The major constraints regarding lack of quality education in the mainstream formal primary schools have been reflected in one of the BRAC studies conducted in early 1990s soon after the Jomtien conference (Chowdhury *et al.* 1992). The 14 month-long school ethnography (September 1990 to October 1991) was done in three government primary schools to understand the learning process and quality of education. Following were the observations:

- Poor as well as unhygienic physical condition;
- Actual attendance is significantly lower than registered attendance;
- Non-existence of lesson plan;
- Teachers' abuse and under-use of school hours;
- Most topics in the textbooks are not taught;
- Co-curricular activities are rarely done;
- Teacher-student interaction in classrooms is highly discouraged;
- Concept of school management does not exist;

¹ Two of the eight MDGs are on education, which target to ensure gender parity in all levels of education including full completion of primary education for all children.

-
- Irregular and inadequate supervision from upazila office;
 - Very poor learning achievement of the students;
 - Schools failed to attract many children to enrol; and
 - Primary education is not free of cost in real sense.

Fifteen years later, the *Education Watch 2003/4* examined the macro level situation of quality and equity in primary education. The study found that the situation did not improve much except some infrastructure development. The main constraints lie with the poor classroom teaching learning practices, almost no care of the first generation learners, and lack of academic supervision and monitoring (Ahmed *et al.* 2005).

BRAC has been involved in education for mass people since its inception in 1972. Functional literacy programme and teaching of how to tackle a public health problem were two countrywide initiatives during the first two decades of BRAC activities. Especially, the later taught millions of Bangladeshi mothers to fight against diarrhoeal diseases using simple homemade ORT solution (Chowdhury and Cash 1996). When BRAC started its functional literacy programme no more than a quarter of the country's population was literate² (BBS 1977).

Considering the above-mentioned situation of primary education, BRAC initiated school programme for children in mid 1980s (Lovel and Fatema 1989, Nath 2005). It subsequently extended its education programme to include the adolescents, and pre-primary aged children. Initiative to improve formal primary and secondary schools were also taken, which included development of teachers' capacity in some core subjects (such as English, mathematics and science) and training on school management. To encourage out of school activities, libraries were established at the school and community levels. Adolescents' safe socialization and skills development centres were also introduced as a part of BRAC's Education Programme. Besides, BRAC helps the small local NGOs to implement non-formal schools in their working areas through its Education Support Programme (ESP). All these are various components of BRAC Education Programme (BEP). Details of these programmes are available in the next section.

Established in 1975, the Research and Evaluation Division (RED) is an independent division within BRAC mandated to provide research and analytical support to BRAC's development programmes. Education research in RED started in 1988. To date, a total of 140 studies have been conducted on different components of BEP and the national education system.

² Could read and write a sentence in any language (definition used in census 1974).

The aim of this report is two-fold. Firstly, to review the studies conducted so far on various components of BEP to explore the quality of the programme. Secondly, to find out the gaps in our existing studies to plan further research on quality of education provided by BRAC.

THE BRAC EDUCATION PROGRAMME

The educational activities of BRAC started with a functional literacy programme for adults in mid 1970s, when it observed that without literacy people were not able to take advantage of income generating activities, health and other social services. This programme was initiated only in those areas where BRAC's development programmes existed. When this programme was initiated the adult literacy rate in Bangladesh was 24% with a huge gender disparity against women (National census 1974, BBS). Through this activity BRAC learned that education could be provided if it is accessible to the doorstep of those who do not have access to it. However the curriculum should be made relevant to the needs of the people (Ahmed and Nath 2004).

A major shift occurred in the programme when rural mothers participating in the BRAC development activities and also attending in the functional literacy classes asked, ".....What about our children? Will they have to wait till they are 18 to join your programme?" It was in 1984, BRAC started thinking about school programme for young children. Children's education programme was started in BRAC in 1985 with 22 experimental schools. The national census data show that at that time, the school attendance rate was 30% among 5-9 years old and 43% among 10-14 years old. The adult literacy rate was only 31%. Quite high gender gap also existed both in school attendance and literacy rates. The girls and the females were lagging behind their respective counterparts. Nearly 80% of the adult females were unable to read or write at the functional level. Only a half of the school-enrolled children could complete the five-year cycle of primary education. Although no data on pupils' learning achievement is available for that particular time, the present situation can only suggest that it was very poor. Because, at that time the school condition, teacher-pupil ratio, classroom culture, etc. were mostly the same like as now. The major features of BRAC schools were as follows:

- Single room, one female teacher school with 33 students, 70% of whom are girls;
- Out of school children aged 8-10 years were eligible to enrol;
- It covered three years primary curriculum;
- School timing was flexible;
- Parents teacher meeting once a month; and
- Teacher and the programme organizer's home visit to absentee pupils.

In the first year of running the experimental schools demand to open more schools of similar type was raised. Additional 153 schools were opened in 1986 and another 262 in 1987 (Lovell and Fatema 1989). Success of these schools was measured in three ways. Firstly, it was possible for BRAC to run this alternative model of primary education without interruption but with much cooperation of the parents; secondly, only a few of the enrolled pupils were dropped out during the cycle; and thirdly, about 95% of those who completed the cycle enrolled in class IV in nearby formal schools for further education. Although, the organizers identified some problems they were confident enough to overcome these.

A revised version of this model was extended for the adolescents (aged 11-14 years) in 1988. The school system for the adolescents was similar to that of the children aged 8-10 years. However, the curriculum of this programme was more life oriented than that of the other. The idea behind this programme was to create the last opportunity for the adolescents to be educated. It was thought that such an opportunity would help them in their family life after their marriage. At that time, the names of these two initiatives were respectively the Non-formal Primary Education (NFPE) and the Primary Education for Older Children (PEOC). The former was popularly known as NFPE schools and the later as *Kishor Kishori* or KK schools. After some years, getting inspired from the Jomtien conference³, PEOC was renamed as Basic Education for Older Children (BEOC). Because, it was thought that such a name would be more appropriate with the spirit of the Jomtien Declaration. However, the curriculum was not changed any more (WCEFA 1990).

At the initial phase NFPE was a three-year programme and BEOC was a two-year programme. Later, NFPE was extended to four years (since 1999) and BEOC to three years (since 1993) to make them fully competent with the formal primary education. The objective of this extension was to provide the full course of primary education to the children and the adolescents and thus prepare them for secondary education. The children's school programme is now known as BRAC Primary School (BPS) and the adolescents' school programme is called as BRAC Adolescent Primary School (BAPS).

BEP also helps the small local NGOs to implement BPS model schools in their working areas through its Education Support Programme (ESP). In addition to the usual schools, special schools of this kind were opened for domestic child labourers, garment workers, and children involved in worst form of child labour during 1996–2001. At the end of 2005, 20,776 BPS, 5,601 BAPS, and 5,500 BPS under ESP were in operation, totalling

³ This is the first grand conference on Education for All held in Jomtien, Thailand in 1990, where the heads of the States or their representatives from 150 countries participated. This conference urged an expanded vision to provide basic education to all population in the world by 2000.

31,877. Over one million children are currently enrolled in these schools. Till December 2005, a total of 3.12 million children graduated from BRAC schools. One estimate shows that 6.3% of the total primary school students in Bangladesh were enrolled in BRAC schools (Chowdhury *et al.* 1999). BRAC school students constituted nearly 20% of the total students outside the State owned primary schools.

BRAC pre-primary schools were started in 1986. However, after running 15 schools the programme was stopped. Later, in view of the necessity of pre-schooling for the children the programme was restarted in 1997. This is now a growing component of BEP. These schools are generally located nearer to the existing formal schools (both government and non-government registered) and many are in the formal school campuses. It is a one-year course. BRAC is currently operating 16,025 pre-primary schools throughout the country.

BRAC operates formal schools too. It has its own formal primary schools and some community schools⁴ handed over by the government. The number of formal school is 11 (10 established in 1999 and another one in 2000) and the number of community school is 44. Unlike the above (BPS, BAPS or pre-primary) each formal school has more number of classrooms and teachers.

Adolescent Development Programme through its *Kishori Kendras* (adolescent girls' centre) and special life skills courses for both boys and girls at the village level provide scope for socialization, access to reading materials, and develop leadership skills. This programme was started in 1993 to create an exposure for rural girls. At present, over 8,000 such centres are in operation.

To improve the quality of secondary schools Post-Primary Basic and Continuing Education (PACE) Programme intervention was started in 2003. This programme develops the capacity of the non-government secondary school teachers in English language, mathematics and science. Training on school management is also a part of it. To increase self-esteem among students co and extra curricular activities are arranged. Currently there are 1,019 schools under this programme.

⁴ The community schools were established under the General Education Project of the government. The communities provided land and the government provided cost of school building and furniture. Management of the schools were in hand of the communities. The teachers were appointed by the SMC and the government provided each of them Tk. 500 as monthly stipend. The communities were supposed to deposit Tk. 10,000 per school to the government. A number of difficulties arose through the process. Some communities could not manage Tk. 10,000 to deposit it to government account, some could not appoint teacher due to local problems, and some had misunderstanding with the respective upazila education officers. As a result the government identified 194 schools as non-functional, 67 of which were handed over to BRAC at the end of 1998 in order to make them functional.

Multipurpose learning centre called *Ganakendra* provides continued learning for all people in the community with minimum education. Some of these are in the community and some in selected secondary schools. The community libraries have a mobile section too. This component of BEP was started in 1995 with 30 libraries; however the number increased to 964 in 2005.

Although BEP begun enrolling ethnic minority children in BRAC schools (BPS and BAPS) since 1999, the education for the indigenous children was started as a special programme in 2002 through creating separate schools for them. The aim of this programme is to bring the indigenous children into mainstream education through preserving their culture and language. Education in these schools starts with their mother tongue, which gradually shifts to Bangla language. A number of reading materials were developed taking rituals, cultural elements and stories from the indigenous communities. As of December 2005, total number of such schools is 2,161.

Although the initial name of the programme was same as the name of the non-formal primary education programme for the children, but now all educational initiatives of BRAC are collectively under BRAC Education Programme (BEP). The initiatives can be called as the components of BEP.

A FRAMEWORK FOR QUALITY ASSESSMENT

The economic and social health of the nation depends on the quality of its education system. If the pupils are not taught values and social skills necessary to become good citizens and do not learn adequate skills and competencies necessary to be economically productive then the schools cannot be called as successful in their mission (US Department of Education 1991). The concept of 'quality' is an encompassing one. Everything that happens in any education programme has a relation with its quality. Again, it has no limit. Actually, the level of quality that one can expect from the education system has no clear-cut answer. Even in the developed countries, the question of quality of education programmes is often raised. The main concern here is probably the deviation between the expectation from the education system and its immediate as well as long-term output. This is done generally comparing the present with the past or extrapolating the present condition looking at the future expectation. This has an obvious connection with the 'vision' of the education system.

The question of quality has been raised in every initiative taken internationally from Jomtien conference to Dakar forum (WCEFA 1990, UNESCO 2000). For instance, the Dakar goals of EFA emphasised early childhood care and education, free and compulsory primary education with good quality, and improving all aspects of quality of education. Putting quality at the heart of education, the issues like healthy and motivated students, competent teachers, relevant curriculum, good governance, and equitable resource allocation were set as characteristics of quality education. The Delors commission of UNESCO⁵ saw education throughout life as based upon following four pillars:

- *Learning to know* acknowledges that learners build their own knowledge daily, combining indigenous and external elements.
- *Learning to do* focuses on the practical application of what is learned.
- *Learning to live together* addresses the critical skills for a life free from discrimination, where all have equal opportunity to develop themselves, their families and their communities.
- *Learning to be* emphasises the skills needed for individuals to develop their full potential.

