THE TECHNOLOGY ENVIRONMENT IN BANGLADESH

BASELINE STUDY 6

RESEARCH REPORT

ENGLISH in ACTION

THE TECHNOLOGY ENVIRONMENT IN BANGLADESH – INFRASTRUCTURE AND SUPPLY

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Executive Summary

Background

Desk research was undertaken to determine the nature of the technology environment in Bangladesh relevant to the English in Action (EIA) project. Information was sought that related to (i) the information and communication technologies infrastructure, and (ii) the electrical power infrastructure. On the basis of the findings, some implications for the EIA Project have been highlighted.

Findings

- The total number of telephone subscribers in Bangladesh rose dramatically in recent years, from 0.6 subscribers per 100 people in 2000 to 22.41 subscribers per 100 people in 2007.
- The growth rate for fixed telephone lines has been very modest in comparison with the growth in mobile phone subscriptions.
- Mobile phone subscriptions had reached 46.69 million by the end of June 2009 with high rates of access in rural areas.
- Computer ownership and access to the Internet remain at very low levels. There were only 0.32 Internet users per 100 people in 2007.
- The overall national figure for Internet usage is 3%, but there is considerable variation by location. While 8% of metropolitan dwellers have used the Internet, only 1% of those in rural areas have done so. Variation by gender is also high: 4% of males have used the Internet compared with 1% of females.
- About a quarter of households in Bangladesh contain a television. In 2008, 19% of households had a cable and/or satellite connection, although about 25% of the population was able to watch cable and/or satellite television programmes.
- Access to television is considerably higher in metropolitan and urban locations than in rural areas.
- In contrast, the audience for radio programmes is currently higher in rural areas than in urban locations (24% of the rural population compared with 17% of urban dwellers in 2008).
- Access to a supply of electricity varies considerably by location. In 2005, 83% of urban households had electricity compared with 31% of rural households. The overall national figure was 44%.
- The supply of electricity is not always stable because the demand is much greater than the amount generated. For example, in December 2008 the actual generation (about 3500 MW) was considerably lower than the installed capacity for electricity generation (about 5453 MW). 'Load shedding' is quite common.

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1. Introduction

1.1 Rationale for the Baseline Studies

English is taught as a compulsory subject in Bangladeshi schools, both at primary and secondary levels. While the national 'English for Today' curriculum stresses communicative use of the language, this does not appear to be effectively implemented as widespread concerns have been expressed about the ability of students to communicate in English.

English in Action, Bangladesh (EIA) aims to develop language learning and teaching over a 9-year period from May 2008. Funded by the UK Government's Department for International Development (DFID), the EIA Project's **goal** is to "contribute to the economic growth of Bangladesh by providing English language as a tool for better access to the world economy". The **purpose** of the planned interventions aimed at groups of school students, teachers and adults is to "increase significantly the number of people able to communicate in English, to levels that enable them to participate fully in economic and social activities and opportunities". Initiatives by EIA Project partners in three sectors (Primary, Secondary and Adult) will utilise a range of media technologies to:

- overcome barriers to the effective use of communicative English,
- increase motivation and access to appropriate resources, and
- enhance and extend the necessary learning and teaching practices.

A programme of research, monitoring and evaluation activities will assess the extent to which the EIA Project manages to achieve its purpose and goal. Within the first year, a set of project-wide Baseline Studies were planned and carried out in advance of the various sector interventions being launched. Each of six Baseline Studies concentrates upon separate, but related, fields for investigation in relation to developing the use of communicative English within Bangladesh. These will be repeated and extended in each of the Project's three-year phases to enable comparisons to be made to determine what improvements have occurred.

The initial Baseline Studies serve a number of purposes, primarily to:

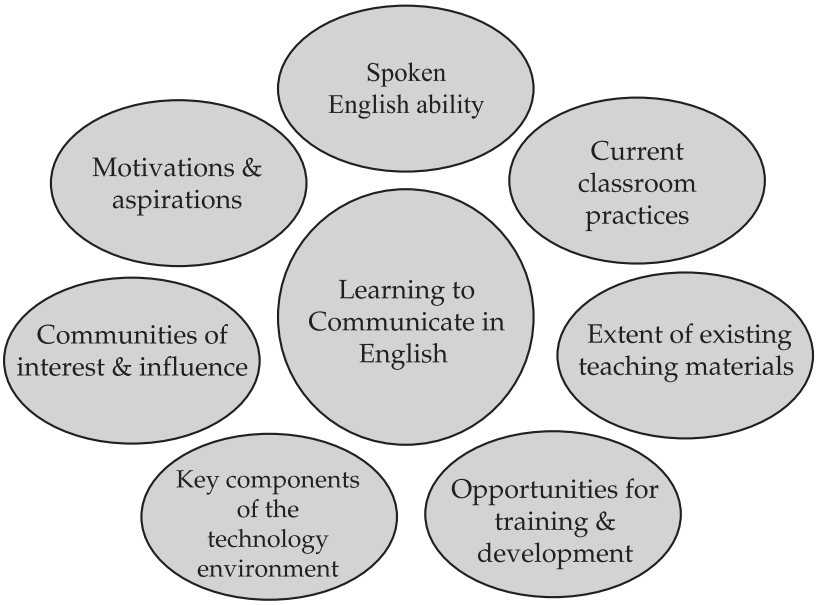
a. learn about the current situation relating to the teaching and learning of English 'on the ground' and the contexts for communicative use of English,

b. inform the outputs and activities for each sector and the project as a whole, and

c. provide a base against which outputs and activities of the project can be subsequently evaluated.

Each study provides insights and evidence relating to an element of the 'Communicative Environment' - the complex of factors that impact on the EIA Project's purpose, to "increase significantly the number of people able to communicate in English". This is illustrated in the Figure 1 below.

Figure 1: The Communicative Environment



1.2 Rationale for this Baseline Study

The main objective of the EIA Project is to develop and support innovative methods of teaching and learning English that will complement existing activities in Bangladesh and cover all areas of the country. The first phase (2008-2011) will develop and test innovative programmes to enhance the learning and teaching of communicative English. This will be scaled up in the second phase and institutionalised in the third phase.

The EIA interventions in the primary, secondary and adult sectors will all utilise various technologies to achieve their aims, so it was necessary to establish the nature of the technology environment currently existing in Bangladesh. A key question that the project sets out to explore is: In what ways do innovative strategies such as TV, Interactive Radio, and the use of ICT effect English language acquisition at scale?

This baseline study sets out to provide an overview of the existing technology infrastructure in Bangladesh that can be used to inform the design and implementation ICT-mediated interventions in the country. In terms of provision, the availability and reach of broadcasting, telecommunications and computing facilities have been investigated. The availability of a reliable supply of electricity has also been looked into. Technology access and use is likely to change significantly over the life of the project and there is potential for influences external to the EIA interventions (e.g. music and films in English) to make an impact.

Another separate study, Baseline Study 6b, involved surveys of school students, teachers and community adults to assess the levels of access to technologies and familiarity with their use.

1.3 Background and Scope of this Baseline Study

Project partners the BBC World Service Trust have undertaken data collection to help inform the development of their outputs for the English in Action Project. This study was not intended to duplicate the BBC WST studies, nor did it seek to collect information in as much detail. This Baseline Study was aimed more at providing an overview of the general situation in Bangladesh, particularly in respect of consumers and users of various technologies for teaching and learning purposes.

As well as determining the technology environment at the national level, this study has endeavoured to

establish the nature and extent of any differences between metropolitan/urban areas and rural locations.

1.4 Structure of this Report

The main findings are reported in Section 3, which is divided into two sub-sections. The first of these relates to the information and communication technologies infrastructure (i.e. telephone, computers, Internet, television and radio): the second sub-section relates to the electrical power infrastructure.

Section 4 of the report is devoted to highlighting the implications for the EIA project on the basis of the overview of the technology environment in Bangladesh.

2. Research Methods

2.1 Collection of Information and Data

Desk research was the main means of gathering information for this baseline study. Existing authoritative sources of data (published in reports and other documents) have been identified and drawn upon for this study. All the sources are listed in Section 5, References.

3. The Technology Environment: Some statistical profiles

3.1 The Information and Communication Technologies (ICT) Infrastructure

3.1.1 Telephone

Although Bangladesh achieved only a modest growth in GDP between 2000 and 2007, the total number of telephone subscribers during the period showed a tremendous increase (Table 3.1). While the number of subscribers was only a little above one million in 2001, the figure reached over 35.5 millions in 2007. From 2003 through to 2007 the percentage of telephone subscribers doubled in each year in comparison to the previous year.

Table 3.1 : Population, GDP, and telephone subscribers

	2000	2001	2002	2003	2004	2005	2006	2007
Population (Million)	128.92	131.46	134.03	136.62	139.21	141.82	144.44	158.66
Population density (per square Km)	895	913	931	949	967	985	1,003	1,102
Total GDP (Billion US$)	44.75	45.47	45.43	47.19	51.69	55.95	57.28	57.28
Per capita GDP (US$)		353	346	352	378	402	404	404
Telephone subscribers (Thousands)		1,084.90	1,680.90	2,107.00	3,612.50	10,070.00	20,265.00	35,556.90
Telephone subscribers per 100 people	0.60	0.83	1.25	1.54	2.59	7.10	14.03	22.41
Price basket for residential fixed lines ($ a month)	10.7						4.0	

Source: International Telecommunication Union (2009); World Bank (2009)

Table 3.1 above relates to all telephone subscribers, but the growth in fixed (landline) telephone subscriptions has been much less apparent. There were a little over one million main or fixed telephone lines in Bangladesh in the year 2007. Although this number was over five times higher than the year 1995 and over twice as high as in 2000, the growth rate (CAGR) in landline connections during that period had only been modest or even showed a declining trend (Tables 3.2 and 3.3).

Less than one in a 100 people in Bangladesh had a landline connection, even in the year 2007. This trend remained relatively stable from the year 1995 through to 2007 (Table 3.2).

Table 3.2 : Main telephone lines

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Main (fixed) lines ('000')	286.6	316.1	368	412.6	433	491.3	564.9	605.9	742	831	1,070.00	1,134.00	1,186.90
Lines/ 100 inhabitants	0.25	0.27	0.3	0.33	0.34	0.38	0.43	0.45	0.54	0.6	0.75	0.79	0.75

Source: International Telecommunication Union (2009)

Table 3.3 : Combined Annual Growth Rate (CAGR) of main telephone lines

	1995-2000	1996-2001	1997-2002	1998-2003	1999-2004	2000-2005	2001-2006	2002-2007
CAGR (%)	11.4	12.3	10.5	12.5	13.9	16.8	15	14.4
CAGR per 100 inhabitants	9.1	10.1	8.3	10.3	11.7	14.6	12.8	10.6

Source: International Telecommunication Union (2009)

While the growth in landline connections was relatively static from 1995 through to 2007, the number of mobile phone subscribers increased tremendously during this period - exceeding 100% in some years (Tables 3.4 and 3.5). This explains why, despite having almost no improvement in landline connections, the number of telephone subscribers was so high (Table 3.1 above). In other words, the increase in telephone subscribers was due mainly to increased access of Bangladeshi people to mobile phones. In contrast to the years from 1995 to 1999, almost 100% of the mobile connections became digital from 2002 onwards.

In Bangladesh, mobile phone ownership in 2008 increased more than six times compared to that of 2005 and more than twice compared to 2006. Despite such a substantial increase, the gap in mobile phone ownership between rural and urban households is still quite high. The picture is, however, encouraging since the proportion of rural households owning a mobile phone in 2008 was 13 times higher than in the year 2005 and about three times higher than that of 2006. The percentage of mobile ownership among metropolitan households, i.e. in the major cities, has been slightly higher in comparison to urban households, i.e. in the towns (Table 3.6).

Table 3.4 : Mobile cellular subscribers

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total subscribers ('000')	2.5	4	26	75	149	279	520	1,075	1,365	2,781.60	9,000	19,131	34,370
Subscribers per 100 inhabitants	….	….	….	….	….	0.22	0.4	0.8	1	2	6.35	13.25	21.66
Subscribers - Digital (%)	….	….	….	….	….	55.6	80.8	99.2	99.5	99.8	……	……	……
Subscribers as % of total telephone subscribers	….	….	….	….	….	36.2	47.9	64	64.8	77	89.4	94.4	96.7
Price basket for mobile service ($ a month)	….	….	….	….	….	….	….	…..	….	….	….	2.6	….

Source: International Telecommunication Union (2009); World Bank (2009)

Table 3.5 : Combined Annual Growth Rate (CAGR) of mobile cellular subscribers

	1995-2000	1996-2001	1997-2002	1998-2003	1999-2004	2000-2005	2001-2006	2002-2007
CAGR (%)	156.8	164.7	110.5	78.7	79.6	100.3	105.7	100

Source: International Telecommunication Union (2009)

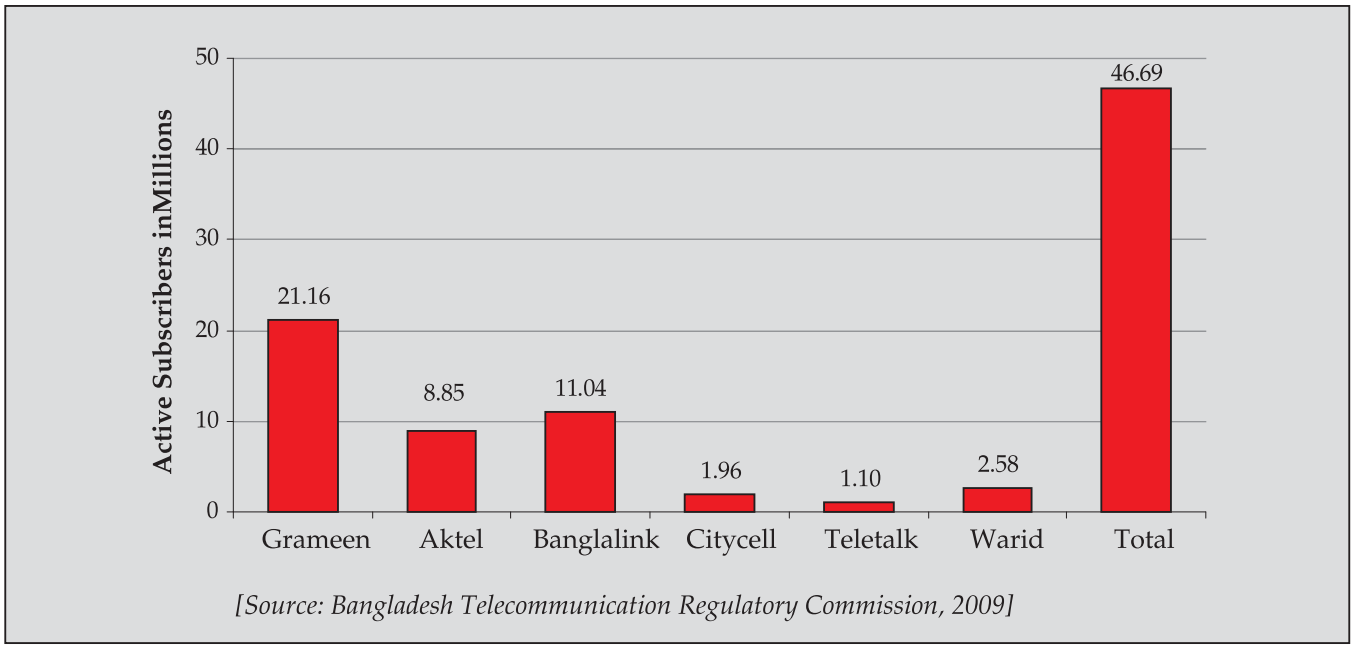
Table 3.6 : Mobile phone ownership by user categories

	2005	2006	2008
All	8%	23%	50%
Metropolitan	23%	60%	83%
Urban	21%	49%	74%
Rural	3%	14%	40%

Source: BBC World Service Trust, 2008 (Courtesy: AC Nielsen Media and Demographic Survey, 2008); Population = 98 million adults (15+ years); sample 14400

By the end of June 2009 the total number of mobile phone active subscribers had reached 46.69 million - a 36% increase (from 34.37 million) since 2007. Figure 2 shows the numbers of subscribers for the 6 network operators.

