

Secondary School Teachers in Bangladesh in the Light of SDG 4



**Campaign for Popular Education (CAMPE)
Bangladesh**

Education Watch 2018-19

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in the Light of SDG 4

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Preface

This seventeenth Report of *Education Watch* has tried to explore a relatively new area – *Secondary School Teachers in Bangladesh in the Light of SDG 4*. The study has examined the state of teachers of secondary institutions and their role in educational development in Bangladesh. It has attempted to explore for policies teacher development, their status, understanding of pedagogy and curriculum and their teaching competence. It has also ventured to explore an almost unexplored area of identifying the role and functions of teacher associations. The analysis of the state of teachers in Bangladesh in relation to SDG 4 and correlations among various issues related to teachers' lives, their skills and understanding has enriched the study.

Both quantitative and qualitative techniques were used for the study that included document analysis, sample survey, in-depth interviews, and focus group discussions. Five types of secondary educational institutions including (i) Government Schools; (ii) Non-Government (private) Schools; (iii) Colleges (which house both secondary and higher secondary under the same roof; (iv) Dakhil Madrasahs; and (v) Senior Madrasahs (providing Alim, Fazil and Kamil education altogether) were covered under the survey.

The research has emphasized on a favorable student-teacher ratio, more effective increased training on pedagogy, subject-based training and continuous professional development as well as expansion of the use of appropriate technologies in education. It has recommended that the annual teacher assessment should be linked with their classroom performance. It has flagged up the issue of disparity with regard to teachers' educational qualifications, availability of infrastructure and other facilities among different types of institutions. In addition, revisiting the promotion policy and change of designation with the change of grade for job satisfaction was also suggested. The role of teacher associations commensurate with the needs of 21st century came up as a pertinent issue. A similar study on teachers of primary education to understand the full picture of our school education system has been strongly recommended by the Research Team for taking necessary actions in line with SDG 4.

We strongly urge upon the policymakers of Bangladesh to take note of the findings of this study and to make use of the evidence, analyses and policy recommendations. Strong political commitment accompanied with pragmatic strategies, adequate allocation and judicious use of resources and continuous monitoring will be required to prepare our next generation, particularly the disadvantaged to contribute to nation-building and enable them to perform well as a global citizen. All development actors particularly the government, political parties, corporate sector, CSOs and development partners should strengthen their efforts for human capability enhancement for a country that has already shown its potential to achieve the SDGs.

We would like to express our sincere thanks to Sir Fazle Hasan Abed KCMG, Chairperson of *Education Watch*, Mr A Mushtaque R Chowdhury, Convener of *Education Watch* and Mr Kazi Rafiqul Alam, Chairperson of CAMPE for their continued guidance to the *Education Watch Team*. The *Education Watch* is privileged to have the unflinching support of CAMPE for more than two decades. Its staff has all along played significant role in producing the annual watch reports and facilitating their dissemination. Our sincere appreciation goes to them for their tireless effort despite CAMPE's struggle to maintain regular flow of funds for the purpose.

Mr Samir Ranjan Nath took the lead in carrying out the study and preparing the report. We are grateful to him and other members of the research team including Prof. M. Nazmul Haq, Mr Rasel Babu, Ms Nowreen Yasmin, Mr M. Anwar Hossain, and Ms Saira Hossain, among others. The panel of reviewers comprising Prof. Dr. Syed Shahadat Hossain, Mr Shaymal Kanti Ghosh, Principal Quazi Faruque Ahmed and Dr. Zia Us Sabur deserve our special thanks for their valuable comments on the draft. Our sincere gratitude to the *Education Watch* community, who participated in various sharing sessions on the draft report, provided valuable suggestions on the design, approach and findings of the study. Their contribution in preparing the key messages and policy recommendations of this report is highly appreciated.

Our appreciation will remain incomplete if we do not acknowledge the contribution and wholehearted cooperation of the Secondary and Higher Education Division (SHED) of Ministry of Education, Directorate of Secondary and Higher Education (DSHE), Directorate of Madrasah Education (DME), Bangladesh Bureau of Education Information and Statistics (BANBEIS) and other relevant government agencies for their support in different stages of the study.

We would like to extend our thanks to the respondents of the survey, particularly heads of the institutions and teachers for sharing their thoughts, experience and other pertinent information to the research team.

Mr K M Enamul Hoque, Mr Ghiasuddin Ahmed and Ms Mirza Quamrun Naher of CAMPE who played important roles at various stages of the study deserve a lot of appreciation.

Education Watch and its reports have been possible due to the generous support received from BRAC particularly Mr Asif Saleh, the Executive Director, BRAC. Besides, Prof. Abdul Bayes, former Director of the Research and Evaluation Division (RED) of BRAC and Dr Erum Mariam, Director BRAC IED provided generous support as and when we requested it. Modest financial support was extended from the Global Partnership for Education (GPE) through Global Campaign for Education (GCE) under the Civil Society Education Fund (CSEF). We acknowledge their assistance and express our deep appreciation.

Finally, we would like to request the readers, users and well-wishers of *Education Watch* to send us their suggestions, if any, regarding the selection of topics for research, improvement of quality of research, presentation style or any other issue related to our watch studies. Our efforts will be worthwhile if this report could serve as a useful input in the key decision-making process for improving secondary education in Bangladesh.

Let us all work for building a better future, a beautiful Bangladesh.

Dhaka
October 2019



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Acronyms

ABTA	All Bengal Teachers' Association	IER	Institute of Education and Research
ADB	Asian Development bank	ILO	International Labour Organization
BANBEIS	Bangladesh Bureau of Educational Information and Statistics	MDG	Millennium Development Goal
BDT	Bangladesh Taka	MEd	Master of Education
BEd	Bachelor of Education	MOE	Ministry of Education
BMEd	Bachelor of Madrasa Education	MPO	Monthly Payment Order (for schools or teachers by the government)
BPED	Bachelor of Physical Education	NAEM	National Academy for Educational Management
BPSC	Bangladesh Public Service Commission	NCTB	National Curriculum and Textbook Board
BRAC IED	BRAC Institute of Educational Development	NGO	Non-Government Organization
BRAC	an NGO, formerly Bangladesh Rural Advancement Committee	NTRCA	Non-government Teachers' Registration and Certification Authority
CAMPE	Campaign for Popular Education	OECD	Organization for Economic Cooperation and Development
C-in-Ed	Certificate in Education	PACE	Post Primary and Continuing Education
CPD	Continuous Professional Development	PM	Prime Minister
CV	Coefficient of Variation	PTCS	Perceptual Teaching Competence Scale
DEO	District Education Officer	RED	Research and Evaluation Division (of BRAC)
DipEd	Diploma in Education	SDG	Sustainable Development Goal
DSHE	Directorate of Secondary and Higher Education	SMC	School Managing Committee
EFA	Education for All	SSC	Secondary School Certificate
EMIS	Educational Management Information System	TQI-SEP	Teaching Quality improvement in Secondary Education Project
FGD	Focus Group Discussion	TTC	Teacher Training College
FY	Fiscal Year	UEO	Upazila Education Officer
GDP	Gross Domestic Product	UIS	UNESCO Institute of Statistics
HSTTI	Higher Secondary Teacher Training Institute	UNESCO	United Nations Educational Scientific and Cultural Organization
ICT	Information and Communication Technology	USEO	Upazila Secondary Education Officer

Overview



A. Background

Research on teachers strongly suggest that ‘teacher quality’ is the single most important factor for quality education. They are considered as the key to any education systems in the world. Teachers’ not only perform curricular-related activities with their students, their role in shaping and reshaping curriculum and effective running of educational institutions are also vital. It is more critical in a fast changing globalized world. As such the issues related to teachers become a priority for public policy and debate. Keeping quality education at the heart, the fourth Sustainable Development Goal (SDG 4) included the following specific target related to teachers:

By 2030, sustainably increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small developing states.