⁵ International Commission on Education for the Twenty-first Century, chaired by a France statesman Jacques Delors. Other 14 members collaborated him. The title of the report is Learning: The Treasure Within.

This conceptualization of education provided an integrated and comprehensive view of learning and therefore, of what constitutes education quality (Delors *et al.* 1996).

A number of approaches are available to understand the quality of education. The UNICEF approach recognises five dimensions of quality viz., learners, environment, content, processes, and outcomes founded on the rights of children to survival, protection, development and participation (UNICEF 2000). Education traditions and associated notions of quality include humanist approaches, behaviourist approaches, critical approaches, indigenous approaches and adult education approaches (UNESCO 2005).

No clear definition of quality of education is available in Bangladesh context in any of the policy documents like education commission reports, national plan of action on education for all, primary curriculum of NCTB, etc. Referring to the basic principles of the State, mentioned in the national constitution, the aim of primary education was described in the following way in the curriculum document of the National Curriculum and Textbook Board:

The basic aim of primary education is the overall upholding and development of the child's physical, mental, social, spiritual, moral and human qualities. (NCTB and UNICEF 1988, NCTB undated)

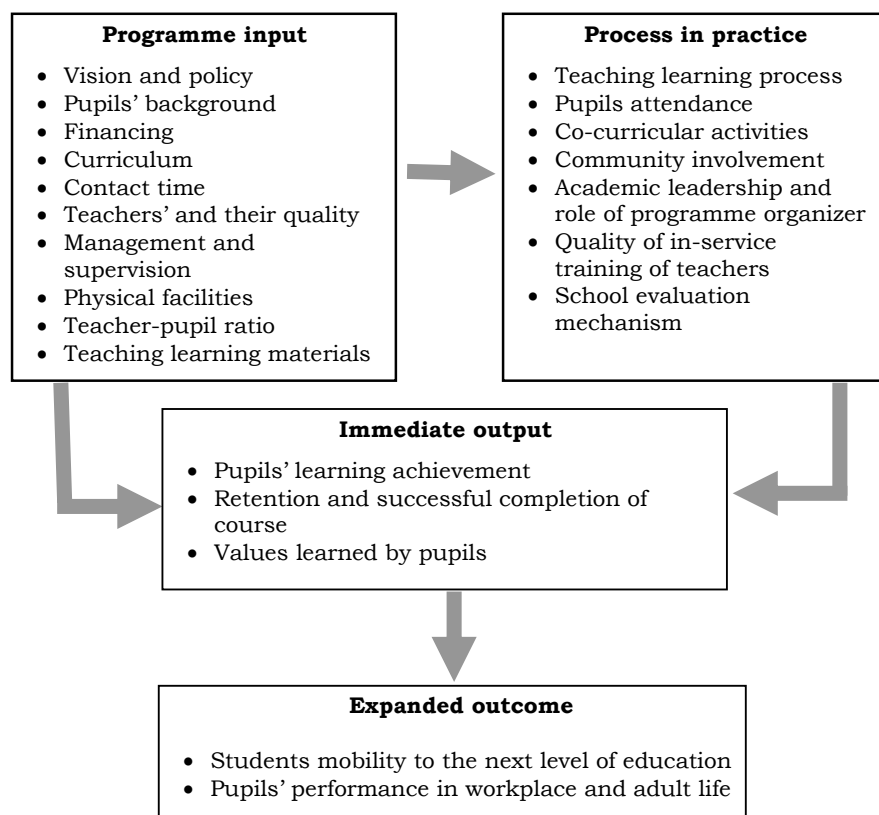
Nineteen general objectives were set in order to attain the aim, which were followed by 50 attainable terminal competencies. However, the documents of quality improvement projects and programmes of the government (IDEAL, ESTEEM and PEDP II)⁶ mentioned a number of activities leading to quality of education at primary level. These include infrastructure development, training of teacher and other staff in the education department, improvement of teaching learning approach, school management, community participation, local level planning, academic supervision of schools, monitoring of quality levels and so on (DPE-MoPME 2003, UNICEF 2004).

To do a comprehensive analysis of quality of BRAC education programme a popularly used format of looking at it was chosen. It is known as input-process-output (IPO) format of quality assessment. This is primarily because no other model is available in hand and secondly the studies already done on BRAC education programme can be fitted into this framework easily.

⁶ IDEAL = Intensive District Approach to Education for All.
ESTEEM = Effective Schools Through Enhanced Education Management.
PEDP II = Second Primary Education Development Programme.

To build the format, UNESCO's EFA global monitoring report 2005, School quality monitoring report 2000 of the US Department of Education, and a paper on quality of Bangladesh primary education by Chowdhury *et al.* (1997) were consulted. Figure 1 provides the analytical framework used in this report.

Figure 1. Analytical framework for quality assessment



Sources: UNESCO (2005), Mayeer *et al.* (2000), Chowdhury *et al.* (1997)

AN OVERVIEW OF THE RESEARCH WORKS UNDER REVIEW

Education research in RED started in 1988 with a baseline survey before opening of non-formal primary schools in Manikganj. A total of 140 research studies have been produced during the last 18 years (1988-2005). Of these, 23 were prepared during the first six years, 68 during 1994 to 1999, and 49 during the last six years. Three quarters of these studies were on BRAC education programme and the rest were on primary education system of the country.

The studies covered a wide range of BEP components like school programme for the children and the adolescents, pre-primary schools, adolescent development programme, education support programme, library programme, community schools and formal schools. An attempt was made to see the distribution of studies by programme component. It was observed that more than 80% of the studies were conducted on the non-formal primary school programme; three quarters of these studies were on the education programme for the children (BPS) and a quarter on the adolescents school programme (BAPS).

A wide range of areas was covered through these studies. Most of the indicators of quality education were addressed in these studies. A quarter of the studies were on assessing pupils learning achievement and its socioeconomic differentials. Some studies were done to assess the need of new schools in some selected areas including detection of problems faced during initial days. Some studies assessed the teaching learning process through classroom observations. However, very little work was done on school management, teacher training, and long-term impact of the programme. More than one issue was addressed in a number of studies.

Survey based quantitative research technique was used in majority of the studies. Among others, a good number of them used only qualitative research techniques and some used both qualitative and quantitative methods. Classroom observation, in-depth interview, group interview, and focus group discussions were the popularly used qualitative research techniques. Bi-variate and tri-variate analyses with hypothesis testing and multivariate regression analysis were the major statistical tools used in the survey based quantitative studies.

As majority of the studies were done on non-formal schools, thus the chance of getting more information on this component was higher than

others. In order to follow the analytical framework it is obvious that the major source of information would be the studies on non-formal schools. Thus, the information available in these studies may not be fully adequate to see the quality of other components of the programme. However, information on other components of BEP would be provided alongside to non-formal. Another important reality is that the studies were done during 18 years. Most of them were commissioned by the programme in order to see the existing situation. It would be difficult to assess the quality of education during the initial years of the programme. Again, looking for any statistical relationship among the findings of these studies is not possible. However, we tried to build logical relationship.

INPUTS TO THE PROGRAMME

Vision and policy

Vision of the implementing organisation and policy for particular action are no less than important for its improvement. These act as guidelines for implementing the programme. BRAC, as a national development organisation has its vision towards long-term issues of poverty alleviation and empowerment of the poor (BRAC 2005). Following sentence describes the vision of BRAC:

A just, enlightened, healthy and democratic Bangladesh free from hunger, poverty, environmental degradation and all forms of exploitation based on age, sex, religion and ethnicity.

The activities of BRAC education programme are guided by this vision. As already mentioned in the introductory section, the programme mainly targets the children and the adolescents. It includes both in school and out of school activities for the poorer communities. Such a targeted focus is expected to build a strong base for an enlightened Bangladesh with equity.

Guided by the national education policy and international goals and targets for compulsory education for all, education policy in BRAC is mainly made at the central level. The senior management of the programme prepares the policy, which is translated into programme proposal for donors. No proposal can go for implementation without an approval of the Governing Board. It is understood that donors funding policy also act as one of the guiding factors in framing the proposal.

Although no separate study was conducted to understand BRAC's educational vision and policy, all the studies conducted reflect that a pro-poor, women focused, child-centred, flexible pedagogic provision is there to achieve national goal of education for all. This review report will also give such a sense at the end.

Survey of potential students

Generally the programme organizers conduct surveys before taking decision on starting school programme in an area. This is important because BRAC's mandate is to open schools where out of school children exist or children are in difficult situation in respect to participation in

existing schools. Such surveys are also done to assess the necessity to reopen BRAC schools in old areas. Generally the programme organizers (PO) with the supervision of the area managers (AM) are mainly responsible for such surveys. However, the educational research unit in RED during the initial years trained the POs in survey techniques, conducted surveys for the programme, and checked quality of survey data collected by the POs.

RED's first education study was a survey in 20 villages of Manikganj to assess the potential of BRAC schools (Chowdhury 1988). This study identified the number of dropped out and never schooled children aged 8-10 years in the survey villages. Village-wise list of such children helped BEP to open schools. Second survey of this kind was conducted during the third quarter of 1991 (Mohsin 1992). It was done in such villages where third cycle of BRAC schools were in operation. The objectives were to explore the enrolment and literacy situation of the children aged 6-16 years. Based on the findings of low literacy rate and huge number of out of school children, it suggested running more cycle of BRAC schools in those villages.

Another survey of over 13 thousand households in 45 villages was conducted in 1993 to identify the potential of opening new schools (Khan and Mohsin 1993). This identified the villages where new schools could be started. A PRA/RRA exercise was done in the same year to discover a quicker method for selection of prospective pupils (Khan 1993). The method was then taught to the POs. Five years later RED conducted another survey in more than 12,000 households located in 120 villages of 38 districts (Hadi 1998). Examining the situation of school enrolment in the areas the study concluded that possibility to open new schools under current admission procedure would be difficult because of lack of adequate number of children. It suggested revision of the admission procedure, which includes taking children aged below 8 years, changing the composition of sex ratio, allowing admission of the children of better-off families.

Quality of survey data collected by the POs was assessed through a repeat survey in some randomly selected areas to improve the quality of survey. Although the data quality was not as good and complete as would be required for research, it was good enough in the indicators important for programme decision making such as, age of children, their schooling status, and poverty situation of the households (Kalam 2002).

Background of the pupils

Background of the BRAC school students was reflected in a number of studies. However, no separate study was done on this issue but such information is available as a supplementary to many studies including

the tracer studies on Assessment of Basic Competencies (ABC). These showed that between 1993 and 1999 over 70% of the mothers and half of the fathers of BRAC schools students were never schooled (Nath *et al.* 1996, 1998, 2000, 2003). Similar figures at the national level were lower than these. This implies that BRAC intakes more first generation learners compared to formal sector.

Reanalysis of *Education Watch* data showed that 42% of the formal school students were first generation learners, whereas it was 48.4% in case of BRAC schools (Nath 2005). The above-mentioned studies also showed that the proportion of first generation learner was reducing in BRAC schools over time – over 50% during 1992-94 to 43-45% during 1996-98. About 60% of the students came from those households having less than 50 decimals of land for cultivation and a half of the families lived basically on selling manual labour⁷. Generally the women of poorer families are the beneficiaries of the NGO run micro-finance programmes. Over a half of the students' mothers' were the participants of such programmes. The surveys showed that 12-16% of the BRAC school students had experience in studying in formal schools before their enrolment in BRAC schools. Table 1 provides socioeconomic profile of BRAC schools students (combining BPS, BAPS and ESP) during 1992-98.