Figure 2 : Mobile Phone Active Subscribers in Bangladesh – End of June 2009



[Source: Bangladesh Telecommunication Regulatory Commission, 2009]

3.1.2 Computers and the Internet

Computer - particularly personal computers - are relatively scarce in Bangladesh. Computer ownership was only a little over 2% in 2006. This means that about 98% of Bangladeshi population did not have a personal computer. The situation is even worse in rural areas where the percentage of computer ownership was almost nil in the year 2005 (Table 3.7).

Internet subscription is very low in Bangladesh (Table 3.7). During the year 2005 to 2007, for example, only one person in a thousand had an Internet subscription. Similarly, the number of Internet users is still quite low in Bangladesh. In the year 2007, only 0.32% of the population used the Internet. This figure is not surprising given the very low level of computer ownership and a very high price basket for computer service (Table 3.7). The latter cause is, in particular, quite noticeable. It is quite realistic to expect that in a poor economy like Bangladesh very few people would be able to afford the Internet at the cost of $24 a month. The trend of computer use, however, is positive as more and more people are using the Internet. In comparison to the year 2000, for instance, the number of computer users increased five fold by 2007.

Table 3.7 : Computer, Internet and broadband subscribers and users

	2000	2001	2002	2003	2004	2005	2006	2007
Personal computers (per 100 households)	0.15	0.19	0.34	0.78	….	1.36*	2.2	….
Total Internet subscribers (Thousands)	60	62	68	81	100	123	150	150
Internet subscribers per 100 inhabitants	0.05	0.05	0.05	0.06	0.07	0.09	0.1	0.1
Total Internet users (Thousands)	100	186	204	243	300	370	450	500
Internet users per 100 inhabitants	0.08	0.14	0.15	0.18	0.22	0.26	0.31	0.32
Total broadband subscribers (Thousands)	…..	….	….	….	….	…..	…..	43.7
Broadband subscribers per 100 inhabitants	…..	….	…..	…..	….	…..	…..	0.03
International Internet bandwidth	0	….	….	….	….	….	8	….
Price basket for Internet service ($ a month)	….	….	….	….	….	….	24	….
Total Internet Service Providers (ISPs)	….	….	….	….	120**	….	….	….

Source: International Telecommunication Union (2009); World Bank (2009); Ahmed and Lentz (2008); Islam and Rahman (2006)

** Urban 4.88% and rural 0.17%* *** 80% in Dhaka*

The use of the Broadband technology is rare in Bangladesh. Over one half of the total Internet subscribers in 2007 did not have a Broadband connection (Table 3.7). In the year 2004, there were only 120 Internet Service Providers (ISPs) in Bangladesh. Four-fifths of those ISPs were located in the capital city, Dhaka.

While the overall extent of Internet use is quite low in Bangladesh, the picture is even worse in rural areas. In the year 2008, for example, the percentage of Internet use in rural areas was one-eighth in comparison with metropolitan areas and one-sixth in comparison with urban areas (Table 3.8). These figures indicate a very high degree of 'digital divide' among the various population groups in Bangladesh. However, the variation in Internet use is quite low among the major metropolitan cities in Bangladesh.

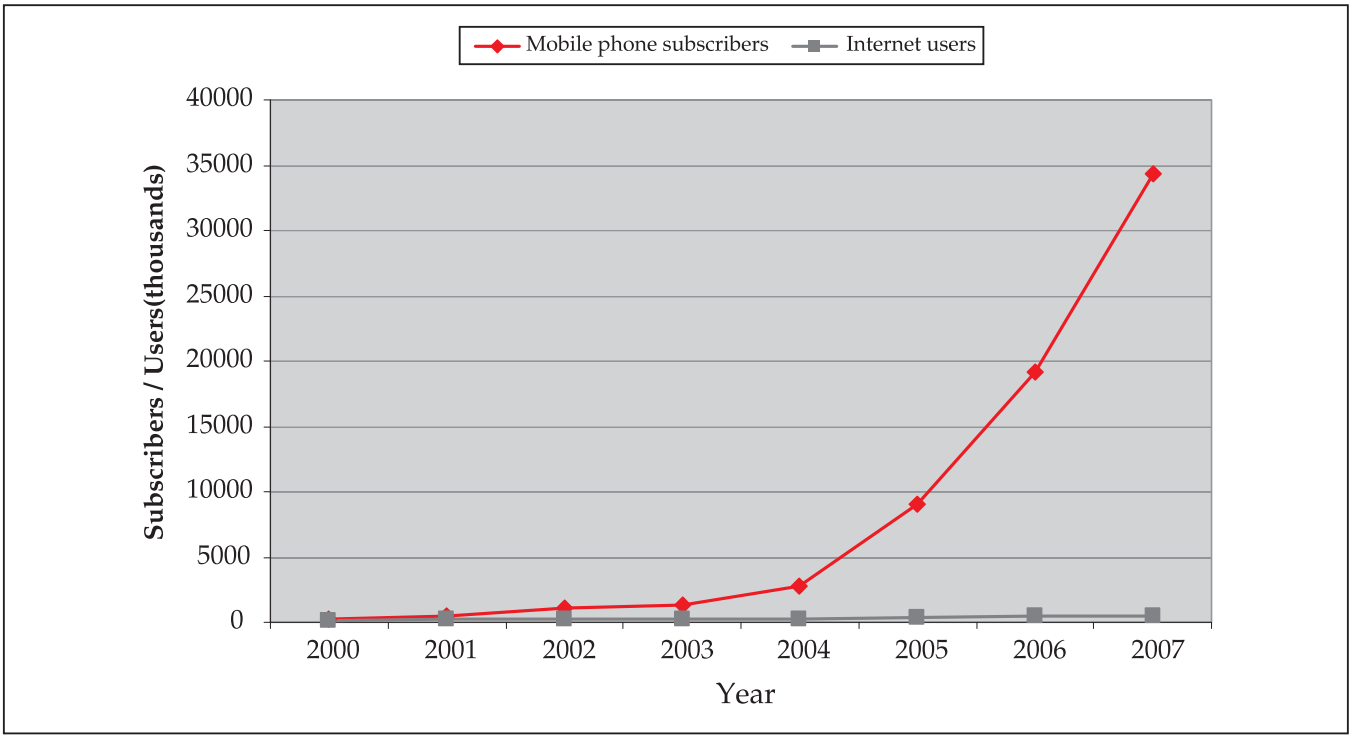
Table 3.8 : Internet users by categories and locations

	National	Metro	Urban	Rural	Male	Female	DHK*	CTG	RAJ	KHL	BSL	SYL
Not aware of Internet	61%	33%	43%	68%	53%	69%	53%	55%	68%	73%	64%	63%
Aware but never used	37%	59%	51%	31%	43%	31%	43%	42%	31%	25%	35%	35%
Ever used Internet	3%	8%	6%	1%	4%	1%	4%	3%	2%	3%	1%	2%

Source: BBC World Service Trust, 2008 (Courtesy: AC Nielsen Media and Demographic Survey, 2008); Population = 98 million adults (15+ years); sample 14400

[DHK = Dhaka; CTG = Chittagong; RAJ = Rajshahi; KHL = Khulna; BSL = Barisal; SYL = Sylhet]*

Figure 3 : Comparison of Mobile Phone Subscribers and Internet Users 2000-2007



Use of the Internet is unlikely to increase considerably while access requires network connections via fixed telephone lines. The relatively low penetration of fixed telephone lines (0.75 lines per 100 people in 2007 - mainly in metropolitan/urban areas) and the slow annual rate of growth of landlines represent major limitations to the expansion of Internet use. Future development of the Internet in Bangladesh, particularly in rural areas, is more likely to be achieved through enhancements to the mobile telephone networks that will enable Internet connectivity.

For example, following a mobile broadband pilot project from August to October 2008 aimed at boosting social and economic development (Ericsson, 2008), the company has urged the Government of Bangladesh to issue 3G licences to enable mobile broadband services to operate throughout the country (Cellular News, 2009). 3G mobile services would make the Internet available in rural as well as in metropolitan locations.

3.1.3 Television

Slightly over one-fifth (23%) of the households in Bangladesh owned a television set in the year 2006. This was slightly higher than in 2000, when only 18% households had a television (Table 3.9).

Table 3.9 : Households with a TV set

	2000	2006
% Households with a TV set	18	23

Source: World Bank (2009)

The percentage of the Bangladeshi population having Cable and/or Satellite connections was 19% in the year 2008 (Table 3.10). However, the proportion of the population able to watch cable and/or satellite television is higher (25% overall). This means that 75% of the people still do not have access to cable

and/or satellite technology. Moreover, the vast majority of the cable and/or satellite connections were located in the urban and, in particular, the metropolitan areas. Only a tiny fraction (6%) of the total cable and/or satellite connections was in rural areas.

These figures in conjunction with those in Table 3.9 indicate a very meagre situation with regard to the availability and use of ICTs in the rural areas of Bangladesh.

Table 3.10 : Access to cable and/or satellite TV in Bangladesh in 2008

	National	Urban	Rural	Metro	Male	Female	DHK*	CTG	RAJ	KHL	BSL	SYL
Have C & S Connection	19%	49%	6%	62%	19%	18%	30%	16%	13%	15%	12%	15%
Watch C & S TV	25%	59%	10%	70%	29%	21%	36%	21%	21%	22%	15%	19%

Source: BBC World Services Trust, 2008 (Courtesy: AC Nielsen Media and Demographic Survey, 2008); Population = 98 million adults (15+ years); sample 14400

[DHK = Dhaka; CTG = Chittagong; RAJ = Rajshahi; KHL = Khulna; BSL = Barisal; SYL = Sylhet]*

Almost all of the programmes transmitted on the Bangladeshi television channels (terrestrial and cable and/or satellite) are in Bangla. Subscribers to cable and/or satellite television services have access to foreign channels, including a few English and American news and entertainment services.

3.1.4 Radio

A minority of the Bangladesh population listen to radio programmes and the proportion has declined between 1995 and 2008 (Table 3.11). This might be related to the increased access to television. Since the year 2000, the radio audience in rural areas has greater than in urban locations.

Table 3.11 : Radio audiences in Bangladesh

	1995	1998	2000	2002	2005	2006	2008
National	36%	39%	37%	34%	22%	24%	22%
Urban	41%	42%	37%	24%	16%	15%	17%
Rural	33%	38%	36%	30%	25%	27%	24%

Source: BBC World Services Trust, 2008 (Courtesy: AC Nielsen Media and Demographic Survey, 2008); Population = 98 million adults (15+ years); sample 14400

Almost all of the programmes transmitted on the Bangladeshi radio channels are in Bangla. However, some FM channels play some music in English.

Early in 2009 a review was undertaken at the EIA Base in Dhaka to examine the current broadcast radio situation in Bangladesh (Nishad & Leelen, 2009). That review was particularly concerned with radio broadcasting for educational purposes. It considered not only the existing provision, but also the potential of Community Radio.

3.1.5 The Digital Divide

From the data presented above we note that there are very considerable differences between the metropolitan/urban and rural areas of Bangladesh in the provision of and access to media and

technologies. About three-quarters of the population of Bangladesh live in rural areas, but have restricted access to media and technologies. They are much less likely than members of the urban minority to have a landline telephone, a computer, Internet access and television (particularly cable and/or satellite services).

3.2 The Electrical Power Infrastructure

A source of electricity is essential for all of the technologies considered in this study. It is absolutely necessary for the production, transmission and reception of television and radio programmes. It is vital for conveying telephone calls and messages from senders to receivers. Computers and the associated network technologies cannot function without a stable supply of electricity. However, in Bangladesh there is a considerable difference between the demand for and the supply of electricity and significant variations exist between urban and rural areas.

As of December 2008, the total installed capacity of electricity generation in Bangladesh was 5453 MW. However, the actual amount of electricity generated during the same period was only around 3500 MW, indicating a very high gap between the installed capacity and actual production (Tables 3.12 and 3.15). This gap arises because of several reasons, including a shortage of water supply, natural calamities, poor management, and especially a shortfall in the gas supply. The last factor is particularly significant, given that over 80% of the total electricity in Bangladesh is generated from burning natural gas.

The demand for electricity during the peak hours is around 5000 MW as against the actual generation of around 3500 MW. The demand figure is even higher when unofficial statistics are taken into account. In the year 2006 there was a shortfall of 1295 MW of electricity in Bangladesh. This figure is likely to rise to 1800 MW in the year 2009 (Table 3.12).

Table 3.12 : Key statistics indicating the power situation in Bangladesh

Total installed capacity (December, 2008)	5453 MW
Present generation capacity (December, 2008)	Around 35000
Peak electricity demand (official)	> 5000 MW
Demand (unofficial)	6000 MW
Electricity shortage in 2006	1295 MW
Expected shortfall in 2009	1800 MW
Consumer number of BPDB (FY 2008)	17,83,295
Proportion of population served with electricity (FY 2006)	42.09%
Per capital electricity consumption (FY 2006)	169.92 kWh

Source: Bangladesh Power Development Board (BPDB) (2008, 2006a); Saifullah (2009)

Table 3.13 : Installed capacity of electricity generation according to energy sources

Energy source	Percent
Diesel	4.08%
Hydro	4.39%
Coal	4.77%
Furnace oil	5.34%
Natural gas	81.43%

Source: Bangladesh Power Development Board (BPDB) (2006b)

Currently about one-half of the Bangladeshi households do not have access to electricity (Table 3.14). Access to electricity for rural households is even lower than in urban households. Although the situation was better in 2005 compared to the year 2000, still about 70% of the rural households did not have access to electricity.

Table 3.14 : Electricity access by household categories (MW)

	2000	2005
National	31.2	44.23
Rural	18.7	31.19
Urban	80.4	82.61

Source: Ahmed and Lentz (2008)

Table 3.15 : Average monthly electricity generation (MW)

	2007	2008	2009
Jan	2729	3399.9	3524.82
Feb	2694	3528.95	3384.99
Mar	3113	3783.25	3615.93
Apr	3378	3639.01	……
May	3348	3423.85	……
Jun	3333	3365.54	……
Jul	3511	3400.94	……
Aug	3612	3435.93	……
Sep	3697.27	3804.85	……
Oct	3507.49	3776.76	……
Nov	3321.36	3695.03	……
Dec	3315.7	3646.49	……

Source: Bangladesh Power Development Board (2009a)

Because of such a big gap between the demand and the generation capacity, the incidence of 'load shedding' (i.e. power cuts in specific areas) is quite common in Bangladesh. On the 29th of April 2009, for example, the amount of load shedding was 1094 MW against the estimated demand of 4237 MW (Table 3.16). This load shedding was the highest in Dhaka among all major cities of Bangladesh.

Table 3.16 : Electricity demand and load shedding on 29th April 2009

Regions	Estimated demand (MW)	Shedding (MW)
Dhaka (DESA)	1772	404
Chittagong	483	133
Khulna	450	132
Rajshahi	446	139
Comilla	299	89
Mymensingh	253	81
Sylhet	185	22
Barisal	92	19
Rangpur	257	75
Total	4237	1094

Source: Bangladesh Power Development Board (2009b)

Efforts to combat power shortfall in Bangladesh are quite noteworthy. Such initiatives are based mainly on the utilisation of solar energy technologies (Table 3.17). A number of research and development agencies have taken initiatives to implement such programmes, but the total amount of electricity generated through such initiatives is still quite negligible when compared with overall demand.

Table 3.17 : Current utilisation of solar energy technology in Bangladesh

Stakeholders	Number of systems (SHS) installed and locations	Installed capacity (Approx.)
Grameen Shakti	42,000 SHSs all over the country	2150 KW
Bangladesh Rural Advancement Committee (BRAC)	10,456 SHSs all over the country	300 KW
Bangladesh Power Development Board	Centralized system at Juraichari, Rangamati District	54 KW
Local Government Engineering Department	Coastal Cyclone Shelters and remote off-Grid areas	53 KW
Bangladesh Council of Scientific and Industrial Research	82 Systems	1.5 KW
Rural Electrification Board	Narshingdi District	62 KW
TMSS	300 Solar Home Lighting System	17 KW
CMES	618 Solar Home Lighting System	33 KW
COAST Trust	352 Solar Home Lighting System	17 KW
Integrated Development Foundation	300 Solar Home Lighting System	16 KW
Srizony Bangladesh	1,272 Solar Home Lighting System	65 KW
Shubashati	350 Solar Home Lighting System	17 KW
Total		**2785.5 KW**

Source: Grameen Shakti, 2006

4. Implications for the English in Action Project

1. Given that the number of landline subscribers has been static and/or in decline over the past decade and the number of mobile phone subscribers has tremendously increased, it would be useful for the EIA project to use existing mobile phones and networks in Bangladesh to implement its interventions. In particular, mobile phones constitute an encouraging means for the EIA project to be able to reach rural beneficiaries. In this connection, an effective strategy for EIA would be to establish collaborative links with the mobile phone companies in Bangladesh.

