Learners' Achievement in Chandina Learning Improvement Project: an Evaluation

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July 1998

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EXECUTIVE SUMMARY

Learners' Achievement in Chandina Learning Improvement Project: an Evaluation

Introduction

From its inception to the end of phase I (March 1996), main concern of BRAC's education programme was to complement the government's Universal Primary Education (UPE) scheme through providing access for poor children to education with a view to eradicating illiteracy from the society. As the programme progressed and experienced, and based on the research findings, it has been realized that there was much room for qualitative improvement. This realization led them BRAC to initiate further intervention to make its Non-Formal Primary Education (NFPE) more effective. From the beginning of phase II (April 1996), the main emphasis was put on the quality of education in the BRAC schools.

Accordingly, BRAC initiated an experimental education project known as Chandina Learning Improvement Project (CLIP) to improve the quality of education. The project was implemented in three team offices of Chandina, Debidwar and Borura of Comilla region. The major aims of the project were to improve both the quality of students' learning and teachers' teaching. Students' achievement is one of the important factors that determine the efficiency of an educational intervention. This study aimed at assessing the level of academic achievement of the learners in CLIP schools as well as regular NFPE and Kishore Kishori (KK) schools keeping the common content taught to them in the two basic subjects of Bangla and Mathematics, in the first seven months of the commencement of class in sample schools.

The study was undertaken in four areas of Comilla region, of which three from CLIP area and the fourth one Nowabpur from regular area. Ten NFPE schools from each of the four areas and ten KK schools from each of Chandina, Borura and Nowabpur areas were randomly selected for this purpose. All of the learners who were present at the sample schools on the day the test was held were included in the study.

A test instrument based on the competencies taught in the sample schools during the first seven months of their operation, was developed for the study. The instrument covered the major competencies in the two basic subjects of

Bangla and Mathematics. The instrument was a question-answer sheet. Before finalizing, it was pre-tested with a group of learners having similar background, for validity. The test was administered by 18 Field Investigators (FIs) who were adequately trained for the purpose and the researchers accompanied the FIs to several sample schools to conduct the test effectively.

Major findings

It was revealed from the study that in Bangla, mean scores of the learners of all categories crossed the 49.66% mark. About half of the NFPE learners and around 58% of the KK school goers in the CLIP areas scored more than 60%. Among NFPE-CLIP learners, those from Borura scored the highest, followed by those from Debidwar. In the case of KK learners too, the Borura learners scored the highest.

The study also found that in Mathematics, mean scores of the learners of all categories crossed the 37% mark. Around 24% and 37% of the NFPE and KK learners respectively in the CLIP areas scored more than 60%. In the CLIP areas, the NFPE learners from Debidwar scored the highest, followed by those from Borura. In the case of KK schools in the CLIP areas, The Borura learners scored the highest.

The KK learners performed much better than those of NFPE in all areas irrespective of subjects. The reason for the better performance by the KK learners might be due to their wider general awareness of the content and competencies than their counterpart in the NFPE schools in the same period of time.

Learners in all school categories scored higher in Bangla than in Mathematics. Except for boys in Borura KK schools, boys in all the other school categories performed better than girls irrespective of subjects.

The study found no general trend of difference in learners' performance with variation in their ages. It was also found that there were no significant influences of learners' background on their achievement.

It was also observed from the study that learners in all categories of schools in the CLIP areas performed better than their counterpart in regular area. However, the learners' performance level in the CLIP areas remaind below

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the mastery level. This might be due to the failure in addressing the low achievers effectively and also to the failure on the part of teachers and staff in getting good hold of the innovation.

The study suggests that special attention has to be given to push up the performance level of low achievers as well as others, and also to bridge the gender gap. It also suggests that comprehensive training for the staff may be organized to give them a thorough understanding of the innovation.

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Background

BRAC initiated its non-formal education programme for children who never went to schools and who dropped out of schools. They predominantly come from the lower stratum of the society. The programme started in 1985 with 22 experimental schools and now operates more than 34 thousand schools. It is designated as Non-Formal Primary Education (NFPE) as the programme provides primary education through non-formal approach. It was designed to impart education through one teacher schooling and to make the classroom interesting to the children.

Based on children's age, BRAC operates two models of NFPE schools. The first one is NFPE for children of 8 to 10 years and the second one is Basic Education for Older Children (BEOC) also known as KK, for the children of 11 to 16 years. These children either have never been enrolled in a school or have dropped out from school prior to completion of the primary cycle without having any literacy. A new curriculum and text material different from the formal one, have been developed and the teachers and the supervisors are trained for the programme. In these schools about 70% of the learners and 90% of the teachers are females.

From its inception to the end of phase I (March 1996), the major concern of the programme was to complement the government's Universal Primary Education (UPE) programme through providing access for poor children to the education with a view to eradicating illiteracy from the society. As the programme progressed and experienced, it has been realized that there was much room for qualitative improvement. This has been supported by Verma and others (Verma et al, 1996:32) who found that the BRAC school graduates faced problems while coping with Mathematics and English curriculum when they joined in the formal school. This realization led BRAC to initiate further intervention to make its NFPE more effective. From the beginning of phase II (April 1996), the main emphasis was put on the quality of education in the BRAC schools. BRAC decided to keep the number of schools around 34,000 and planned to implement a pilot experimental project known as Chandina Learning Improvement Project (CLIP) which would aim at improving the qualitative aspects of the education programme (Karim, 1997). This study focused on the achievement of learners in CLIP schools.

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The CLIP: a new experimental project in NFPE

The CLIP is a three year long experimental project of BRAC's NFPE programme which started in October 1996 and will continue upto September 1999. The project started with 100 first year (out of which 30 are Kishore Kishori schools) and 62 second year schools in three NFPE team offices in the Comilla region. The team offices are located at Chandina, Debidwar and Borura.

The project aims at improving both the quality of student's learning and teacher's teaching. The project's major concerns are to review the curriculum, the teaching methods, the training of the teachers and the trainers, classroom organisation and any other aspects of the NFPE schools that may contribute to the overall qualitative improvement, and the student's learning capacity. Thus, the long-term objective of the CLIP is to promote the students and the teachers as reflective practitioners and independent lifelong learners so that they can utilize their learning on a continuing basis. The short-term objective is to promote thinking, creativity and life skills to accelerate and widen the areas of learning (Karim, 1997).

In order to meet its aims and objectives, CLIP has developed an academic and administrative teacher support system which includes the Core Group, Programme Organisers (POs), Programme Assisstants (PAs), Resource Teachers (RTs), Resource Centre and cluster-wise demonstration schools. The core group members evaluate the existing curriculum, change them according to the project's objectives, develop the needed supporting materials, design training manuals and conduct monthly refreshers courses for the teachers.

The CLIP has some salient features of its own. The salient features include a more child-centred participatory approach, teacher as a facilitator rather than an instructor, emphasis on peer learning through small group activities and individual assignments. These also include an increased pace of learning, blending continuous assessment with standardised tests to ensure equivalent academic standards, diversified learning situations to suit different learning styles of learners, decentralized teacher support system with room for flexibility in curriculum supplementation. These further include training and workshop for staff development in order to create room for constant improvisation. This initiative expects supervisors to take part in teaching in order to support teachers technically on the job (Karim, 1997).

Rationale of the study

While there was a plan to give an achievement test to all students in the CLIP schools at the very beginning of the session, such test could be designed and administered only after three months of the commencement of the class. The existing practice of assessing students' performance through teacher made and marked test does not provide any meaningful description (Latif et al, 1995:4) or comparative picture of learners' actual achievement. The above account led to a need for assessment that follow a test common to different school categories and programme. This assessment would enable the programme personnel as well as the teachers to have a comparative picture of learners' achievement among programme, teams and schools as well. This assessment would also provide a basis of comparison for further improvement.