This is associated to the first SDG target which calls for ‘effective learning outcome’ for all boys and girls. Describing the teacher as a fundamental condition for guaranteeing quality education, it was suggested in a UNESCO document that they should be empowered, adequately recruited and remunerated, motivated and professionally qualified, and supported with well-resourced, efficient and effectively governed system.

Research on teachers is scanty at best in Bangladesh. Fortunately, various issues pertaining to teachers were touched in several past studies under the *Education Watch*, including a dedicated study on primary school teachers in 2000. None of these studies, however, considered ‘school teachers’ as the main theme of exploration. Under the circumstances, the *Education Watch* group decided to explore the various issues related to teachers. Because of the broadness of the area and the issues therein, the study concentrated only on secondary school teachers.

As of 2018, secondary education in Bangladesh comprised of 29,330 institutions, 358,907 teachers, and 12,197,554 students. It consists of three major streams which are general, madrasa, and vocational. The general stream is the largest with 67.7% of institutions and teachers, followed by the madrasas covering 31.7%. The vocational stream is the smallest with only 0.6%. Of the students, 82.9% go to schools under the general stream, 16.9% under madrasa stream, and only 0.2% under vocational stream. Unlike the primary, most of the secondary institutions are run by private initiatives, but with government financial support in terms of teacher salary. The secondary educational institutions in the public sector comprise of only 1.2% of the institutions, and 2.4% of the teachers and students.

Because of the demand, the expansion of the secondary education sector is still taking place. During 2008-2016, the number of institutions increased by 3.7%, teachers by 13.2%, and students by 43.4%. This resulted in a modest increase in the teacher-institution ratio, but higher increase in the student-institution and student-teacher ratios. As mentioned above, the Government of Bangladesh made subvention (popularly known as Monthly Payment Order or MPO) available to about 83% of the non-government institutions of all streams and over 89% of the teachers. The subvention increased by 2.3 times over the past five years, with BDT 87,943.6 million (US\$ 1,047 million) for the FY 2015-16.

B. Objective and research methodology

Keeping the teachers in the centre, this study examined and documented the state of secondary school teachers and their roles in educational development in Bangladesh. The following specific issues were explored:

- a. Policies related to development of teachers for secondary education in Bangladesh;
- b. Social, educational, professional, and economic statuses of the teachers;
- c. Teachers understanding of pedagogy and curriculum and their teaching competence;
- d. Role and functions of teacher associations;
- e. State of the teachers in Bangladesh with regard to the fourth Sustainable Development Goal (SDG 4); and
- f. Correlations among various issues related to teachers lives and their skills and understanding.

In terms of the research methods, a combination of both quantitative and qualitative techniques was used. This included document analysis, sample survey, in-depth interviews, and Focus Group Discussions. The study universe included those institutions which provided the full range of secondary education (from grade VI to X). The following five types of secondary educational institutions were covered:

- Government School;
- Non-Government (private) School;
- School & College (institutions which house both secondary and higher secondary under the same roof);
- Dakhil Madrasa; and
- Senior Madrasa (providing Alim, Fazil and Kamil education altogether).

One hundred and twenty educational institutions from each type were randomly selected for the quantitative part of the study, the sampling frame for which was provided by the Bangladesh Bureau of Educational Information and Statistics (BANBEIS). Five permanent teachers (appointed against approved positions) were randomly sampled from each of the selected institution. The study sample thus comprised of 3,000 teachers and 600 educational institutions. The teacher survey included a Perceptual Teaching Competence Scale (PTCS) for getting a sense of their teaching competence. Qualitative investigation was carried out in 10 institutions located in five upazilas. It also included observation of 30 classrooms, and in-depth interviews with 10 heads of institutions and 30 Assistant Teachers. The fieldwork for this study was carried out during September-October 2018 and in January 2019.

C. Policies related to teacher development

The Directorate of Secondary and Higher Education (DSHE) under the Ministry of Education is the key agency to implement secondary education in Bangladesh. The DSHE recruits teachers for Government secondary schools. The School Managing Committee (SMC), on the other hand, recruits teachers for the other types. The applicants need to qualify the teachers' registration test administered by the Non-government Teachers Registration and Certification Authority (NTRCA). This is done in line with UNESCO's recommendation for teachers' licensing. The Dr Qudrat-e-Khuda Education Commission (1974) for the first time highlighted the importance of teacher training. The Commission argued that like any other professions, appropriate and adequate training is required in teaching. The Education Commission of 1988 mentioned that pre-service and refreshers' training should be introduced for the secondary school teachers. Acknowledging the limitations of the teacher training initiatives, the National Education Policy of 2010 opined that the teachers training in the country was very traditional, insufficient, certificate-based, loaded with theoretical contents and so on. It thus recommended the Bachelor of Education (BEd) degree as the pre-requisite. It also recommended introducing co-curricular activities during the training.

Policy documents by UNESCO and others put importance on teachers' professional status and benefits to ensure quality education. However, a clear discrimination is evident in terms of wage and benefits between the government and non-government secondary teachers in Bangladesh. The Government school teachers enjoy many more benefits including house-rent, medical allowance, festival allowance, and yearly increment. In addition, benefits such as tiffin allowance, rest and recreation allowance, time scale salary increase, and pension are admissible only for the Government school teachers. To determine the salary and benefits of teachers, UNESCO set some basic principles such as national income level, minimum living standard, comparator professions, and education authorities' revenue capacity. Unfortunately, these were not adequately considered for any of the schools. Teachers' promotion is almost impossible in the secondary education system. After a certain period of time the grades of the teachers are increased which result in some addition in salary and benefits keeping the designation the same – Assistant Teacher. In case of the Non-government schools the promotional process is even worse. For such teachers, the National Education Policy 2010 recommended that teachers should be promoted through a competitive process considering their qualifications.

D. The educational institutions in sample

Majority of the educational institutions sampled for the survey were established after the Independence of Bangladesh. Of the institutions, 1.1% were established in the 19th century (1832-1900), 10.7% during the start of 20th century to the end of the British rule in India (1901-1947), 24.1% during the Pakistan period (1947-1971), 29.1% during the first two decades of Bangladesh era (1972-1990), and remaining 35% more recently (1991-2016). Whereas, 38% of the rural institutions were established before the Independence of Bangladesh, only a quarter of the institutions in urban locations were established during that period. Similarly, about three-quarters of the madrasas were established after the liberation of Bangladesh, but less than 60% of the schools were established during that period. The Government schools were established relatively earlier than others.