2. Given the existing situation in Bangladesh, use of computer-assisted technologies would be difficult for the EIA project. Such technologies will be highly costly and unaffordable by the majority of Bangladeshi people. Further, maintenance and technical support would be problematic outside the main metropolitan centres.

3. The situation of the ICT infrastructure in rural areas is considerably poor in comparison to the urban areas in terms of telephone connections, number of telephone subscribers, computer and TV ownership, Internet connections, and the availability of the Broadband technology. The EIA Project needs to take these limitations into account in selecting locales for interventions. A critical question for EIA is to explore whether to implement the project in rural areas, in particular, in its first (pilot) phase when success is very critical for its long-term survival.

4. Any ICT based intervention is highly contingent on the power situation of a country. The review of the power situation in Bangladesh shows a grim picture. Constant shortfall of electricity and frequent load shedding are quite commonplace. In order to be effective, the EIA project would require introducing technologies that do not rely upon a mains electricity supply. Ultimately, all the batteries of ICT devices should be capable of being recharged using alternative energies such as the solar power. It is encouraging to note that a good number of programmes aiming to introduce solar technologies are already being implemented in Bangladesh. The EIA project would benefit from collaborating with these ongoing programmes.

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THE TECHNOLOGY ENVIRONMENT IN BANGLADESH – ACCESS, FAMILIARITY AND USE

BASELINE STUDY 6B

RESEARCH REPORT

ENGLISH in ACTION

THE TECHNOLOGY ENVIRONMENT IN BANGLADESH - ACCESS, FAMILIARITY AND USE

Executive Summary

Background and Methods

English is taught as a compulsory subject in Bangladeshi schools, both at primary and secondary levels. While the national 'English for Today' curriculum stresses communicative use of the language, this does not appear to be effectively implemented as widespread concerns have been expressed about the ability of students to communicate in English.

Baseline Study 6b sought to assess the levels of access to technologies and the familiarity with their use among school students, teachers and community adults. The Study involved survey interviews with almost 2,900 individuals - more than 2,100 school students, over 450 teachers and over 260 adults in the community. The study was undertaken in 2 phases: the first in NGO schools and the second in Government schools.

Key Findings

Access to Technologies:

- Almost all teachers and a large proportion of adults own or have access to a mobile phone. About one-third of students in NGO schools and two-thirds of those in Government schools had access to a mobile phone.
- About half of teachers use a mobile phone frequently for calls; students do so less frequently.
- Across all categories of respondent, the frequency of using a mobile phone for sending or receiving text messages is relatively low.
- Just over half of respondents have access to an audio player - about two-thirds of those with access listen to music or other recordings 'occasionally'.
- Just over half of respondents have access to a radio - about half of those with access listen to radio programmes 'occasionally'.
- Across all categories of respondent access to a television was high (83% - 95%). A majority of teachers and adults reported watching TV programmes 'quite often/frequently', as did over 40% of students.
- Internet use is low, particularly among students. The frequency of use is also very low. Teachers in NGO schools were more likely to use the Internet than their counterparts in Government schools.

Use of Technologies for Learning:

- Between 80% and 99% of respondents had never experienced the use of audio or video materials for learning in school lessons, in college or in training. Those who had such experience as learners had done so 'occasionally' or 'not very often'.
- A very large proportion of respondents in all categories (77% – 97%) had not used a computer for learning in school lessons, in college or in training. Students in NGO schools were more likely than those in Government schools to have used a computer (22.2% compared with 12.8%).

- The frequency of educational computer use tends to be 'occasional' or 'not very often'.
- A very large proportion of respondents in all categories had not used a computer for informal learning (i.e. outside of lessons, college or training). Where this had been done, it was only 'occasionally' or 'not very often'.

Use of Technologies for Teaching:

- A very large proportion of teachers (84% +) had not used audio or video materials to support teaching.
- A greater proportion of teachers in NGO schools had used audio or video materials to support teaching in comparison to teachers in Government schools.
- A very large proportion of teachers (87% +) had not used computer-based materials to support teaching.
- A much greater proportion of teachers in NGO schools had used computer-based materials to support teaching in comparison to teachers in Government schools.

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1. Introduction

1.1 Rationale for the Baseline Studies

English is taught as a compulsory subject in Bangladeshi schools, both at primary and secondary levels. While the national 'English for Today' curriculum stresses communicative use of the language, this does not appear to be effectively implemented as widespread concerns have been expressed about the ability of students to communicate in English.

English in Action, Bangladesh (EIA) aims to develop language learning and teaching over a 9-year period from May 2008. Funded by the UK Government's Department for International Development (DFID), the EIA Project's goal is to "contribute to the economic growth of Bangladesh by providing English language as a tool for better access to the world economy". The purpose of the planned interventions aimed at groups of school students, teachers and adults is to "increase significantly the number of people able to communicate in English, to levels that enable them to participate fully in economic and social activities and opportunities". Initiatives by EIA Project partners in three sectors (Primary, Secondary and Adult) will utilise a range of media technologies to:

- overcome barriers to the effective use of communicative English,
- increase motivation and access to appropriate resources, and
- enhance and extend the necessary learning and teaching practices.

A programme of research, monitoring and evaluation activities will assess the extent to which the EIA Project manages to achieve its purpose and goal. Within the first year, a set of project-wide Baseline Studies were planned and carried out in advance of the various sector interventions being launched. Each of six Baseline Studies concentrates upon separate, but related, fields for investigation in relation to developing the use of communicative English within Bangladesh. These will be repeated and extended in each of the Project's three-year phases to enable comparisons to be made to determine what improvements have occurred.

The initial Baseline Studies serve a number of purposes, primarily to:

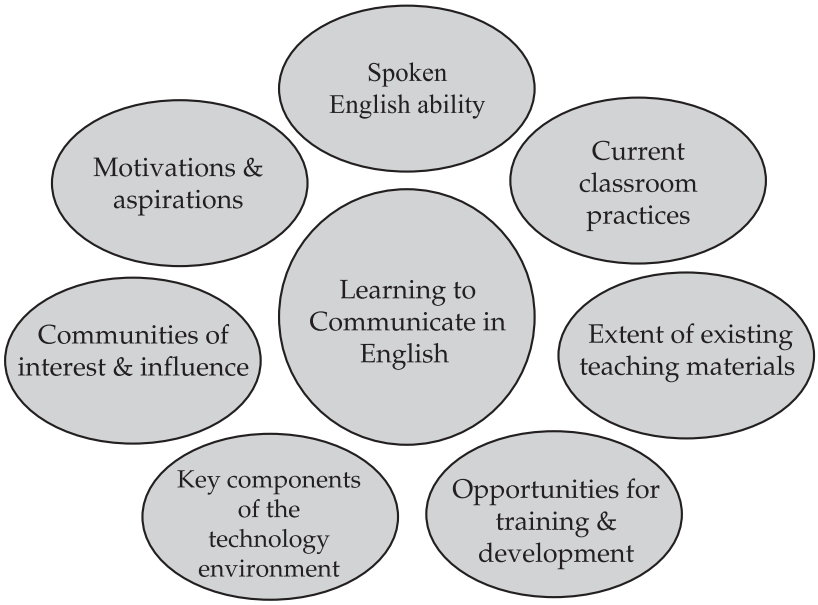
a. learn about the current situation relating to the teaching and learning of English 'on the ground' and the contexts for communicative use of English,

b. inform the outputs and activities for each sector and the project as a whole, and

c. provide a base against which outputs and activities of the project can be subsequently evaluated.

Each study provides insights and evidence relating to an element of the 'Communicative Environment' - the complex of factors that impact on the EIA Project's purpose, to "increase significantly the number of people able to communicate in English". This is illustrated in the Figure 1 below.

Figure 1: The Communicative Environment



1.2 Overview of the Education Sector in Bangladesh: NGO and Government Schools

Bangladesh is the eighth most densely populated country in the world with 150 million people. The priority need of the Government of Bangladesh (GOB) is to explore and invest in developing the nation's human resource for socioeconomic growth and well being. The Government's Five Year Plans stress the need to enhance educational opportunities in order to create a skilled labour force. Since the 1990s, the GOB has emphasized achieving Universal Primary Education in its mandate. Primary education includes children in Classes/Grades 1 to 5, usually aged from 6 to 10 years.

Secondary education covers Classes/Grades 6 to 10 (Lower Secondary includes Classes 6 to 8 and Upper Secondary Classes 9 and 10). Beyond the compulsory stage of primary education, secondary schools are made available by both the government and non-government providers. Over 97% of all secondary schools in the country are non-government and are administered by local School Management Committees. However, they receive substantial support from the government.

A large number of Non Government (NGO) schools exist in the country. These schools are often for underprivileged children in the communities and are financed by either private sector funds or donor funds. The timetables for NGO schools vary from one school to another and these do not maintain the same hours as government schools. Many run non-formal education systems with teachers that are less trained and qualified than those in government run schools. As the salaries of teachers in NGO schools tend to be lower than those paid in governmental schools, the educational qualifications of NGO teachers are seldom up to the same standard. Some come into the job with only high school certification.

Although the classroom environment is crowded and has weak infrastructure, NGO schools are believed to have a much more interactive and participatory approach to learning than government schools. Government schools have more classroom space, but also a very large number of students - sometimes ranging from 60 to 100 students in a classroom with only one teacher. In comparison, classrooms in NGO schools are often not well equipped with sufficient space, light or furniture, but the class size is much smaller with only 30-35 students in the class. There is often greater scope to use interactive teaching techniques in a NGO classroom than in a government school.

1.3 Rationale for this Baseline Study

The EIA interventions in the Primary, Secondary and Adult sectors will all utilise media technologies to achieve their aims, so it was necessary to establish the nature of the technology landscape currently existing in Bangladesh. In terms of provision, the availability and reach of broadcasting, telecommunications and computing facilities have been investigated, while surveys of school students, teachers and other adults have assessed the levels of access to technologies and familiarity with its use. Technology access and use is likely to change significantly over the life of the project and there is potential for influences external to the EIA interventions (e.g. music and films in English) to make an impact.

1.4 Background and Scope of this Baseline Study

To achieve its ultimate goal and purpose, English in Action must not concentrate solely on the metropolitan and urban areas of Bangladesh: about three-quarters of the population live and work in rural areas. In selecting the locations for fieldwork and data collection for Baseline Studies it was important to ensure an adequate representation of the rural population. However, on the basis of guidance provided, it was envisaged that in the Pilot Phase of EIA (2008-2011) the school-based interventions would not be nationwide in scope, but limited to certain areas in Dhaka and Upazilas in the central part of Bangladesh. Accordingly, data collection for the initial Baseline Studies did not aim to be fully representative of the nation as a whole, but was predominantly undertaken within the geographical area anticipated for the Pilot Phase. Negotiations with the Government after the Baseline Studies were undertaken have resulted in a modification of the geographical scope of the Pilot Phase. The implications for the Baseline research are being explored and, where appropriate, the studies are being extended.

The survey interviews were planned to take place within the geographical area in which the initial EIA Primary and Secondary interventions were expected to take place. Some NGO Primary schools were visited around Sylhet in North East Bangladesh. These were FIVBD schools and that organisation is an EIA partner. Interviews were planned to take place in Government and non-Government schools and their communities. Two phases of fieldwork were necessary in order to achieve this. In total, almost 2,900 individual interviews were undertaken for Baseline Study 6b.

1.5 Structure of this Report

The next section reports on the Research Methods (Section 2). As the data collection fieldwork was undertaken in two phases (October-November 2008 and March 2009), each of those is reported in separate substantive sections (Sections 3 and 4). Section 5 presents tables showing the combined data from the two phases of fieldwork. The English versions of survey instruments used are shown in Appendices 1 and 2.

2. Research Methods

2.1 The Population and Sample

The targets for English in Action are school students, teachers and adults in communities throughout Bangladesh. Interventions will need to involve Primary and Secondary schools supported by the Government of Bangladesh and also by NGOs as well as media-based outputs aimed primarily at adults.

To achieve its ultimate goal and purpose, English in Action must not concentrate solely on the metropolitan and urban areas of Bangladesh; about three-quarters of the population live and work in rural areas. In selecting the locations for fieldwork collection for baseline studies it was important to

ensure an adequate representation of the rural population. However, in the Pilot Phase of EIA (2008-2011) the school-based interventions will not be nationwide in scope, but limited to a range of Upazilas in parts of Dhaka and in the central part of Bangladesh. Accordingly, data collection for the initial Baseline Studies did not aim to be fully representative of the nation as a whole, but was predominantly undertaken within the geographical area of the Pilot Phase.

Approximately equal numbers of Primary and Secondary school locations were selected for data collection. The Government supports the majority of Primary schools, while the majority of Secondary schools are supported by NGOs or the local community. Account was taken of this situation in selecting the schools to be visited for data collection. [N.B. Some schools were visited around Sylhet in North East Bangladesh because insufficient NGO Primary schools were identified within the main geographical area for the Pilot Phase.]

For logistical reasons, the fieldwork for Baseline Studies 1, 2a and 6b was conducted by investigators/interviewers working concurrently in the same schools. Phase 1 of the fieldwork for those studies was undertaken in October & November 2008 in 53 NGO schools. Phase 2 of the fieldwork was undertaken in March 2009 in 84 Government schools.

2.2 Selecting the Sample for this Baseline Study

At each school visited for data collection, students from a range of different school grades/classes were selected. As far as possible, the allocation of students to each of the studies was undertaken on a random basis.

In the first phase of data collection, 5 experienced Field Investigators completed the survey instruments by conducting individual interviews with 1,180 respondents (students, teachers and adults). Data collection was undertaken over 10 working days. In the second phase, 6 experienced Field Investigators interviewed 1,702 respondents (students, teachers and adults) over 14 working days.

The number of respondents covered in this study was as follows:

	Phase 1 NGO	Phase 2 Government Schools	Total
Students	887	1,272	2,159
Teachers	187	270	457
Community Adults	106	160	266
Total	**1,180**	**1,702**	**2,882**

2.3 Development of the Survey Instrument

EIA project staff at the UK Open University developed two related survey instruments. These were very similar in content, but one was designed for school students and the other for teachers and adults (see Appendices 1 and 2). Both instruments comprised multiple-choice questions to a very large extent. These were subject to review by other project staff during their development. The consultants, Uniconsult International Ltd. (UCIL) based in Dhaka, translated the instruments into Bangla and supplied sufficient numbers of these instruments to their Field Investigators for conducting the face-to-face survey interview.

2.4 Fieldwork for the Study

The fieldwork, data analysis and initial reporting for this Baseline Study were undertaken by UCIL. Details of the Uniconsult team and their respective roles are given in Appendix 3.

For the purpose of subsequent analysis, information was recorded for each respondent in respect of gender, location and type of school (if appropriate). All the data collected was aggregated so that the reported responses could not be identified with individuals. The data was analysed to determine the frequency of responses within major groupings, i.e. male/female, primary/secondary, student/teacher/community adult, urban/rural. The two phases of fieldwork also enabled responses from Government and NGO schools to be compared.

For Phase 2, the interviews were started on 8 March 2009 and were completed on 25 March 2009.

2.5 Recruitment and Training of the Field Investigators

Experienced Field Investigators were recruited from amongst the panel of field investigators / researchers maintained by UCIL. Most of them are Masters Degree holders in various subjects. 5 experienced Field Investigators were recruited and trained on 25 October 2008 for the first phase of data collection for Baseline Study 6b. 6 Field Investigators were trained extensively in UCIL during 26-27 February 2009 for the second phase of fieldwork.

The training particularly addressed the following areas:

- Purpose and Objective of the Study;
- Detailed Methodology;
- Selection of Samples;
- Procedure for administering the instruments;
- Record keeping; and
- Other related issues.

Both teams of Investigators also attended a briefing session at the EIA Base Office in Gulshan, Dhaka on the morning of the first day of data collection.

2.6 Quality Control

To improve the quality of data collection in the field Uniconsult undertook the following activities:

- Engaged efficient survey Investigators/ Fieldworkers working with the company for several years;
- Conducted training of survey Investigators/ Fieldworkers on the specific Terms of Reference;
- Conducted initial surveys under close supervision from consultants;
- Arranged continuous supervision in the field by the Supervisors.