Objective of the study

The overall objective of the study was to assess the level of achievement of the learners in CLIP schools. The specific objectives were to:

- assess the achievement of learners in CLIP schools;
- measure learners' subject-wise achievement;
- assess team area-wise learners' achievement; and
- examine whether there is any difference in achievement of the students of CLIP and regular schools.

Methodology

Sample of the study

The study was conducted in four areas of Comilla district under four team offices of NFPE. Out of these four team offices, three (Chandina, Debidwar and Borura) had CLIP schools and the fourth (Nowabpur) was a regular NFPE team office. Ten NFPE schools from each of the four team offices were randomly selected for the study. Besides, ten Kishore Kishori (KK), also known as BEOC, schools from each of the three teams viz. Chandina, Borura and Nowabpur were also randomly selected. No KK schools were in operation at Debidwar. Thus the sample of the study stood at 40 NFPE and 30 KK schools. All these schools started their operation about the same time.

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The learners who were present at the schools on the day the test was administered were taken as the sample population for the study. Thus the total learners were 2175, out of which 964 (352 boys, 612 girls), 583 (179 boys, 404 girls), 329 (116 boys, 213 girls) and 299 (96 boys, 203 girls) were NFPE-CLIP, KK-CLIP, NFPE and KK learners respectively. The following table is showing the distribution of the sample:

Table 1. Distribution of the study sample.

Programme	Team office	Type of schools			
		NFPE		KK	
		Number of schools	Number of learners	Number of schools	Number of learners
CLIP	Chandina	10	329	10	296
	Debidwar	10	315	-	-
	Borura	10	320	10	287
	Total	30	964	20	583
Regular	Nowabpur	10	329	10	299
Total		40	1293	30	882

Test Instrument

A test instrument based on the contents / competencies taught in these schools during the first seven months of their operation, was developed for the study. The instrument covered the major competencies in the two basic subjects: Bangla and Mathematics. The Bangla language test items were developed to test the learners skills of decoding the alphabets and the *shorokars* (vowel symbol), writing words and sentences, comprehension of unseen text having reading level comparable to text book and creative/ free writing. On the other hand, the Mathematics test items of the instrument were developed for assessing learners' skills of recognising and writing numbers, the understanding of some basic number properties (odd-even, larger-smaller, order and place value), and also the skills in the basic operations of addition, subtraction, multiplication, problem solving and familiarity to the known geometric shapes, and so on.

The instrument consisted of 23 items in Bangla and 20 in Mathematics. Among these items there were explicit as well as thought provoking

questions. The instrument was a question-answer sheet. Examples of model answers were provided with more difficult questions. Before finalising the instrument it was pre-tested with a group of learners having similar background to ensure its validity. Another survey instrument for collecting learners' background information such as those of age, sex, parental education, access to media, previous schooling etc. were used in the study.

Administering the test

A group of 18 Field Investigators (FIs) were recruited for conducting the test. They had been trained sufficiently for the purpose prior to conducting the test. It was a paper-pencil test and the sample BRAC school learners got acquainted with the test for the first time through a dummy test conducted in the sample schools about two weeks before the final test. It was a two and a half hour test and the FIs helped the learners in understanding the questions.To conduct the test effectively the researchers accompanied the FIs to several sample schools.

Data processing and analysis

Immediately after the test, the test papers and the items of the test papers were evaluated and coded by trained Research Assistants (RAs) following a manual prepared by the researchers. There were 100 variables in each of the two subjects, Bangla and Mathematics, in the instrument. The scores for the variables were estimated through weighing correct, partially correct and incorrect answers by 1, 0.5 and 0 respectively. The total score of a learner was calculated by summing up the weighed scores in the two subjects seperately.

Conceptual aspects

In studying a system consisting of inputs, educational processes, and outputs, one of the most desirable outputs is students' achievement. Thus, students' achievement is one of the major indices reflecting the degree of efficiency of the primary education system (Chantavanich et al. 1990:18). In general term, achievement is the degree of success obtained after inputting a certain amount of effort.

Assessing learners' achievement is essentially assessing for learning. The success and relative value of assessing for learning depends on the

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assessment techniques used, which further leads to answering the following questions, like: what are the overall purposes, or aims of assessing? Who are the audiences? How can we assess? What are the criteria for assessing? What are the modes of assessing? What is the type of tool used for assessing? These questions and responses to these together formulate the conceptual framework outlined below. This approach as adopted from Harris and Bell (Harris and Bell, 1990:86) will be followed in this study.

Conceptual Framework
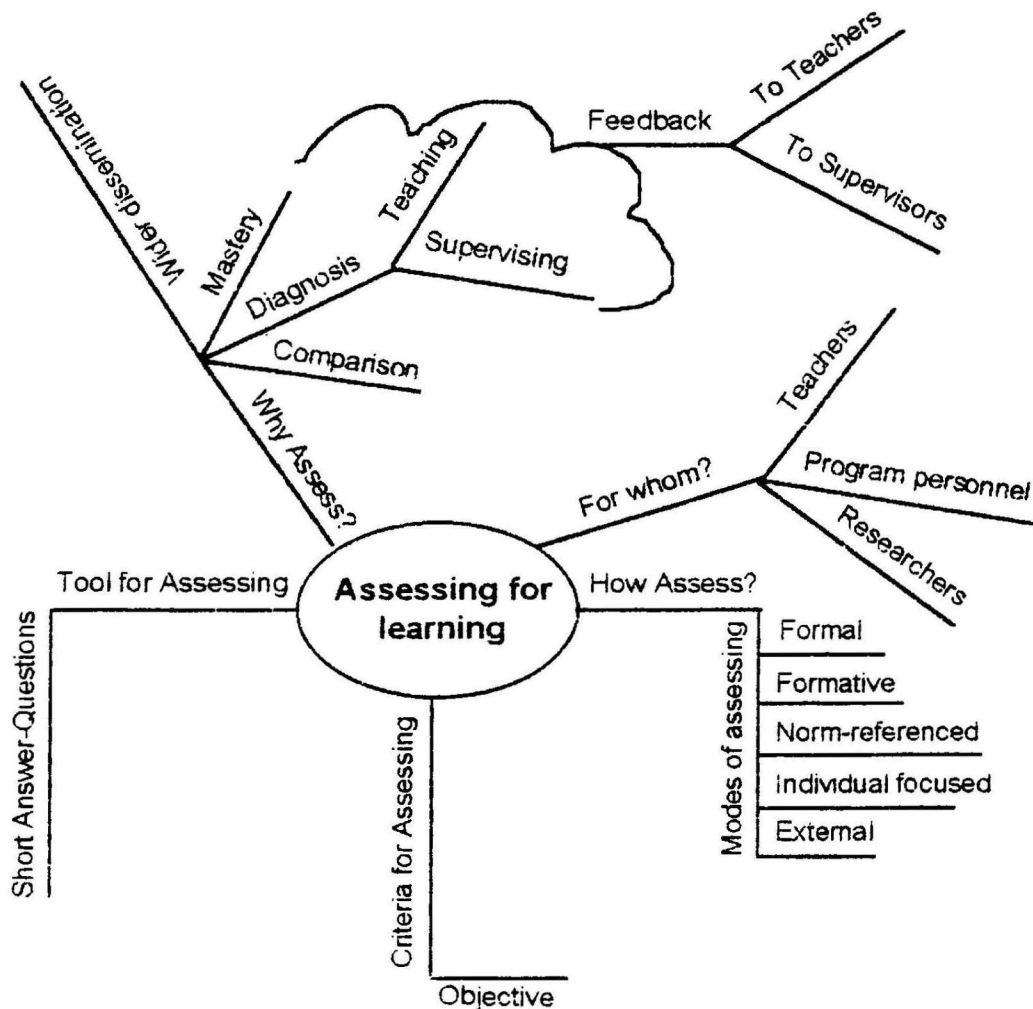
RESULTS

School type and mean score

It was revealed from the study that in Bangla (Table 2); learners in the CLIP schools scored better than their counterpart in regular schools. Learners in the NFPE-CLIP schools scored, on an average 57.24, whereas learners in the NFPE-regular schools scored 49.66. In both the cases, the KK learners did better than the NFPE learners. Learners in the KK-CLIP and KK-regular schools scored 62.24 and 60.24 respectively. Male learners in all the cases scored higher than the females, except those in the KK-CLIP schools.