The majority of the four types of private institutions (87.8%) were receiving government subvention. They were 94.2% of the Non-government schools, 90% of the School & Colleges, 98.3% of the senior madrasas, and 67.5% of the Dakhil madrasas. Majority of the educational institutions in the sample were co-ed (91.6%). 7.1% were for girls only and 1.3% were for boys only. Most of the institutions established during the British period were predominantly for boys and those established during Bangladesh period were for both girls and boys. Proportion of institutions established exclusively for girls was significantly higher in Bangladesh period than in any other previous period.

Number of students in the institutions varied from 58 to 4,775. Mean number of students per institution was highest in Government schools (900), followed by School & Colleges (795), Non-government schools (564), senior madrasas (273), and Dakhil madrasas (210), respectively. Proportion of girls was 52.9%. Number of teachers per institution varied from 5 to 84. It was 12 for a quarter of the institutions, 11 for 18.3%, and 10 for 11.9%. Whereas, on average, the Government schools had 25.5 permanent teachers, the others had 10-14 teachers. The institutions, on average, had 13.4 approved positions, but 11.6 were actually filled up. A half of the institutions recruited temporary teachers thereby shooting the average to 13.5. A quarter of the teachers were females in all institutions. Whereas a third of the teachers of Government schools and School & Colleges were females, it was much lower in the madrasas (18%).

There were 46 students against a permanent teacher, which decreased to 39 on recruitment of temporary teachers. The highest student-teacher ratio was found in School & Colleges, followed by Non-government

schools, Government schools, senior madrasas and Dakhil madrasas, respectively. The ratio was more than 40:1 in 56% of the institutions before recruitment of temporary teachers, which decreased to 39.6% on recruitment of them.

E. The teachers and their families

Age of the teachers varied from 21 to 60 years with a mean 42.2 years. Over 94% of them were married, 17.8% were non-Muslims, and 1.5% came from small ethnic groups. Average family size was 4.2. Overall, 12.5% of the teachers were first generation learners in their families, meaning that none of their parents had schooling. This was 16.3% in Dakhil madrasas, 14.7% in senior madrasas, 11.3% in Non-government schools, 9% in School & Colleges, and 5% in Government schools.

Of the spouses of the teachers, 19.3% had a Master's degree, 25.5% had a Bachelor's degree, 20.7% completed higher secondary education, 19.8% completed secondary education, and 14.6% did not complete secondary level. Spouses of the Government school teachers were much ahead of their peers in terms of educational qualifications, followed by those of School & Colleges, Non-government schools, senior madrasas and Dakhil madrasas, respectively.

Over 53% of the teachers had at least one person in the family who chose teaching as profession, beside themselves. They include parents (11.8%), elder siblings (19.1%), younger siblings (18.9%), spouses (23.7%), and offspring (2.1%). Institution type wise, 68.8% of the Government school teachers had at least one teacher family member, which was 56.3% in School & Colleges, 55.2% in Non-government schools, 53.7% in senior madrasas, and 43.8% in Dakhil madrasas. Such type of family member was observed more among female teachers than males (66.1% versus 49.4%), and among school teachers than madrasa teachers (55.7% versus 47.9%). For the remaining, s/he was the first person in the family who took teaching as a profession.

F. Education and training of teachers

The minimum educational qualification for being a secondary school teacher in Bangladesh is a Bachelor's degree. Majority of the teachers in the sample (48.8%) had a Master's degree, 48.2% had a Bachelor's degree and the remaining 3% had only higher secondary schooling. Over three-quarters of the teachers studied exclusively under general stream, a third studied in madrasa stream and the remaining in both. As expected, proportion of madrasa educated teachers was more in the madrasas (47.3%) than in schools (11.7%). A very high proportion of the teachers got their primary education from the public educational institutions (82.6%), which was 5.3% at junior secondary level, 5.2% at secondary level, 24.4% at higher secondary level, 44.9% at undergraduate level, and 58.9% at graduate level. Proportionately more school teachers studied in public institutions than those of madrasas.

Majority of the teachers studied Humanities in their educational life. Proportion of teachers studying Humanities was 49.1% at secondary level, which went up to 74.8% at Master's level. A reverse direction was therefore observed in their study of Science, which gone down from 45.4% at secondary level to 17.1% at Master's level. Nearly 58% of the teachers achieved at least a second division in each of the first three public examinations (secondary, higher secondary and Bachelor's), which declined to 33.2% when all four examinations were considered (including Master's).

Two-thirds of the teachers got professional training such as Bachelor of Education (BEd), Master of Education (MEd), Bachelor of Madrasa Education (BMEd) or Bachelor of Physical Education (BPEd). School

teachers were more likely to have such training than their Madrasa counterpart (79.4% versus 39.5%) and the females were more likely to do so than the males (76.9% versus 62.9%). The teachers also received a number of subject based training and various short courses in recent years, especially since 2011. Overall, 78.2% of them got subject based training and 83.6% got various short courses. Teachers had more training in Mathematics, English, and Religion as against Science, Accounting, Bangla, and Bangladesh & Global studies. The main short training courses included Information and Communication Technology (ICT), creative question preparation, teachers' curriculum guide, teaching quality improvement, skills based training, and national curriculum. None of these courses reached more than a third of the secondary teachers. A mixed impact was observed regarding use of training in classroom teaching. A section of the teachers reported that they were getting benefits of training through using those in classrooms; however, another section blamed the school context or themselves for not using them.

G. Choice of profession, income and job satisfaction

The teachers varied in terms of their aim in life. Majority of the teachers (58.7%) had aimed to take teaching as profession; the others wanted to be a doctor, an engineer, a government servant, a police/defence officer, a banker, or a businessperson. A small section (3.3%) had no aim in life. A Master's degree holder female teacher who had an elder sibling a teacher and father had incomplete secondary education was more likely to have teaching as the aim in life.

Teaching in the present institution was the first job for 53.2% of the teachers. A fifth of the teachers had taught in other institutions, 16.5% moved to teaching from a number of non-teaching jobs, and 10% experienced both teaching and non-teaching jobs before their current job. The current one was the second job for 64.4% of the teachers of Government schools, a half of those of Non-government schools and School & Colleges, and about 40% of those of madrasas. Before entering in their present job, over a half of the Government school teachers worked for private educational institutions and 30% of the teachers of private institutions worked for a similar institution. The length of service was eight years or less for a quarter of the teachers, 9-16 years for another quarter, 17-22 years for the third quarter, and 23-40 years for the fourth quarter. Overall, the mean length of service was 16.3 years with a standard deviation of 9 years.

Teaching was reported to be the principal occupation of all of them; however, two-thirds of them claimed to have a second occupation. Teaching was the only occupation for 39.7% of the male and 10% of the female teachers. Whereas, a fifth of all teachers claimed household management as their second occupation, 86% of the female teachers claimed so. The other occupations include agriculture (23.3%), private supplementary tutoring (11.3%), small or medium business (4.4%), aquaculture (2.8%), and others (5.7%). Teaching was the only profession of 57.8% of the Government and a third of the teachers in other institutions.