Like any other data collection effort, Investigators/ Fieldworkers followed a uniform set of procedures to collect data in a valid and reliable manner. Investigators/ Fieldworkers were trained in its administration, including what to say to respondents to introduce the survey and get their cooperation, ways to avoid refusals, how to ask the survey questions, how to record responses, and how to answer respondents' questions about the survey. Investigators/ Fieldworkers were thoroughly familiar with all questions and procedures before beginning.

The primary purpose of conducting a survey, of course, is to produce data that will help answer important research questions. Once collected the data is collated, organised, summarised, and described.

Data collection is a complex activity. Mistakes and missing data are inevitable. Data cleaning and

checking is thus a multi-stage process. The Investigators/ Fieldworkers reviewed their work at the end of each day. Supervisors reviewed the work of Investigators/ Fieldworkers for consistency of collected data.

The second stage of data cleaning took place at the time of data entry. In particular, the Data Entry Operators were familiar with the questionnaire. In case of any unusual responses, they sent notes to the supervisor of each team so that Investigators/ Fieldworkers could verify the recorded information. In addition, the Data Entry Operators were given time at the end of each day to run frequencies of all variables on the questionnaires. Any unusual responses were checked for data entry errors or errors by the Investigators/ Fieldworkers. At this stage, data cleaning was done by a set of rules written into SPSS.

Finally, data cleaning was done by the Statistician/Data Analyst. Again, this involved frequencies, descriptive statistics, written rules, and examination of outliers on original data, but also on calculated variables derived from the original data.

The experts calculated summary measures such as means, frequencies, standard deviations, and correlations and creating tables and graphs that illustrate important findings. Such activities were appropriate, necessary, and important.

After efficient entry, survey data were coded into a data matrix that could be analyzed by SPSS.

2.7 Data Processing

Data processing involved: (a) data checking, editing and coding of the filled-in questionnaires, and (b) data cleaning and data entry. Data entry was done in SPSS for Windows. An appropriate data cleaning and data entry program was developed to ensure error-free data.

2.8 Data Analysis

The data has been analysed taking into account the objectives of the Study specified to UCIL.

2.9 Reporting Requirements

For Phase 1, the following reports were required to be submitted to the EIA Project office in line with the Terms of Reference:

- Headline Report for Baseline 6b: This was sent to the EIA Project office in Dhaka on 19 November 2008 - electronically and in 2 hard copies.
- Full Report for Baseline 6b: Submitted to the EIA Project office in Dhaka on December 7 2008.
- For Phase 2, Uniconsult prepared and submitted the Full Report and data sets to the EIA Base Office by 30 April 2009.

3. Findings of the First Phase of Fieldwork

The first phase of fieldwork took place in October and November 2008 in 53 NGO schools. The schools covered in the fieldwork for Phase 1 are listed in Appendix 4.

3.1 Access to Technologies

3.1.1 Use of a Mobile Phone

When the respondents were asked whether they own or have of use a mobile phone, 38.6% of students, 99.5% of teachers and 76.4% of community people reported that they have and use a mobile phone (Table 3.1).

Table 3.1 : Own or have use of a mobile phone

		Yes %	No %	Don't know %	Number
Students	Boys	39.8	60.0	0.1	422
	Girls	37.5	62.5	-	464
	Urban	32.5	67.3	0.3	382
	Rural	43.3	56.7	-	504
	Primary	25.5	74.5	-	345
	Secondary	47.4	52.4	0.2	515
	Overall	38.6	61.3	0.1	886
Teachers		99.5	0.5	-	187
Community people		76.4	23.6	-	106

3.1.2 Frequency of Using a Mobile Phone for Making or Receiving Calls

The respondents who were mobile phone users were asked how often they used a phone for making or receiving calls. 26.1% of students, 51.6% of teachers and 64.2% of community people reported that they used a mobile phone quite often. Almost half of the students (46.5% overall) made or received calls occasionally (Table 3.2).

Table 3.2 : Using a mobile phone for making or receiving calls

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	24.4	47.6	28.0	164
	Girls	30.2	45.6	24.3	169
	Urban	38.7	44.5	16.8	119
	Rural	21.0	47.7	31.3	214
	Primary	44.2	47.7	8.1	86
	Secondary	21.5	47.7	30.8	237
	Overall	27.3	46.5	26.1	333
Teachers		11.3	37.1	51.6	186
Community people		11.1	24.7	64.2	81

3.1.3 Use of a Mobile Phone for Sending or Receiving Text Messages

People do not send or receive messages very often. When the respondents were asked about how often they used a mobile phone for sending or receiving messages, 51.2% of students, 42.7% of teachers and 47.3% of community people reported that they send or receive massages not very often (Table 3.3).

Table 3.3 : Using a mobile phone for sending or receiving text messages

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	46.8	44.9	8.2	158
	Girls	55.6	37.0	7.4	162
	Urban	57.4	35.7	7.0	115
	Rural	47.8	43.9	8.3	205
	Primary	64.6	31.6	3.8	79
	Secondary	47.6	43.3	9.0	233
	Overall	51.2	40.9	7.8	320
Teachers		42.7	44.9	12.4	178
Community people		47.3	37.8	14.9	74

3.1.4 Use of an Audio Player

The respondents were asked whether they owned or had use of an audio player (e.g. a cassette player or MP3 player). 56.7% of students, 67.9% of teachers and 49.1% of community people reported that they could access an audio player (Table 3.4).

Table 3.4 : Do the respondents own or have use of an audio player

		Yes %	No %	Don't know %	Number
Students	Boys	58.3	41.5	0.2	422
	Girls	55.3	44.7	-	463
	Urban	47.5	52.5	-	381
	Rural	63.7	36.1	0.2	504
	Primary	45.3	54.4	0.3	344
	Secondary	63.3	36.7	-	515
	Overall	56.7	43.2	0.1	885
Teachers		67.9	32.1	-	187
Community people		49.1	50.9	-	106

3.1.5 Using an Audio Player for Listening to Music or other Recordings

Those with access to an audio player were asked how often they listened to music or other recordings. 65.1% of students, 58.9% of teachers and 61.5% of community people reported that they occasionally used an audio player to listen to music or other recordings (Table 3.5).

Table 3.5 : Using an audio player for listening to music or other recordings

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	16.4	64.3	19.3	244
	Girls	10.2	65.7	24.0	254
	Urban	17.9	61.5	20.7	179
	Rural	10.7	67.1	22.3	319
	Primary	17.5	72.7	9.7	154
	Secondary	10.5	61.4	28.1	324
	Overall	13.3	65.1	21.7	498
Teachers		16.9	58.9	24.2	124
Community people		23.1	61.5	15.4	52

3.1.6 Use of a Radio

Respondents were asked whether they owned or had use of a radio. 50.7% of students, 57.2% of teachers and 52.8% of community people reported that they do have access to a radio (Table 3.6).

Table 3.6 : Do the respondents own or have use of a radio

		Yes %	No %	Don't know %	Number
Students	Boys	54.4	45.4	0.2	423
	Girls	47.4	52.4	0.2	462
	Urban	41.4	58.4	0.3	382
	Rural	57.9	41.9	0.2	503
	Primary	45.8	54.2	-	345
	Secondary	54.3	45.3	0.4	514
	Overall	50.7	49.0	0.2	885
Teachers		57.2	42.8	-	187
Community people		52.8	47.2	-	106

3.1.7 Listening to Radio Programmes

Respondents with access to a radio were asked how often they listened to radio programmes. 53.2% of students, 42.9% teachers and 48.2% of community people said that they occasionally listen to radio programmes (Table 3.7).

Table 3.7 : Frequency of listening to radio programmes

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	23.8	57.6	18.6	231
	Girls	32.4	48.6	18.9	222
	Urban	31.1	52.2	16.8	161
	Rural	26.4	53.8	19.9	192
	Primary	35.2	56.0	8.8	159
	Secondary	23.1	52.3	24.6	281
	Overall	28.0	53.2	18.8	453
Teachers		30.5	42.9	26.7	105
Community people		41.1	48.2	10.7	56

3.1.8 Use of a Television

Respondents were asked whether they owned or had use of a television. 83.6% of students, 95.2% of teachers and 90.5% of community people reported that they have access to a television (Table 3.8).

Table 3.8 : Do respondents have access to a television

		Yes %	No %	Don't know %	Number
Students	Boys	84.8	14.2	0.9	422
	Girls	82.5	16.6	0.9	464
	Urban	84.0	15.0	1.0	381
	Rural	83.4	15.8	0.8	505
	Primary	80.3	19.1	0.6	345
	Secondary	86.0	13.0	1.0	515
	Overall	83.6	15.5	0.9	886
Teachers		95.2	4.8	-	187
Community people		90.5	8.6	1.0	105

3.1.9 Frequency of Watching TV Programmes

The respondents with access to a television were asked how often they watched TV programmes. 57.3% of teachers, 55.2% community people but only 41.8% of students reported that they watched TV programmes quite often or frequently (Table 3.9). Overall, a slightly higher proportion of students (45.3%) watched TV programmes only 'occasionally'.

Table 3.9 : Frequency of watching TV programmes

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	14.8	47.1	38.2	359
	Girls	11.2	43.6	45.2	383
	Urban	13.8	47.5	38.8	320
	Rural	12.3	43.6	44.1	422
	Primary	14.9	52.2	33.0	276
	Secondary	11.5	41.1	47.4	445
	Overall	12.9	45.3	41.8	742
Teachers		12.9	29.8	57.3	178
Community people		17.7	27.1	55.2	96

3.1.10 Use of the Internet

Very few people have used the Internet - many did not know what it was. When the respondents were asked whether they had used Internet, only 1.6% of students, 11.2% of teachers and 6.6% of community people reported that they had (Table 3.10).

Table 3.10 : Had respondents ever used the Internet

		Yes %	No %	Don't know %	Number
Students	Boys	1.7	80.3	18.1	421
	Girls	1.5	71.9	26.6	463
	Urban	0.5	75.3	24.1	381
	Rural	2.4	76.3	21.3	503
	Primary	0.3	74.5	25.2	345
	Secondary	2.3	77.2	20.5	513
	Overall	1.6	75.9	22.5	884
Teachers		11.2	86.6	2.1	187
Community people		6.6	72.6	20.8	106

3.1.11 Frequency of Internet Use by the Respondents

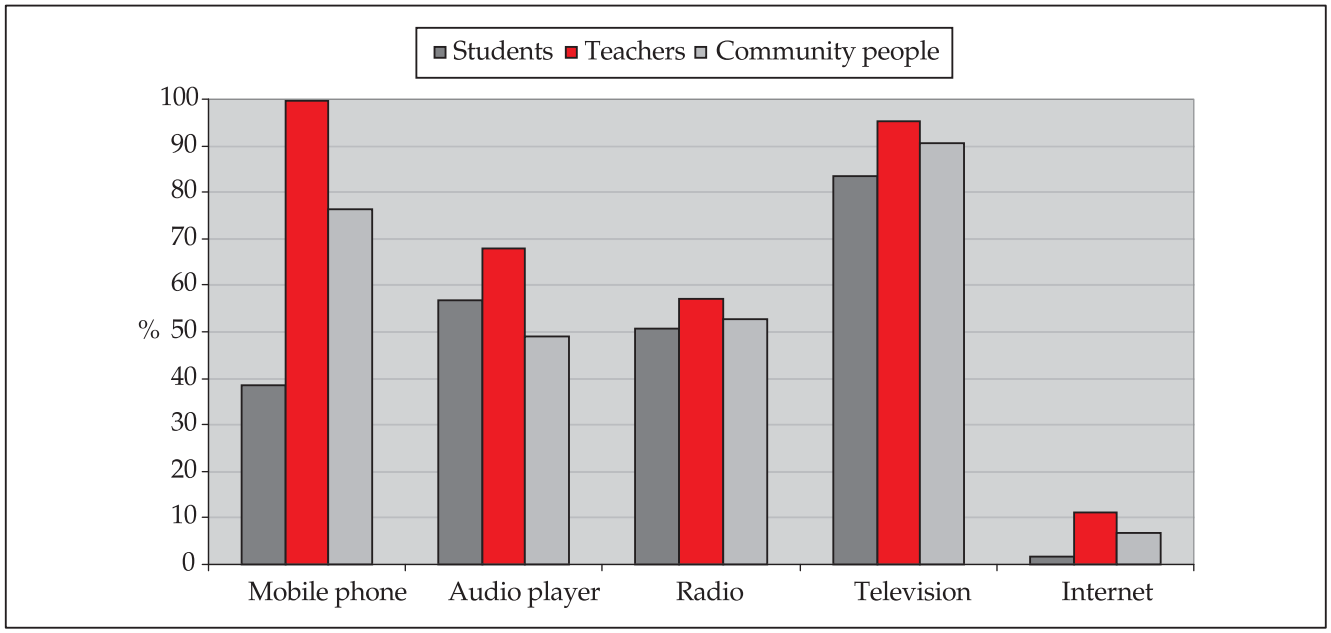
Those respondents who had used the Internet were asked as to how often they had done so - most reported 'not very often' or 'occasionally'. 54.5% of students, 53.3% of teachers and 33.3% of community people reported that they had used the Internet not very often (Table 3.11).

Table 3.11 : Frequency of Internet Use

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	42.9	57.1	-	7
	Girls	75.0	-	25.0	4
	Urban	-	-	100	1
	Rural	60.0	40.0	-	10
	Primary	-	-	-	-
	Secondary	60.0	30.0	10.0	10
	Overall	54.5	36.4	9.1	11
Teachers		53.3	26.7	20.0	15
Community people		33.3	50.0	16.7	6

Figure 2 (below) shows the extent of respondents' access to the technologies mentioned in the survey interviews (based upon data from Tables 3.1, 3.4, 3.6, 3.8 and 3.10).

Figure 2 : Respondents' access to technologies



3.2 Use of Technologies for Learning

3.2.1 Use of Audio or Video Materials in School Lessons, at College or in Training

The respondents were asked whether they had used audio or video materials in school lessons, at college or in training. Very little experience of using audio-visual materials in education or training was reported. Only 1.0% of students, 18.2% of teachers and 3.8% of community people reported that they had used audio or video materials in school lessons, at college or in training (Table 3.12).

Table 3.12 : Respondents' use of audio or video materials in school lessons, at college or in training

		Yes %	No %	Don't know %	Number
Students	Boys	1.2	98.3	0.6	464
	Girls	0.9	98.5	0.5	421
	Urban	1.0	97.9	1.0	382
	Rural	1.0	98.8	0.2	503
	Primary	-	98.8	1.2	345
	Secondary	1.8	98.1	0.2	514
	Overall	1.0	98.4	0.6	885
Teachers		18.2	81.8	-	187
Community people		3.8	94.3	1.9	106

The subject areas mentioned by the 34 teachers who answered 'Yes' to this question were 'subject based education' (30), 'watching dance/film/entertainment' (4), 'electronics' (2), 'training on teaching method' (2), 'social work/child rights' (1) and 'pathological lab activities' (1).

3.2.2 Frequency of Using Audio or Video Materials

The small number of respondents with experience of using audio or video materials was asked how often they had used them in school lessons, at college or in training. 57.1% of students, 52.9% of teachers and 75.0% of community people reported that they had used audio or video materials occasionally (Table 3.13).

Table 3.13 : Frequency of using audio or video materials

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	25.0	75.0	-	4
	Girls	66.7	33.3	-	3
	Urban	33.3	66.7	-	3
	Rural	50.0	50.0	-	4
	Primary	-	-	-	-
	Secondary	42.9	57.1	-	7
	Overall	42.9	57.1	-	7
Teachers		41.2	52.9	5.9	34
Community people		25.0	75.0	-	102

3.2.3 Use of Computer-based Materials in School Lessons, at College or in Training

Respondents were asked whether they had ever used computer-based materials in school lessons, at college or in training. Few had done so. Only 7.9% of students, 12.8% of teachers and 2.9% of community people reported that they had used computer-based materials in school lessons, at college or in training (Table 3.14).