Table 1. Socioeconomic characteristics of BRAC school students, 1992–1998

Characteristics	Year of enrolment in BRAC schools			
	1992 (n=1,259)	1994 (n=1,259)	1996 (n=1,259)	1998 (n=1,256)
Non-schooled mothers (%)	77.8	73.8	70.2	70.1
Non-schooled fathers (%)	59.2	56.3	46.5	51.8
Deficit food security status (%)	53.9	53.3	54.2	34.7
HHs with ≤ 50 decimals of land (%)	57.5	63.8	61.5	58.8
HHs survive on manual labour (%)	54.4	43.9	58.0	48.0
HHs with ≤ 50 decimals of land and sell manual labour (%)	71.1	69.1	75.9	70.7
HHs with NGO membership (%)	54.1	49.7	52.9	46.2
Non-Muslim pupil (%)	4.9	15.5	8.2	9.0

Figures indicate proportion of students with respective characteristics.

Sources: Nath *et al.* (1996, 1998, 2000, 2003)

Another study collected retrospective information of the BRAC school students (enrolled in 1990 and earlier) and their counterparts in formal schools and out of school children (Hossain *et al.* 2002). It observed that in respect to parental education, ownership of land, and food security

⁷ This is a popular technique in BRAC to identify poor household by knowing two information – cultivable land size and labour sale status.

status of household, the BRAC school students were similar to those out of school children. However, the formal school students were ahead of BRAC school students.

Inclusive education was introduced in BRAC schools some years ago. This created an opportunity for children with various kinds of disability to enrol in BRAC schools. General instruction is to take 10% of the students with disabilities (three in a cohort of 30-33 students). Not all types of BRAC schools obeyed this. A recent study showed that the proportion of disabled students was over 14% in the non-formal schools, 6.7% in the community schools and less than one percent in the BRAC formal schools (Nath *et al.* 2005).

Curriculum

Curriculum is crucial for any education programme. It actually plays a guiding role in programme's quality. Only two studies were conducted on this. A comparison between the curricula of the government and BRAC schools was first done in 1991; it showed that the range of objectives in Bangla, mathematics and social studies of BRAC was far less than the coverage of these subjects in the national curricula (Lovell and Fatema 1989). Afterwards BRAC modified its curricula.

The second study was done in 1999. It explored how much the NCTB prescribed competencies were addressed in BRAC school textbooks (Ghosh 1999). This study considered only the curriculum of first three grades of both BPS and BAPS schools, because, at that time BPS was just started as four years course and was suppose to use NCTB textbooks for grades IV and V. Ghosh (1999) found that over two-third of the terminal competencies were well covered by both text and curriculum transaction materials in BRAC schools (Table 2). However, only a third of the competencies were covered at such level through the evaluation materials.⁸

Table 2. Distribution of coverage of 53 terminal competencies by level of coverage and type of materials

Types of materials	Level of coverage			All
	Well	Fairly	Not at all	
Text materials	34	17	2	53
Curriculum transaction materials	41	10	2	53
Evaluation materials	19	12	22	53

Source: Ghosh (1999)

⁸ All the textbooks including supplementary storybooks were considered as text materials. Curriculum transaction materials included all the guidebooks for teachers, and the modules used in teachers training. Evaluation materials included recorded evaluation system practiced in the classrooms.

Domain-wise analysis showed that the competencies falling in the affective domain were less likely to be reflected in the materials compared to the psychomotor and cognitive type of the competencies⁹. In contrast to the above findings, most of the competencies were found to be well reflected in the NCTB prepared textbooks and teachers' guides (Kalam and Nath 2001). Ghosh (1999) also identified five learning objectives not covered in three years BRAC programme; however, additional 60 learning objectives were covered in it.

BRAC now prepares its own textbooks for some subjects of grades IV and V. In this connection a new study on the reflection of competencies in BRAC school textbooks is crucial.

Contact time

Teacher-student contact time in school is an important indicator of quality of education. BRAC schools are seriously concerned in this regard. Classes in BRAC schools are held six days a week – three hours for first three grades and four and a half hours for rest of the grades. Even in the month of Ramadan, while all other schools are closed, BRAC schools are kept open. However, sometimes the school contact time is hampered by the socio-political climate of the country and natural calamity like flood. It was observed that BRAC schools were not closed during the continuous countrywide *hartal* (shut down) against the then government in 1996 (Chowdhury and Alam 1998); the contact hour of other schools was drastically reduced at that time.

Teachers and their quality

The teachers are considered as one of the main players in quality education. Their socioeconomic and educational background, experience, and teaching skill are important in respect to their function in the classroom.

A number of studies have documented the profile of BRAC schoolteachers. It is expected that the teachers in BRAC schools would mostly be the women of the same or nearby villages where the schools were located. However, sometimes men had to be considered due to unavailability of suitable females. Taking a sample of teachers from four BRAC working regions it was observed that 15.7% of the BPS teachers were male (Khan and Chowdhury 1992). On average, the teachers were 25 years of old, where a higher portion belonged to 20-24 years range

⁹ Such categorisation of learning outcomes or the competencies were done according to Bloom's taxonomy. The *cognitive domain* includes the area of knowledge and thinking. Physical activities, habit formation, skill development, performance in real life, etc. are under *psychomotor domain*. On the other hand, belief, faith, outlook, attitude, interest, etc. belong to *affective domain* (Bloom *et al* 1956).

(39.6%) followed by those aged 25-29 years (29.9%). Three quarters of them were currently married and less than a fifth of them were unmarried. Regarding educational qualifications, 46.7% were below SSC level, 32.4% with SSC and more than a fifth with HSC or more. Majority of them were Muslims (87.8%). The household heads of the 39% of the teachers were farmer, a third service holder, a quarter small traders, and others with various other occupations. Majority (55.8%) of the teachers had less than three years of experience and only 15.2% had five or more years of experience in teaching in BRAC schools.

Table 3. Teachers in various types of BRAC schools, 2004

Indicators	BRAC primary school	Community school	BRAC formal school
Average number of teacher per school	1	4.5	4.4
Female teachers (%)	100	96	100
Educational qualifications (%)			
Below SSC	24	10	-
SSC pass	62	60	40
HSC and above	14	30	60
Length of experience as teacher (years)	6.8	10.7	11.7

Note: A quarter of the BRAC formal schools teachers had bachelors or masters degree.

Source: Nath *et al.* (2005)

A recent study collected background information of three types of BRAC schools viz., BPS, community and BRAC formal (Nath *et al.* 2005). The BRAC formal schoolteachers were the most qualified than other two groups followed by the community schools and the BPS (Table 3). However, an improved situation of BPS teachers was noticed in this study.

The above findings show that the teachers in BRAC formal schools were more educated than those in community and non-formal schools. Again, the community schoolteachers were ahead of those in non-formal schools. A common feature is that all the teachers received basic foundation training and refresher training once a month during their service duration.

In contrast, the proportion of female teachers in other types of schools was lower than BRAC schools. For instance, it was 42.8% in government schools, 37.3% in registered non-government schools and below 5% in the *ebtedayee* madrasas. Education level of the teachers of other types of schools was better than that of BRAC schoolteachers. The average year of schooling was 12 years among government and 11.6 years for non-

government schoolteachers. Similar trend was also observed in length of service as teacher. A portion of these teachers were non-trained, their proportions were much higher in the non-government registered schools and the *ebtedayee* madrasas (Chowdhury *et al.* 1999).

The 1992 study took a test of the BPS teachers in English and mathematics. It showed that 40% of the teachers received a score equivalent to the then called first division (60% and above of total marks) in English and 38% did so in mathematics. A quarter of the teachers failed (received a score less than 33% of marks) in English test and a third failed in mathematics (Khan and Chowdhury 1992). Khan (1999a) took another test of the teachers of BPS in English language. On average, they got less than 40% of the total score. Of the teachers tested, 37.8% got a score below 31, 36% got 31-50 marks, and others got a score more than 50. No such information was available to compare these with the teachers of other school systems.

The BRAC schoolteachers were asked to mention whether they faced any problem in their job – nearly two-third of them did not mention any (Khan and Chowdhury 1992). However, the others who mentioned facing problems raised three issues. Some of them said that they were unable to conduct extra curricular activities due to lack of practice at home. Some mentioned that although they tried hard but were unable to bring the entire pupil in the classes. For this reason they were under pressure from the respective programme organizers. Some mentioned that they were paid low remuneration that did not compensate their labour for the school (including out of school activities). Some of the teachers' families were dependent on their job in BRAC schools.

In another study Khan (1998) reported that about 6% of the BRAC schoolteachers dropped out from the programme during 1994-97. Majority of them dropped out due to personal reasons like familial (24%), physical illness (20%), and pregnancy (13%). Nearly 11% dropped out due to having a better job. Other reasons include difficult road communication to reach school, misbehaviour of BRAC POs, out migration, low remuneration, etc. However, about 10% of these teachers job were declared as redundant due to fiction with the landlord of the school house, irregular attendance of the pupils or low performance of teachers in the classrooms.

Management and supervision

Proper management and regular supervision of schools are vital for quality of any education programme. Although the BRAC management centrally adopts the overall policy, but a decentralised mechanism has been developed for implementation of the programme at field level. As already mentioned, BRAC education policy is not independent of the

government policy, international goals and targets regarding EFA and intention of the donors in this regard. Again, a number of studies mentioned that monthly meeting of the Regional Managers play important role to materialise policy directions into practice. The central management of BEP and the regional managers jointly take decision on the issues related to implementation of the programme. However, no independent study to date was conducted on the effectiveness of these management and supervision processes.

Only one study gathered field level data to see the age, length of service and education of the POs, who are directly responsible for 13-14 schools (Nath and Chowdhury 2000). On average, the POs were 28.6 years of old ranging from 20 years to more than 40 years. Only 5% was more than 25 years old. A quarter of them were females. The mean length of service of the POs was less than five years, 4.8 years for the males and 3.3 years for the females. On average, the POs had 13.2 years of schooling, 13.5 years for the males and 12.8 years for the females. More than half of the POs were graduate, 38% with higher secondary certificate (HSC) and 7% with a Masters degree.

Through discussion with the POs and the Regional Managers (RM) at the field level and the field operations unit in head office, a number of activities were identified that the POs were responsible for. These include financial and resource management, conducting monthly refresher course for teachers, curriculum management, personnel management, academic supervision of schools, report to team-in-charge, communicate with the parents, and link with community. Comparing these responsibilities with that of the head teachers in the formal primary schools the study concluded that the POs in BRAC education programme play similar roles of the head teachers in formal schools (Nath and Chowdhury 2000).

Another study explored how the POs work in the field in order to make the schools successful (Nath and Shahjamal 2004). Along with many others, personality, honesty and devotion to education of the POs were found important factors in making the schools successful. These people know how to make others active and capable, especially the teachers and the parents. This study listed following activities that the POs were normally doing:

- Prepare/train the teachers through a monthly refresher course;
- Oversee the classroom activities and provide feedback to the teachers twice a month;
- Prepare school evaluation reports fortnightly and send them to higher authorities (area and regional managers);
- Visit the homes of the students especially the absentees;
- Participate in the monthly parents teacher meeting; and
- Participate in weekly staff meetings in the area office.

To understand POs competency in English language Khan (1999a) took a test of 18 of them. The test items were taken from the NCTB's textbook for grade III. On average, the POs got a score of 68% marks. Over 80% of the POs got a score of 50% marks or more. No other study was conducted to see the POs knowledge in other subject areas.

There is a seven-member school managing committee for each school. This includes parents, teacher, and two outsiders interested in education. It has no specific function except visiting the schools. More details of their activities are discussed in community involvement section.