The teachers earned BDT 273,672 annually; of which 85.5% from their principal occupation, i.e., teaching. A wide variation existed in income. Teachers belonging to the highest quintile of income earned about 3.5 times of those belonging to the lowest quintile. The Government school teachers were the top earners. Their annual income was 1.9 times of the grant (MPO) and 3.8 times of the non-grant (non-MPO) teachers of the other institutions. Considering the past year's income and expenditure from all sources, 5% of the teachers rated their households as *always in deficit*, 20.2% as *sometimes in deficit*, 34.9% as *breakeven*, and 40% as *surplus*. A positive relationship was observed between annual income and household food security status.

Majority of the teachers were satisfied with their profession and institutions, but not with the remuneration. Overall, 26.3% of the teachers were 'satisfied' with each of the three issues concerned, 46.4% were 'satisfied' with current profession and institution, but not with remuneration, 16% were 'satisfied' only with profession, but not with the rest two issues, and 11.3% fell in other categories. About 55% of the Government school teachers expressed their satisfaction in all three areas concerned, which was 30.2% among the teachers of School & Colleges, 27% among those of senior madrasas, 26.3% among those of Non-government schools, and 21% among those of Dakhil madrasas. About a third of the teachers wished to change their current institution and 5.2% wished to change their teaching profession.

H. Teaching, workload and supervision

The teachers did not teach in each secondary grade – 63% taught at grade VI, 71.1% at grade VII, 83.4% at grade VIII, and over 90% at grades IX and X. They, on average, taught 3.3 subjects with a range from one to nine. As per class routine, they were supposed to conduct 23.7 periods per week involving 16 hours 10 minutes. The lowest quintile of teachers, in terms of workload, were responsible to conduct 3-18 periods per week, which was more than 28 periods for the highest quintile. Though the teachers conducted most of the periods as required, they thought they were overloaded and thus proposed to reduce it by 21.5%.

Overall, 57.3% of the teachers were directly engaged in preparing class routine and distribution of subjects among the teachers, 29% were not engaged with the process but were consulted before finalization, and 13.7% had no involvement with this. The male teachers were more likely to be involved with the process than the female teachers. No variation was observed between the teachers of schools and madrasas. Majority of the teachers expressed their satisfaction (fully or most part of it) with the class routine.

Question papers for internal examinations were prepared in many different ways. Whereas, 43.7% of the teachers claimed that they themselves prepared the question papers, 36.8% bought them from Teachers Union, 14.4% bought from open market, and 10.3% reported to prepare by the other teachers themselves in the school. Teachers themselves preparing the question papers were highest in Government schools (76.8%) followed by School & Colleges (53.5%), Non-government schools (44.3%), senior madrasas (42.8%), and Dakhil madrasas (35.5%), respectively. Additional teaching was arranged in two-thirds of the institutions, mostly for the students of grades VIII and X. The School & Colleges and Non-government schools jointly topped with 70% of them arranging it, followed by both types of madrasas (around 60% each) and Government schools (35.8%). A half of the teachers of these institutions were engaged in it. Such teaching is provided before school hours (63.9%), after school hours (17.8%), on holidays (15.3%), and during school hours (3%).

Over 78% of the teachers reported that their classroom teaching was observed for monitoring purpose at least once during the three months prior to interview. No difference was observed by gender of teacher or area of institution, but the school teachers were more supervised than madrasa teachers (80.1% versus 74.4%). This was highest in School & Colleges (83.7%) and lowest in Dakhil madrasas (72.7%). The institution heads were the top supervisors, who supervised 57.4% of the teachers' classroom teaching. The others included Upazila Education Officers, Upazila Academic Supervisors, assistant heads of the institutions, Zila Education Officers, and chairperson and members of school managing committees. Providing no feedback to the teachers was a common practice, written feedback was seldom given. Oral feedbacks were very basic in nature with little consequences for pedagogic performance.

I. Teaching-learning in classrooms

Based on classroom observations, it was found that one-way lecture was the main method of teaching in classrooms, irrespective of subject and topic. Teachers started talking on the day's topic without linking it with previous lessons or any introductory note. No motivational or inspirational words were used while delivering lessons on national heritage or important personalities. One-way delivery of lessons was the most popular without engaging students. Class captains were engaged for disciplinary matters only. Classroom teaching was centred into identifying answers to set of questions probable to appear in examination. Homework just followed it. Teachers were seen to be happy with memorization capability of the students. Teaching aids were hardly used. ICT based multimedia contents were not found in use. Teachers asked questions mostly belonging to the 'remembering' subdomain of Bloom's Taxonomy, to the students in order for assessing them. Students hardly asked questions.

J. ICT, Mass Media and Use of Multimedia

Thirty-one percent of the institutions had a multimedia classroom but not an ICT lab, 5.2% had an ICT lab but not a multimedia classroom, 22.5% had both, and 41.3% had none. The Government schools and the School & Colleges were much better than others in having these and the Dakhil madrasas were at the bottom. With regard to owning ICT devices, 79.8% of the teachers had an ordinary mobile phone, 64.3% had a smart phone or a tablet, and 29.3% had a desktop or a laptop computer. Female teachers and the teachers of urban institutions were more likely to have these devices than the male and rural teachers respectively. More madrasa teachers than school teachers had an ordinary mobile phone, but an opposite scenario was observed in rest of the devices.

Every teacher used their ICT devices for talking purposes, which was followed by sending short messages or SMS with three-fifths of the teachers doing so. The other purposes of using ICT devices included Internet browsing (57.4%), photo/videography (50.7%), listening to music, drama etc. (48.8%), multimedia use for teaching (37.1%), listening to Islamic preaching (35.7%), money transfer/mobile banking (34.8%), preparation of contents for students (29.4%), self-study (24.5%), occupational writing (18%), gaming (15%), and listening radio programmes (13.2%). Over a half of the teachers used ICT devices for purposes related to their profession. No gender difference was observed in this, but teachers of urban institutions and those of schools were significantly ahead of their respective counterparts such as rural institutions and madrasas. This was 81% among the teachers of Government schools, 63.2% among those of School & Colleges, 54% among those of Non-government schools, 49.3% among those of senior madrasas, and 40.7% among those of Dakhil madrasas.

Nearly two-fifths of the teachers reported to using multimedia in classroom teaching at least once in 2018. This was 39% among the males and 42.5% among the females, 50.9% among urban and 37.1% among rural teachers, and 44.6% among school teachers and 30.2% among madrasa teachers. About two-thirds of the teachers of Government schools, 54.2% of those of School & Colleges, 42.7% of those of Non-government schools, 40.3% of those of senior madrasas, and 23.2% of those of Dakhil madrasas used multimedia in classrooms. The middle half of the teachers in terms of length of service, having own ICT devices and training on ICTs were more likely to use multimedia in classrooms than others.

