

A Survey on English Linguistic Ability of the Government Primary School Children Prior to Introduction of Interactive Radio Instruction (IRI) Programme

Kaisar A. Khan
Senior staff sociologist

August 1997

**Research and Evaluation Division
BRAC Center, 75 Mohakhali, Dhaka -1212**

Table of Contents

Table of Contents	ii
List of Tables	iii
Acknowledgments	v
Abstract	vi
✓Executive Summary	vii
Introduction	1
<i>BRAC's education programme</i>	1
✓ <i>An introduction of interactive radio instruction programme</i>	1
✓ <i>Historical background of the IRI programme</i>	2
✓ <i>BRAC's IRI programme</i>	2
✓ <i>Reasons for introducing the programme in BRAC</i>	3
✓Objectives	4
✓Rationale of the Survey	4
✓Methodology	4
Area selection and sampling procedure	4
Instruments and data collection procedure	5
✓Results	6
Achievement Level by Gender, Score band and Test Items	6
Achievement Level by Area and Age of the Selected Learners	8
Achievement Level by Household's Socioeconomic Condition	9
✓Discussion and Conclusion	10
Annexure	12
References	17

List of Tables

Tables in the text

Table - 1. Distribution of selected learners by district and gender	5
Table - 2. Mean score of English language of the learners of grade II in government primary schools	6
Table - 3. Distribution of learners of grade II in government primary schools by score band and gender	7
Table - 4. Item wise achievement level of the learners of grade II in govt. primary schools	8

Tables in the Annexure

Table - 1. Basic level of English of the learners of grade II in government primary schools by district and gender	12
Table - 2. Basic level of English of the learners of grade II in government primary schools by age and gender	12
Table - 3. Basic level of English of the learners of grade II in government primary schools by parents' occupation and gender	13
Table - 4. Achievement level of the learners on English linguistic by father's educational level	13
Table - 5. Achievement level of the learners on English linguistic by mother's educational level	13
Table - 6. Correlation coefficient of parents' education and achievement level of the learners	14
Table - 7. Basic level of English of the learners of grade II in government primary schools by household's land holding and gender	14

Table - 8. Basic level of English of the learners of grade II in government primary schools by possessions of TV	15
Table - 9. Basic level of English of the learners of grade II in government primary schools by having private tutor	15
Table -10. Multiple regression analysis of score obtained by the learners of grade two in government primary school	16

ACKNOWLEDGEMENT

I am grateful to Dr. AMR Chowdhury, Director - research for allowing me to conduct this study and I also acknowledge his support and guidance at different stages of the study. I am also grateful to Dr. David Clarke of the Aid Management Office Dhaka (AMOD), British High Commission for providing necessary fund and suggestions on this study. My profound gratitude is extended to Kaniz Fatema, Director Education and Serina Samad, Senior Materials Developer Specialist, NFPE for providing information on Interactive Radio Instruction Programme. I owe a lot to the NFPE staff at field offices and also to the teachers of government primary schools for their co-operation. My sincere thanks and gratitude are also extended to Professor Nazmul Haq (consultant, education research) for his constructive criticism and valuable suggestions in different phases of the study. Finally I am grateful to Mr. Hasan Shareef Ahmed for editorial assistance.

Abstract

With the agreement of Directorate of Primary Education (DEP) of the government of Bangladesh, BRAC is introducing the Interactive Radio Instruction (IRI) programme on a pilot basis in 17 government primary schools. The primary objective of the programme is to teach English to the learners of grade two. This study aimed at assessing the basic level of English linguistic ability of the learners before the programme starts. It investigated the gender difference (if any) of the level of knowledge in basic English and examined relationship between such knowledge and parental socioeconomic background. For the purpose, 320 learners (160 boys and 160 girls) were tested through a set of questionnaire and tools developed following the curriculum of the IRI course. The learners scored 29.5 on average, out of 102. The boys scored insignificantly higher (30.3) than the girls (28.7). The study also found that the learners from rich families performed better in the test. It indicates that aggregate educational level of families, occupation of parents, ages of the learners, and reputation of schools were the influential determinants not only for learning English but also in acquiring knowledge on other subjects.