Other input issues

Finance, physical facilities, teacher-pupil ratio, and teaching learning materials are important factors for understanding quality of any education programme. However, in this case the first three factors are strictly controlled from the head office. For instance, teacher student ratio is mostly same in all BRAC schools (30-33 pupils per teacher) and schools are supposed to be arranged in a fixed sized rented house constructed locally. Moreover, cost per student is also centrally determined and there is no way for the field management or the school managing committees to collect extra money from the community. The programme is fully dependent on donor support. Teaching learning materials are also supplied from the head office. BRAC provides all necessary textbooks, supplementary books, copybooks, paper, pencils, etc. to all the students free of cost. However, there is flexibility for the teachers and the POs to introduce some hand-made or locally found teaching aids. Some studies documented grassroots level innovations in introducing teaching learning materials in BRAC schools (Hossain *et al.* 2000, Nath and Shahjamal 2004). However, innovations depend on the quality and competency of the teachers. Teaching learning materials available in the classrooms were also seen adequate for the pupils present there.

The parents of BRAC school students also bear some costs of education of their children, however much lower than that of the other primary schools. The *Education Watch* 2001 documented the various expenditures that parents incur for the primary education of their children (Chowdhury *et al.* 2002). At the national level, the average yearly private expenditure per pupil is almost equal to that comes from public fund. It was estimated that in addition to donor support a BRAC school student had to spend Tk. 270 per year for their education. This was Tk. 522 for a government school student and Tk. 391 for a non-government school student in rural areas. Lower private expenditure in BRAC schools lies in the provision of free stationeries and supplies provided by BRAC. It can be noted that textbooks are free in all three types of schools.

PROCESS IN PRACTICE

Teaching-learning process

The quality of teaching-learning process in any education provision depends on a number of factors including teachers, their training and motivation, students and their parents, supervisors, and overall planned activities considered by the programme itself. A number of these factors in the context of BRAC schools have already been discussed in earlier section. It is the teaching-learning process, which determines the performance of the learners – the immediate outcome from any education provision.

BRAC schools whether it is pre-primary, BPS, or BAPS are smaller than any other school system in the country. Only 30-33 students and a teacher are common features in all BPS and BAPS schools. However, two teachers for 25 pupils is the provision in pre-primary schools. Whatever the type of school is, the students sat on mat in a U-shape pattern. There is no bench or chair even for the teacher. Such a seating arrangement made no student as backbencher. Each and everyone could see the teacher and the blackboard equally irrespective of their height. Such a seating arrangement is unique in BRAC schools, which has no similarity with the government or registered primary schools.

A number of studies examined the teaching-learning activities in BRAC schools. The issue is a complex one and requires intensive classroom observation for longer period. Thus, most of the studies of this kind were done in few schools.

Hossain *et al.* observed classroom activities in one 'good' and another 'not so good' BRAC schools (Hossain *et al.* 2000). They found both the teachers trained and attended their classes daily with lesson plan. Each of the students had adequate books and stationeries. Both the teachers used blackboards as and when necessary. The classroom of the 'not so good' school was little noisy. Both the schools followed learner-centred and two-way activity-based teaching. Memory as well as understanding was emphasised in both. The teacher of the 'good' school was more careful to the slow learners and classroom discipline than the other one. The teachers took both oral and written tests to understand learning of the pupil. However, the teacher of the 'good' school was ahead of the other in taking remedial measures through providing additional time after school hour.

On observation of a number of classrooms in two areas under two successful POs, Nath and Shahjamal (2004) summarized their observation in the following manner:

The teachers and the students were, in general, sincere in attending their classes on time, although a few teachers and some students came 5-6 minutes late. Usually the schools started with physical exercise and recitation of the national anthem. The classrooms were neat and clean. The pupils living closer to the centres came earlier and used to clean the classrooms and surrounding areas everyday.

The teachers started each period by assessing what was taught in the previous day. A lecture method was primarily used to teach the students, however, group work, peer work, question answer, demonstration, etc. were often used as needed. Most of the teachers were good in teaching and were prepared through continuous training by the POs. The teachers prepared lesson plans everyday and used teaching aids. Classroom teaching was mostly pupil centric and the teachers were able to reach each of the learners. This was primarily because of small class size and secondly due to the system itself. The teachers were very careful in ensuring participation of all the students in every event in the class activities. If the teachers were not able to teach everyone equally, they often stayed in the centre for some additional time to provide extra care to the weaker students. The teachers were expected to do so especially for the pupils of grades IV and V. Homework was given regularly, especially for mathematics and handwriting. Considering parents' educational status no new work was given. Pupils were only asked to redo work at home that they have already done in the classroom.

A study on 30 grade V schools found 16 different activities that took place in the classrooms (Shahjamal 2002). Of these, the most frequently done activities were students' evaluation (28% of total time), students' individual class work (22% time), teacher's examining class work (19% time), investigation of previous knowledge (17% time), and pertinent discussion (15% time). These activities were not mutually exclusive, more than one activity was carried out simultaneously. Subject-wise analysis showed that the highest time was taken for mathematics classes and lowest for Bangla. There was no fixed class routine. It was the teachers' responsibility in deciding when to take which class. Such flexibility helped teachers teach the relatively harder subjects (or contents of the day) at the beginning of the day with ample time. It was interesting to see that 60% of the English classes were held in first period, 80% of the Bangla classes were held in the fourth period and 87% of the mathematics classes were taken in the second or fourth period. Although

the distribution varied from one school to another, it had no significant relationship with the performance of the students.

There was no provision of mid-term or year ending examinations in BRAC schools. The teachers assessed the students while teaching (Shahjamal 2002, Nath and Shahjamal 2004). Moreover, the POs did random assessment of students while visiting the schools. Results of such assessment of the POs are also used for school evaluation purpose. Evaluation results are supposed to use in school improvement.

Pupils' attendance

Head counting of pupil in 60 BPS schools taken equally from the two areas showed that the average attendance was 97% in the area where BRAC was in operation for longer period and 82% where BRAC started working a few years ago (Hassan *et al.* 1994). All the students of over half of the schools in the older area were present in the counting day. Khan (1995) observed that the attendance rate in BRAC schools was fairly high with only one or two students absent daily. Reason behind such low absenteeism is firstly the home visit to the absentee pupils by the teachers and the POs, and secondly, energising mothers motivation during monthly meeting with the teacher and the PO (Nath and Shahjamal 2004). In contrast, 60% of the registered pupils were found present in the classrooms of the formal primary schools (Chowdhury *et al.* 1999, 2002).

Co-curricular activities

The BRAC school programme managers often say, 'Co-curricular activities are integral part of classroom activities.' A number of classroom observation based studies found the same (Rashid and Chowdhury 1994, Begum 1995, Hossain *et al.* 2001). When the teachers observe that the pupils need some refreshment they ask the students to take part in singing songs or dancing. The students often take part in story telling, recitation of rhymes and poems or talking on specific subjects of their choice. Some of these activities were done in-group and some individually as per the instruction of the teachers. Shahjamal (2002) found that it was an everyday activity and on average, 5% of total class time was used for co-curricular activities.

Community involvement

There are two formal ways to involve community with BRAC school activities. These are through participation in monthly parents' meeting and school management committee. Mostly the parents/guardians of the pupils are involved in these; however, the managing committee includes 2/3 other people interested in education from the community as well.

However, before setting up the schools, cooperation from the community members is needed in selection of school location, hiring/building the schoolhouse, and selecting the right kind of pupil.

Rashid and Chowdhury (1994) for the first time investigated the initial set up of BRAC schools to have insights into the character and relationship of the schools with the community. It showed how lack of communication with the local formal and informal leaders (especially the religious leaders) created misunderstanding about BRAC activities. Conflict due to selection of teachers resulted in increased dropout of the pupils. Frequent transfer of the POs also hampered regular parent teacher meeting. Lack of motivation of the teachers resulted in poor teaching capacity of the teachers and hence poor performance of the pupils. As the teachers in BRAC schools come from the community, right selection of them has implications on the quality of teaching, pupil attendance and performance, and parental involvement with school activities.

Sixty monthly parental meetings from 60 BPS schools located in two rural areas were studied to investigate attendance, role of the participants, participation level, issues discussed, etc. (Hassan *et al.* 1994). Mostly the mothers were present in the meetings. Other attendees included grandmothers, aunts, elder sisters or brothers. Although the fathers were also encouraged to attend, they were rarely present. On average, representatives of 87% of the pupils attended in one area and it was 69% in another area. Although the POs had some fixed issues to be discussed, the participants also raised issues for discussion. Responsibility of the guardians towards their children was discussed in 70% of the meetings in one area, followed by a discussion on home gardening (66%). The second issue was discussed in 92.4% of the meetings held in other area. The guardians expressed their deep concern about well-being of their children by asking whether BRAC is going to extend duration of schooling from three to five years (60% of the meetings), and how BRAC can help these pupils to enrol in formal schools after graduation (51% of the meetings).

Through focus group discussion with the members of eight school management committees (SMC) and in-depth interview with some of them, it was understood that they were not much oriented about their duties and responsibilities as SMC members (Sultan 1998). Even the other parents (those who were not the members of SMC) were not aware of the existence of this committee. However, the committee members, especially the mothers were visiting the schools in rotation to see the attendance of the teachers and the pupils. A study conducted in 2004 found that such committees were very much active in the schools under two successful POs (Nath and Shahjamal 2004). Followings are the observations on the activities of the 25 such committees:

No regular formal meeting of these committees was held. However, each member visited the respective centre once a week. This task was not difficult seeing as they lived within short distance from the centres. These parents were either illiterates or have little education, thus, it was not possible for them to observe the pedagogical aspects of the centres. Instead, they had three things to monitor – that the teacher started the centre on time, that the teacher teaches and the students followed the instructions in a disciplined manner, and that the centre did not close before the right time. The parents questioned the teachers to explain any deviation that they observed, and the parents' observations were discussed in the monthly parents-teacher meetings.

It was also observed that the parents sometimes visit the teachers to know about the progress of their children or to explain the reason of absenteeism. The teachers cordially accept such initiative of the parents and encourage them to visit school frequently. In such meetings, they talk about social issues too (Nath and Shahjamal 2004).

Two of the first 10 urban BPS schools were studied after one year of their inception with the intention to find the reasons behind dropout of the pupils, obstacles to quality education and other related issues regarding urban setting of BRAC schools (Khan and Khan 1993). Comparing one so called 'good' with another 'not so good' school, the study suggested for careful selection of the neediest children as pupils in an urban context, greater emphasis on POs school supervision, parental motivation to education, discussion of urban contextual issues in parents' meeting, etc.

Academic leadership and role of programme organizer

The teachers are the frontline academic leaders in BRAC schools. They are continuously nurtured and supervised by the programme organizers. Most of the POs are also the trainers of the monthly refreshers' training courses. The POs in BRAC schools act like as head teachers in formal schools and even more (Nath and Chowdhury 2000). They are the responsible persons to keep the teachers up to date on academic matters through training, supervision, and off and on discussion (Nath and Shahjamal 2004). Sometimes they show the ways of teaching while visiting the schools.

In order to keep in mind the situation of first generation learners the POs instruct the teachers to form small reading groups among the pupils. Such out of school group learning helps the slow learners to keep them up. The teachers and the POs supervise such activities of the pupils (Nath and Shahjamal 2004).

Actually, the academic leadership that the teachers and the POs provide jointly are not independent of the socioeconomic situation of the pupils. These people are trained in such a way that they can implement learning in a lower socioeconomic environment. This is not the case in formal primary schools (Ahmed *et al.* 2004).

Quality of in-service training of teachers

In-service training of the teachers is known as the main strength of BRAC school programme. It has two parts – monthly refreshers training and annual training at the beginning of academic year. Besides, there is a foundation training course for all teachers at their joining. It is to be noted here that the issue of teacher training was observed only in three studies.

A group of 25 teachers took part in a PRA exercise to react on the basic training course offered to them (Ahmed 1994). The content of the course included aim and objective of education, various types of education, significance of non-formal provision, child psychology, teaching methods, evaluation procedure, lesson plan preparation, co-curricular activities, and some contents from Bangla, arithmetic and social studies. According to the teachers, the training was enjoyable to them and they could also learn many things, which were unknown to them. They also suggested for a longer duration of basic training course.