Not a single subject was found where a third of the teachers used multimedia in teaching. Subjects like ICT, Accounting, Mathematics were at the top where multimedia classroom teaching was provided, followed by English, Biology, Chemistry, Physics, General Science and Bangla. Poor situation was observed in religious

and madrasa-related subjects, Higher Mathematics, History, and Arts and Crafts. Two-thirds of the teachers reported to face various difficulties in using multimedia in classroom teaching. These were power failure, lack of training, inadequacy of classrooms, lack of adequate equipment, lack of skills, defective equipment, lack of preparatory time, and defective materials. The teachers who did not use multimedia cited three major reasons: absence of any provision of it in their institutions, having no training on this, and defective equipment.

K. Teachers' perceptual teaching competence

Only 0.4% of the teachers assessed themselves as *highly competent*, 15% as *competent*, 39.8% as *moderately competent*, 27.6% as *averagely competent*, 13.7% as *limited competent*, and 3.5% as *incompetent*. Around a fifth of the teachers of Government schools and School & Colleges assessed themselves as competent or highly competent. Such a level was reported for 16.8% of the teachers of senior madrasas, 14.8% of those of Non-government schools, and 13.6% of those of Dakhil madrasas. No difference was observed by gender of teacher or broad institution type in this. Sub-component-wise analysis shows that the highest score was recorded in professional development (93.6%), closely followed by ethical aspects (88%), and the lowest in pedagogical skills (69.7%). The teachers scores in the remaining two sub-components (motivational and resilience) were in between the highest and the lowest performing sub-components. The teachers of rural institutions, non-Muslims and those who were satisfied with their institutions were more likely to be moderately competent than the others. No difference was observed between the grant and non-grant teachers.

L. Involvement in private supplementary tutoring and use of guidebooks

Though the government provides free textbooks to all, and teaching-learning should primarily take place in classrooms – teachers were found to use guidebooks and involve in private supplementary tutoring. Overall, 22.4% of the teachers reported to engage themselves in private supplementary tutoring. They, on average, tutored 23.3 students. A high variation was observed among the tutoring teachers in terms of number of tutees, which ranges from 1-230. The standard deviation of this was found 34% more of mean. Male teachers working in urban educational institutions, younger in terms of service length and having some training were more likely to involve in private supplementary tutoring than others.

Teachers' homes were most frequently used for providing private tutoring where 15.4% of the teachers offered this service. Among other places 7.2% of the teachers provided tutoring at students' homes, 2.8% at schools using classrooms, and 0.8% at coaching centres. Some teachers provided tutoring services at multiple places. The major portion of the tutees (53.8%) was the teachers own school students. Although the Government school teachers were at the bottom in terms of providing private tutoring, they were at the top in serving own school students. In providing tutoring services, the Mathematics teachers were at the top, English teachers were closely behind them, the teachers of Science subjects just followed them.

Overall, 37.1% of the teachers were using guidebooks. Female teachers, younger in terms of service length, Muslim and those who had subject based training were more likely to use guidebooks than their respective counterparts. The teachers having a parent teacher were less likely to use guidebooks than those who had no such parent. Teachers used guidebooks for English and Mathematics in all secondary grades, Physics, Chemistry and Higher Mathematics in grades IX and X, and Arabic throughout the school years in madrasas.

M. Knowledge on national education policy, secondary curriculum and SDG 4

In general, the secondary school teachers in Bangladesh had no clear idea about the important national and international documents which have direct implications on educational development in the country. They seem to have not been able to differentiate among the documents. Of the teachers, 85.5% knew that Bangladesh had a National Education Policy (NEP), 63.1% claimed to have read the policy in hard copy or from the Ministry website; however, only 40.6% could state the correct year of introducing it. Eighty-six percent of the teachers knew about the existence of a national curriculum for secondary education, and 62.4% claimed to have read it. While asked, 43.1% of the teachers could say correctly the objectives of national secondary curriculum and 18.5% could say the year of latest modification of curriculum.

Two-fifths of the teachers claimed that they have heard about Sustainable Development Goals (SDGs), but only 5.5% knew under whose leadership the SDGs were formed. A very few of the teachers were aware about the various details of SDGs. For instance, 3.1% knew the start year of SDGs and 3.6% knew the end year. Only 1.4% of the teachers could say the number of goals in SDGs. One in ten teachers said that there was a goal on education, but only 1.5% of the teachers could say about the goal specific to education.

The Government school teachers were better informed about various aspects of SDGs, but no such difference was observed in the cases of NEP and national curriculum. In most cases, the male teachers surpassed their female counterparts. The Master's degree holders had better knowledge than others. All three types of training (professional, subject based, and short courses) had a positive relationship with teachers' knowledge in NEP, curriculum and SDG. Youngest teachers were more likely to have better knowledge in all the above aspects than the rest of the teachers.

N. Role of teachers associations

Six different teacher associations were identified for the secondary level school teachers and two for the madrasas. These organizations are sub-divided into several quarters depending upon political and personal interest of their leaders, which resulted in various malpractices and deprivation among the teachers. Teacher development initiatives undertaken by the government received no direct assistance from the teacher associations. It is believed that the quality of education and teachers' competence are areas where teacher associations can contribute but in reality, they are found to work as pressure groups in the matters of petty financial and personal interests.

Three out of every ten teachers were members of any of the teacher associations. Majority of these teachers (60.4%) got membership influenced by their seniors, followed by those who became members on their own choice (34.5%). About three-quarters of the members reported to participate in some activities of the associations. Major activity seemed to be the regular meeting of the associations, where 59.4% of the participating members attended. The other activities included movement for educational rights and teachers' rights. Male, elder teachers (belonging to the fourth quartile in terms of service length) having Master's degree and were satisfied with profession and remuneration were more likely to be members of a teacher association and be a participant of association activities than others. About 13% of the teachers confessed that their participation in association activities hindered teaching-learning activities in schools. It was clearly found that the government recognised the importance of teacher associations and occasionally seek their views regarding formulation of new policy.

O. Policy recommendations

Based on the findings of this study, and the analyses and discussions made of those in line with the SDGs, the following recommendations are formulated to help promote achieving the targets of SDG 4 in Bangladesh. It should be noted that many of these are already in the policy, but are not progressing in due speed. This study, therefore, reemphasises those.