Table 3.14 : Respondents' use of computer-based materials in school lessons, at college or in training

		Yes %	No %	Don't know %	Number
Students	Boys	8.3	91.5	0.2	423
	Girls	7.5	92.2	0.2	464
	Urban	0.5	99.2	0.3	382
	Rural	13.5	86.3	0.2	505
	Primary	-	99.7	0.3	345
	Secondary	3.6	86.2	0.2	516
	Overall	7.9	91.9	0.2	887
Teachers		12.8	87.2	-	187
Community people		2.9	97.1	-	104

The subject areas mentioned by the 35 teachers who answered 'Yes' to this question were 'learning about computers/MS Word/ MS Excel' (15), 'subject based learning' (12), 'typing' (5), 'games/songs/ entertainment' (5) and 'official work' (2).

3.2.4 Frequency of Using Computer-based Materials

Those respondents with experience of using computer-based materials were asked how often they had used them. 54.3% of students, 56.5% of teachers and 33.3% of community people reported that they had used computer-based materials occasionally (Table 3.15).

Table 3.15 : Frequency of using computer-based materials

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	31.4	62.9	5.7	35
	Girls	51.4	45.7	2.9	35
	Urban	100.0	-	-	2
	Rural	39.7	55.9	4.4	68
	Primary	-	-	-	-
	Secondary	41.4	54.3	4.3	70
	Overall	41.4	54.3	4.3	78
Teachers		39.1	56.5	4.3	23
Community people		66.7	33.3	-	103

3.2.5 Use of a Computer to Get Information or Learn about Something other than in School Lessons, at College or in Training

[N.B. Students and community adults only]

Respondents were asked whether they had ever used a computer to get information or to learn about something other than in school lessons, at college or in training. Only 13.2% of students and 17.3% of community people reported that they had used a computer to learn about something other than in school lessons, at college or in training (Table 3.16).

Table 3.16 : Respondents' use of a computer to get information or to learn about something (informal learning)

		Yes %	No %	Don't know %	Number
Students	Boys	14.2	85.6	0.2	423
	Girls	12.3	87.3	0.4	463
	Urban	9.7	90.1	0.3	382
	Rural	15.9	83.7	0.4	504
	Primary	10.7	88.4	0.9	345
	Secondary	15.0	85.0	-	515
	Overall	13.2	86.5	0.3	886
Community people		17.3	81.7	1.0	104

3.2.6 Frequency of Using a Computer to Get Information or to Learn about Something other than in School Lessons, at College or in Training

[N.B. Students and community adults only]

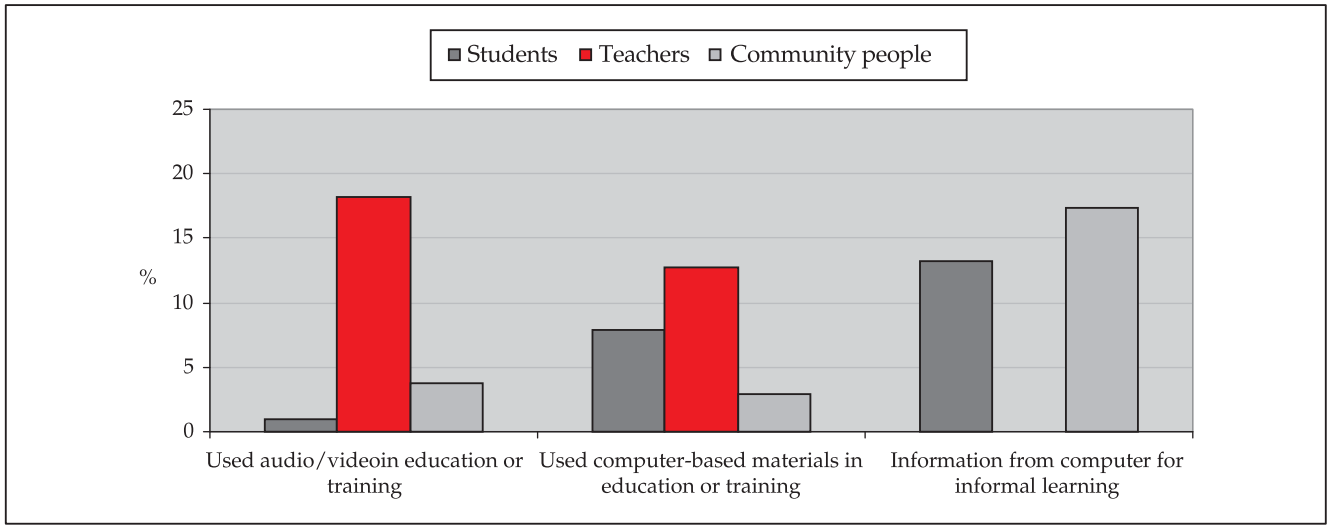
Those respondents who had used a computer to get information or to learn about something (other than in school lessons, at college or in training) were asked how often they had done so. 70.0% of students and 50.0% of community people reported that they had used a computer for this purpose occasionally (Table 3.17).

Table 3.17 : Frequency of using a computer to get information or to learn about something (informal learning)

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	28.3	68.3	3.3	60
	Girls	27.6	72.4	-	58
	Urban	25.0	75.0	-	36
	Rural	29.3	68.3	2.4	82
	Primary	18.9	81.1	-	37
	Secondary	32.1	65.4	2.6	78
	Overall	28.0	70.0	1.7	118
Community people		50.0	50.0	-	18

Figure 3 (below) shows the extent of respondents' experience of using technologies for learning - in school, at college or in training. (Based upon data from Tables 3.12, 3.14 and 3.16)

Figure 3 : Use of technologies in education & training



3.3 Use of Technologies for Teaching

A set of questions asked teachers about their use of technologies in their lessons or in support of their teaching.

3.3.1 Use of Audio or Video Materials in Lessons or to Support their Teaching

Only 10.2% of teachers had used audio or video materials in their lessons.

15.5% of teachers had used audio or video materials to get information or material to support their teaching.

Table 3.18 : Use of audio or video materials for teaching

	Yes (Number)	Yes (% of total)
Have used audio or video materials in lessons	19	10.2
Have used audio or video materials to get information or material to support teaching	29	15.5

3.3.2 Use of Computer-based Materials in Lessons or to Support their Teaching

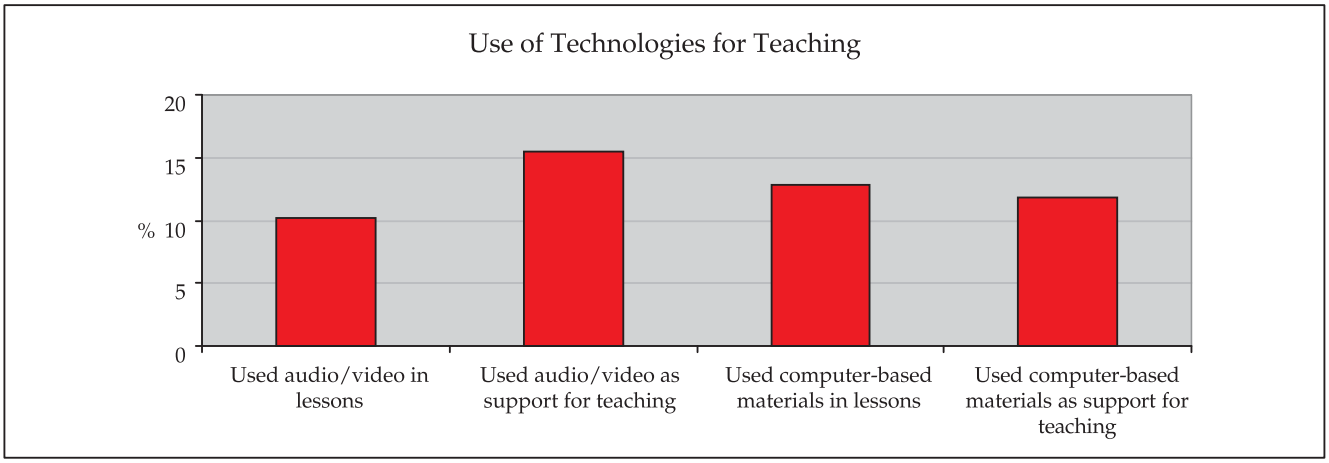
Only 12.8% of teachers had used computer-based materials in their lessons.

11.8% of teachers had used a computer to get information or material to support their teaching.

Table 3.19 : Use of computer-based materials for teaching

	Yes (Number)	Yes (% of total)
Have used computer-based materials in lessons	24	12.8
Have used computer to get information or material to support teaching	22	11.8

Figure 4 : Teachers' use of technologies



3.3.3 Observations of the Field Investigators

During the first phase of fieldwork that took place in October and November 2008 the 5 Field Investigators visited 52 NGO schools (primary and secondary) and the catchment areas of those schools. They conducted the survey / interview of 887 students, 187 teachers and 106 other adults for Baseline Study 6b. During the interviews they observed many things and their observations are given below.

Team 1 - Areas Visited: 1) Savar, 2) Dhaka

Observations:

a) The Team did not face any problem in conducting the survey/ interview.

b) All the teachers, students and community people were very co-operative.

c) The students are eager to learn and speak in English.

d) If they are given scope, they will try their best.

e) Respondents, particularly the rural children, have little access to and familiarity with the use of media or technologies in educational, work, domestic or social contexts.

f) Children of UCEP schools are working children. Hence, they do not find time to watch TV or listen to radio programmes at all.

Team 2 - Areas Visited : 1) Rupgonj, Narayanganj, 2) Monohordi, Narsingdi

Observations :

a) The students can read and write English, but they cannot speak in English since there is no practice.

b) They are very eager to learn English.

c) Most of the guardians are illiterate or have little education.

d) In BRAC schools there is only one classroom. So the classroom is very crowded.

e) Every BRAC school has only one teacher. So he or she is beset with extra pressure.

f) Mobile phones are seldom used by the teachers. There is no use of the Internet and MP3 players. Some listen to cassette players and radio programmes.

g) A convenient environment should be created so that the students and teachers can speak in English.

Team 3 - Areas Visited: 1) Mirzapur, Tangail, 2) Sylhet, Sadar

Observations:

a) All the respondents extended all out support and co-operation.

b) Students, teachers and community people are very eager to learn English.

c) There is no use of the Internet in these areas

d) Most of the community people are illiterate or have little education.

Team 4 - Areas Visited: 1) Dhaka City, 2) Monohrodi, Narsingdi

Observations:

a) Teachers and students were very co-operative.

b) All the students of UCEP schools are working children.

c) They are very eager to learn English.

d) They are better in English than students of other schools visited by the team.

e) Most of the guardians and other adults are illiterate or have little education.

f) Every BRAC school has only one teacher.

4. Findings of the Second Phase of Fieldwork

The second phase of fieldwork took place in March 2009 in 84 Government schools - 31 Primary and 53 Secondary.

4.1 Access to Technologies

4.1.1 Use of a Mobile Phone

The respondents were asked whether they owned or have use of a mobile phone. Most of the adults and about two-thirds of the students do. Overall, 66.0% of students, 98.9% of teachers and 92.8% of community people said that they have or use mobile phones (Table 4.1).

Table 4.1 : Own or have use of a mobile phone

		Yes %	No %	Number
Students	Boys	70.8	29.2	655
	Girls	60.9	31.9	617
	Urban	71.1	28.9	318
	Rural	64.4	35.6	954
	Primary	60.0	40.0	453
	Secondary	69.4	30.6	819
	Overall	66.0	34.0	1272
Teachers		98.9	1.1	261
Community people		92.8	7.2	180

4.1.2 Frequency of Using Mobile Phone for Making or Receiving Calls

Respondents were asked how often they use a mobile phone for making or receiving calls. Students used a mobile phone for calls less frequently than adults: only 8.7% of students reported that they did so quite often, while 61.4% did so occasionally. In contrast, 46.9% of teachers and 44.9% of community people reported that they did so quite often (Table 4.2).

Table 4.2 : Using a mobile phone for making or receiving calls

		Not very often %	Occasionally %	Quite often %	Number
Students	Boys	29.5	60.6	9.9	654
	Girls	30.3	62.5	7.2	376
	Urban	41.2	54.0	4.9	226
	Rural	25.7	64.2	10.1	614
	Primary	41.2	53.7	5.1	272
	Secondary	24.5	65.1	10.4	568
	Overall	29.9	61.4	8.7	840
Teachers		7.4	45.7	46.9	258
Community people		6.0	49.1	44.9	167

4.1.3 Use of a Mobile Phone for Sending and Receiving Text Messages

The respondents were asked about how often they use mobile phone for sending or receiving messages. Few people did this frequently, although adults were more likely than students to use text messages. Overall, 73.1% of students, 61.8% of teachers and 68.0% of community people said that they send or receive messages by mobile phone 'not very often' (Table 4.3).

Table 4.3 : Using a mobile phone for sending and receiving text messages

		Not very often %	Occasionally %	Quite often %	Number
Students	Boys	75.6	23.5	0.9	464
	Girls	69.9	27.9	2.1	376
	Urban	65.0	32.3	2.7	226
	Rural	76.1	23.0	1.0	614
	Primary	80.9	18.4	0.7	272
	Secondary	69.4	28.9	1.8	568
	Overall	73.1	25.5	1.4	840
Teachers		61.8	30.9	7.2	249
Community people		68.0	23.8	8.2	147

4.1.4 Use of an Audio Player

Respondents were asked if they owned or had use of an audio player, e.g. a cassette or MP3 player. 49.5% of students, 57.9% of teachers, and 50.6% of community people reported that they did have access to an audio player (Table 4.4).

Table 4.4 : Do the respondents own or use an audio player

		Yes %	No %	Don't know %	Number
Students	Boys	50.4	49.2	0.5	655
	Girls	48.6	51.4	-	617
	Urban	49.7	50.3	-	318
	Rural	49.5	50.2	0.3	954
	Primary	45.9	54.1	-	453
	Secondary	51.5	48.1	0.4	819
	Overall	49.5	50.2	0.2	1272
Teachers		57.9	42.1	-	261
Community people		50.6	49.4	-	180

4.1.5 Using an Audio Player for Listening to Music or other Recordings

The respondents who answered 'Yes' to the previous question were asked how often they used an audio player for listening to music or other recordings. In reply, 67.5% of students, 66.9% of teachers and 65.9% of community people said that they used an audio player for listening to music or other recordings occasionally (Table 4.5).

Table 4.5 : Using an audio player for listening to music or other recordings

		Not very often %	Occasionally %	Quite often %	Number
Students	Boys	13.9	66.4	19.7	330
	Girls	13.3	68.7	18.0	300
	Urban	8.2	77.2	14.6	158
	Rural	15.5	64.2	20.3	472
	Primary	11.5	73.6	14.9	208
	Secondary	14.7	64.5	20.9	422
	Overall	13.7	67.5	18.9	630
Teachers		16.6	66.9	16.6	151
Community people		19.8	65.9	14.3	91

4.1.6 Use of a Radio

When the respondents were asked whether they have use of a radio, 50.4% students, 57.1% of teachers and 42.8% of community people reported that they do (Table 4.6).

Table 4.6 : Do the respondents own or have use of a radio

		Yes %	No %	Don't know %	Number
Students	Boys	46.6	53.3	0.2	655
	Girls	54.4	45.6	-	616
	Urban	45.6	54.4	-	318
	Rural	51.9	48.0	0.1	953
	Primary	39.5	60.5	-	453
	Secondary	56.4	43.5	0.1	818
	Overall	50.4	49.6	0.1	1271
Teachers		57.1	42.9	-	261
Community people		42.8	57.2	-	180

4.1.7 Listening to Radio Programmes

The respondents with use of a radio were asked how often they listened to radio programmes; not many did so frequently. Overall, 66.7% of students, 57.0% of teachers and 63.6% of community people said that they listened to radio programmes occasionally.

Table 4.7 : Frequency of listening to radio programmes

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	22.0	64.9	13.1	305
	Girls	20.8	68.2	11.0	337
	Urban	19.3	73.1	7.6	145
	Rural	21.9	64.8	13.3	497
	Primary	20.6	72.2	7.2	180
	Secondary	21.6	64.5	13.9	462
	Overall	21.3	66.7	12.0	642
Teachers		24.8	57.0	18.1	149
Community people		24.7	63.6	11.7	103

4.1.8 Use of a Television

Most respondents have access to television: 83.4% of students, 91.2% teachers and 90.6% of community people said that they owned or have use a television (Table 4.8).