Table 2. Mean scores of the learners in Bangla by school type and sex.

Type of school		Boys	Girls	Both
NFPE	CLIP	58.87	56.31	57.24*
	Regular	49.91	49.52	49.66
KK	CLIP	61.88	62.40	62.24**
	Regular	63.07	58.91	60.24

*= significant at p<.001 row 2 v/s 3. **= not significant at p<.05 row 4 v/s 5.

On an average, in Mathematics (Table 3) too, the learners of CLIP schools scored higher than those of the regular schools. Like Bangla, learners in KK schools performed better than those in NFPE schools. Learners in KK schools under CLIP scored the highest (53.66), followed by KK-regular learners (49.40) and NFPE-CLIP learners (48.65). In all the cases boys scored higher than girls.

Table 3. Mean scores of the learners in Mathematics by school type and sex.

Type of school		Boys	Girls	Both
NFPE	CLIP	50.23	47.74	48.65*
	Regular	39.53	35.36	36.97
KK	CLIP	55.01	53.06	53.66*
	Regular	51.36	48.47	49.40

*= significant at p<.001 row 2 v/s 3 and row 4 v/s 5.

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Learners in all types of schools scored higher in Bangla than in Mathematics.

Area and learners' score

Table 4 presents team-wise learners' score in Bangla. NFPE learners in Borura scored the highest (58.35), followed by Debidwar (57.88). NFPE learners in Nowabpur scored the lowest (49.66). In the case of KK too, learners in Borura scored the highest (67.61), followed by learners in Nowabpur (60.24). Boys did better than girls in all the cases, except KK learners in Borura. But the difference between the performances of boys and girls were not statistically significant in all the categories of schools except KK-regular schools in Nowabpur.

Table 4. Mean scores of the learners in Bangla by sex, school type and team office.

Type of school	Team office	Boys	Girls	Both
NFPE	Chandina	56.66**	54.70	55.46
	Debidwar	59.39**	57.08	57.88
	Borura	60.65**	57.06	58.35
	Nowabpur	49.91**	49.52	49.66
KK	Chandina	58.08**	56.58	57.04
	Borura	65.81**	68.40	67.61
	Nowabpur	63.07*	58.91	60.24

*= significant at $p < .05$ column 3 v/s 4, **= not significant at $p < .05$ column 3 v/s 4.

In Mathematics, on an average, NFPE learners in all the four areas scored less than 50 percent (Table 5). NFPE learners in Chandina, Debidwar and Borura scored, on an average, around 50 whereas NFPE learners in Nowabpur scored 36.97. Learners in KK schools in Borura scored the highest (57.69). Learners of the KK schools in the areas of Chandina and Nowabpur scored around 50. In Mathematics, boys in all the team areas and school types scored better than the girls. But the difference in the performances of boys and girls was statistically significant only in the case NFPE-regular learners in Nowabpur.

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Table 5. Mean scores of the learners in Mathematics by sex, school type and team.

Type of school	Team office	· Boys	Girls	Both
NFPE	Chandina	49.90**	47.30	48.31
	Debidwar	50.61**	48.16	49.01
	Borura	50.11**	47.75	48.61
	Nowabpur	39.53*	35.36	36.97
KK	Chandina	51.85**	48.76	49.71
	Borura	58.23**	57.45	57.69
	Nowabpur	51.36**	48.47	49.40

*= significant at p<.05 column 3 v/s 4, **= not significant at p<.05 column 3 v/s 4.

Learners, school type and score band

Table 6 presents the proportion of learners according to their scores in Bangla and school type. About 20% of the learners in NFPE-CLIP schools scored 40 percent or below whereas about 27% learners in NFPE-regular schools came under that category. The proportion of those learners in NFPE-CLIP and NFPE-regular schools who scored more than 60 were about 48% and 24%, respectively. The proportion of the learners in KK schools in both the cases of CLIP and regular who scored 40 percent or below were almost the same (about 12%). The proportion of the learners belonging to CLIP and regular schools who scored more than 60 were also more or less the same in these two cases i.e about 57.62% and 58.18%, respectively. But the proportion of learners who scored more than 80% were significantly different in the cases of NFPE-CLIP and NFPE-regular (5.70% and 0.60%) as well as KK-CLIP and KK-regular (12.52% and 6.35%).

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Table 6. Distribution of learners by score bands in Bangla and type of school.

Score band	NFPE		KK	
	CLIP	Regular	CLIP	Regular
Up to 40	190 (19.71)	90 (27.36)	70 (12.01)	37 (12.37)
41- 50	121 (12.55)	71 (21.58)	69 (11.84)	29 (9.70)
51- 60	190 (19.71)	88 (26.75)	108 (18.52)	59 (19.73)
61- 70	215 (22.30)	58 (17.63)	114 (19.55)	94 (31.44)
71- 80	193 (20.02)	20 (6.08)	149 (25.56)	61 (20.40)
81 & above	55 (5.71)	02 (0.60)	73 (12.52)	19 (6.36)
Total	964 (100)	329 (100)	583 (100)	299 (100)

Figures in the parentheses indicate percentage of learners.

Among the learners in NFPE-CLIP schools the proportion of both boys and girls who scored 61-70 happened to be the highest (Table 7). In the case of learners in NFPE-regular schools the score band of 51-60 was obtained by the highest proportion of boys, whereas the score band of 40 and below were obtained by the highest proportion of girls. On the other hand, among the learners in KK-CLIP schools, highest proportion of boys and girls both scored 71-80 whereas their counterpart in regular schools scored 61-70.

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Table 7. Distribution of learners by score bands in Bangla, type of school and sex.

Score band	NFPE				KK			
	CLIP		Regular		CLIP		Regular	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Up to 40	61 (17.33)	129 (21.08)	32 (27.59)	58 (27.23)	24 (13.41)	46 (11.39)	09 (9.37)	28 (13.79)
41-50	39 (11.08)	82 (13.40)	24 (20.69)	47 (22.07)	17 (9.50)	52 (12.87)	06 (6.25)	23 (11.33)
51-60	72 (20.45)	118 (19.28)	37 (31.90)	51 (23.94)	31 (17.32)	77 (19.06)	17 (17.71)	42 (20.69)
61-70	82 (23.29)	133 (21.73)	20 (17.24)	38 (17.84)	43 (24.02)	71 (17.57)	35 (36.46)	59 (29.06)
71-80	77 (21.88)	116 (18.95)	03 (2.59)	17 (7.98)	46 (25.70)	103 (25.50)	23 (23.96)	38 (18.72)
81+	21 (5.97)	34 (5.55)	00 (0.00)	02 (0.94)	18 (10.05)	55 (13.61)	06 (6.25)	13 (6.40)
Total	352 (100)	612 (100)	116 (100)	213 (100)	179 (100)	404 (100)	96 (100)	203 (100)

Figures in the parentheses indicate percentage of learners.