- *A favourable student-teacher ratio in every institution should be ensured.* This should be done through examining the present student-teacher ratio, number of students over a period of past five years, and the approved number of positions of teacher – separately for each of the institutions. The aim should be to place more teachers where the ratio is higher (say over 40:1) and withdraw from those with excess. However, the extreme or unusual situation of remote rural areas needs to be considered with care. Recruitment of temporary teachers should be avoided.
- *Teacher training capacity aiming to teach only by a formally trained teacher in pedagogy should be increased. Scope and capacity of subject-based and other short training courses need to be expanded from a lifelong learning perspective.* Existing capacity of public and private teacher training institutions may hardly be able to provide training to the currently untrained teachers, but not to the new recruits. Capacity building of the current institutions as well as establishment of new training institutions should be considered seriously. BRAC's Post Primary and Continuing Education (PACE), whereby short subject-based residential pedagogic training were effectively provided, can be utilised to solve a portion of this task. International cooperation may also be sought. Subject based training should be provided to the teachers in all subjects they offer and on a continuous basis. Some generic courses should be provided to every teacher, which should include curriculum, education policy, SDGs and ICT. Along with capacity building of training institutions, capable non-government organizations should also be considered as training provider. Benefits of ICTs and Internet can be used to reach the teachers inexpensively.
- *Annual teacher assessment based on their classroom performance should be introduced to keep them obliged to improve classroom teaching.* Quality classroom teaching is the way to quality education. A part of huge lacking in effective classroom teaching is due to inadequate knowledge of the teachers, but a major part is related to lack of obligation. Provision of regular supervision of classroom teaching and written feedback to respective teacher may help in this. An important task of the head of the institutions should be to provide annual assessment of the teachers based on a set of prescribed indicators/outcomes. This should also include teachers' preparation of exercises for classroom teaching and counselling and welfare duties to the students. Monitoring school visits needs to be emphasised in this regard.
- *Expansion of use of technologies in education should be prioritised.* This can be done through quick expansion of ICT labs, multimedia classrooms and providing high-speed Internet accessibility covering all the educational institutions with trained teachers. Quality of equipment with provision of maintenance is also important. ICT devices and high-speed Internet facilities should be made available to teachers at a subsidised price so that they can have them of their own. Networking of teachers with pedagogical issues can help them improve their own quality.
- *In order to address widening inequality within and among various types of educational institutions, a serious attempt should be made to reduce the gaps with regard to teachers' educational qualifications, and availability of infrastructure and other facilities in the institutions.* This should include a similar recruitment procedure including equity in financial and other benefits during job and after retirement. As the existing natural selection process has widened inequity over time, an

intervention from the government is a call of the time. The Non-government private schools and the Dakhil madrasas need special attention.

- *Review of promotion policy with the principle 'change of designation with the change of grade' may be seriously thought of to create an incentive mechanism and to increase job satisfaction of the teachers.* As it is now, the teachers can be recruited at grade 10 as Assistant Teachers; if the annual assessment reports show good progress, they can be promoted to grade 9 after five years, to grade 8 after 10 years, and to grade 7 after 15 years. The new designations at the promoted grades may be Associate Teacher, Teacher and Senior Teacher, respectively. The Head and Assistant Head of the institutions should be considered as administrative positions, for which only the Senior Teachers will be eligible. Two more positions such as Senior Assistant Teacher and Senior Associate Teacher may also be introduced if a separate pay-scale is considered. Like as public college teachers, qualified teachers can be posted to secondary education administration.
- *The secondary teaching community should seriously think about a major review of the role of their associations with regard to 21st century needs.* Having many associations should not be a problem, but the challenge is how these associations can be made more responsible and proactive towards creating a new generation of teachers and achieving quality of education, coming out of traditional role like 'trade unions' in line with parent political parties. The government need to engage the associations in policy formulation and implementation.
- Finally, a similar study as this can be carried out on teachers of primary education. This will help understand the full picture of our school education system and, therefore, take necessary actions for improvement in line with SDG 4.

Chapter 1

Introduction and Background

Key Findings

Teachers are the key to any education system. Their quality is the single most important factor for quality education. They are instrumental for achieving the fourth Sustainable Development Goal (SDG 4) and parts of the other SDGs.

Secondary education in Bangladesh comprised of 29,330 institutions, 358,907 teachers, and 12,197,554 students. The system is still expanding. During 2008-2016, the number of institutions increased by 3.7%, teachers by 13.2%, and students by 43.4%.

The system consists of three major streams: general, madrasa, and vocational. The general stream is the largest with 67.7% of the institutions and teachers. The madrasas cover 31.7% and the vocational stream covers 0.6%. Of the students, 82.9% go to general schools, 16.9% in madrasas, and only 0.2% in vocational schools.

The Ministry of Education has undertaken a number of teacher development programmes over the past two decades with financial support from development partners.

The expectations from any educational opportunities are becoming more and more complex. This is because of the transition from a predefined *competencies* based approach to a more holistic *learning community* based approach. It means that the teachers need to have the capacity to prepare students for a society and economy in which they will be expected to become self-directed learners and develop the capability and attitude to continue learning over time. For this to happen, teachers would have to be the drivers of change with much broader responsibilities in educational institutions and in student's learning process (Hattie 2003). They are the frontline cadres in implementing the curriculum and the national education policy. Teacher and teaching are considered as the most important influences on student learning. Teaching quality is identified as the most important variable influencing students' learning achievement (OECD 2005).

This year's *Education Watch* research explores the lives, works and overall status of the teachers of secondary education in Bangladesh. The research team identified, through review of existing research and documents, the factors and issues that relate to the teacher, teaching, and quality education. These included: distribution, educational qualifications and training system, recruitment system, work load and supervision, tutoring and classroom practice, application of multimedia and Information and Communication Technologies (ICTs) in pedagogy, incidence of using guidebook and other supplementary material, teacher's knowledge about national educational policies, secondary curriculum and the fourth Sustainable Development Goal (SDG), activities of teachers association, job satisfaction and their underlying thoughts of choosing this profession. All these aspects are the core area of interest for exploration within the arena of this study.

This introductory chapter presents the background for the *Education Watch* 2018-19 study. It is divided into different sections starting with a brief description of the main theme of the study 'school teacher'. The first section explains the rationale for considering school teachers as the epicentre of this study. Role of teachers in a global context is provided afterwards. The third part highlights the recent expansion and development of secondary education in Bangladesh and the teachers therein. The importance of teacher development is discussed with regard to ensuring quality education at school level. This section is followed by a brief description of the organization of this report.

A. Why school teacher is the core of this study?

Teachers play a vital role in teaching-learning implementation in educational setting. They are tasked for imparting education to their students. Based on a study carried out in 25 countries, Organisation for Economic Cooperation and Development (OECD 2005) identified that 'teacher quality' is the single most important school level variable influencing student's achievement. Beyond that, teachers play various other roles and serve many other responsibilities to create an efficient school equipped with appropriate learning environment (Harden and Crosby 2000). Teachers perform different tasks in parallel – they contribute to revise and reshape the curriculum, they guide their students as mentors which involves encouraging students to enjoy learning and also listen to the students, and they lead the institution. It is argued that better teacher can bring better education for learners. Therefore, issues related to teachers become a priority for public policy and likely to become even more so in near future as we move to a 'learning community' approach. All these accentuate the necessity of exploring teacher's status more profoundly.

Teachers were always a subject of study in the past *Education Watch* reports. Various information related to teachers of primary and secondary educational institutions were collected and analysed in those reports.

An independent study on teacher training at primary level was carried out as a part of the second *Education Watch* in 2000 (Alam and Haq 2001). However, none of the studies considered 'school teachers' as the main theme of exploration. The *Education Watch* group, therefore, decided to do so from a broader perspective for its research in 2018.