After making a decision to increase the length of education in BRAC schools up to grade V, a need was felt to improve English teaching skills of the teachers. The materials development unit¹⁰ adopted a three-stage skills dissemination approach. The English curriculum specialist would train and build the master trainers, the master trainers would train the POs who would train the teachers during monthly refreshers training. A study was conducted after one year of inception of this initiative to see the effectiveness of the approach (Sultan *et al.* 1999). It found that the master trainers were training well because of their higher educational background and training skills of the curriculum specialists, however, it did not reach at the end with such quality because of the absent of the above two factors. The study suggested one-step reduction in the process of dissemination, i.e. the master trainers should train the teachers directly in order to maintain the standard.

While doing the study on successful school management Nath and Shahjamal (2004) observed some of the monthly refreshers training. The observations are as follows:

¹⁰ It is one of the three major units in BEP. Its function is to develop learning materials such as textbooks and supplementary books, and teacher guides. The other two units are field operation unit and monitoring unit.

The POs were skilled enough in conducting the refreshers' training. They had ample knowledge of textbook contents and they knew the appropriate ways to teach them. Moreover, the ability of a PO in identifying some of the mistakes and gaps in the textbooks was impressive. The teachers found many things to learn from the POs, who have a strong command over the training classes and the teachers. Their ability in preparing teaching aids and lesson plans was excellent. The POs often helped the teachers in preparing lesson plans.

Besides the above formal training the POs did classroom observations and provided necessary feedback to the teachers. Such pedagogic supervision was also important for quality improvement of the teachers (Nath and Shahjamal 2004).

By contrast, there is no provision of refreshers training in the formal education sector. The head teachers, who are relatively better than others in pedagogy, are so overburdened that they are not able to supervise the juniors or oversee their activities (Ahmed *et al.* 2004).

School evaluation mechanism

The POs are responsible to evaluate the schools under their supervision. A study was done to examine the existing evaluation mechanism in BRAC schools. It was done through reviewing relevant documents and discussing the issue with the programme personnel at various levels. The findings revealed that there was no central mechanism for school evaluation. The POs did so based on their observation during school supervision. Three indicators were considered viz., pupils' attendance, students' performance, and school infrastructure. Based on their observations the POs categorise the schools in three groups – A, B, and C. The evaluation system seemed very much subjective in nature, tests of the students taken were not standardized, and a number of quality indicators were missing in the process (Nath 2002b).

There are 10 criteria for a four-fold grading (from A to D) system of the government and the registered primary schools. The assistant upazila education officers (AUEO) do it once after two years. The list of criterion is well developed compared to the BRAC's one, however, question of standardization is also there.

OUTPUTS OF THE PROGRAMME

Learning achievement

It is an immediate outcome of any education programme that draws general peoples' attention. A number of studies have been conducted during the last 15 years to know the learning achievement of the students of BRAC schools. Both casually developed and standardized test instruments were used in these studies. Assessment of basic competencies after completing grade III and assessment of terminal competencies after completing grade V are two initiatives used to continuously monitor the level of learning achievement of the students. Findings of these studies are useful in understanding overall progress of the programme.

The test instrument to assess the basic competencies of the children aged 11-12 years old was first developed in 1992 with support from UNICEF and two national sample surveys were held in 1992 and 1993 (Chowdhury *et al.* 1992, Nath *et al.* 1993, Chowdhury *et al.* 1994). It was not possible to have valid estimate of the level of performance of BRAC school students from the above studies because of their small representation in the national sample. The instrument was then separately used to assess the basic educational level of BRAC school students after completing grade III (Nath *et al.* 1992 and 1994). Two cohorts of the students (graduated in 1990 and 1992) were assessed two years after their graduation irrespective of their enrolment status. The studies show that 55.5% of the graduates of 1990 and 59% of the graduates of 1992 satisfied the basic educational criteria. Although these studies considered both BPS and BAPS schools, but as the assessment of the students took place two years after graduation it included the influence of two years education of some students in formal schools.

Later a fresh tracer study was planned and the graduates of BPS, BAPS and ESP were assessed during the same year of their graduation. Starting from 1995, this initiative continued up to 2001 (Nath *et al.* 1996, 1998, 2000, 2003). The survey was done in every alternative year. Along with taking a new cohort, previously sampled graduates were traced every year. This initiative has two important dimensions; firstly, the schools under ESP were included in it for the first time and secondly, the sample size of this was much larger than the previous attempt of this kind.

The major findings are as follows:

1. The overall performance of the programme decreased gradually. On average, the proportion of graduates satisfying the criteria of basic education was 73.7% in 1995, 69.3% in 1997, 68.7% in 1999, and 62.5% in 2001. Highest level of deterioration was seen in BAPS. (Table 4)
2. There was no gender variation in basic education among the graduates of 1995 and 1997. However, boys outperformed the girls in 1999 first, which continued till 2001 (Fig. 2). Such gender difference was found only among the graduates of BPS in 1999 and in both BPS and BAPS in 2001.
3. Skill-wise analysis shows that the performance declined in three areas viz., life skills/knowledge, reading and numeracy, however performance was constant in writing skills.
4. Numeracy was the area where gender difference was found among the graduates of all the four cohorts. Boys did significantly better than the girls in all the four surveys.
5. The level of basic education of the graduates of 1995, who were tested in four successive surveys increased over time, 72% in 1995 to 83.6% in 1997 and 1999, and 84.6% in 2001. Skill-wise analysis shows improvement in all the four areas. Similar pattern was observed in other two cohorts (1997 and 1999) also.

Table 4. Percentage of graduates satisfying all basic education criteria by school type and year of graduation

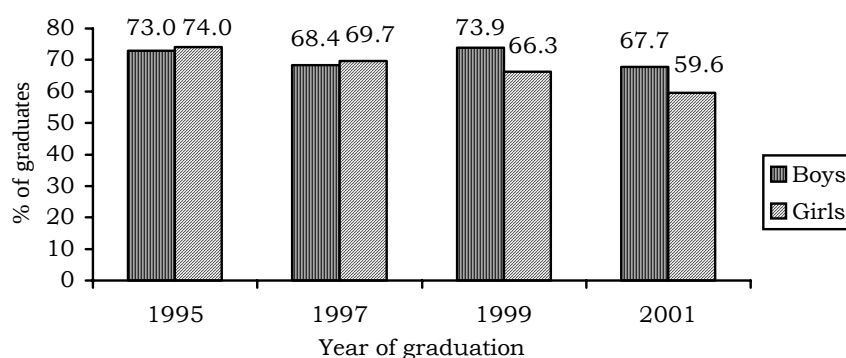
School type	Year of graduation				Level of significance
	1995	1997	1999	2001	
BPS	72.9	69.0	67.9	65.6	ns
BAPS	76.3	71.2	68.0	52.3	$p < 0.001$
ESP	75.3	49.0	76.8	78.7	$p < 0.001$
All	73.7	69.3	68.7	62.5	$p < 0.001$
Significance	ns	$p < 0.001$	$p < 0.01$	$p < 0.001$	

ns: not significant at $p = 0.05$

Sources: Nath *et al.* (1996, 1998, 2000, 2003)

Without exploring the reasons of such deterioration the last study hypothesized a number of reasons for this. Firstly, introduction of grades IV and V took a good amount of time and energy of the head office and field staff, which might result in poor supervision and monitoring of the students of first three grades. Secondly, a good portion of qualified and experienced BEP staff was transferred to other programmes in mid 2000, which could have adversely affected pedagogical supervision of the schools.

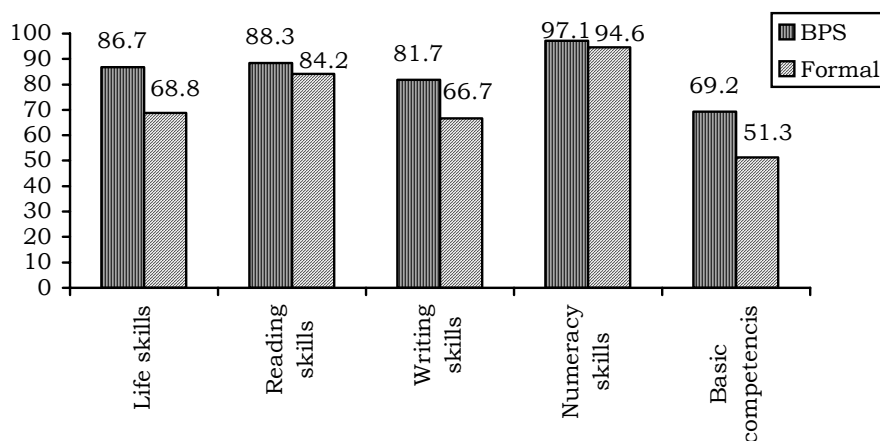
Figure 2. Proportion of BRAC school graduates achieving basic education by year of graduation and sex



Sources: Nath *et al.* (1996, 1998, 2000, 2003)

Another study was conducted in 1996, using the same instrument, to compare the performance of the graduates of BRAC schools with that of the formal schools (Nath 1997, Nath *et al.* 1999). This study was done where a demographic surveillance system was there for 10 years (*Watch* project). It shows that overall performance of BRAC school graduates was higher than that of the formal schools (69.2% vs. 51.3%; $p < 0.001$). BRAC school graduates did better in two skills areas viz., life skills and writing (Fig. 3). Both types of students performed equally in reading and numeracy

Figure 3. Percentage of graduates satisfying different skills criteria in ABC test by school type, 1996

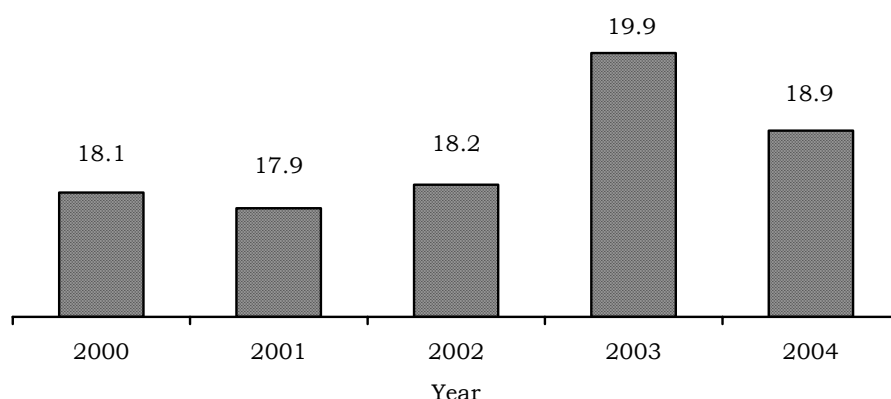


Sources: Nath (1997), Nath *et al.* (1999)

skills. Comparing a group of students having three years of BRAC school education and two years of formal education with another group having five years of formal school education this study showed an advantage position of BRAC school graduates regarding competencies achievement. A suggestion as thus made to extend the duration of BRAC schools up to grade V.

A series of studies were conducted to know the achievement of terminal competencies after completing the full course of primary education in BRAC schools (Nath 2002a, 2003, Nath *et al.* 2004, 2005). Five cohorts of NFPE graduates were assessed using the instrument developed for *Education Watch* (Nath *et al.* 2000). Of the 27 competencies assessed, on average, the graduates of the first three cohorts achieved about 66% of these, which increased to about 74% for the 2003 cohort and decreased to 70% for the cohort of 2004. Figure 4 provides mean number of competencies achieved in various years. The boys and the girls performed equally. However, the number of competencies where gender difference prevailed reduced over time – from 14 competencies in 2002 to six competencies in 2003, which increased to eight in 2004. Inter-school variation¹¹ has been reduced from 26.4% in 2000 to 15% in 2003, indicating an achievement in lowering variation among the non-formal schools. A slight increase has occurred in this regard in 2004 (15.3%).