Executive Summary

Introduction

BRAC operates an Interactive Radio Instruction (IRI) programme by using audio instructional material (cassette) in its 1000 non-formal schools on a pilot basis. The specific aim of the intervention is to teach English to the learners of Non-formal Primary Education (NFPE) programme and to impart appropriate teaching skills to NFPE teachers in English. This programme was undertaken by BRAC in collaboration with the Directorate of Primary Education (DPE) for second grade learners in 17 government primary schools.

BRAC's Research and Evaluation Division (RED) undertook this baseline survey subsequent to introduction of the programme to determine the basic level of English knowledge among the learners of grade II in government primary schools. The survey also investigated the gender differences (if any) in basic English language and examined relationship of this ability with the parental socioeconomic backgrounds.

For the purpose, a total of 320 learners of class two (75 boys and 85 girls as programme group and 82 boys and 78 girls as control group) were tested by using an English language test developed on the basis of major contents of the IRI course. The test consisted of alphabetical knowledge, vocabulary for daily use and some communication skills that were taken from the syllabus specially developed for the IRI programme. In order to assess the daily use of language the test used flash cards, pictures and charts based on IRI materials. A separate questionnaire prepared for the parents of the learners was attached to gather socioeconomic background information about the learners. Data were collected by a group of field investigators under direct supervision of the concerned researcher.

Major Findings

The study shows, the learners scored 29.5 on average out of 102. The boys scored 30.0 which was insignificantly higher than the girls (28.7). The study also shows that the learners in the programme schools (experimental group) obtained significantly higher (32.2) score compared to the learners of control group (26.7). Item wise distribution of result shows that the achievement level of both the groups (programme and control) was significantly higher in the knowledge of capital (68.1%) and small (57.4) English alphabets in comparison to other items such as; parts of human body (32.0%), human relationship (32.6%), order/request (30.4%) meaning of different words (33.3%) and making word by letters (32.0%), etc. The items such as greetings, name of days, name of different professions and understanding of different sentences were found very difficult for the learners.

Achievement level of the learners by areas and age reveals that the learners of Gazipur and Manikgonj districts obtained quite high score (36.3 and 31.3 respectively) than the learners of Dhaka and Narshingdi (26.3 and 21.7 respectively) districts. Data also show that the trend of test scores of the older children was higher than that of the younger children.

Finally, the study reveals that the effectiveness of learner's education has direct relation with learner's households' socioeconomic condition. In this regard, data reveal that the average score was higher among the children of service holders (38.0) and businesspersons (28.4) than the children of labourers and farmers (26.5 and 23.6 respectively). Data also indicate that the learners from socioeconomically well-off families are more likely to perform better than those of poor families.

INTRODUCTION

BRAC's education programme

BRAC initiated two models of Non-Formal Primary Education (NFPE) Programme to provide basic education to the children of poor families. Preference is given to the children who never been enroled in schools or dropped out before gaining basic education. The first model called "Non-Formal Primary Education" (NFPE) was started in 1985 and the second model called "Basic Education for Older Children" (BEOC) was started in 1988. However, until December 1996, BRAC was operating more than 34,000 schools both in rural and urban areas. To enrich the teaching method of the programme, BRAC has incorporated a new teaching method in its education programme (NFPE) in 1994, called Interactive Radio Instruction (IRI) programme.

An introduction to the Interactive Radio Instruction (IRI) programme

Interactive Radio Instruction (IRI) is a method of using radio for effective education. It facilitates active learning and meaningful interaction between the radio, the teacher and the learners. It is different from traditional education programmes because it is based on sound pedagogical principle with strong emphasis on cognitive learning. It is just one of several uses of radio for development. In this programme, radio is being used as a means of instruction for enhancement of learning in a systematic way. It is also used for instruction in many countries to supplement or enrich classroom instruction¹. It also can support at all levels of education, both for in-school and out of school learning. Hawkridge and Robinson² have listed the

following four characteristics of instructional radio such as:

- i) the programme is arranged in a series to assist to cumulating learning;
- ii) it is planned in consultation with external education advisors;
- iii) it is commonly accompanied by print materials; and
- iv) there are some evaluations of the programme by teachers and learners.