Different global initiatives such as Education for All (EFA) and The Millennium Development Goals (MDGs) mostly concentrated to bringing the children to schools and achieve gender parity in access to education. On the other hand, in the Sustainable Development Goals (SDGs), education is seen from a much broader perspective, including a specific target related to teachers. The target on teacher development states: 'By 2030, sustainably increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small developing states.' This target is clearly associated to the first target which calls for 'effective learning outcome' for all boys and girls. Describing the teacher as a fundamental condition for guaranteeing quality education, it was depicted that they should be empowered, adequately recruited and remunerated, motivated and professionally qualified, and supported with well-resourced, efficient and effectively governed system (UNESCO undated). The education SDG and the targets under it are provided in Annex 1.1.

Bangladesh has an institutional framework for teacher training and support for teachers of secondary level. Unfortunately, these suffer from various professional deficiencies. Compared to this, many better performing countries have instituted various mechanisms to accelerate teacher's capacity such as extended period of practice as part of pre-service teacher education during the induction period; variety of need-based training for in-service teacher's professional development, and a scientific teacher's appraisal system (OECD 2005). It is thus an imperative to examine how Bangladesh has put into practice these mechanisms in order to fine-tune teacher development at secondary level.

As teachers are in regular contact with the students who potentially form the future teachers, the enthusiasm and morale of the current workforce are important influencers on future teacher flow. Additionally to achieve the targets of SDGs, the policy makers of Bangladesh need to think whether it is sufficiently attractive for talented new candidates, and whether teachers are adequately remunerated and supported in their workplace.

B. Teachers in global context

Much attention was devoted on improving access to education during the MDG era. Although the emphasis was mostly on primary education, the wave of the movement hit secondary education as well. Enrolment and survival rates in secondary education also increased. In order to manage huge increase many new educational institutions had to be built. Teachers had to be recruited, which were not up to the mark always. As a result, in far too many parts of the world teachers were increasingly employed under precarious and shoddy conditions (Edwards 2018). Consequently, part-time contracts contributing to low teacher salaries and high job insecurity were also observed. Analysing a global survey data of Education International, Stromquist (2018) showed that teacher salaries were less than other professions with similar qualifications in 79% of the countries in the world. The teachers in today's world are facing some serious problems effecting their lives as well as profession. This includes contractual recruitment, unstable job without provision for pension, per-hour basis payment, delays in payment, long distance travel to collect pay etc. Therefore, a growing lack of respect and support have been observed for one of the world's most essential professions (Edwards 2018).

The UNESCO Institute of Statistics (UIS 2016) estimated that to achieve SDG 4, the countries will have to recruit 68.8 million new teachers by 2030 – 24.4 million for primary education and 44.4 million for secondary education. Half of the required secondary level teachers will have to be recruited by 2020, 11.3 million by 2025, and remaining 10.9 million by 2030. South Asia and Sub-Saharan Africa are the two regions facing the most teacher shortage. Half of the above figures are from these two regions. If the current rate of recruitment continues the progress will be limited. Ninety-eight countries will continue to remain secondary teacher shortage in 2020, which will come down to 81 countries in 2025 and 73 countries in 2030. Referring to the above figures, the Education Commission's *The Learning Generation* report commented – in some countries, this will mean that more than half of all university graduates will have to choose the teaching profession (Education Commission undated). This may be too ambitious given the current popularity of teaching as a profession among new graduates.

Reviewing the learning achievement of the primary level pupils, the EFA Global Monitoring Report 2013/4 of UNESCO (2014) identified that millions of students throughout the globe have not acquired basics of literacy and numeracy and therefore 'ill equipped to make the transition to secondary education'. Describing the situation as 'global learning crisis', UNESCO (2014) suggested four strategies to come out from this crisis, each of which are related to the teachers. The strategies are:

- Strategy 1. Attract the best graduates as teachers,
- Strategy 2. Improve teacher education so that all students can learn,
- Strategy 3. Get teachers where they are most needed, and
- Strategy 4. Provide incentives to retain the best teachers.

Training of teachers for professional development is another area that needs to be addressed with care. Training can be pre-service, in-service and through refresher courses. Whatever the case, it should be able to impact on profession and lives of the teachers, and therefore on the students' learning (Villegas-Reimers 2003). It should also be able to bring impact on success in educational reform initiatives. Beyond traditional pre-service and in-service training, it is needed to be innovative in establishing models for continuous professional development. Countries have chalked out both long and short courses for teacher development, but in Educational International's survey, only less than a third of the teachers reported to have access to continuous professional learning and development, but 77% of them saw it as poor quality and having little value (Stromquist 2018).

C. Secondary education in Bangladesh

Secondary education in Bangladesh includes grades VI to X. Grades XI-XII are called higher secondary education. Students sit for Secondary School Certificate (SSC) examination after completion of 10 years of school education. Bangladesh operates its secondary education in three broad streams. These include general, madrasa and vocational; of which the general stream is the most prominent in terms of its size: number of institutions, teachers and students. There are five categories of educational institutions under general stream, five under madrasa stream, and two under vocational stream. These categories vary in terms of management, financial arrangement and grades of students to which they serve. The institutions which are established by the government or established privately, but later on taken over by the government, and getting full financial and management support from the state may be called as public educational institutions. The private institutions are established and managed privately, but may or may not get government subvention or grants for infrastructure development and salary subvention for the teachers.

The Government schools are fully funded by the government which provides education to students starting from any of the grades I-VI and ending at grade X. The Non-government schools may receive grant from the government or may have non-grant status; however, provides education to the students from any grades (in between I and VI) to grade X. The School & Colleges may also be fully funded by the government, grant or non-grant. They provide education from any grade (between I and VI) to grade XII. The Junior Secondary Schools may be grant or non-grant-based and provide education to students of grades VI-VIII.

The institutions under madrasa stream start from grade I, but end at various grades. The madrasas that provide education up to grade X are called Dakhil madrasas, those providing education up to grade XII are called Alim madrasas, those providing education up to grade XIV are called Fazil madrasas and those provide education up to grade XVI are called Kamil madrasas. The Dakhil, Alim and Fazil madrasas may be grant or non-grant institutions, but the Kamil madrasas may be government operated, grant or non-grant-based. The Dakhil, Alim, Fazil and Kamil in madrasa stream are equivalent to secondary, higher secondary, graduate and postgraduate levels respectively in general stream. Similarly, the vocational institutes provide education for 9th and 10th graders; these institutions may be government operated, grant or non-grant-based.

In 2016, Bangladesh had 29,330 secondary level educational institutions with 358,907 teachers and 12,197,554 students (Table 1.1). The proportionate distributions of institutions and teachers by stream of education were – 67.7% under general stream, 31.7% under madrasa stream, and only 0.6% under vocational stream. Of the students, 82.9% admitted in the institutions under general stream, 16.9% under madrasa stream, and only 0.2% under vocational stream. The public secondary educational institutions comprised of 1.2% of the institutions, and 2.4% of the teachers and students.