Figure 4. Mean number of competencies achievement of BPS students by year of graduation



Sources: Nath (2002a, 2003); Nath *et al.* (2004, 2005)

The first three surveys (2000, 2001 and 2002) repeatedly showed that the non-formal school students performed poorly in three competencies.

¹¹ Measured through calculating coefficient of variation. It is a ratio of standard deviation of the school means (average performance of the students) and their aggregate average times 100.

These are writing skills in English, word problem in mathematics, and life history of prophet Mohammed (SM) or the preachers of own religion. In 2003, the students improved their level of achievement in first two competencies from 'poor' category to a 'mediocre' stage. However, they performed poorly in these competencies again in 2004. A serious attention needs to be given in these three competencies.

Comparing the performance of BRAC school graduates of 2000 with that of the other schools it was observed that the NFPE students achieved more competencies than the students of government and non-government registered primary schools (Nath and Chowdhury 2001, Nath 2002a). The students of these schools, on average, achieved less than three-fifth of the assessed competencies. Whereas, 8.5% of the BRAC school graduates achieved all the 27 competencies, only one percent of the formal school students (both government and registered non-government schools did equally) could show such performance.

If we compare the private cost per competency achievement among the students of above-mentioned three types of schools we would see that the cost of education is much lower in BRAC schools. For instance, the parents of BRAC school students had to spend Tk. 76 per competency, which was Tk. 189 for the government school students and Tk. 163 for the registered non-government school students. It should be mentioned that the average public cost per pupil in formal schools is mostly equal to BRAC's cost per pupil in its schools.

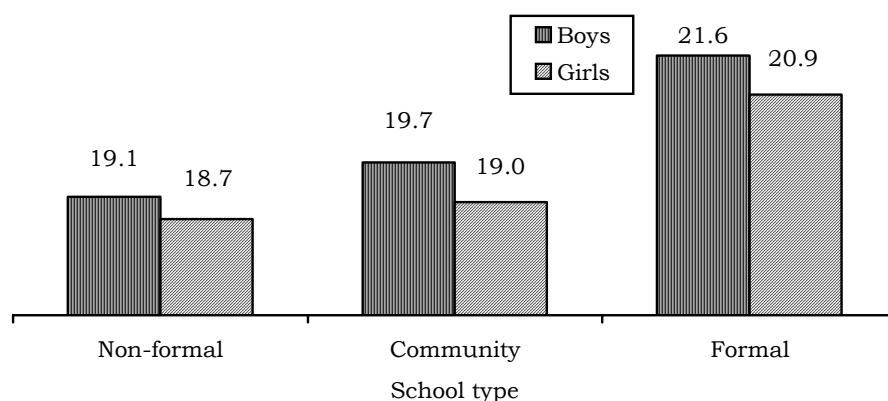
The last year's study (on the graduates of 2004) made a comparative analysis of three types of BRAC schools viz., BPS, community and formal (Nath *et al.* 2005). On average, the graduates of BRAC formal schools scored the highest followed by those in community and BPS schools (Fig. 5). A general trend of the BRAC school students was that they were less competent in those questions needing understanding level of skills, and relatively better in the knowledge-based questions. This indicates an emphasis of rote learning in the schools. Similar findings were also found in the government and registered schools in 2000 (Nath and Chowdhury 2001). The disabled students in BRAC schools also did well in the competency test; however their performance was significantly lower than that of the other students. A quarter of the disabled students did better than the average performance of the formal school students.

Retention and successful completion

These are two important quality indicators in respect to EFA. A number of studies were done to see the dropout of the students from BRAC schools. The findings show that some students dropped out during the first six months of their enrolment, majority of whom were replaced by out of school children. A 1994 study found that it was 16.3% (Khan and

Chowdhury 1995b). The rate was higher for the boys than the girls. A quarter of them were withdrawn by the parents due to misunderstanding about BRAC and its school programme (so called anti-Islamic rumour), and another quarter were expelled by the school authority due to under age, over age and absenteeism. Other reasons of dropout included children's engagement in household work, migration of the households, and enrolment in other schools.

Figure 5. Mean number of competencies achievement of BRAC school graduates by school type and sex, 2004



Source: Nath *et al.* (2005)

Later, a number of studies confirmed that the dropout rate in BRAC schools would not be more than 5-6%. Such a lower rate of dropout (compared to the national rate) indicates a higher percentage of retention and completion rates. This was possible due to some strict measures taken by the teachers and the POs. Home visit of the absentee students and monthly parents meetings are the key instruments to keep the dropout rate so low. Due to such a low dropout rate it was not felt necessary to study on retention and completion in BRAC programme. The *Education Watch* studies show that the retention and completion rates were much higher in non-formal system compared to the formal system (Chowdhury *et al.* 1999, 2002).

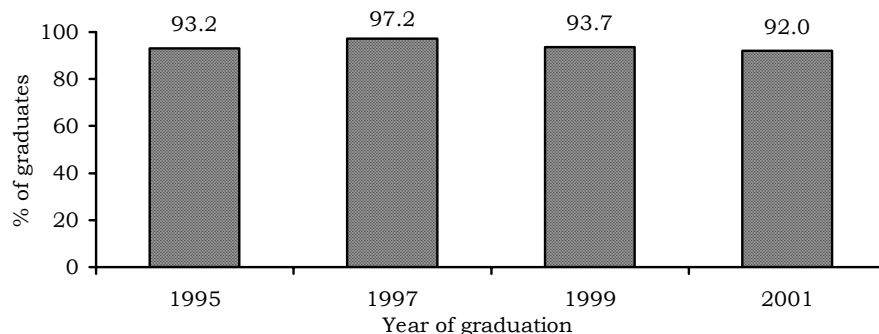
Students' mobility to the next level of education

The issue of mainstreaming of BRAC school graduates was first studied by Verma and Christie (1996). In order to ensure smooth transition they suggested for improvement of relation between government education department and the BRAC programme at the central level and also among the teachers of both sides at the grassroots level. They also suggested for organizing joint meeting and training of the teachers in

order to learn from each other. A number of initiatives have been developed in this regard since then.

The POs generally take attempts to admit the BRAC school graduates in the formal schools for further education. Information on enrolment of BRAC school graduates in formal schools was collected in some studies. Over 90% of the graduates enrolled in formal schools after completing education in BRAC schools (Fig. 6).

Figure 6. Proportion of students enrolled in formal schools after graduating from BRAC schools by year of graduation



Sources: Nath *et al.* (1996, 1998, 2000, 2003)

An analysis of the 1995 graduates show that 93.2% of those who completed the three-year course enrolled in formal schools – some in grade IV and some in grade V. No gender variation was observed. However, younger aged graduates of relatively better-off households with some education of the parents were more likely to enrol in formal schools than the others (Nath 1996). After five years of graduation, 39.6% remained in schools and others dropped out. Although there was no gender difference at the initial stage but the gap significantly increased against the boys over time. Only a third of the boys and 42.3% of the girls were found enrolled after five years (Nath, 2000b, 2002c). School-type wise analysis shows this figure as 42.6% for BPS, 30.5% for BAPS and 31.8% for ESP. Although, such information for other cohorts of the tracer study were also collected but no more analysis was done on them. No such information was available to compare the above information with the formal system. Again, similar analysis for those completed the full course of primary education in BRAC schools is also needed.

Khan and Chowdhury (1993) identified a number of reasons of BRAC school students dropping out from formal schools. One important reason is the teaching learning provision in the classrooms, which is far different in formal schools than that in BRAC schools. BRAC school students

sometimes fail to cope with the new system. Due to poverty they could not meet the educational expenses needed for high school education, which includes buying of textbooks, supplementary books and other supplies, and various types of fees including tuition fees. A support system has been developed based on the findings of this study to help continuation of education of BRAC school graduates in formal secondary schools.

Pupils' performance in workplace and adult life

Only one study was conducted to explore the situation of the BRAC school graduates in adult life (Hossain *et al.* 2002). It explored the impact of education in three broad areas, viz., social, economic, and women's empowerment. A number of indicators were put in each of the areas. Three groups of people were investigated viz., BRAC school graduates (both BPS and BAPS), formal school graduates and never schooled people. Selection of the individuals was done controlling for age and sex for all the groups and years of schooling of the two ever-schooled groups.

On average, the three groups were similar according to the age of the respondents (around 23 years). Otherwise, in respect to other indicators such as parental education, ownership of land, and food security status of household, the former BRAC school students were similar to the never schooled respondents, but the formal school respondents were ahead of the other two groups. Regarding the impact of BRAC schools the study concluded the followings:

- Former BRAC school students performed equally with their counterpart formal school graduates, however, they did significantly better than those who had no schooling. The formal school students were economically better-off at the childhood but the BRAC graduates were able to catch up at the adult stage,
- In most cases, the males were ahead of their female counterparts. However, the females were found more conscious about their own as well as their children's health and hygiene issues,
- Individual level impact was found pronounced than the household level impact,
- Knowledge-based performance was higher than the attitude and practice-related impacts, and
- Social impact was more pronounced than economic and empowerment effects.

A study on married women shows that affiliation with BRAC schools during childhood increased chance to marry at the right age as per law (18 years) (Kamal *et al.* 1997). They observed that 27.4% of the former

BRAC school students obeyed the law. In contrast, 18.5% of the formal school graduates and 11.4% of the never schooled women obeyed this law. However, they did not see such influence of BRAC programme on contraceptive use or health knowledge like benefits of immunization, ways of water purification, and causes of night blindness.

Values learned by pupils

No separate study was conducted to know how much value the students learn through their primary schooling with BRAC (BPS and BAPS). However, a number of studies especially done through qualitative approach documented some in this regard. One of these observations is that the pupils of BRAC schools are disciplined in and outside the school. They in general, do not create much noise in the classrooms and obey their teachers. They greet among themselves, with their teachers and the POs. They are very cooperative to each other, which they learn through the peer learning activities in the classrooms. The pupils are very much friendly with the visitors and do not hesitate to talk to them. They take the responsibility of keeping their classrooms clean.

OTHER COMPONENTS OF BEP

An early assessment of APON programme

A study was conducted on the Adolescent Peer Organized Network (APON) programme – an initiative towards adolescent-to-adolescent development in order to acquire and share knowledge through peer organized network (Khan *et al.* 2003). Findings reveal that the APON course participants had significantly better knowledge than the non-participants in various social, legal, health, hygiene, and environmental issues. Their attitude on some issues was positively different than the non-participants. The course participants also shared and disseminated their knowledge to peer adolescents. The activities could develop leadership quality for some of the participants.

Library programme

A number of studies have been conducted on the library programme. Khan and Akter (1999) observed that use of libraries tend to decrease after one year of their establishment, because, the serious readers finish reading all the books by this time and do not get any new book to read. Use of libraries also declines before the exams in schools and during long vacations. The females felt easy to use those libraries, which were exclusively for them. Daily newspapers and weeklies were the most popular materials for the readers irrespective of age and occupation. The students particularly wanted more reference books. Well functioning of the libraries depends on how active the library committees were. In the same year Khan (1999b) developed an evaluation tool for the programme to use it for assessing the performance of the libraries.

Another study on the community-based libraries observed that the organizers could attract more males than the females to be members of the libraries. However, the number of females was higher than the males among the book borrowers (Khan 2002). Children and the student members were more regular in using the libraries. Among the non-student members, the college-educated ones used the libraries most. Lack of arrivals of new books and non-availability of school text and supplementary books came out as the reasons for loss of attraction to the libraries. This study also found that the busyness of the managing committee members in their own work created over dependency on BRAC staff, which hampered the independent running of the libraries. The interior space and surrounding environment of most of the libraries were

found satisfactory (Khan 2000b). Majority of the libraries organized cultural function on a regular basis and few of them started social activities. This study also observed that community participation was at the top at the initial stage of library establishment, which reduced over time.