Historical background of the IRI programme

The programme began in the mid 1970s with the Nicaraguan Radio Mathematics Project. The project was funded by the United States Agency for International Development (USAID) and administered by Stanford University and Nicaraguan ministry of education. This was the first of several researches and development projects to test the potential of designed radio programme to improve academic achievement among the primary school children in developing countries especially in rural areas³. At the later stage, some Latin American and Asian countries incorporated this programme with their educational system. The children of these countries have been taught different subjects like: mathematics, English, science, health, environmental education, mental arithmetic, etc. by using the media.

The BRAC's IRI programme

BRAC's education programme initially started the IRI programme in mid 1994. The first-phase pilot programme was initiated in 4 schools with 10 lessons. According to the suggestions made by the external experts, major changes were made to the programme and the second-phase pilot programme commenced during mid 1995 in

20 schools with 240 lessons. The programme was further revised and the third-phase pilot programme commenced in November 1996 in 1,000 BRAC schools with equal number of lessons.

The primary objective of the intervention is to teach English to the learners of both NFPE and BEOC by using cassette tapes. A tape recorder, some tapes on different lessons, and other printed materials were supplied to the schools. All the lessons were developed and recorded on tape according to the formulated curriculum of the programme. Each lesson is a 50 minutes programme (25 minutes for tape, 10 minutes for work book and the remaining 15 minutes for story card). At the scheduled time, tape is played in the classroom and the learners are asked to interact with the directions of the tape. During the period, class teacher is also asked to interact with the tape and helps the learners to interact with it. The teacher is not allowed to express any verbal instruction during the tape playing. After finishing the recorded part of the lesson 10 minutes are allowed for writing practice of the key words taken from the recorded lesson. The remaining 15 minutes are spent on story card reading which (story) has been produced by using the same key words taken from the taped lesson. English class is held three days (alternative days) a week, and a total of 20 months will be needed to complete the whole course. The method has been introduced in BRAC schools from the second year of each cycle.

In collaboration with the government of Bangladesh, BRAC has decided to introduce this programme on pilot basis in 17 government primary schools in four districts (5 schools in Gazipur, 5 in Narshingdi, 5 in Manikganj and 2 schools in Dhaka urban area) from July 1997. The programme will be introduced in class two.

Reasons for introducing the programme in BRAC and government primary schools

IRI programme is considered one of the cost effective methods in education which requires few printed materials thereby reducing production and distribution costs of bulky textbook materials. It also requires minimal teacher's training usually not more than one day. Once radio lessons have been developed, the cost per student per year is very low because the same lessons can be transmitted to thousands of new students at minimal cost⁴.

The government primary schools introduce English from grade I and continue up to grade V. Therefore, it is expected that whoever enrolled in any grade should have the English language skill up to a certain level. After graduation from BRAC schools, majority of the BRAC graduates enrol in government primary schools in grades IV and V. It is, therefore, necessary for the NFPE graduates to become equivalent with the learners in government primary schools in all subjects. It is observed that the NFPE learners were lagging behind in English compared to the learners in government primary schools although they (the NFPE learners) were equivalent in all the other subjects⁵. Realizing the fact, BRAC introduced this new teaching technique to overcome the problems. This method is designed to help teachers deal with such situations as well as for their own development in the use of English. Thus, as a cost effective method, the programme has been introduced in BRAC schools on pilot basis.

However, before starting the pilot programme in government primary schools, BRAC Research and Evaluation Division (RED) realized the necessity of a baseline survey the intervention area to meet the following objectives.

The objectives of the survey were:

- i. to determine the basic level of English knowledge among the learners of grade two in government primary schools;
- ii. to investigate gender differences (if any) in basic English knowledge among the second grade learners in government primary schools.
- iii. to examine the relationship between basic English knowledge of the learners and socioeconomic background of their parents.