As far as scores in Mathematics are concerned, the results showed that the proportion of learners in NFPE schools in the CLIP areas who scored 40 and below, was about 29% (Table 8). This proportion was about 59% in case of the learners in the NFPE-regular schools. The proportion of learners who scored more than 60% were about 24% and 5% respectively among the NFPE-CLIP and NFPE-regular schools. KK learners in CLIP and regular schools who scored 40 and below were about 21% and 25% respectively. But the proportion of learners in these two cases who scored more than 60% were significantly different. The proportions were about 39% and 21% respectively. A very negligible proportion of learners in all the cases scored more than 80%.

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Table 8. Distribution of learners by score bands in Mathematics and type of school.

Score band	NFPE		KK	
	CLIP	Regular	CLIP	Regular
Up to 40	283 (29.36)	193 (58.66)	123 (21.10)	74 (24.75)
41- 50	190 (19.71)	77 (23.40)	96 (16.47)	77 (25.75)
51- 60	260 (26.97)	42 (12.77)	134 (22.98)	86 (28.76)
61- 70	157 (16.29)	15 (4.56)	156 (26.76)	42 (14.05)
71- 80	68 (7.05)	02 (0.61)	71 (12.18)	18 (6.02)
81 & above	06 (0.62)	00 (0.00)	03 (0.51)	02 (0.67)
Total	964 (100)	329 (100)	583 (100)	299 (100)

Figures in the parentheses indicate percentage of learners.

Among the learners in NFPE-CLIP schools, the highest proportion of boys scored 51-60 and the highest proportion of girls scored 40 and below. In the case of the learners in NFPE-regular schools, the highest proportion of both the boys and girls scored 40 and below (Table 9). The highest proportion of boys and girls among KK learners in CLIP schools scored 61-70 whereas their counterpart in KK-regular schools scored 51-60.

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Table 9. Distribution of learners by score bands in Mathematics, type of school and sex.

Score band	NFPE				KK			
	CLIP		Regular		CLIP		Regular	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Up to 40	91 (25.85)	192 (31.37)	59 (50.86)	134 (62.91)	34 (18.99)	89 (22.03)	20 (20.83)	54 (26.60)
41-50	62 (17.61)	128 (20.92)	34 (29.31)	43 (20.19)	23 (12.85)	73 (18.07)	23 (23.96)	54 (26.60)
51-60	107 (30.40)	153 (25.00)	17 (14.66)	25 (11.74)	43 (24.02)	91 (22.52)	29 (30.21)	57 (28.08)
61-70	63 (17.90)	94 (15.36)	05 (4.31)	10 (4.69)	46 (25.70)	110 (27.23)	16 (16.67)	26 (12.81)
71-80	27 (7.67)	41 (6.70)	01 (0.86)	01 (0.47)	33 (18.44)	38 (9.41)	07 (7.29)	11 (5.42)
81+	02 (0.57)	04 (0.65)	00 (0.00)	00 (0.00)	00 (0.00)	03 (0.74)	01 (1.04)	01 (0.49)
Total	352 (100)	612 (100)	116 (100)	213 (100)	179 (100)	404 (100)	96 (100)	203 (100)

Figures in the parentheses indicate percentage of learners.

Area—wise learners and score band

The highest proportion of NFPE-CLIP learners in Chandina and Debidwar (22.97% and 22.22%) scored 61-70 in Bangla (Annexure 1). The highest proportion of NFPE boys and girls in Chandina scored the same 61-70, but in Debidwar. the highest proportion of boys (27.52%) and girls (19.90%) scored 61-70 and 71-80 respectively. In Borura, the highest proportion of NFPE learners (21.88%) scored 61-70 and 71-80, the highest proportion of boys (26.08%) and girls (22.92%) scored 71-80 and 61-70 respectively. Among the NFPE learners in Nowabpur, the highest proportion of learners (27.35%) scored 40 and below and this proportion was different among the boys and girls. The highest proportion of boys (31.89%) scored 61-70 and the highest proportion of girls (27.23%) scored 40 and below. These indicated a more gender equity in the performance of NFPE-CLIP learners.

Among the KK learners in Chandina. the highest proportion (20.94%) scored about 51-60 (Annexure 2) in Bangla. The scores obtained by the highest proportion of boys and girls were different. They scored 40 and

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below, and 51-60 respectively. The highest proportion of KK learners in CLIP in Borura (34.87%) and regular in Nowabpur (31.43%) scored 71-80 and 61-70, respectively. Scores obtained by the highest proportion of boys and girls were the same in both the areas.

In Mathematics (Annexure 3), the highest proportions of NFPE-CLIP learners in both Chandina (28.57%) and Borura (29.06%) scored about 51-60. But these proportions and the scores were different among the boys and girls in both the areas. The highest proportion of both NFPE-CLIP learners in Debidwar (31.42%) and NFPE-regular learners in Nowabpur (58.66%) schools, scored about 40 and below, and the highest proportions of boys and girls in both the two areas scored the same.

The highest proportion of KK learners in CLIP in Chandina (30.74%) scored about 40 and below (Annexure 4) in Mathematics. In CLIP schools in Borura and regular schools in Nowabpur, the highest proportions of KK learners scored about 61-70 and 51-60, respectively. The scores were the same for boys and girls in all the three areas.

Area –wise schools and mean score band

Most of the NFPE schools in each of the four areas, Chandina , Debidwar, Borura and Nowabpur, scored on an average, 51-61 (table 10) in Bangla. None of the NFPE schools in Nowabpur area scored more than 61. In the case of KK schools, most schools in Chandina and Nowabpur scored 51-60, whereas most KK schools in Borura scored 61-70. None of the NFPE or KK schools in any of the four areas scored more than 81.

Table 10. Distribution of schools by mean score bands in Bangla and team office.

Score band	Chandina		Debidwar		Borura		Nowabpur	
	NFPE	KK	NFPE	KK	NFPE	KK	NFPE	KK
Up to 40	01	00	00	-	00	00	00	01
41-50	02	03	00	-	02	00	05	00
51-60	04	05	08	-	04	01	05	04
61-70	02	00	02	-	03	06	00	04
71-80	01	02	00	-	01	03	00	01
81–	00	00	00	-	00	00	00	00
Total	10	10	10	-	10	10	10	10

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In Mathematics, most of the NFPE-CLIP schools in Chandina and Borura scored 41-60 (Table 11). Most of the NFPE-CLIP schools in Debidwar scored 41-50 whereas most of the NFPE-regular schools in Nowabpur scored 40 and below. No NFPE-regular school in Nowabpur scored more than 51, and no NFPE-CLIP School in Chandina, Debidwar and Borura, scored more than 61. Most of the KK-CLIP schools in Chandina and KK-regular schools in Nowabpur scored 41-50, whilst most of the KK-CLIP schools in Borura scored 61-70. None of the NFPE or KK schools in any of the areas scored more than 71.

Table 11. Distribution of schools by mean score bands in Mathematics and team office.

Score band	Chandina		Debidwar		Borura		Nowabpur	
	NFPE	KK	NFPE	KK	NFPE	KK	NFPE	KK
Up to 40	02	01	01	-	02	00	06	01
41-50	04	04	05	-	04	03	04	05
51-60	04	03	03	-	04	02	00	03
61-70	00	02	01	-	00	05	00	01
71-80	00	00	00	-	00	00	00	00
81+	00	00	00	-	00	00	00	00
Total	10	10	10	-	10	10	10	10

Background variables and learners' achievement

Age and learners' achievement

The average age of NFPE learners was 9.60 years and for KK learners, the average age was 10.88 years (Annexure-5). The NFPE-CLIP learners were relatively older than the NFPE-regular learners, and the difference between the mean age of these two groups of learners was significant ($p < .02$). On the other hand, although KK-CLIP learners were slightly older than KK-regular learners the difference between the mean age of these two groups of students was not statistically significant.