Pre-primary schools

Only three studies were conducted on pre-primary schools. The first study on pre-primary schools was done in 1988 on completion of 10 experimental schools in Manikganj (Ahmed 1988). It was an early assessment to see the presence of the graduates in formal primary schools. It was observed that out of 250 children, 241 initially enrolled in formal schools and 80% of them were in schools during the study. It was observed in the second study that though most of the graduates of pre-primary schools enrolled in the formal primary schools, however, majority of them could not attend school regularly and thus dropped out within few months (Akter 2000). The main reason was the distance between home and formal school. This study suggested to open pre-primary schools nearer to the formal schools or if possible at the premises of the formal schools.

The teachers of the formal schools and the SMC members were very much positive at the activities of the pre-primary schools (Begum *et al.* 2004). Over a half of the 100 head teachers under study opined that as these students attained some competencies before starting their formal education it helped them a lot and it was comfortable to teach them. A good proportion of the SMC members said that they visited the pre-primary schools and found competent teachers and joyful learning environment in the classrooms. However, without mentioning any reason, some of them opined for higher educated teachers for pre-primary schools. The result of a test taken five months after the start of academic year in the formal schools shows that the achievement of the grade I pre-primary oriented students was significantly higher than those having no pre-primary orientation. However, such difference did not exist among the students of grade II. Regarding participation in classroom activities, pre-primary oriented students in both the grades were ahead of their peers without such orientation (Begum *et al.* 2004).

Community schools

After getting 67 non-functioning community schools from the government at the end of 1998, BEP could run half of them within a short period of time (by March 1999). An initiative was taken to see the existing situation of three types of community schools viz., those BEP could restart, those that could not be restarted, and those which were not handed over to BRAC. Another objective was to know the reasons behind

non-functioning (Kalam and Hadi 1999). The three types of schools were compared in respect to discipline, attendance of pupils and teachers, teacher-pupil ratio, supervision of higher authority, holding SMC meeting, and community reaction about the school functioning. The BRAC-operated schools were ahead of the others in all the indicators. Worst situation was observed in those schools handed over to BRAC, but BRAC could not restart those due to non-cooperation of the community. A comparison between the background characteristics of the students of BRAC-run community schools and those were not handed over to BRAC shows that the former group were poorer than the other group. For instance, 65% of the mothers and 48% of the fathers of the students of BRAC-run community schools never attended in any schools, these figures were respectively 48% and 37% for the other group of students. Poor condition of the BRAC school students was also confirmed through self rated food security status of their households (Kalam and Hadi 1999).

SUMMARY AND CONCLUDING REMARKS

Bangladesh's vision towards education is reflected in its Constitution. Considering education as a basic need (article 15a), it desired to establish uniform, mass oriented, universal, free and compulsory education up to a certain level determined by the law (article 17). Again, equality of access to education in any educational institution is also mentioned (article 28.3). In order to fulfil these commitments a number of steps have been taken by the government during the last 35 years since its independence in 1971. Although, the nation could progress a lot in the case of children's participation in education, but very little improvement was noticed in the case of quality of education. A kind of pluralism exists in primary education in Bangladesh due to different types of schools, but a wide range of variation in quality by school type is also a reality. Actually, quality of education was better in those institutions where the authority invested much, access was restricted, and the parents had the capacity to invest more in out of school education. Even the State owned primary schools were not operating in line with what it had to be. All these were the obstacles to the children of poorer communities to participate in education. Reflection of these can be found in a BRAC study done 15 years back and also in the *Education Watch* report 2004 (Chowdhury *et al.* 1992, Ahmed *et al.* 2004).

BRAC, due to its overall vision regarding poverty alleviation and empowerment of the poor, had no choice but to open schools for the poorer children, if it wanted to do any work in the field of education. Based on the experiences gained in functional literacy programme and a public health education programme it experimented some schools for the poorer children and took affirmative actions enrolling more girls than the boys. BRAC model of education was improved and expanded based on its own experience, experiences of other public education systems, and the international goals and targets committed by the nation.

From the beginning, BRAC schools admitted those children who were never enrolled or dropped out from the formal school system before completing the full cycle of primary education. Considering women's disadvantaged position in the families and in the societies at large, it admitted more girls than the boys. Selection of the pupils was done carefully. Although the programme itself was responsible to do this; they took help from the Research and Evaluation Division as and when necessary. RED sometimes trained the POs in survey techniques, and also checked the quality of programme data. Seeking of such help

indicates BEP's seriousness in selecting the right children for the school programme. Such a strategy was very much consistent with achieving equity in participation at the national level. A number of studies confirmed that BRAC schools were advanced than other schools in admitting more first generation learners.

A structured framework was followed in implementing the programme. Regarding programme inputs, one cannot find much variation among the BRAC schools whether it is BPS, BAPS or the ESP schools. The infrastructure, material facilities, stationeries, and other teaching learning provision were also standardized in these schools. Cost per pupil was also equal across the programme. There is no provision of monetary contribution of the parents or the community to the schools. The curriculum of BRAC schools is consistent with that of the National Curriculum and Textbook Board (NCTB). The teachers were trained in a similar fashion – initial foundation training, monthly refreshers' course, and special training at the beginning of each academic year. Although the teachers were less educated than those in other schools in the country and they were paid much lower than the others, such an intensive training programme kept them capable in implementing teaching and learning at the classroom level. Role of the POs in the training sessions and regular supervision were unique compared to such things in the formal education provision. All the above-mentioned conditions and practices created an equitable environment at the school level. Thus, the teachers became competent in using various teaching materials in the classrooms. They taught through various activities rather than a monotonous way, and took care of the first generation learners. Parental cooperation was also important at this stage. They often came to school and talked to the teachers about progress of their children, and met once a month to discuss about school and other related issues. The SMC members' rotational school visit and limited number of holidays in schools helped keep actual contact time higher than other primary schools in the community. Attendance rate of the pupils in classes was also higher in BRAC schools. However, there is scope to improve school evaluation mechanism through introducing standardized instruments.

The inputs and the process factors were well reflected in the immediate outcome of the programme i.e., the students learning achievement. The BRAC school students showed better performance in competencies achievement compared to those in other schools. However, a new comparative study is needed to see whether such trend is still continuing. Again, there is variation in the performance of the students might be due to variation in the students home environment, which is not something that can be addressed rapidly. The good thing is that whatever the variation is (among the students or among the schools), it is significantly less in BRAC schools compared to the government or

registered primary schools. The overall performance of the programme in respect to students learning achievement does not show any consistent pattern of improvement over time. The long-term outcome of the programme was found satisfactory as the former students of BRAC schools showed equal performance with those of formal schools, although the BRAC pupils came from the disadvantaged households.

One important limitation of this review is that the studies used here were done in different periods. Studies on school opening, community participation, and teacher training are quite old; the situation might have changed by this time. If all the issues related to quality were brought under research at least once in every three to four years, it would have been more justifiable to analyse them together and relate with each other. Again, a number of input related factors were not brought under any research studies. Meso or macro level management issues were not adequately addressed. Most of the learning achievement studies did not collect any data on schools or the households. Thus, factors predicting pupils learning achievement were unknown. It is understood that school is a complex case and some of the process factors requires longer period of observation to have conclusive remarks and thus, it is not easy to consider many schools in one study. Again, it is difficult to quantify the observed information and correlate them with short and long-term outputs.

There are positive sides too. No other primary education provision in the country has such continuous research initiative. Findings of a good number of studies were used for programme improvement. The State, who is the main provider of primary education in the country, introduced competency-based primary education. Not the government itself, the Research and Evaluation Division (RED) of BRAC did the first study on pupils' competency achievement in the government schools under the *Education Watch* initiative of CAMPE. On the other hand, RED is continuously assessing the competency of learning of the BRAC school pupils during the last five years. The government and the registered schools are suppose to do household survey once a year in January to identify eligible children for primary education, which is not done at all during the last four to five years. It is a regular practice in BRAC Education Programme (BEP). Other aspects of quality issues are also unknown except from the studies under *Education Watch*.

The other components of BRAC education programme were not as well researched as the non-formal primary education programme. This is expected, because this component is the core of BRAC's Education Programme. However, this makes it difficult to say much about the quality of other components. It is important to do systematic research on other components of BEP following the framework used in this review report. The components include pre-primary, library programme, APON

programme, community schools, ESP schools, education for indigenous children, and secondary school teachers training programme.

Followings are the summary of the gaps identified in the existing studies:

- Knowledge and competencies of the teachers in formal schools were not addressed in any of the studies conducted in RED or elsewhere. BRAC school teachers' knowledge was tested many years ago. A fresh research is needed to assess the skills and competencies of the teachers.
- The issue of teacher training was observed only in three studies. Information lacks how the teacher training is fitted into classroom practices.
- Only one study was conducted to see the Programme Organizers' knowledge in various subjects.
- Management and supervision of BRAC Education programme were partially addressed in some of the studies. However, no independent study was conducted on the effectiveness of these issues.
- Most of the learning achievement studies did not collect any data on schools or the households. The tracer study, which was done on class III graduates, was a regular source of socioeconomic information of BRAC school students. It stopped some years ago.
- No assessment of the textbooks of classes IV and V used in BRAC schools were done. An assessment of the full set of textbooks used in BPS and BAPS is necessary to know their comparability with those used in formal schools, particularly in relation to primary competencies.
- What makes a good teacher is a crucial question in any education programme. A study on this in the context of BRAC schools can be undertaken. Aspects of teachers' motivation in BRAC system are also unknown.
- BRAC is strong in teacher training but it is not clear from the existing studies whether other aspects of teacher motivation are present in BRAC system.
- An important component of management and supervision service has to do with feedback of information gained through school visits. How such information is reported back and what actions are taken is also unknown. Adequacy of follow-up actions and participation of various stakeholders needs to be addressed.
- Not all information (gathered through tracer study) on continuation of education of BRAC school graduates in formal schools was analysed. This should be done to have comparative analysis of the situation.

Similar information on formal system was also unavailable. Again, similar analysis for those completed the full course of primary education in BRAC schools is needed.

- Comparative analysis of learning achievement of the BRAC school graduates and formal school students were done five years before. A new comparative study is needed to see whether such trend is still continuing.

Considering the above situation of research on quality a number of studies can be planned. However, some of these have already been initiated. For instance, a study on factors affecting school-to-school variation in pupils' competency achievement under BPS is underway. Another study to explore the causes behind differential performance level of various types of BRAC schools (BPS, community and formal) is at fieldwork stage. An investigation of the immediate effect of English teachers training under PACE programme is on its mid way.

Regarding further research on quality, RED can conduct at least one research on each of the issues mentioned in the analytical framework during phase IV (next three years) focussing on components of the BRAC education programme that are relatively under researched. However, it would not be possible to see the long-term outcome of all the components, especially those that are relatively new. Studies should be designed in such a way that generalized and fairly conclusive remarks can be made from the findings, which can then be fitted into the framework and analysed for policy guidance.