METHODOLOGY

Study are and sampling

The survey was conducted in 17 government primary schools from all the intervention areas (the four districts). Of the 17 primary schools, 10 were selected randomly. Sixteen learners (8 boys and 8 girls) of class II were planned to select from each school. This selection was arbitrary and the number was kept at minimum for convenience. Besides, another 10 government primary schools were selected purposively from the same areas and similar number of boys and girls were planned to select from each school as control group. Due to heavy rainfall and fear of child kidnapper, attendance in these schools was very low. Consequently, the gender ratio could not be maintained as planned. Thus, a total of 320 learners (75 boys, 85 girls from programme group and 82 boys, 78 girls from control group) were tested. Table 1 shows the distribution of the selected learners by district and gender.

Table 1. Distribution of selected learners by district and by gender.

Districts	Number of selected learners						All
	Programme			Control			
	Boys	Girls	Total	Boys	Girls	Total	
Dhaka	8	8	16	8	8	16	32
Manikganj	21	27	48	26	22	48	96
Narshingdi	24	24	48	24	24	48	96
Gazipur	22	26	48	24	24	48	96
Total	75	85	160	82	78	160	320

Instruments and data collection procedure

The selected learners were assessed through an individual English proficiency test covering most of the lessons of the course. The test was developed on the basis of IRI syllabus to be used for grade II. It consisted of test for alphabetical knowledge, vocabulary for daily use and some communication skills. However, no thorough psychometric approach was adopted due to time constraint. To determine the English vocabulary of the learners picture cards were used. The pictures were taken from the chart book especially designed for the programme which (chart book) is regularly used in BRAC schools and also will be used in government primary schools. The test instruments also contained background information about the learners' households or families such as: family size, household's aggregate educational level, economic status, etc. These data were collected from the parents of the selected learners, who (parents) were requested to attend before the interviewers at the schools. Due to heavy rainfall and probably lack of time 58 out of 320 parents could not attend the interview. The interviews of the children and parents were taken in a friendly environment.

Table 4 presents itemwise achievement level of the learners. The achievement level of the learners of programme group was significantly higher in recognizing capital letters and small letters (72.8% and 62.8% respectively) of the English alphabets compared to the other items. The learners moderately did well on some other items such as; recognizing different parts of the human body (35.6%), human relationship (39.4%), order/request (32.6%), meaning of different words (35.2), and making words by different letters (33.8%), etc. Although, itemize achievement level of the learners of control group was lower than the learners of programme group. A similar trend of achievement was found on the selected items. Some items such as, naming of different colours, days of the week, different professions, different adjectives, articles, and understanding of different sentences were found very difficult by the learners.

Table - 4. Itemize (detail in annex-) achievement level of the learners of grade II in government primary schools.

Description of Items	Maximum score	Achievement level (mean)	
		Programme	Control
Alphabet (capital letters)	10✓	7.28 (72.8)	6.34 (63.4)
Alphabet (small letters)	10✓	6.28 (62.8)	5.20 (52.0)
Numbers	10✓	2.34 (23.4)	1.92 (19.2)
Greetings	5✓	0.96 (19.2)	0.85 (17.0)
Different colours	5✓	0.39 (7.8)	0.12 (2.4)
Different parts of body	10✓	3.56 (35.6)	2.84 (28.4)
Relationship	5✓	1.97 (39.4)	1.30 (26.0)
Order and request	5✓	1.63 (32.6)	1.42 (28.4)
Word meaning	15✓	5.28 (35.2)	4.72 (31.5)
Name of days	5✓	0.46 (9.2)	0.15 (3.0)
Name of professions	4✓	0.33 (8.3)	0.23 (5.8)
Word making by letters	5✓	1.69 (33.8)	1.51 (30.2)
Different adjectives	6✓	0.14 (2.3)	0.11 (1.8)
Understanding of sentences	5✓	0.04 (0.8)	0.01 (0.2)
Articles	2✓	0.15 (7.5)	0.07 (3.5)

Figures in parentheses indicate percentage

Achievement level by area and age of the selected learners

Locationwise (area) presentation of scores depicts that the basic level of knowledge of English language (scores) of the learners of programme group of Gazipur and Manikganj were higher (39.8 and 36.0 respectively) compared to the learners of Dhaka and Narshingdi (25.9 and 23.1 respectively) districts (Table Annex 1). Similar trend was found for the learners of control group i.e., the score was higher of the learners of Gazipur (33.1) followed by Dhaka and Manikganj (26.8 and 26.7 respectively). The reason for these variations may lie in the quality of schools and teachers which normally differ from district to district and school to school.