Achievement of learners varied with their age in some cases. In Bangla, however (Annexure-6), no general trend was observed for different age groups from different school categories. Differences in achievement level of

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different age groups were not statistically significant. In Mathematics (Annexure-7) also, no general trend was found in differences in achievement of learners of different age groups. Differences in achievement of learners in all categories of schools were not significant, with a couple of exceptions. Among the NFPE-CLIP learners, difference in achievement of learners from age groups 8-9 and 12+ was found to be significant (p<.05). On the other hand, the difference in achievement of learners of age groups 10-11 and 12+ was significant (p<.05) among the KK-regular learners.

Other background variables and learners' achievement

In Bangla (Annexure-8), the learners from NFPE-CLIP, NFPE-regular and KK-regular schools who were getting help in their studies at home performed better than those who did not receive help at home. However, in the case of the KK-CLIP learners, those who did not get help at home performed better than those who received help in their studies at home. Although there were differences in performance level of learners based on help received at home, these differences were not significant.

In the case of Mathematics (Annexure-9), learners from all school categories who got help in their studies at home performed better than those who did not get help at home. Again these differences were not significant as well.

Learners were asked whether they studied in another school before their admission into the BRAC school. A very negligible proportion of learners from different school categories, ranging from 9.56% to 12.50%, mentioned that they had previous schooling (Annexure-8&9). It was found that in Bangla (Annexure-8), previous schooling made no significant difference in learners' achievement. But in the case of Mathematics (Annexure-9), previous schooling made significant (p<.01) difference in achievement of the learners of KK-CLIP.

Parental education and learners' achievement

Proportions of learners having mothers who had some schooling ranged between 11.18% and 31.71% from different school categories. On the other hand, proportions of learners having fathers who had some schooling ranged between 37.05% and 48.78% from different school categories (Annexure-10 & 11).

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In Bangla (Annexure-10), learners having parents with some schooling performed better compared to those having parents with no schooling with an exception of fathers' schooling in the case of the learners of KK-CLIP schools. In Mathematics (Annexure-11), learners having mothers with some schooling scored higher than those whose mothers had no schooling, with the exception case of the learners from NFPE-regular schools. Learners from NFPE-regular and KK-regular schools having fathers with some schooling scored higher than those having fathers with no schooling. On the other hand, learners from NFPE-CLIP and KK-CLIP schools having fathers with no schooling performed better than those having fathers with some schooling. Both in Bangla and Mathematics, however, there were differences in achievements of learners having parents with some schooling and no schooling, but these differences were not significant.

Access to the media and learners' achievement

Learners were asked whether they had access to radio, television and newspaper. It was found that proportions of learners having access to radio ranged between 18.92% and 46.71% and to television ranged between 12.35% and 34.15% from different school categories (Annexure-12 & 13). A very negligible proportion of learners had access to newspaper (Annexure-12 & 13). Both in Bangla and Mathematics (Annexure-12&13), learners having an access to media scored higher than those who did not with the exception of KK-CLIP learners in the case of the access to the radio. The differences between the achievement of learners having an access and not having an access to media were not significant in almost all school categories. But the difference in achievement of learners of NFPE-CLIP having and not having an access to the radio was significant (p<.05). The differences between the achievement of learners having and not having an access to the media were found not to be significant in most cases. But this difference was significant (p<.05) only in the case of KK-regular learners having and not having an access to the television.

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DISCUSSION AND CONCLUSION

An experimental project known as Chandina Learning Improvement Project (CLIP) was introduced by the Non-Formal Primary Education (NFPE) programme of BRAC in Chandina, in the district of Comilla with the aim to improve the qualitative aspects of the programme. The efficiency and effectiveness of any educational intervention depends upon several factors. Students' achievement is one of the important factors that determine the efficiency of an educational intervention. Assessment of learners' achievement plays a vital role in determining the quality of learning, as well as the efficiency of an education programme (Akter, 1996). This study aimed to assess academic achievement of learners in CLIP schools as well as in the regular NFPE and KK schools keeping the common content taught to them in the two basic subjects of Bangla and Mathematics, in the first seven months in the sample schools in view.

The findings from the present study indicated that in Bangla, mean scores of the learners of all categories crossed the 49.66% mark. About half of the NFPE learners and around 58% of the KK school goers in the CLIP areas scored more than 60%. Among the NFPE-CLIP learners those from Borura scored the highest followed by those from Debidwar. In the case of KK learners too, the Borura learners scored the highest.

It was also revealed from the study that in Mathematics, mean scores of the learners of all categories crossed the 37% mark. Around 24% and 37% of the NFPE and KK respectively in the CLIP areas scored more than 60%. In the CLIP areas, the NFPE learners from Debidwar scored the highest followed by those from Borura. In the case of the KK learners in the CLIP areas, the Borura learners scored the highest.

The KK learners performed much better than the NFPE learners in all areas irrespective of the subjects. The gaps between the performance of the KK and NFPE learners were 5% in the CLIP areas and 10-12% in the regular schools in Nowabpur. The reason for the better performance by the KK learners might be due to their wider general awareness of the content and competencies than their counterpart in NFPE schools in the same period of time. .

The study observed a significant difference in students' performance in two subjects. Learners in all school categories scored higher in Bangla than in

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Mathematics. The gaps between Bangla and Mathematics scores ranged from 8% to 13% in different school categories. This supported the findings of a study on academic achievement of the NFPE learners by Akter (1996), and another similar study on academic achievement in Bangla, Mathematics and General Knowledge of the learners of 17 NGOs by Development Planners and Consultants (DPC)(1996) as quoted in Chowdhury et al. (1997).

The overall performance of boys was better than girls. Except for boys in Borura KK schools, boys in all the other school categories performed better than girls irrespective of the subject. The gaps between scores of the boys and the girls ranged from 1% to 5%. This result was consistent with the national estimates for the boys and the girls in basic competency (Chowdhury et. al, 1992:93, Nath et. al, 1993: 94) as well as in literacy rate (Bangladesh Bureau of Statistics, 1994: 47). Akter's study (Akter, 1996) on the academic achievement of the NFPE learners also confirmed this finding.

It was observed that there was no general trend in the differences of learners' achievement with the variation in their ages. The study also did not find much significant influences of learners' other background such as, getting help in their studies at home; previuos schooling; parental education; and access to media, on their achievement.

Furthermore the study found a significant difference in the achievement level of learners in CLIP schools and regular schools. The learners in CLIP schools scored higher than the learners in regular schools irrespective of school categories and the subjects. The gaps between the achievement levels of learners in CLIP and regular schools ranged between 2% and 12%. This might be due to the better quality of education provided through CLIP schools. The better quality of education might have been ensured by the distinctive teaching method, aid and environment introduced by the CLIP as Chauncey and Dobbin (1963), quoted in Chantavanich et al (1990), maintained that the students' achievement relates not only to intelligence but may also indicate the effectiveness of the school curriculum and efficiency of school administrators and teachers.

In final words, although learners in CLIP areas performed better than their counterpart in regular area, however their level of achievement remained behind the mastery level. This might be due to the failure in addressing the low achievers effectively and also the failure on the part of teachers and

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staffs as well in getting good hold of the innovation. The extent of the students' mastery level can be understood through a thorough item-wise analysis, which could be investigated through a Criterion-referenced (Harris and Bell. 1990: 101) assessment.