Table 4.8 : Do the respondents have access to a television

		Yes %	No %	Don't know %	Number
Students	Boys	83.1	16.8	0.2	655
	Girls	83.8	16.2	-	617
	Urban	93.7	6.3	-	318
	Rural	80.0	19.9	0.1	954
	Primary	79.9	20.1	-	453
	Secondary	85.3	14.5	0.1	819
	Overall	83.4	16.5	0.1	1272
Teachers		91.2	8.8	-	261
Community people		90.6	9.4	-	180

4.1.9 Frequency of Watching TV Programmes

Respondents with access to a television were asked how often they watch TV programmes. 44.1% of students, 52.5% of teachers and 52.8% of community people reported that they watch TV programmes quite often or frequently (Table 4.9).

Table 4.9 : Frequency of watching TV programmes

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	11.6	43.9	44.5	544
	Girls	13.0	43.3	43.7	517
	Urban	7.0	43.0	50.0	298
	Rural	14.3	43.9	41.8	763
	Primary	7.7	40.6	51.7	362
	Secondary	14.6	45.2	40.2	699
	Overall	12.3	43.6	44.1	1061
Teachers		7.6	39.9	52.5	238
Community people		11.7	35.6	52.8	163

4.1.10 Use of the Internet

Respondents were asked whether they had ever used the Internet. Very few of the respondents had any experience of doing so. Only 2.4% of students, 4.2% of teachers and 4.4% of community people said that they had used the Internet (Table 4.10).

Table 4.10 : Had respondents ever used the Internet?

		Yes %	No %	Don't know %	Number
Students	Boys	0.9	89.5	9.6	655
	Girls	4.1	90.0	6.0	617
	Urban	3.5	86.5	10.1	318
	Rural	2.1	90.8	7.1	954
	Primary	1.1	86.1	12.8	453
	Secondary	3.2	91.7	5.1	819
	Overall	2.4	89.7	7.9	1272
Teachers		4.2	94.6	1.1	261
Community people		4.4	94.4	1.1	180

4.1.11 Frequency of Internet Use by the Respondents

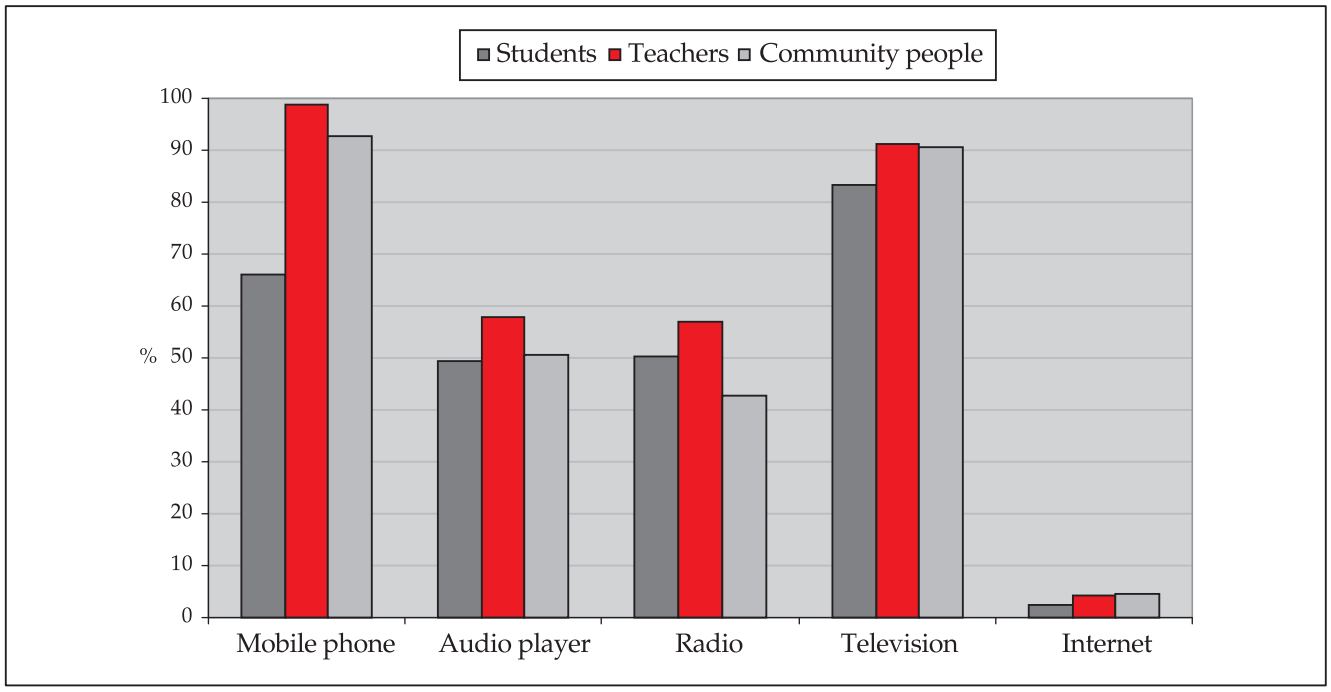
When the small number of Internet-using respondents were asked how frequently they had used it, 61.3% of students. 36.4% of teachers and 12.5% of community people said that they used the Internet occasionally (Table 4.11).

Table 4.11 : Frequency of Internet use

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	50.0	50.0	-	6
	Girls	36.0	64.0	-	25
	Urban	36.4	63.6	-	11
	Rural	40.0	60.0	-	20
	Primary	80.0	20.0	-	5
	Secondary	30.8	69.2	-	26
	Overall	38.7	61.3	-	31
Teachers		63.6	36.4	-	11
Community people		75.0	12.5	12.5	8

Figure 5 (below) shows the extent of respondents' access to the technologies mentioned in the survey interviews (based upon data from Tables 4.1, 4.4, 4.6, 4.8 and 4.10).

Figure 5 : Respondents' Access to Technologies



4.2 Use of Technologies for Learning

4.2.1 Use of Audio or Video Materials in School Lessons, at College or in Training

Very few of the respondents had any experience of using audio or video materials in education or training. In response to this question, 2.6% of students, 13.0% of teachers and 4.6% of community people said that they had used audio or video materials in school lessons, at college or in training (Table 4.12).

Table 4.12 : Respondents' use of audio or video materials in school lessons, at college or in training

		Yes %	No %	Don't know %	Number
Students	Boys	3.1	96.6	0.3	655
	Girls	2.1	97.2	0.6	617
	Urban	5.3	94.0	0.6	318
	Rural	1.7	97.9	0.4	954
	Primary	-	99.7	0.3	453
	Secondary	4.0	96.0	-	819
	Overall	2.6	96.9	0.5	1272
Teachers		13.0	86.6	0.4	261
Community people		4.6	94.4	-	180

4.2.2 Frequency of Using Audio or Video Materials

Respondents who had answered 'Yes' to the previous question were asked how often they had used audio or video materials at school or in training. 66.7% of students reported that they had done so 'not very often'; while 70.6% of teachers and 30.0% of community people reported that they had used such materials 'occasionally' at college or in training (Table 4.13).

Table 4.13 : Frequency of using audio or video materials

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	65.0	35.0	-	20
	Girls	69.2	30.8	-	13
	Urban	69.7	35.3	-	17
	Rural	68.8	31.3	-	16
	Primary	-	-	-	-
	Secondary	66.7	33.3	-	33
	Overall	66.7	33.3	-	33
Teachers		26.5	70.6	2.9	34
Community people		70.0	30.0	-	10

4.2.3 Use of Computer-based Materials in School Lessons, at College or in Training

In response to this query, 22.2% of students, and 11.7% community people reported that they had used computer based materials in school lessons, at college or in training (Table 4.14).

Table 4.14 : Use of computer-based materials in school lessons, at college or in training.

		Yes %	No %	Don't know %	Number
Students	Boys	23.4	76.2	0.5	655
	Girls	20.9	78.6	0.5	617
	Urban	23.3	76.1	0.6	318
	Rural	21.8	77.8	0.4	954
	Primary	12.4	86.3	1.3	453
	Secondary	27.6	72.4	-	819
	Overall	22.2	77.4	0.5	1272
Teachers		13.4	86.6	-	261
Community people		11.7	88.3	-	180

4.2.4 Frequency of Using Computer-based Materials

The respondents were asked as to how often they had used computer-based materials. In response, 47.9% of students and 52.4% of community people reported that they had used computer-based materials occasionally (Table 4.15).

Table 4.15 : Frequency of using computer-based materials

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	37.3	48.4	14.4	153
	Girls	42.6	47.3	10.1	129
	Urban	31.1	58.1	10.8	74
	Rural	42.8	44.2	13.0	208
	Primary	44.6	50.0	5.4	56
	Secondary	38.5	47.3	14.2	226
	Overall	39.7	47.9	12.4	282
Teachers		25.7	60.0	14.3	35
Community people		42.9	52.4	4.8	21

4.2.5 Use of a Computer to Get Information or Learn about Something other than in School Lessons, at College or in Training

[N.B. Students and community adults only]

This question was about using a computer outside of a formal educational setting to acquire information or to learn about something. Some teachers, but very few other respondents had ever done so. Only 4.3% of students and 2.2% Community People replied that they had used a computer in that way (Table 4.16).

Table 4.16 : Use of a computer to get information or learn about something (informal learning)

		Yes %	No %	Don't know %	Number
Students	Boys	4.0	96.0	-	655
	Girls	4.7	95.0	0.3	617
	Urban	5.3	94.7	-	318
	Rural	4.0	95.8	0.2	954
	Primary	0.2	99.3	0.4	453
	Secondary	6.6	93.4	-	819
	Overall	4.3	95.5	0.2	1272
Community people		2.2	97.8	-	180

4.2.6 Frequency of Using a Computer to Get Information or Learn about Something other than in School Lessons, at College or in Training

[N.B. Students and community adults only]

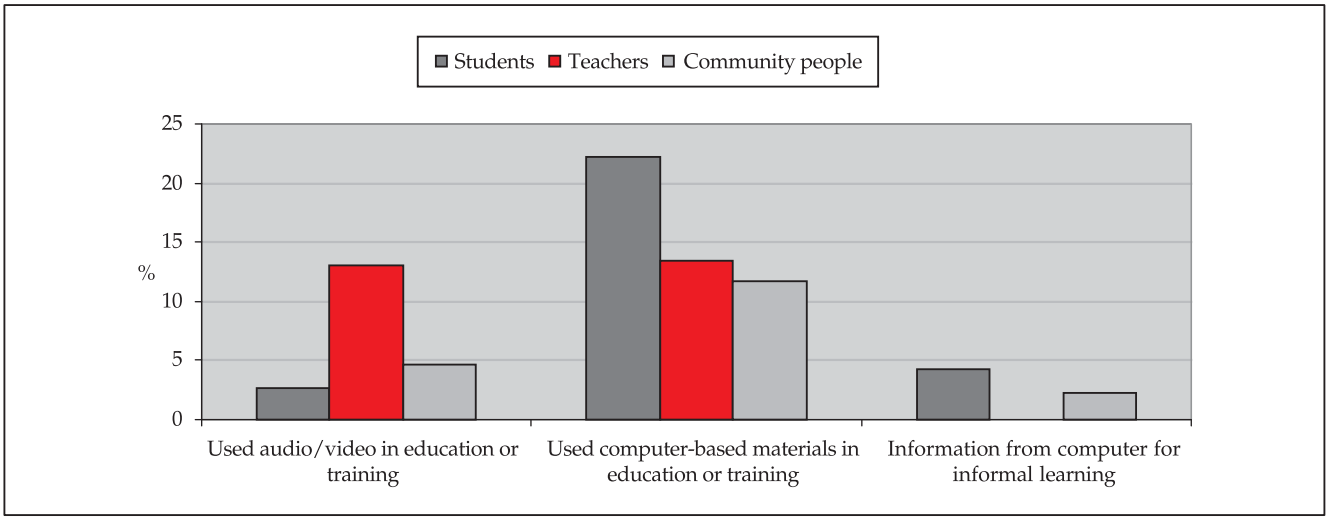
Those who had responded 'Yes' to the previous question were asked how often they had used a computer to get information or learn about something other than in a formal educational setting. In reply, 69.1% of students and 50.0% of community people said that they had used a computer for the above-mentioned purpose only occasionally (Table 4.17).

Table 4.17 : Frequency of using a computer to get information or learn about something (informal learning)

		Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	30.8	65.4	3.8	26
	Girls	24.1	72.4	3.4	29
	Urban	5.9	82.4	11.8	17
	Rural	36.8	63.2	-	38
	Primary	100.0	-	-	-
	Secondary	25.9	70.4	3.7	54
	Overall	27.3	69.1	3.6	55
Community people		25.0	50.0	25.0	4

Figure 6 (below) shows the extent of respondents' experience of using technologies for learning - in school, at college or in training. (Based upon data from Tables 4.12, 4.14 and 4.16)

Figure 6 : Use of technologies in education & training



4.3 Use of Technologies for Teaching

A set of questions asked teachers about their use of technologies in their lessons or in support of their teaching.

4.3.1 Use of Audio or Video Materials in Lessons or to Support their Teaching

Only 6.5% of teachers had used audio or video materials in their lessons.

7.3% of teachers had used audio or video materials to get information or material to support their teaching.

Table 4.18 : Use of audio or video materials for teaching

	Yes (Number)	Yes (% of total)
Have used audio or video materials in lessons	17	6.5
Have used audio or video materials to get information or material to support teaching	19	7.3

4.3.2 Use of Computer-based Materials in Lessons or to Support their Teaching

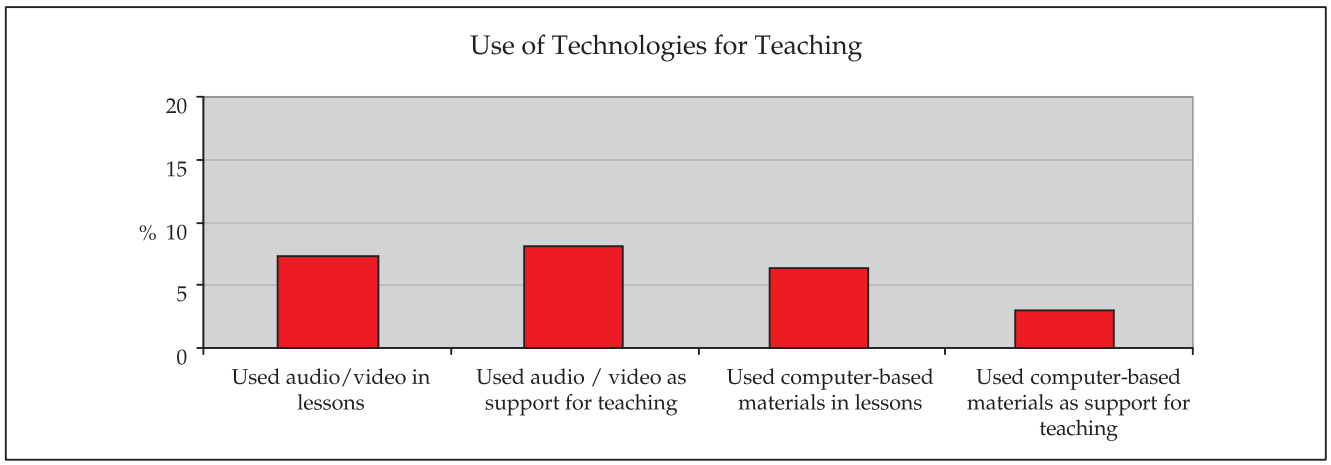
Only 5.7% of teachers had used computer-based materials in their lessons.

2.7% of teachers had used a computer to get information or material to support their teaching.

Table 4.19 : Use of computer-based materials for teaching

	Yes (Number)	Yes (% of total)
Have used computer-based materials in lessons	15	5.7
Have used computer to get information or material to support teaching	7	2.7

Figure 7 : Teachers' use of technologies



4.3.3 Observations of the Field Investigators

During the second Phase of fieldwork in March 2009, 6 Field Investigators visited 84 Government schools (31 primary schools and 53 secondary schools) and the catchment areas of these schools. They conducted the survey/interview of students, teachers and community people (guardians and SMC members) for Baseline Study 6b (Technology Environment). During the survey/interview the Field Investigators made various observations that have been analysed and categorised as follows:

- Some schools do not have electricity.
- Most of the teachers use mobile phones but cannot send or receive text messages.
- Some students listen to radio programmes through mobile phones.
- Instead of cassette players, some students prefer to use CD/MP3 players.
- Most of the teachers and students have no knowledge of using audio or video materials in teaching and learning.
- Outside the schools some students use audio-visual devices to watch films, drama and listen to music.
- IT usage is almost non-existent in most schools.
- Students who use computers are those enrolled for computer science classes in the higher grades (grades 9 & 10).
- There is a shortage of teachers teaching computer science subject in secondary schools.
- Only a few teachers can use the Internet.
- The Internet is seldom used by students.
- Most of the School Management Committee members have not heard of the Internet.