Table Annex 2 presents the basic level of English of the learners by their age group which depicts that the trend of scores of both the group (programme and control) is increasingly higher among elders than the younger learners.

Achievement level by household's socioeconomic condition

Effective formal education is highly linked with learners households' socioeconomic condition. It was found that, majority of the service holders and businessmen were literate and economically well-off. They realize the importance of education, and are able to provide adequate educational support to their children. Annex Table 3 supports the above views and presents the achievement level (average score) of the sampled learners by household head's occupation. It reveals that average score of the children of service holders was higher (45.1 for programme group and 30.1 for control group), followed by businessmen (28.8 for programme group and 27.5 for control group). Most of the farmers and labourers were found illiterate and poor. Their socioeconomic condition seemed to be worse compared to the other groups. They (farmers and labourers) had very limited time and ability to meet their childrens' educational requirements i.e. help at home with studies, bear educational expenses, etc. As a result, children of farmer and labourer households suffered from inadequate educational supports. Furthermore, they had to assist their parents in farming and/or at household chores.

The above findings are supported by annex tables 4-7 in which data are presented focusing on the indicators of socioeconomic factors. These tables show that the performance level of the sampled children, especially in English, mostly depended on

higher level of socioeconomic condition of the households. Some studies^{6,7} showed that children's educational achievement was highly correlated with their parental education. This study also presents similar findings. Table annex 4 and 5 present the achievement level of the learners by their parent's educational level. These tables show that the scores were increasingly higher according to their parental level of education. A correlation coefficient analysis (Table-6) supports the findings which shows achievement level of the learners highly correlated with their parents' education.

The other tables (Table annex, 7, 8 and 9) show that the scores were higher of the children who had higher amount of land, supported by private tutor and had TV at their homes. These tables indicate that the socioeconomic factors of the households/families were the influential determinants of achievement in the field of education. Multiple regression analysis shows that among the independent variables, age of the learners fathers' education, having TV at household and having private tutor were the most influential determinants for learning English (Table 10).

DISCUSSION AND CONCLUSION

The test results show that the learners of programme and control group scored on average 32.2 and 26.7 respectively out of 102. Among the learners of programme group the score of boys (31.3) was lower than the girls (33.0). Among the learners of control group the score of boys (29.4) was significantly higher than the girls (23.9). The findings further show that most of the alphabets (capital and small letters) were known to the majority of the learners but some of the other items of the test were found difficult by the learners.

The above findings particularly the variations of scores between boys and girls are also supported by the studies of GK Verma⁸ and Akter⁹. The reports also explored one reason for this variation as the girls had little scope in practicing their English outside school. Although, school related data were not collected in this survey, it was realized that the schools of programme group were seemed better compared to the schools of control group with regard to the attendance of both learners and teachers and in using of school hours. It is assumed that the government purposively selected those schools for the programme which are of good reputation.

In this study the learners from rich families performed better in the test. Parent's occupation and educational level, and age of the learners were the most influential determinants not only for learning English but also in acquiring knowledge on other subjects. It is also experienced that an extent of the learners in primary schools especially in rural Bangladesh generally come from poor families. Due to lack of required level of literacy parents often fail to realize the importance of education for their children and can not help them with studies. Moreover, due to the extreme poverty their parents cannot afford cost of private tutor and other educational expenses. A study on the primary education in Bangladesh concluded saying,

"The children from highest land holding group, the highest income group, with guardians engaged in services and highly educated families are more regular in school than those of disadvantaged classes¹⁰."