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Implications

1. Performance of learners had been far below the mastery level irrespective of school category and subject. In a considerable number of cases, learners' performance had been even stagnated, below the forty- percent mark.

   In view of the above, it is suggested that while additional specific inputs may be provided in the low performing areas and schools, existing efforts may be stepped up in all areas and schools to push their performance level up to the mastery level.

2. The analysis of the findings revealed that almost in all cases boys performed better than girls. The gap between the achievement level of boys and girls, in some cases, had been even around 5% mark.

   For the areas where the gap was high, special inputs may be provided to bridge the gender gaps.

3. Learners level of achievement below the mastery level in CLIP schools indicated that there might have not been a deeper understanding of the innovation on the part of the staffs as well as teachers.

   In view of the above account, comprehensive training for the staffs may be organized in order to make them have a thorough understanding of the innovation. This further would help them in supporting teachers in understanding the method and in teaching as well, in a fuller strength.

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Reference

1. Akter. S (1996) Academic Achievements of the NFPE learners in BRAC schools. Dhaka. BRAC.
2. Bangladesh Bureau of Statistics (1994) Women and men in Bangladesh: Facts and Figures 1970-1990, Dhaka. BBS, Ministry of Planning, Government of Bangladesh.
3. Chantavanich. A, Chantavanich. S and Fry. Gerald W (1990) Evaluating Primary Education: Qualitative and Quantitative policy study in Thailand. International Development Research Centre. Ottawa, Ont., Canada.
4. Chauncey. H and Dobbin. J (1963) Testing for teachers, American Book Co. New York. USA.
5. Chowdhury. AMR, Mohsin. M and Nath. SR (1992) Assessment of Basic Competencies of Children in Bangladesh, Dhaka, BRAC.
6. Chowdhury. AMR. Haq. MN and Ahmed. Z (1997) Quality of Primary Education in Bangladesh, In: Jalaluddin. AK and Chowdhury. AMR, editors (1997). Getting Started: Universalising Quality Primary Education in Bangladesh. University Press Limited. Dhaka. Bangladesh.
7. DPC (1996) Monitoring and Evaluation of Nonformal Primary Education (NFPE) Programme, Annual Evaluation Report, 1995, Phase I and II, Development Planners and Consultants. Dhaka.
8. Harris Duncan and Bell Chris (1990) Evaluating and Assessing for Learning, Revised Edition, Kogan Page, London/ Nichols Publishing Company, New York.
9. Karim. S (1997) Chandina Learning Improvement Project: BRAC's education program takes on a project to improve the overall quality of its non-formal primary schools, in Access, The Quarterly Newsletter of BRAC. No 23 & 24, October 1997, Dhaka, BRAC.
10. Latif. Dr AH et. al (1995) Development of Standardized achievement tests for BRAC NFPE schools, Bangladesh Forum for Educational Development (BAFED). Dhaka, Bangladesh.
11. Nath. SR, Mohsin. M and Chowdhury. AMR (1993) Assessment of Basic Competencies of Children in Bangladesh, Dhaka, BRAC.
12. Verma. GK et.al (1996) The Mainstreaming of BRAC/NFPE students. Faculty of Education, University of Manchester, UK.

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Annexure

Annexure 1. Distribution of NFPE learners by score bands in Bangla, team office and sex.

Score band	Chandina			Debidwar			Borura			Nayabpur		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
up to 40	27 (21.09)	45 (22.39)	72 (21.88)	17 (15.60)	38 (18.45)	55 (17.46)	17 (14.78)	46 (22.44)	63 (19.69)	32 (27.59)	58 (27.23)	90 (27.36)
41-50	16 (12.50)	31 (15.42)	47 (14.29)	10 (9.17)	36 (17.48)	46 (14.60)	13 (11.30)	15 (7.32)	28 (8.75)	24 (20.69)	47 (22.07)	71 (21.58)
51-60	25 (19.53)	39 (19.40)	64 (19.45)	26 (23.85)	36 (17.48)	62 (19.68)	21 (18.26)	43 (20.98)	64 (20.00)	37 (31.90)	51 (23.94)	88 (26.75)
61-70	29 (22.65)	46 (22.89)	75 (22.80)	30 (27.52)	40 (19.42)	70 (22.22)	23 (20.00)	47 (22.93)	70 (21.88)	20 (17.24)	38 (17.84)	58 (17.63)
71-80	28 (21.88)	35 (17.41)	63 (19.15)	19 (17.43)	41 (19.90)	60 (19.05)	30 (26.09)	40 (19.51)	70 (21.88)	03 (2.59)	17 (7.98)	20 (6.08)
81+	03 (2.34)	05 (2.49)	08 (2.43)	07 (6.42)	15 (7.28)	22 (6.98)	11 (9.57)	14 (6.83)	25 (7.81)	00 (0.00)	02 (0.94)	02 (0.61)
Total	128 (100)	201 (100)	329 (100)	109 (100)	206 (100)	315 (100)	115 (100)	205 (100)	320 (100)	116 (100)	213 (100)	329 (100)

Figures in the parentheses indicate percentage of learners.

Annexure 2. Distribution of KK learners by score bands in Bangla, team office and sex.

Score band	Chandina			Borura			Nayabpur		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
Up to 40	19 (20.88)	37 (18.05)	56 (18.92)	05 (5.68)	09 (4.52)	14 (4.87)	09 (9.38)	28 (13.79)	37 (12.38)
41-50	12 (13.19)	38 (18.54)	50 (16.89)	05 (5.68)	14 (7.04)	19 (6.62)	06 (6.25)	23 (11.33)	29 (9.70)
51-60	15 (16.48)	47 (22.93)	62 (20.95)	16 (18.18)	30 (15.08)	46 (16.02)	17 (17.71)	42 (20.69)	59 (19.73)
61-70	17 (18.68)	35 (17.07)	52 (17.57)	26 (29.55)	36 (18.09)	62 (21.60)	35 (36.46)	59 (29.06)	94 (31.44)
71-80	18 (19.78)	31 (15.12)	49 (16.55)	28 (31.82)	72 (36.18)	100 (34.87)	23 (23.96)	38 (18.72)	61 (20.40)
81+	10 (10.99)	17 (8.29)	27 (9.12)	08 (9.09)	38 (19.10)	46 (16.02)	06 (6.25)	13 (6.40)	19 (6.35)
Total	91 (100)	205 (100)	296 (100)	88 (100)	199 (100)	287 (100)	96 (100)	203 (100)	299 (100)

Figures in the parentheses indicate percentage of learners.

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Annexure 3. Distribution of NFPE learners by score bands in Mathematics, team office and sex

Score band	Chandina			Debidvar			Borura			Nayabpur		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
Up to 40	30 (23.44)	63 (31.34)	93 (28.27)	32 (29.36)	67 (32.52)	99 (31.43)	29 (25.22)	62 (30.24)	91 (28.44)	59 (50.86)	134 (62.91)	193 (58.66)
41-50	30 (23.44)	43 (21.39)	73 (22.19)	17 (15.60)	40 (19.42)	57 (18.10)	15 (13.04)	45 (21.95)	60 (18.75)	34 (29.31)	43 (20.19)	77 (23.40)
51-60	37 (28.91)	57 (28.36)	94 (28.57)	26 (23.85)	47 (22.82)	73 (23.17)	44 (38.26)	49 (23.90)	93 (29.06)	17 (14.66)	25 (11.74)	42 (12.77)
61-70	21 (16.41)	30 (14.93)	51 (15.50)	23 (21.10)	39 (18.93)	62 (19.68)	19 (16.52)	25 (12.10)	44 (13.75)	05 (4.31)	10 (4.69)	15 (4.56)
71-80	09 (7.03)	08 (3.98)	17 (5.17)	11 (10.09)	13 (6.31)	24 (7.62)	07 (6.09)	20 (9.76)	27 (8.44)	01 (0.86)	01 (0.47)	02 (0.61)
81+	01 (0.78)	00 (0.00)	01 (0.30)	00 (0.00)	00 (0.00)	00 (0.00)	01 (0.87)	04 (1.95)	05 (1.56)	00 (0.00)	01 (0.47)	00 (0.00)
Total	128 (100)	201 (100)	329 (100)	109 (100)	206 (100)	315 (100)	115 (100)	205 (100)	320 (100)	116 (100)	213 (100)	329 (100)

Figures in the parentheses indicate percentage of learners.