REFERENCES

- Ahmed M. Pre-primary students in formal schools: an early assessment of their school attainment. Dhaka: BRAC, 1998.
- Ahmed M, Nath SR, Ahmed KS. Literacy in Bangladesh – need for a new vision. Dhaka: Campaign for Popular Education, 2003.
- Ahmed M, Nath SR, Hossain A, Kabir MM, Kalam MA, Shahjamal MM, Yasmin RN, Zafar T. Quality with equity: the primary education agenda. Dhaka: Campaign for Popular Education, 2005.
- Ahmed S and Nath SR. Public service delivery in education: The BRAC experience. *In*: Ahmed S and Bery S (Editors.) Annual bank conference on development economics 2003 – South Asia component. New Delhi: National Council of Applied Economic Research. 2004:1-9.
- Ahmed SA. Basic training course for the teachers of BRAC's non-formal primary education program: the views of the trainee teacher on some selected issues. Dhaka: BRAC, 1994.
- Akter S. Exploring the perception of different stakeholders regarding BRAC pre-primary schools. Dhaka: BRAC, 2000.
- BBS. Bangladesh statistical yearbook 1976. Dhaka: Bangladesh Bureau of Statistics, Government of Bangladesh, 1977.
- Begum F. NFPE urban teachers and their teaching performances - a case study of six schools. Dhaka: BRAC, 1995.
- Begum HA, Yasmin RN, Shahjamal MM. An assessment of BRAC pre-primary graduates in formal primary schools. *Bangladesh Edu J* 2004;3(2):9-18.
- Bloom BS, Engelhart MD, Furst EJ, Hill WH, Krathwohl DR. Taxonomy of educational objectives, the classification of educational goals. London: Longman Group Ltd., 1956.
- BRAC. BRAC annual report. Dhaka: BRAC, 2005.
- Chowdhury AMR and Cash R. A simple solution: teaching millions to treat against diarrhoea. Dhaka: University Press Limited, 1996.
- Chowdhury AMR, Choudhury RK, Nath SR (Editors). Hope not complacency: state of primary education in Bangladesh 1999. Dhaka: Campaign for Popular Education and University Press Limited, 1999.
- Chowdhury AMR, Haq MN, Ahmed Z. Quality of primary education in Bangladesh. *In*: Jalaluddin AK and Chowdhury AMR (Editors), Getting started: universalising quality primary education in Bangladesh. Dhaka: University Press Limited, 1997.
- Chowdhury AMR, Mohsin M, Nath SR. Assessment of basic education of children in Bangladesh. Dhaka: BRAC, 1992.

Chowdhury AMR, Nath SR, Choudhury RK, Ahmed M. Renewed hope daunting challenges - state of primary education in Bangladesh. Dhaka: Campaign for Popular Education and University Press Limited, 2002.

Chowdhury AMR, Ziegahn L, Haq MN, Shrestha GL, Ahmed Z. Assessment of basic competencies of children through a simplified methodology. *Int Rev Edu* 1994;40:437-54.

Chowdhury JA, Chowdhury AMR, Hadi A. The neglected outpost: a closer look at rural schools in Bangladesh. Dhaka: BRAC, 1992.

Chowdhury SR. Baseline survey in 20 villages of Manikganj prior to opening of non-formal schools. Dhaka: BRAC, 1988.

Directorate of Primary Education. Project proforma, primary education development programme II. Dhaka: Planning Commission, Ministry of Planning, Government of Bangladesh, 2003.

Ghosh SK. An appraisal of the BRAC's NFPE programme in respect to coverage of the terminal competencies specified by the government of Bangladesh. Dhaka: BRAC, 1999.

Hasan M, Rashid S, Chowdhury AMR. Linking the school and family: community participation in BRAC school. Dhaka: BRAC, 1994.

Hossain A, Imam SR, Amin MN, Rahman T. Classroom situation at primary level. Dhaka: BRAC, 2001.

Hossain MA, Nath SR, Chowdhury AMR. Socioeconomic impact of BRAC Education Programme. Dhaka: BRAC, 2002.

Hossain MA. Community participation in improving non-formal primary education in Bangladesh: a BRAC experience. Dhaka: BRAC, 1999.

Kalam MA. Quality of baseline data: the case of PRIME project. Dhaka: BRAC, 2002.

Kalam MA and Hadi A. An analysis of the situation of community schools in Bangladesh. Dhaka: BRAC, 1999.

Kamal FM, Hadi A, Chowdhury AMR. Impact of non-formal primary education on women's autonomy and socialization in rural Bangladesh. Dhaka: BRAC, 1997.

Khan KA. Reasons behind discontinuation of BRAC teachers in non-formal primary education programme. Dhaka: BRAC, 1998.

Khan KA. Assessing the level of cognitive knowledge in English among the teachers and staff of BRAC's Non-Formal Primary Education programme. Dhaka: BRAC, 1999.

Khan KA. Determining performance indicators and developing tools for evaluating BRAC *pathagar*. Dhaka: BRAC, 1999.

Khan KA and Akter S. Analysis of issues and problems of BRAC *pathagars*. Dhaka: BRAC, 1999.

Khan KA and Chowdhury AMR. Continuation of education of BRAC's non-formal school graduates in formal schools. Dhaka: BRAC, 1995. (Rural study series no. 8)

-
- Khan KA and Chowdhury AMR. Why students dropout in the first six months of enrollment: a comprehensive study on the BRAC's education programme. Dhaka: BRAC, 1995.
- Khan MKA. A follow up study of the former teachers of BRAC schools who lost their jobs due to shifting of schools. Dhaka: BRAC, 2000.
- Khan MKA. Assessing operational status of BRAC *pathagar*. Dhaka: BRAC, 2000.
- Khan MKA. Socioeconomic differentials of the members of BRAC *gonokenbdra pathagar*. Dhaka: BRAC, 2002.
- Khan MKA and Chowdhury AMR. The NFPE teachers: their socioeconomic characteristics and competencies in English and mathematics. Dhaka: BRAC, 1992.
- Khan MKA and Chowdhury AMR. Identifying the reasons for dropout of former NFPE students in formal schools. Dhaka: BRAC, 1993.
- Khan MKA and Mohsin M. Enrolment status and literacy differentials: a survey of re-opening of NFPE schools. Dhaka: BRAC, 1993.
- Khan MKA, Nath SR, Kabir MM. Adolescent-to-adolescent development: a pilot assessment of adolescent peer organized network. Dhaka: BRAC, 2003.
- Khan MR. The Sharshi village of Barisal: a survey for NFPE through RRA/PRA. Dhaka: BRAC, 1993.
- Khan N and Khan MKA. Education for freedom: the children of BRAC's urban schools. Dhaka: BRAC, 1993.
- Lovel CH and Fatema K. The BRAC non-formal primary education programme in Bangladesh. Assignment Children. New York: UNICEF, 1989.
- Mohsin M. Literacy in rural Bangladesh: enrolment and dropout in selected NFPE villages. Dhaka: BRAC, 1992.
- Nath SR and Shahjamal MM. Management in successful primary schools. *In: School management: learning from successful schools in Bangladesh*. Dhaka: NAEM and BRAC, 2004:9-36.
- Nath SR. The impact of BRAC's education programme on raising basic education levels for the children of rural Bangladesh [dissertation]. Oxford: University of Oxford, 1997.
- Nath SR. Health knowledge of rural Bangladeshi children: does BRAC's non-formal schools programme have any impact? *Health Edu J* 1999;58(1):26-38.
- Nath SR. Basic competencies of the graduates of BRAC's non-formal schools: levels and trends from 1995 to 1999. Dhaka: BRAC, 2000.
- Nath SR. Continuation of BRAC non-formal school graduates of 1995 in formal school education. Dhaka: BRAC, 2000.
- Nath SR. Achievement of competencies of the students of BRAC non-formal primary schools. Dhaka: BRAC, 2002.
- Nath SR. School evaluation mechanism in BRAC education programme. Dhaka: BRAC, 2002.

-
- Nath SR. The transition from non-formal to formal education: the case of BRAC, Bangladesh. *Int Rev Edu* 2002;48(6):517-24.
- Nath SR. Achievement of competencies of the students of BRAC non-formal primary schools. Dhaka: BRAC, 2003.
- Nath SR. Basic competencies of the graduates of BRAC non-formal primary schools declining. Dhaka: BRAC, 2003.
- Nath SR. Reaching primary education at the doorstep of the poor: the BRAC experience. Dhaka: BRAC, 2005.
- Nath SR and Chowdhury AMR. Quality of primary education in Bangladesh: the case of BRAC's non-formal schools. Paper presented at the conference 'Enhancing capacities for community participation – revisiting practices in education development, Karachi, Pakistan, May 17-18, 1999. Karachi, 1999.
- Nath SR and Chowdhury AMR. School without a head teacher: one-teacher primary schools in Bangladesh. Paper presented at the policy seminar of ANTRIEP held in Shanghai, China, September 19-21, 2000. Shanghai, 2000.
- Nath SR and Chowdhury AMR (Editors). A question of quality: state of primary education in Bangladesh. Volume II: Achievement of competencies. Dhaka: Campaign for Popular Education and University Press Limited, 2001.
- Nath SR and Shahjamal MM. Competencies achievement of BRAC NFPE students improving. Dhaka: BRAC, 2004.
- Nath SR, Ahmed M, Ahmed KS. Literacy for a learning society: a collective effort with broader vision is needed. *Bangladesh Edu J* 2003;2(1):1-14.
- Nath SR, Ghosh SK, Akhter S. Development of instruments to assess the achievement of national competencies at the end of primary cycle. Dhaka: BRAC, 2000.
- Nath SR, Imam SR, Chowdhury AMR. Levels of basic competencies of the BRAC school graduates of 1995 and 1997. Dhaka: BRAC, 1998.
- Nath SR, Khan MKA, Chowdhury AMR. Progress in basic competencies of NFPE and PEOC graduates over time. Dhaka: BRAC, 1994.
- Nath SR, Mohsin M, Chowdhury AMR. Assessment of basic education of NFPE and PEOC graduates. Dhaka: BRAC, 1992.
- Nath SR, Mohsin M, Chowdhury AMR. Assessment of basic competencies of children in Bangladesh 1993. Dhaka: BRAC, 1993.
- Nath SR, Shahjamal MM, Yasmin RN, Zafar T, Kabir MM. Achievement of competencies of the BRAC school students. Dhaka: BRAC, 2005.
- Nath SR, Sylva K, Grimes J. Raising basic education levels in rural Bangladesh: the impact of a non-formal education programme. *Int Rev Edu* 1999;45(1):5-26.
- NCTB. Revision and modification of curriculum of the primary stage against the background of universal primary education- essential learning continua (primary education). Dhaka: National Curriculum and Textbook Board. (undated)
- NCTB and UNICEF. Sarbajanin Prathamik Sikshyar Patabhumite Prathamik Starer Sikshyacramer Parimarjano Nabayan [in Bangla] Dhaka: National Curriculum and Textbook Board, 1988.

-
- Rashid S and Chowdhury AMR. An inside look at two BRAC schools in Matlab thana. Dhaka: BRAC, 1994.
- Shahjamal MM. Causes behind gender difference in mathematics achievement: an exploratory study in BRAC schools [dissertation]. Dhaka: University of Dhaka, 2000.
- Shahjamal MM. Time distribution in different teaching learning activities in BRAC schools. Dhaka: BRAC, 2002.
- Sultan S. Performance and effectiveness of school management committees in BRAC schools. Dhaka: BRAC, 1998.
- Sultan S, Khan KA, Imam SR. The effectiveness of teachers training in English of BRAC schools. Dhaka: BRAC, 1999.
- UNESCO. The Dakar framework of action. Paris: UNESCO, 2000.
- UNESCO. EFA global monitoring report. Paris: UNESCO, 2005.
- UNICEF. Quality primary education in Bangladesh. Dhaka: UNICEF Bangladesh, 2004.
- US Department of Education. Monitoring school quality: an indicators report. Washington DC: National Centre for Educational Statistics, Office of Educational Research and Improvement, US Department of Education, 2000.
- Verma GK and Christie T. Study on mainstreaming of NFPE graduates. Dhaka: BRAC, 1996.
- WCEFA. World conference on education for all: meeting learning needs. Jomtein, Paris: UNESCO, 1990.