The researcher would like to include with the above statement that achievement level and learning opportunity for children depends not only on indicators of higher level socioeconomic background of respective families. These also depend on an appropriate

teaching method, relevant curriculum, effective supervision in schools, maximum use of schooling hours, teachers' competencies as well as their commitment.

The objectives of the IRI programme would be achieved if the programme is supported through ensuring the above mentioned aspects i.e., the independent variables. To this end, proper supervision, adequate guidance and training to the teachers, required logistic support, etc. are necessary to make effective not only the IRI programme but also all kinds of educational programmes.

Finally, ✓ on the basis of the test results, the researcher would like to conclude that basic level of English language of the learners studied was higher than expected. Since English is introduced in class I in government primary schools, their base education was a bit enriched. More learning issues and/or items could be included in the course contents of this programme. It is suggested to reconsider in reorganizing the course contents of the programme for making more learning opportunities especially for the mainstream learners.

Annexure

Annex 1

Table 1. Basic level (Score) of English of the learners of grade II in government primary schools by district and gender.

Districts	Score (mean)					
	Programme			Control		
	Boys	Girls	All	Boys	Girls	All
Dhaka	33.0	18.8	25.9	37.6	15.9	26.8
Manikganj	29.6	40.9	36.0	27.6	25.7	26.7
Narshingdi	23.7	22.6	23.1	25.1	15.6	20.4
Gazipur	40.8	38.9	39.8	32.8	33.4	33.1
All	31.3 (75)	33.0 (85)	32.2 (160)	29.4 (82)	23.9 (78)	26.7 (160)

Figures in parentheses indicate number of learners.

Table -2. Basic level (Score) of English of the learners of grade two in government primary schools by age and gender.

Age of the learners	Score (mean)					
	Programme			Control		
	Boys	Girls	All	Boys	Girls	All
7 Years	31.6	27.0	28.8	31.0	22.4	26.1
8 Years	30.5	34.6	32.5	26.7	25.2	26.1
9 + years	32.8	41.5	37.3	32.6	24.5	29.6
All	31.3 (75)	33.0 (85)	32.2 (160)	29.4 (82)	23.9 (78)	26.7 (160)

Figures in parentheses indicate number of learners

Table 3. Basic level (Score) of English of the learners of grade II in government primary schools by gender and parents occupation.

Occupation of Parents	Programme			Control		
	Boys	Girls	All	Boys	Girls	All
Farmer	24.4	30.0	27.2	23.7	17.5	21.4
Serviceholder	44.5	45.4	45.1	34.6	25.9	30.1
Businessman	28.7	29.1	28.8	29.7	24.6	27.5
Labourer	31.6	25.4	28.5	29.5	19.5	24.3
Others	28.7	28.1	28.4	31.9	24.9	28.0
All	32.3 (64)	33.5 (74)	33.0 (138)	30.5 (65)	22.9 (59)	26.9 (124)

Figures in parentheses indicate number of learners

Table 4. Achievement level of the learners on English linguistic by father's educational level

Father's educational level	Boys (mean score)	Girls (mean score)	All (mean score)
Illiterate	27.6	20.5	24.1
Primary education (I-V)	25.9	24.2	25.1
Secondary Education (VI-X)	33.6	28.8	31.3
Higher education (X +)	46.2	43.2	44.2
All	31.4 (129)	28.8 (133)	30.1 (262)

Figures in parentheses indicate number of learners

Table 5. Achievement level of the learners on English linguistic by mother's educational level.

Mother's educational level	Boys (mean score)	Girls (mean score)	All (mean score)
Illiterate	27.3	22.7	25.2
Primary education (I-V)	30.7	24.4	27.5
Secondary education (VI-X)	35.8	39.1	37.6
Higher education (XI +)	66.3	40.6	47.6
All	31.4 (129)	28.8 (133)	30.1 (262)

Figures in parentheses indicate number of learners

Table - 6. Correlation coefficient of parents' education and educational level of the learners.

Gender	Father's education	Mothers education
Boys	.3365	.3261
Girls	.4626	.4096
All	.3958	.3621

Note : All correlation coefficients are statistically significant at $p < .001$ level.