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Annexure 2. Distribution of KK learners by score bands in Bangla, team office and sex.

Score band	Chandina			Borura			Nayabpur		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
Up to 40	19 (20.88)	37 (18.05)	56 (18.92)	05 (5.68)	09 (4.52)	14 (4.87)	09 (9.38)	28 (13.79)	37 (12.38)
41-50	12 (13.19)	38 (18.54)	50 (16.89)	05 (5.68)	14 (7.04)	19 (6.62)	06 (6.25)	23 (11.33)	29 (9.70)
51-60	15 (16.48)	47 (22.93)	62 (20.95)	16 (18.18)	30 (15.08)	46 (16.02)	17 (17.71)	42 (20.69)	59 (19.73)
61-70	17 (18.68)	35 (17.07)	52 (17.57)	26 (29.55)	36 (18.09)	62 (21.60)	35 (36.46)	59 (29.06)	94 (31.44)
71-80	18 (19.78)	31 (15.12)	49 (16.55)	28 (31.82)	72 (36.18)	100 (34.87)	23 (23.96)	38 (18.72)	61 (20.40)
81+	10 (10.99)	17 (8.29)	27 (9.12)	08 (9.09)	38 (19.10)	46 (16.02)	06 (6.25)	13 (6.40)	19 (6.35)
Total	91 (100)	205 (100)	296 (100)	88 (100)	199 (100)	287 (100)	96 (100)	203 (100)	299 (100)

Figures in the parentheses indicate percentage of learners.

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Annexure 3. Distribution of NFPE learners by score bands in Mathematics, team office and sex

Score band	Chandina			Debidvar			Borura			Nayabpur		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
Up to 40	30 (23.44)	63 (31.34)	93 (28.27)	32 (29.36)	67 (32.52)	99 (31.43)	29 (25.22)	62 (30.24)	91 (28.44)	59 (50.86)	134 (62.91)	193 (58.66)
41-50	30 (23.44)	43 (21.39)	73 (22.19)	17 (15.60)	40 (19.42)	57 (18.10)	15 (13.04)	45 (21.95)	60 (18.75)	34 (29.31)	43 (20.19)	77 (23.40)
51-60	37 (28.91)	57 (28.36)	94 (28.57)	26 (23.85)	47 (22.82)	73 (23.17)	44 (38.26)	49 (23.90)	93 (29.06)	17 (14.66)	25 (11.74)	42 (12.77)
61-70	21 (16.41)	30 (14.93)	51 (15.50)	23 (21.10)	39 (18.93)	62 (19.68)	19 (16.52)	25 (12.10)	44 (13.75)	05 (4.31)	10 (4.69)	15 (4.56)
71-80	09 (7.03)	08 (3.98)	17 (5.17)	11 (10.09)	13 (6.31)	24 (7.62)	07 (6.09)	20 (9.76)	27 (8.44)	01 (0.86)	01 (0.47)	02 (0.61)
81+	01 (0.78)	00 (0.00)	01 (0.30)	00 (0.00)	00 (0.00)	00 (0.00)	01 (0.87)	04 (1.95)	05 (1.56)	00 (0.00)	00 (0.00)	00 (0.00)
Total	128 (100)	201 (100)	329 (100)	109 (100)	206 (100)	315 (100)	115 (100)	205 (100)	320 (100)	116 (100)	213 (100)	329 (100)

Figures in the parentheses indicate percentage of learners.

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Annexure 4. Distribution of KK learners by score bands in Mathematics, team office and sex.

Score band	Chandina			Borura			Navabpur		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Guls	Both
Up to 40	24 (26.37)	67 (32.68)	91 (30.74)	10 (11.36)	22 (11.06)	32 (11.15)	20 (20.83)	54 (26.60)	74 (24.75)
41-50	13 (14.29)	37 (18.05)	50 (16.89)	10 (11.36)	36 (18.09)	46 (16.03)	23 (23.96)	54 (26.60)	77 (25.75)
51-60	20 (21.98)	46 (22.44)	66 (22.30)	23 (26.14)	45 (22.61)	68 (23.69)	29 (30.21)	57 (28.08)	86 (28.76)
61-70	19 (20.88)	43 (20.98)	62 (20.95)	27 (30.68)	67 (33.67)	94 (32.75)	16 (16.67)	26 (12.81)	42 (14.05)
71-80	15 (16.48)	10 (4.88)	25 (8.45)	18 (20.46)	28 (14.07)	46 (16.03)	07 (7.29)	11 (5.42)	18 (6.02)
81+	00 (0.00)	02 (0.98)	02 (0.68)	00 (0.00)	01 (0.50)	01 (0.35)	01 (1.04)	01 (0.49)	02 (0.67)
Total	91 (100)	205 (100)	296 (100)	88 (100)	199 (100)	287 (100)	96 (100)	203 (100)	299 (100)

Figures in the parentheses indicate percentage of learners.

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Annexure 5. Mean age of the learners by school type and sex.

Type of school		Sex of learners			All(years)
		Boys(years)	Girls(years)	Both(years)	
NFPE	CLIP	9.76	9.79	9.78*	9.60
	Regular	9.22	8.96	9.05	
KK	CLIP	10.48	11.35	11.07**	10.88
	Regular	10.17	10.64	10.49	

Note: *= significant at p<.02 row 3 v/s 4, **= not significant at p<.05 row 5 v/s 6.

Annexure 6. Mean scores of learners in Bangla by school type and age.

Age (in year)	NFPE				KK			
	CLIP		Regular		CLIP		Regular	
	Mean	%	Mean	%	Mean	%	Mean	%
< 7	62.0	6.4	48.4	7.3	60.3	5.9	-	-
8 – 9	54.4	34.3	49.9	57.3	67.3	12.5	64.4	27.0
10 – 11	55.4	34.7	54.2	29.3	61.6	31.6	61.0	40.5
12 +	59.4	24.7	40.5	6.1	63.6	50.0	65.9	32.4
Level of significance	ns	-	ns	-	ns	-	ns	-

Note: ns = not significant at p<.05.

Annexure 7. Mean scores of the learners in Mathematics by school type and age.

Age (in year)	NFPE				KK			
	CLIP		Regular		CLIP		Regular	
	Mean	%	Mean	%	Mean	%	Mean	%
< 7	50.4	6.4	33.5	7.3	52.3	5.9	-	-
8 – 9	44.2	34.3	36.2	57.3	57.6	12.5	51.3	27.0
10 – 11	49.1	34.7	43.1	29.3	51.4	31.6	45.1	40.5
12 +	50.5	24.7	34.8	6.1	55.1	50.0	52.9	32.4
Level of significance	s	-	ns	-	ns	-	s*	-

Note: s = significant at p<.05 row 2 v/s 4. ns = not significant at p<.05. s* = significant at p<.05 row 3 v/s 4.

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Annexure 8. Mean scores of the learners in Bangla by school type and background variables.