5. Combined Data for the Two Phases of Fieldwork

The following Tables (5.1 to 5.19) present the combined data from the two phases of fieldwork for Baseline Study 6b - Phase 1 in NGO schools and Phase 2 in Government schools.

5.1 Access to Technologies

Table 5.1 : Use of a mobile phone

			Yes %	No %	Don't know %	Number
Students	Boys	NGO	39.8	60.0	0.1	422
		GoB	70.8	29.2	-	655
	Girls	NGO	37.5	62.5	-	464
		GoB	60.9	31.9	-	617
	Urban	NGO	32.5	67.3	0.3	382
		GoB	71.1	28.9	-	318
	Rural	NGO	43.3	56.7	-	504
		GoB	64.4	35.6	-	954
	Primary	NGO	25.5	74.5	-	345
		GoB	60.0	40.0	-	453
	Secondary	NGO	47.4	52.4	0.2	515
		GoB	69.4	30.6	-	819
	Overall	NGO	38.6	61.3	0.1	886
		GoB	66.0	34.0	-	1272
Teachers		NGO	99.5	0.5	-	187
		GoB	98.9	1.1	-	261
Community people		Phase-1	76.4	23.6	-	106
		Phase-2	92.8	7.2	-	180

- Only a little more than one-third of the NGO students use mobile phones
- Almost twice the number of GoB students use mobile phones compared with NGO students.
- Almost 100% teachers from both GoB and NGO schools use mobile phones.

Table 5.2 : Use of a mobile phone for making or receiving calls

			Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	NGO	24.4	47.6	28.0	164
		GoB	29.5	60.6	9.9	654
	Girls	NGO	30.2	45.6	24.3	169
		GoB	30.3	62.5	7.2	376
	Urban	NGO	38.7	44.5	16.8	119
		GoB	41.2	54.0	4.9	226
	Rural	NGO	21.0	47.7	31.3	214
		GoB	25.7	64.2	10.1	614
	Primary	NGO	44.2	47.7	8.1	86
		GoB	41.2	53.78	5.1	272
	Secondary	NGO	21.5	47.7	30.8	237
		GoB	24.5	65.1	10.4	568
	Overall	NGO	27.3	46.5	26.1	333
		GoB	29.9	61.4	8.7	840
Teachers		NGO	11.3	37.1	51.6	186
		GoB	7.4	45.7	46.9	258
Community people		Phase-1	11.1	24.7	64.2	81
		Phase-2	6.0	49.1	44.9	167

- Around 50% of teachers use mobiles phones quite frequently for making or receiving calls. This practice, however, is quite infrequent among the students.

Table 5.3 : Use of a mobile phone for sending or receiving messages
[N.B. Respondents who had answered 'Yes' to the first question]

			Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	NGO	46.8	44.9	8.2	158
		GoB	75.6	23.5	0.9	464
	Girls	NGO	55.6	37.0	7.4	162
		GoB	69.9	27.9	2.1	376
	Urban	NGO	57.4	35.7	7.0	115
		GoB	65.0	32.3	2.7	226
	Rural	NGO	47.8	43.9	8.3	205
		GoB	76.1	23.0	1.0	614
	Primary	NGO	64.6	31.6	3.8	79
		GoB	80.9	18.4	0.7	272
	Secondary	NGO	47.6	43.3	9.0	233
		GoB	69.4	28.9	1.8	568
	Overall	NGO	51.2	40.9	7.8	320
		GoB	73.1	25.5	1.4	840
Teachers		NGO	42.7	44.9	12.4	178
		GoB	61.8	30.9	7.2	249
Community people		Phase-1	47.3	37.8	14.9	74
		Phase-2	68.0	23.8	8.2	

- Despite a huge level of ownership or access, the 'frequency' of mobile phone use for sending or receiving messages is quite low, particularly among students.
- Mobile phones are used more frequently for making and receiving calls rather than for sending and receiving text messages (Tables 5.2 and 5.3 combined).

Table 5.4 : Use of an audio player

			Yes %	No %	Don't know %	Number
Students	Boys	NGO	58.3	41.5	0.2	422
		GoB	50.4	49.2	0.5	655
	Girls	NGO	55.3	44.7	-	463
		GoB	48.6	51.4	-	617
	Urban	NGO	47.5	52.5	-	381
		GoB	49.7	50.3	-	318
	Rural	NGO	63.7	36.1	0.2	504
		GoB	49.5	50.2	0.3	954
	Primary	NGO	45.3	54.4	0.3	344
		GoB	45.9	54.1	-	453
	Secondary	NGO	63.3	36.7	-	515
		GoB	51.5	48.1	0.4	819
	Overall	NGO	56.7	43.2	0.1	885
		GoB	49.5	50.2	0.2	1272
Teachers		NGO	67.9	32.1	-	187
		GoB	57.9	42.1	-	261
Community people		Phase-1	49.1	50.9	-	106
		Phase-2	50.6	49.4	-	180

- About 60% NGO students own or have use of an audio player. In rural areas, the ownership is even higher (about 64%).
- Almost two-thirds of teachers own or have use of an audio player.

Table 5.5 : Frequency of using an audio player for listening to music or other recordings
[N.B. Respondents who had answered 'Yes' to the previous question]

			Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	NGO	16.4	64.3	19.3	244
		GoB	13.9	66.4	19.7	330
	Girls	NGO	10.2	65.7	24.0	254
		GoB	13.3	68.7	18.0	300
	Urban	NGO	17.9	61.5	20.7	179
		GoB	8.2	77.2	14.6	158
	Rural	NGO	10.7	67.1	22.3	319
		GoB	15.5	64.2	20.3	472
	Primary	NGO	17.5	72.7	9.7	154
		GoB	11.5	73.6	14.9	208
	Secondary	NGO	10.5	61.4	28.1	324
		GoB	14.7	64.5	20.9	422
	Overall	NGO	13.3	65.1	21.7	498
		GoB	13.7	67.5	18.9	630
Teachers		NGO	16.9	58.9	24.2	124
		GoB	16.6	66.9	16.6	151
Community people		Phase-1	23.1	61.5	15.4	52
		Phase-2	19.8	65.9	14.3	91

- Despite the high level of ownership or access, the frequency of using audio players is mainly 'occasional' across all groups.

Table 5.6 : Use of a Radio

			Yes %	No %	Don't know %	Number
Students	Boys	NGO	54.4	45.4	0.2	423
		GoB	46.6	53.3	0.2	655
	Girls	NGO	47.4	52.4	0.2	462
		GoB	54.4	45.6	-	616
	Urban	NGO	41.4	58.4	0.3	382
		GoB	45.6	54.4	-	318
	Rural	NGO	57.9	41.9	0.2	503
		GoB	51.9	48.0	0.1	953
	Primary	NGO	45.8	54.2	-	345
		GoB	39.5	60.5	-	453
	Secondary	NGO	54.3	45.3	0.4	514
		GoB	56.4	43.5	0.1	818
	Overall	NGO	50.7	49.0	0.2	885
		GoB	50.4	49.6	0.1	1271
Teachers		NGO	57.2	42.8	-	187
		GoB	57.1	42.9	-	261
Community people		Phase-1	52.8	47.2	-	106
		Phase-2	42.8	57.2	-	180

- Around 45-50% respondents across all groups have access to a radio. The level of access is slightly higher in rural locations than in urban areas.

Table 5.7 : Frequency of listening to radio programmes
[N.B. Respondents who had answered 'Yes' to the previous question]

			Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	NGO	23.8	57.6	18.6	231
		GoB	22.0	64.9	13.1	305
	Girls	NGO	32.4	48.6	18.9	
		GoB	20.8	68.2	11.0	337
	Urban	NGO	31.1	52.2	16.8	161
		GoB	19.3	73.1	7.6	145
	Rural	NGO	26.4	53.8	19.9	192
		GoB	21.9	64.8	13.3	497
	Primary	NGO	35.2	56.0	8.8	159
		GoB	20.6	72.2	7.2	180
	Secondary	NGO	23.1	52.3	24.6	281
		GoB	21.6	64.5	13.9	462
	Overall	NGO	28.0	53.2	18.8	453
		GoB	21.3	66.7	12.0	642
Teachers		NGO	30.5	42.9	26.7	105
		GoB	24.8	57.0	18.1	149
Community people		Phase-1	41.1	48.2	10.7	56
		Phase-2	24.7	63.6	11.7	103

- Frequency of using radio is mainly 'occasional' or 'not very often'.

Table 5.8 : Use of a Television

			Yes %	No %	Don't know %	Number
Students	Boys	NGO	84.8	14.2	0.9	422
		GoB	83.1	16.8	0.2	655
	Girls	NGO	82.5	16.6	0.9	464
		GoB	83.8	16.2	-	617
	Urban	NGO	84.0	15.0	1.0	381
		GoB	93.7	6.3	-	318
	Rural	NGO	83.4	15.8	0.8	505
		GoB	80.0	19.9	0.1	954
	Primary	NGO	80.3	19.1	0.6	345
		GoB	79.9	20.1	-	453
	Secondary	NGO	86.0	13.0	1.0	515
		GoB	85.3	14.5	0.1	819
	Overall	NGO	83.6	15.5	0.9	886
		GoB	83.4	16.5	0.1	1272
Teachers		NGO	95.2	4.8	-	187
		GoB	91.2	8.8	-	261
Community people		Phase-1	90.5	8.6	1.0	105
		Phase-2	90.6	9.4	-	180

- More than 80 to 90% of the respondents had access to a television.

Table 5.9 : Frequency of watching TV programmes
[N.B. Respondents who had answered 'Yes' to the previous question]

			Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	NGO	14.8	47.1	38.2	359
		GoB	11.6	43.9	44.5	544
	Girls	NGO	11.2	43.6	45.2	383
		GoB	13.0	43.3	43.7	517
	Urban	NGO	13.8	47.5	38.8	320
		GoB	7.0	43.0	50.0	298
	Rural	NGO	12.3	43.6	44.1	422
		GoB	14.3	43.9	41.8	763
	Primary	NGO	14.9	52.2	33.0	276
		GoB	7.7	40.6	51.7	362
	Secondary	NGO	11.5	41.1	47.4	445
		GoB	14.6	45.2	40.2	699
	Overall	NGO	12.9	45.3	41.8	742
		GoB	12.3	43.6	44.1	1061
Teachers		NGO	12.9	29.8	57.3	178
		GoB	7.6	39.9	52.5	238
Community people		Phase-1	17.7	27.1	55.2	96
		Phase-2	11.7	35.6	52.8	163

- The frequency of watching TV programmes is mainly quite high: Over 50% of adults and 40% of students reported watching 'quite often or frequently'. This may be a reason why the frequency of listening to radio programmes is low (Table 3.7).

Table 5.10 : Use of the Internet

			Yes %	No %	Don't know %	Number
Students	Boys	NGO	1.7	80.3	18.1	421
		GoB	0.9	89.5	9.6	655
	Girls	NGO	1.5	71.9	26.6	463
		GoB	4.1	90.0	6.0	617
	Urban	NGO	0.5	75.3	24.1	381
		GoB	3.5	86.5	10.1	318
	Rural	NGO	2.4	76.3	21.3	503
		GoB	2.1	90.8	7.1	954
	Primary	NGO	0.3	74.5	25.2	345
		GoB	1.1	86.1	12.8	453
	Secondary	NGO	2.3	77.2	20.5	513
		GoB	3.2	91.7	5.1	819
	Overall	NGO	1.6	75.9	22.5	884
		GoB	2.4	89.7	7.9	1272
Teachers		NGO	11.2	86.6	2.1	187
		GoB	4.2	94.6	1.1	261
Community people		Phase-1	6.6	72.6	20.8	106
		Phase-2	4.4	94.4	1.1	180

- Internet use is low, in particular among students.
- Internet use is higher among teachers in comparison to their students.
- The level of Internet use is considerably higher among the NGO teachers than the GoB teachers.

Table 5.11 : Frequency of Internet use by the respondents
[N.B. Respondents who had answered 'Yes' to the previous question]

			Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	NGO	42.9	57.1	-	7
		GoB	50.0	50.0	-	6
	Girls	NGO	75.0	-	25.0	4
		GoB	36.0	64.0	-	25
	Urban	NGO	-	-	100	1
		GoB	36.4	63.6	-	11
	Rural	NGO	60.0	40.0	-	10
		GoB	40.0	60.0	-	20
	Primary	NGO	-	-	-	-
		GoB	80.0	20.0	-	5
	Secondary	NGO	60.0	30.0	10.0	10
		GoB	30.8	69.2	-	26
	Overall	NGO	54.5	36.4	9.1	11
		GoB	38.7	61.3	-	31
Teachers		NGO	53.3	26.7	20.0	15
		GoB	63.6	36.4	-	11
Community people		Phase-1	33.3	50.0	16.7	6
		Phase-2	75.0	12.5	12.5	8

- The frequency of Internet use is quite low across all respondent categories.
- NGO students use the Internet more frequently in comparison to the GoB counterparts.
- NGO teachers use the Internet more frequently than their GoB counterparts.

5.2 Use of Technologies for Learning

Table 5.12 : Use of audio or video materials for learning in school lessons, at college or in training

			Yes %	No %	Don't know %	Number
Students	Boys	NGO	1.2	98.3	0.6	464
		GoB	3.1	96.6	0.3	655
	Girls	NGO	0.9	98.5	0.5	421
		GoB	2.1	97.2	0.6	617
	Urban	NGO	1.0	97.9	1.0	382
		GoB	5.3	94.0	0.6	318
	Rural	NGO	1.0	98.8	0.2	503
		GoB	1.7	97.9	0.4	954
	Primary	NGO	-	98.8	1.2	345
		GoB	-	99.7	1.3	453
	Secondary	NGO	1.8	98.1	0.2	514
		GoB	4.0	96.0	-	819
	Overall	NGO	1.0	98.4	0.6	885
		GoB	2.6	96.9	0.5	1272
Teachers		NGO	18.2	81.8	-	187
		GoB	13.0	86.6	0.4	261
Community people		Phase-1	3.8	94.3	1.9	106
		Phase-2	4.6	94.4	-	180

- Between 80% and 100% of the respondents had never experienced the use of audio or video materials in their learning.

Table 5.13 : Frequency of use of audio or video materials for learning
[N.B. Respondents who had answered 'Yes' to the previous question]

			Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	NGO	25.0	75.0	-	4
		GoB	65.0	35.0	-	20
	Girls	NGO	66.7	33.3	-	3
		GoB	69.2	30.8	-	13
	Urban	NGO	33.3	66.7	-	3
		GoB	69.7	35.3	-	17
	Rural	NGO	50.0	50.0	-	4
		GoB	68.8	31.3	-	16
	Primary	NGO	-	-	-	-
		GoB	-	-	-	-
	Secondary	NGO	42.9	57.1	-	7
		GoB	66.7	33.3	-	33
	Overall	NGO	42.9	57.1	-	880
		GoB	66.7	33.3	-	33
Teachers		NGO	41.2	52.9	5.9	34
		GoB	26.5	70.6	2.9	34
Community people		Phase-1	25.0	75.0	-	102
		Phase-2	26.5	70.6	2.9	34

- Those who had experienced the use of audio or video materials as learners had done so 'occasionally' or 'not very often'.

Table 5.14 : Use of computer-based materials in school lessons, at college or in training

			Yes %	No %	Don't know %	Number
Students	Boys	NGO	8.3	91.5	0.2	423
		GoB	23.4	76.2	0.5	655
	Girls	NGO	7.5	92.2	0.2	464
		GoB	20.9	78.6	0.5	617
	Urban	NGO	0.5	99.2	0.3	382
		GoB	23.3	76.1	0.6	318
	Rural	NGO	13.5	86.3	0.2	505
		GoB	21.8	77.8	0.4	954
	Primary	NGO	-	99.7	0.3	345
		GoB	12.4	86.3	1.3	453
	Secondary	NGO	3.6	86.2	0.2	516
		GoB	27.6	72.4	-	819
	Overall	NGO	7.9	91.9	0.2	887
		GoB	22.2	77.4	0.5	1272
Teachers		NGO	12.8	87.2	-	187
		GoB	Not reported	Not reported	Not reported	Not reported
Community people		Phase-1	2.9	97.1	-	104
		Phase-2	11.7	88.3	-	180

- A very large proportion of respondents in all categories had not used a computer for learning in a formal context.
- Almost three times as many students in GoB schools (22%) used computers compared with NGO students.