Table 7. Basic level (score) of English of the learners of grade II in government primary schools by household's land holding and gender.

Household's Land Size (acres)	Score (mean)					
	Programme			Control		
	Boys	Girls	All	Boys	Girls	All
0.00	33.6	30.2	32.2	32.1	26.6	29.6
0.01-0.49	32.1	37.3	35.5	31.9	11.3	22.9
0.50 -0.99	22.0	37.4	32.8	23.2	18.6	20.5
1.00- 1.49	31.5	40.7	35.4	28.8	7.0	25.7
1.50 - 1.99	-	19.3	19.3	30.0	22.3	23.8
2.00 +	35.5	36.0	35.9	31.7	36.7	34.2
All	32.3 (64)	33.6 (74)	33.0 (138)	30.5 (65)	22.9 (59)	26.9 (124)

Figures in parentheses indicate number of learners.

Table -8. Basic level (score) of English of the learners of grade two in government primary schools by possession of TV.

Possession of TV	Score (mean)					
	Programme			Control		
	Boys	Girls	All	Boys	Girls	All
Possess	44.2	41.9	42.7	37.1	28.5	33.5
Not possess	27.3	26.5	26.9	27.4	21.0	24.2
All	32.3 (64)	33.5 (74)	33.0 (138)	30.5 (65)	22.9 (59)	26.9 (124)

Figures in parentheses indicate number of learners

Table 9. Basic level (score) of English of the learners of grade II in government primary schools by having private tutor (PT).

Tutorial assistance status	Score (mean)					
	Programme			Control		
	Boys	Girls	All	Boys	Girls	All
Assisted by P	36.4	34.8	35.6	33.3	25.8	30.8
Not assisted	28.3	32.5	30.6	26.9	21.6	23.8
All (%)	32.3	33.5	33.0	30.5	22.9	26.9
	(64)	(74)	(138)	(65)	(59)	(124)

Figures in parentheses indicate number of learners

Table 10. Multiple regression analysis of score obtained by the learners of grade two in government primary school

Explanatory variables	Regression coefficient	Level of significant
Age of the learners	.16	p<.01
Father occupation	-.17	ns
Mother occupation	- 1.67	ns
Father education	.30	p<.05
Mother education	.35	ns
Household land size	-1.45	ns
Have Radio at household	.26	ns
Have TV at household	1.47	p<.01
Have private tutor	1.04	p<.01

Note : ns indicates insignificant

REFERENCES

1. **Tilson DT.** Instructional radio. Paper submitted for publication in the international encyclopedia of education. 2nd ed. Manchester: Education development center, 1992.
2. **Hawkrdge D. and Robinson J.** Organizing educational broadcasting. London: Crobom Helm, 1992.
3. **Zirker J.** Interactive radio instruction confronting crisis in education (Instruction for radio interaction), Manchester: Education development center, 1990:1-63.
4. **Lockheed ME. and Verspoor AM.** Improving primary education in developing countries. Washington: World Bank, 1990.
5. **Verma GK., Christie T, Begum F., Akter S. and Macaulay P.** The mainstream of Brac/nfpe students. Faculty of education, University of Manchester, UK. 1996:63.
6. **Nath S. and Chowdhury AMR.** Assessment of basic competencies of the graduates of Brac's education programme. A research mimeograph, BRAC, Dhaka, 1996.
7. **Chowdhury AMR, Mohsin M. and Nath S.** **Assessment of Basic Education of Children in Bangladesh.** A research Mimeograph. Research reports, 1992. Social studies, Vol-1992.
8. **Verma GK, Christie T, Begum F, Akter S and Macaulay P.** The mainstream of Brac/nfpe students. University of Manchester, 1996:1-98.
9. **Akter S.** Academic achievements of the nfpe learners in Brac schools. A research mimeograph. Dhaka, RED, 1996:1-15.
10. **Gustavsson S.** Primary Education in Bangladesh, for whom ? Dhaka, The University Press Limited, 1990:1-.