Background variables	NFPE				KK			
	CLIP		Regular		CLIP		Regular	
	Mean	%	Mean	%	Mean	%	Mean	%
Get help for study at home								
Yes	56.9	63.9	52.5	67.1	62.5	63.2	66.6	47.3
No	55.8	37.1	46.3	32.9	64.4	36.8	60.8	52.7
Level of significance	ns	-	ns	-	ns	-	ns	-
Previous schooling								
Yes	55.0	9.6	46.1	12.2	68.5	12.5	-	-
No	56.6	90.4	51.1	87.8	62.5	87.5	63.5	100
Level of significance	ns	-	ns	-	ns	-	-	-

Note: ns = not significant at p<.05.

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Annexure 9. Mean scores of the learners in Mathematics by school type and background variables.

| Background variables | NFPE | | | | KK | | | |
| | CLIP | | Regular | | CLIP | | Regular | |
	Mean	%	Mean	%	Mean	%	Mean	%
Get help for study at home								
Yes	49.0	63.0	38.8	67.1	54.9	63.2	51.1	47.3
No	45.9	37.0	36.4	32.9	52.6	36.8	48.0	52.7
Level of significance	ns	-	ns	-	ns	-	ns	-
Previous schooling								
Yes	43.4	9.6	31.7	12.2	62.8	12.5	-	-
No	48.3	90.4	38.8	87.8	52.8	87.5	49.5	100
Level of significance	ns	-	ns	-	s	-	-	-

Note: ns = not significant at p<.05, s = significant at p<.01.

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Annexure 10. Mean scores of the learners in Bangla by school type and parental education.

Background variables	NFPE				KK			
	CLIP		Regular		CLIP		Regular	
	Mean	%	Mean	%	Mean	%	Mean	%
Mother's education								
Yes	60.5	15.1	55.0	31.7	70.6	11.2	66.1	25.7
No	55.7	84.9	48.4	68.3	62.3	88.8	62.6	74.3
Level of significance	ns	-	ns	-	ns	-	ns	-
Mother's schooling year-range								
< 5	60.6	81.6	55.5	88.5	71.0	82.4	67.0	89.5
6+	60.2	18.4	50.8	11.5	68.3	17.6	58.0	10.5
Level of significance	ns	-	ns	-	ns	-	ns	-
Father's education								
Yes	57.1	37.1	53.2	48.8	60.9	40.1	64.4	37.8
No	56.1	62.9	47.9	51.2	64.8	59.9	62.9	62.2
significance	ns	-	ns	-	ns	-	ns	-
Father's schooling year-range								
< 5	54.5	57.0	52.0	77.5	60.1	65.6	65.6	57.1
6+	60.6	43.0	57.3	22.5	62.6	34.4	62.9	42.9
Level of significance	ns	-	ns	-	ns	-	ns	-

Note: ns = not significant at p<.05.

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Annexure 11. Mean scores of the learners in Mathematics by school type and parental education.

Background variables	NFPE				KK			
	CLIP		Regular		CLIP		Regular	
	Mean	%	Mean	%	Mean	%	Mean	%
Mother's education								
Yes	49.9	15.1	36.3	31.7	59.2	11.2	49.9	25.7
No	47.5	84.9	38.7	68.3	53.4	88.8	49.3	74.3
Level of significance	ns	-	ns	-	ns	-	ns	-
Mother's schooling year-range								
< 5	51.0	81.6	36.5	88.5	59.9	82.4	51.4	89.5
6+	44.8	18.4	35.0	11.5	56.0	17.6	37.5	10.5
Level of significance	ns	-	ns	-	ns	-	ns	-
Father's education								
Yes	47.7	37.1	39.9	48.8	52.5	40.1	49.9	37.8
No	47.9	62.9	36.1	51.2	55.1	59.9	49.2	62.2
Level of significance	ns	-	ns	-	ns	-	ns	-
Father's schooling year-range								
< 5	46.8	57.0	39.8	77.5	52.6	65.6	51.5	57.1
6+	48.9	43.0	40.4	22.5	52.5	34.4	47.7	42.9
Level of significance	ns	-	ns	-	ns	-	ns	-

Note: ns = not significant at p<.05.

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Annexure 12. Mean scores of the learners in Bangla by school type and access to media.

Background variables	NFPE				KK			
	CLIP		Regular		CLIP		Regular	
	Mean	%	Mean	%	Mean	%	Mean	%
Access to Radio								
Yes	60.2	35.9	51.9	42.7	62.7	46.7	68.1	18.9
No	54.4	64.1	49.4	57.3	63.7	53.3	62.4	81.1
Level of significance	s	-	ns	-	ns	-	ns	-
Access to TV								
Yes	60.8	12.4	53.9	34.2	67.3	16.5	70.1	18.9
No	55.9	87.6	48.7	65.8	62.4	83.5	62.0	81.1
Level of significance	ns	-	ns	-	ns	-	ns	-
Access to Newspaper								
Yes	59.9	1.6	-	-	-	-	-	-
No	56.4	98.4	50.5	100	63.2	100	63.5	100
Level of significance	ns	-	-	-	-	-	-	-

Note: s = significant at p<.05. ns = not significant at p<.05.

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Annexure 13. Mean scores of the learners in Mathematics by school type and access to media.

Background variables	NFPE				KK			
	CLIP		Regular		CLIP		Regular	
	Mean	%	Mean	%	Mean	%	Mean	%
Access to Radio								
Yes	50.4	35.9	39.6	42.7	53.9	46.7	50.3	18.9
No	46.4	64.1	36.7	57.3	54.2	53.3	49.3	81.1
Level of significance	ns	-	ns	-	ns	-	ns	-
Access to TV								
Yes	51.5	12.4	40.2	34.2	58.6	16.5	58.9	18.9
No	47.3	87.6	36.8	65.8	53.2	83.5	47.3	81.1
Level of significance	ns	-	ns	-	ns	-	s	-
Access to Newspaper								
Yes	49.5	1.6	-	-	-	-	-	-
No	47.8	98.4	37.9	100	54.1	100	49.5	100
Level of significance	ns	-	-	-	-	-	-	-

Note: ns= not significant at p<.05, s= significant at p<.05.

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Annexure 14. An overview of the test used in the study.

Bangla Test

Item	No. of Questions
1. Recognition Alphabets	
2. Writing Alphabets	2
3. Recognition of vowel and vowel symbol	1
4. Making words through alphabets	2
5. Making words through matching syllables	2
6. Making words through vowel symbol (Sharakar)	1
7. Writing name of objects and things	4
8 Separating alphabets and vowel symbol from words	1
9. Making sentences through words	1
10. Completing sentences with appropriate words	1
11. Making sentences through matching	1
12. Changing verb with person	1
13. Changing verb with tense	1
14. Answering of short questions	1
15. Recognition of compound syllables	1
16. Reading comprehension	1
17. Creative/free writing on a given topic	1

Mathematics Test

Item	No. of Questions
1. Recognition of numbers	3
2. Writing numbers in words	1
3. Writing numbers in numerals	1
4. Arranging numbers in ascending order	1
5. Recognition of smaller and larger numbers from pairs	1
6. Recognition of odd and even numbers	1
7. Writing numbers through changing position	1
8. Recognition of units and tens	1
9. Mental maths	1
10. Adds two, 1 and 2 digit numbers with and without carrying	1
11. Subtracts 1 and 2 digit numbers with and without borrowing	1
12. Multiples 1 and 2 digit numbers by a single number	1
13. Multiples using namota	1
14. Fill up the gaps using namota	1
15. Solves simple problem using addition	1
16. Solves simple problem using subtraction	1
17. Solves simple problem multiplication	1
18. Recognition of geometric shape	1

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