Table 5.15 : Frequency of using computer-based materials
[N.B. Respondents who had answered 'Yes' to the previous question]

			Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	NGO	31.4	62.9	5.7	35
		GoB	37.3	48.4	14.4	153
	Girls	NGO	51.4	45.7	2.9	35
		GoB	42.6	47.3	10.1	129
	Urban	NGO	100.0	-	-	2
		GoB	31.1	58.1	10.8	74
	Rural	NGO	39.7	55.9	4.4	68
		GoB	42.8	44.2	13.0	208
	Primary	NGO	-	-	-	-
		GoB	44.6	50.0	5.4	56
	Secondary	NGO	41.4	54.3	4.3	70
		GoB	38.5	47.3	14.2	226
	Overall	NGO	41.4	54.3	4.3	78
		GoB	39.7	47.9	12.4	282
Teachers		NGO	39.1	56.5	4.3	23
		GoB	Not reported	Not reported	Not reported	Not reported
Community people		Phase-1	66.7	33.3	-	103
		Phase-2	42.9	52.4	4.8	21

- The frequency of computer use tends to be 'occasional' or 'not very often'.

5.16 : Use of a computer to get information or learn about something (other than in school lessons, at college or in training)

			Yes %	No %	Don't know %	Number
Students	Boys	NGO	14.2	85.6	0.2	423
		GoB	4.0	96.0	-	655
	Girls	NGO	12.3	87.3	0.4	463
		GoB	4.7	95.0	0.3	617
	Urban	NGO	9.7	90.1	0.3	382
		GoB	5.3	94.7	-	318
	Rural	NGO	15.9	83.7	0.4	504
		GoB	4.0	95.8	0.2	954
	Primary	NGO	10.7	88.4	0.9	345
		GoB	0.2	99.3	0.4	453
	Secondary	NGO	15.0	85.0	-	515
		GoB	6.6	93.4	-	819
	Overall	NGO	13.2	86.5	0.3	886
		GoB	4.3	95.5	0.2	1272
Teachers		NGO	Not reported	Not reported	Not reported	Not reported
		GoB	13.4	86.6	-	261
Community people		Phase-1	17.3	81.7	1.0	104
		Phase-2	2.2	97.8	-	180

- A very large proportion of respondents in all categories had not used a computer for informal learning.
- Almost three times as many students in NGO schools had used a computer for non-formal learning in comparison to students in GoB schools.

Table 5.17 : Frequency of using a computer to get information or learn about something (other than in school lessons, at college or in training)

[N.B. Respondents who had answered 'Yes' to the previous question]

			Not very often %	Occasionally %	Quite often/ frequently %	Number
Students	Boys	NGO	28.3	68.3	3.3	60
		GoB	30.8	65.4	3.8	26
	Girls	NGO	27.6	72.4	-	58
		GoB	24.1	72.4	3.4	29
	Urban	NGO	25.0	75.0	-	36
		GoB	5.9	82.4	11.8	17
	Rural	NGO	29.3	68.3	2.4	82
		GoB	36.8	63.2	-	38
	Primary	NGO	18.9	81.1	-	37
		GoB	100.0	-	-	-
	Secondary	NGO	32.1	65.4	2.6	78
		GoB	25.9	70.4	3.7	54
	Overall	NGO	28.0	70.0	1.7	118
		GoB	27.3	69.1	3.6	55
Teachers		NGO	Not reported	Not reported	Not reported	Not reported
		GoB	25.7	60.0	14.3	35
Community people		Phase-1	50.0	50.0	-	18
		Phase-2	25.0	50.0	25.0	4

- The frequency of computer use for non-formal learning is quite low. Across almost every category the majority response was 'occasionally'.

5.3 Use of Technologies for Teaching

[N.B. All respondents are teachers]

Table 5.18 : Use of audio or video materials for teaching

		Yes (Number)	Yes (% of total)
Have used audio or video materials in lessons	NGO	19	10.2
	GoB	17	6.5
Have used audio or video materials to get information or material to support teaching	NGO	29	15.5
	GoB	19	7.3

- A very large proportion of teachers had not used audio or video materials to support teaching.
- A greater proportion of teachers in NGO schools had used audio or video materials to support teaching in comparison to teachers in GoB schools.

Table 5.19 : Use of computer-based materials for teaching

		Yes (Number)	Yes (% of total)
Have used computer-based materials in lessons	NGO	24	12.8
	GoB	15	5.7
Have used a computer to get information or material to support teaching	NGO	22	11.8
	GoB	7	2.7

- A very large proportion of teachers had not used computer-based materials to support teaching.
- A much greater proportion of teachers in NGO schools had used computer-based materials to support teaching in comparison to teachers in GoB schools.

6. Acknowledgements

We would like to acknowledge with gratitude the contributions of the many people who helped this Baseline Study to be carried out. In particular, we would like to thank :

- Staff of the EIA Base Office in Dhaka who undertook the selection of schools in which the survey interviews were undertaken, and those who made all the practical arrangements for the school visits/fieldwork;
- The Headteacher, teachers and students at all of the schools visited for the fieldwork for the study;
- Central Staff and Field Investigators of Uniconsult International Ltd. (UCIL) in Dhaka who undertook the data collection, data entry, processing, analysis and initial reporting for this baseline study.

7. Appendices

Appendix 1 - Questionnaire 6b for School Students and Community Adults

Location (and school if appropriate) :
Age :
Gender : **Male/Female**
Occupation (if appropriate)

Familiarity with using media and ICT

1. Access to equipment

Do you own or do you have use of a mobile phone?	Yes	No	Don't know
If yes, how often do you use it for making or receiving calls?	Not very often	Occasionally	Quite often/ Frequently
… and how often do you use it for sending or receiving messages?	Not very often	Occasionally	Quite often/ Frequently
Do you own or have use of an audio player? (e.g. cassette player or MP3 player)	Yes	No	Don't know
If yes, how often do you use it for listening to music or other recordings?	Not very often	Occasionally	Quite often/ Frequently
Do you own or do you have use of a radio?	Yes	No	Don't know
If yes, how often do you use it for listening to radio programmes?	Not very often	Occasionally	Quite often/ Frequently
Do you own or do you have use of a television?	Yes	No	Don't know
If yes, how often do you use it for watching TV programmes?	Not very often	Occasionally	Quite often/ Frequently
Have you ever used the Internet (e.g. for sending/receiving e-mails; looking for information on the World Wide Web, etc.)?	Yes	No	Don't know
If yes, please describe what you have used it for			
If yes, how often have you used the Internet?	Not very often	Occasionally	Quite often/ Frequently

2. Resources for learning

Have you ever used audio or video materials in school lessons, at college or in training?	Yes	No	Don't know
If yes, how often?	Not very often	Occasionally	Quite often/ Frequently
If yes, for what subject?			

Have you ever used audio or video materials to get information or learn about something other than in school lessons, at college or in training?	Yes	No	Don't know
If yes, how often?	Not very often	Occasionally	Quite often/ Frequently
If yes, for what subject?			
Have you ever used computer-based materials in school lessons, at college or in training?	Yes	No	Don't know
If yes, how often?	Not very often	Occasionally	Quite often/ Frequently
If yes, for what subject?			
Have you ever used a computer to get information or learn about something other than in school lessons, at college or in training?	Yes	No	Don't know
If yes, how often?	Not very often	Occasionally	Quite often/ Frequently
If yes, for what subject?			

Thank you very much for your co-operation.

Appendix 2 - Questionnaire 6b for Teachers

TEACHERS

Location and school :
Current age :
Gender : Male/Female
Subject(s) You Teach :
Age when you completed full-time education :

Familiarity with using media and ICT

1. Access to equipment

Do you own or do you have use of a mobile phone?	Yes	No	Don't know
If yes, how often do you use it for making or receiving calls?	Not very often	Occasionally	Quite often/ Frequently
… and how often do you use it for sending or receiving messages?	Not very often	Occasionally	Quite often/ Frequently
Do you own or have use of an audio player? (e.g. cassette player or MP3 player)	Yes	No	Don't know
If yes, how often do you use it for listening to music or other recordings?	Not very often	Occasionally	Quite often/ Frequently
Do you own or do you have use of a radio?	Yes	No	Don't know
If yes, how often do you use it for listening to radio programmes?	Not very often	Occasionally	Quite often / Frequently
Do you own or do you have use of a television?	Yes	No	Don't know
If yes, how often do you use it for watching TV programmes?	Not very often	Occasionally	Quite often/ Frequently
Have you ever used the Internet (e.g. for sending/receiving e-mails; looking for information on the World Wide Web, etc.)?	Yes	No	Don't know
If yes, please describe what you have used it for			
If yes, how often have you used the Internet?	Not very often	Occasionally	Quite often/ Frequently

2. Resources for your own learning

As a learner have you ever used audio or video materials in school, at college or in training?	Yes	No	Don't know
If yes, how often?	Not very often	Occasionally	Quite often/ Frequently
If yes, for what subject(s)?			
As a learner have you ever used computer-based materials in school, at college or in training?	Yes	No	Don't know
If yes, how often?	Not very often	Occasionally	Quite often/ Frequently
If yes, for what subject(s)?			

3. Resources for teaching

As a teacher have you ever used audio or video materials in your lessons?	Yes	No	Don't know
If yes, how often?	Not very often	Occasionally	Quite often/ Frequently
If yes, for what subject(s)?			
As a teacher have you ever used audio or video materials to get information or material to support you in your teaching?	Yes	No	Don't know
If yes, how often?	Not very often	Occasionally	Quite often/ Frequently
If yes, for what subject?			
As a teacher have you ever used computer-based materials in your lessons?	Yes	No	Don't know
If yes, how often?	Not very often	Occasionally	Quite often/ Frequently
If yes, for what subject(s)?			
As a teacher have you ever used a computer to get information or material to support your teaching?	Yes	No	Don't know
If yes, how often?	Not very often	Occasionally	Quite often/ Frequently
If yes, for what subject(s)?			

Thank you very much for your co-operation.

Appendix 3 - Uniconsult Study Team Involved and their Respective Roles

Given below are activities performed by the Team Members in Conducting the Study:

1) Dr. Md. Lutfur Rahman (Team Leader / Evaluation Expert)

The Team Leader provided leaderships to other team members and coordinated their activities in conducting the baseline studies. Overall he was responsible for the following activities:

a) To collect EIA project related documents from the project authority;

b) To review the collected documents;

c) To translate the data collection instruments in English supplied by the project authority into Bangla;

d) To conduct training of the Field Investigators and Supervisors;

e) To monitor the collection of information and data from fields;

f) To oversee the data editing, data cleaning and data entry processes;

g) To analyse the data;

h) To prepare the Headline Report;

i) To submit the Headline Report to project authority;

j) To prepare the Final Report with incorporation of comments and suggestions of the project authority on the Headline Report;

k) To submit the Final Report to the Project authority;

l) To maintain liaison with the project authority in conducting the study smoothly.

2) Mr. Md. Mokhlesur Rahman (Statistical Expert / Data Analyst)

The TOR of the Statistical Expert included:

a) To assist the Team Leader in collecting necessary documents relating to the EIA project from the project authority;

b) To assist in reviewing the collected documents;

c) To assist the Team Leader in translating the survey instruments into Bangla;

d) To assist in conducting training of the Field Investigators and Supervisors

e) To monitor collection of information and data from fields;

f) To oversee the data editing, data cleaning and data entry operations;

g) To analyse the data;

h) To prepare necessary tables and graphs of collected data;

i) To assist the Team Leader in preparing the Headline Report;

j) To assist the Team Leader in preparing the Final Report.

3) Supervisors

For Phase 1 Fieldwork (2008)

a) Mr. Asad Hossain

The TOR of Mr. Asad Hossain included:

- To provide support services to the consultants in conducting the study;
- To monitor and supervise data collection by the field investigators from fields;
- To assist in data editing and data cleaning.

b) Mr. Shairul Kalam

The TOR of Mr. Shairul Kalam included:

- To provide support services to the consultants in conducting the study;
- To monitor and supervise data collection by the field investigators from fields;
- To assist in data editing and data cleaning.

For Phase 2 Fieldwork (2009)

c) Mr. Md. Enam Ibne Kader

The TOR of Mr. Enam Ibne Kader included:

- To provide support services to the consultants in conducting the study;
- To monitor and supervise data collection by the field investigators from fields;
- To assist in data editing and data cleaning.

d) Mr. Mostak Ahmed

The TOR of Mr. Mostak Ahmed included:

- To provide support services to the consultants in conducting the study;
- To monitor and supervise data collection by the field investigators from fields;
- To assist in data editing and data cleaning.

Appendix 4 - List of Schools Surveyed in Phase 1 Fieldwork

Sl No	District	Upazila/Thana	Name of School
1	Savar	Bank Town	Agrani High School
2	Savar	Birulia	Akran High School
3	Savar	Bokterpur	Bokterpur-3 BRAC School
4	Savar	GhoraPir mazar	Alhaj Jafar Bepary High School
5	Savar	Raajfulbaria	Mohammad Ali High School
6	Dhaka	Bangsal	UCEP Majed Sarder School
7	Dhaka	Ramna	UCEP Segun Bagicha School
8	Dhaka	Lalbag	UCEP Haji Shafiullah School
9	Dhaka	Badda	UCEP Haji Sikander School
10	Gazipur	Enayetpur	UCEP Kashimpur School
11	Dhaka	Moghbazar	UCEP Tide Board Field School
12	Dhaka	Lalbagh	UCEP Khrister Co-operative School
13	Narayanganj	Rupganj	Purbogram Bohumuki High School
14	Narayanganj	Rupganj	Kaji A. Hamid High School
15	Narayanganj	Rupganj	Tarail BRAC School
16	Narayanganj	Rupganj	Golakandail Mojibur Rahman Bhuiyan High School
17	Narayanganj	Rupganj	Haji Nuruddin High School
18	Narayanganj	Rupganj	Kanchan Varot Chandra High School
19	Narayanganj	Rupganj	Purbogram M.L High School
20	Tangail	Mirzapur	Deohata A.J High School
21	Tangail	Mirzapur	Janata High School
22	Tangail	Mirzapur	Court Bohuria BRAC School
23	Tangail	Mirzapur	Hat Fatehpur High School
24	Tangail	Mirzapur	Rashid Deohata High School
25	Dhaka	Mirpur	UCEP Ismail School
26	Dhaka	Dhanmondi	Alhaj A. Hashem Khan UCEP School
27	Dhaka	Mohammadpur	UCEP Mohammadpur City Corporation School
28	Dhaka	Hajaribag	UCEP Gonoktuli City Corporation School
29	Dhaka	Nolgola	UCEP Nolgola School
30	Narsinghdhi	Monohordi	Tokerkanda D.M.K High School
31	Narsinghdhi	Monohordi	Sagardi Girls High School
32	Narsinghdhi	Monohordi	BRAC School Chairman Dalia
33	Narsinghdhi	Monohordi	Madhusal M.L High School
34	Narsinghdhi	Monohordi	Chandan Bari M.A Pilot High School
35	Sylhet	Sadar	Jogirgacha Primary School
36	Sylhet	Sadar	Mokamer Gul Primary School
37	Sylhet	Sadar	Lusain Primary School
38	Sylhet	Sadar	Tikar Para Primary School
39	Sylhet	Bishwanath	K.R. Madhabpur Primary School
40	Dhaka	Jatrabari	UCEP City Pally Corporation School
41	Dhaka	Jatrabari	UECP Tamijuddin School
42	Dhaka	Postogola	UCEP R.K Choudhury School
43	Gazipur	Fulbaria	Jathalia Majidchala High School
44	Gazipur	Kaliyakour	M.M.P High School
45	Gazipur	Kaliyakour	Akkel Ali High School
46	Gazipur	Kaliyakour	Kaliyakor BRAC School
47	Gazipur	Kaliyakour	Chapair B.B. High School
48	Sylhet	Sadar	Nolkot Primary School
49	Sylhet	Jaintapur	Kandigao Primary School
50	Sylhet	Sadar	Ghater Chat Primary School
51	Sylhet	Sadar	Nalia Primary School
52	Sylhet	Sadar	Rustampur Primary School
53	Narsinghdhi	Monohordi	Char Khandalia BRAC School

ENGLISH in ACTION

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