An increasing trend in the number of institutions, teachers and students occurred since 2008 (Table 1.2). Whereas, the number of institutions increased by 3.7% during 2008-2016, it increased by 13.2% for teachers

Table 1.1
The secondary educational institutions in Bangladesh, 2016

Serial	Institute type	Financing type	Grades covered	Number of		
				Institutions	Teachers	Students ¹
1	Junior secondary	Grant/non-grant	VI-VIII	2,324	19,020	3,85,086
2	Non-government school	Grant/non-grant	Any (I-VI) to X	16,149	1,94,605	85,65,892
3	Government school	Public	Any (I-VI) to X	327	7,600	2,72,897
4	School & College	Grant/non-grant	Any (I-VI) to XII	1,035	21,782	8,67,449
5	School & College	Public	Any (I-VI) to XII	12	546	15,765
6	Dakhil madrasa	Grant/non-grant	I-X	6,558	66,376	13,21,942
7	Alim madrasa	Grant/non-grant	I-XII	1,478	22,752	3,74,484
8	Fazil madrasa	Grant/non-grant	I-XIV	1,054	19,234	2,96,891
9	Kamil madrasa	Grant/non-grant	I-XVI	221	4,933	72,126
10	Kamil madrasa(Alia)	Public	I-XVI	3	73	576
11	Vocational institute	Grant/non-grant	IX-X	158	1,714	21,474
12	Vocational institute	Public	IX-X	11	272	2,972
	Grand total			29,330	3,58,907	1,21,97,554
	Total for grades VI-X			26,837	3,37,901	1,17,88,022

¹Only those in grades VI to X

Source: Education Watch 2018 Research Team's calculation from BANBEIS (2017)

and 43.4% for students. As a result, although a slight increase was observed in the teacher-institution ratio, the student-institution and student-teacher ratios increased heavily.

The government provided grants to 23,730 educational institutions during FY 2015-16; of them 16,114 were under general stream, and 7,616 under madrasa stream (BANBEIS 2017).

Therefore, 82.4% of the private educational institutions received government subvention with no difference between general and madrasa streams. The number of teachers receiving grants was 313,309, which was 89.4% of the teachers. The government spent BDT 87943.6 million (US\$ 1,047 million) in subvention to the secondary educational institutions during FY 2015-16. This figure was more than 80% of the total revenue budget for secondary education. Trends in the government subvention (in BDT) to the educational institutions and the teachers is provided in Figure 1.1. The amount rose by more than 2.3 times over a period of five years.

Although the secondary education sector of Bangladesh has made substantial progress in terms of access and equity in last two decades, there are some remaining challenges at different levels. One of the issues is low teacher motivation and weak teacher development system (ADB 2015). This issue is potentially relevant to public policy initiative and therefore the government has taken a number of initiatives such as revising the curriculum to make it more relevant to 21st century

workplace skills, improving public examinations to support the development of students' higher-order cognitive skills, and establishing a centralised and transparent teacher recruitment system. Three major policy reforms were observed during 1993-2013: curriculum, student assessment, and teaching. It is clear that all these initiatives required direct or indirect participation of the teachers. Under the teaching reform there were two major initiatives: establishment of a registration and certification body for teachers and teacher training reform. So far, these are the most significant policy implications for the teachers working at secondary level.

Table 1.2
Growth in secondary institution, teacher and student, 2008–2016

Year	Number of			Teacher-institution ratio	Student-institution ratio	Student-teacher ratio
	Institutions	Teachers	Students			
2008	28,275	317,079	8,508,704	11.2	300.9	26.8
2010	28,539	327,932	9,423,224	11.5	330.2	28.7
2012	28,818	330,747	9,839,818	11.5	341.4	29.8
2014	29,194	345,762	11,188,819	11.8	383.3	32.4
2016	29,330	358,907	12,197,554	12.2	415.9	34.0
Growth	103.7	113.2	143.4			

Sources: Education Watch 2018 Research Team's calculation from BANBEIS (2009, 2011, 2013, 2015, 2017)

Figure 1.1
Government grants (in BDT million) to the private secondary educational institutions and their teachers



Source: BANBEIS (2017)

The recruitment of teachers for government secondary schools is centrally controlled. On the other hand, recruitment in private entities has to carry out through Non-Government Teachers' Registration and Certification Authority (NTRCA). This is a statutory body established in 2005 under the Ministry of Education (MOE) with the mandate of registering and certifying quality and competent persons who can be appointed as teachers in non-government educational institutions and to impart pedagogical skills and training to them. This is entrusted with the selection of teachers for all vacant posts at the entry level in non-government educational institutions from the applicants having NTRCA registration certificate based on certain criteria set by the MOE. The requisite minimum qualification to become a teacher at secondary level is a Bachelor degree. All candidates to become a teacher in a secondary school have to appear for a competitive selection test and an interview. However, due to various types of influences the objectivity of recruitment process and efficient deployment of teachers is much hindered.

The Ministry of Education (MOE) has undertaken a number of teacher development programmes during the past two decades with financial support from the Asian Development Bank (ADB) and the World Bank. About 70 institutions provide training to the teachers of secondary education – 25 in public and 54 in private sectors. These includes teacher training colleges, higher secondary teacher training institutes, secondary education science development centres, Bangladesh Madrasa Teacher Training Institute, National Academy for Education Management, National University, and Bangladesh Open University. ADB (2015) observed lack of coordination and institutional linkage among these institutions. A Teaching Quality Improvement in Secondary Education Project (TQI-SEP) was therefore initiated to devise a comprehensive teacher training policy so that each of these training related institutions and stakeholders can clearly identify their role in the teacher training system (ADB 2015). The education SDG (or SDG 4) has rightly emphasised on qualified teachers for the cause of achieving quality of education. A holistic exploration of teachers' lives, thoughts about their profession and their professional activities while working as a school teacher in the context of Bangladesh is therefore important to understand.

The government of Bangladesh has initiated to integrate Information and Communication Technology (ICT) in secondary education consisting of mainly four areas: pedagogy integration, digital content development, teaching-learning process, and teachers' professional network. Teachers are the main driving force for the effective implementation of these initiatives and their role becomes more critical with the introduction of ICT in classroom (Buza and Mula 2017). Many public and private initiatives have been taken to train up teachers with ICT knowledge and challenges exist in the context of Bangladesh in terms of ICT implementation in classroom such as lack of knowledge and skill about ICT, and lack of technical facilities (Babu and Nath 2017).

Teachers association is regarded as another vital part of teacher's professional life. The regulatory body or organization who works to protect the rights and interest of the teachers is defined as *Teachers Association*. In Bangladesh, different teachers' associations have been formed for teachers working at different levels and streams of education. Some of these may be spread throughout the country working at various levels from central to local level and the others may work only at local level. Numerous studies are found on teachers association in the context of other countries, but no such study was done in the context of Bangladesh. It is clear that a good understanding on the activities of teachers association and its effectiveness in the development of teacher and educational institutions is vital.

D. Two decades of the *Education Watch* platform

This year the *Education Watch* project has touched its 21st year of operation. The enlightening journey of this research platform started back in 1998 with combined effort of some like-minded individuals and

organizations who aspired to the continuous exploration of educational development of Bangladesh. The *Watch Group* always aimed at investigating and monitoring important issues and aspects of education through large scale field based surveys and research. In Addition, wide spread dissemination of the research findings to aware the stakeholders and mass population in order to promote people's participation in education, initiate policy dialogue and harmonize policy and practices were also parts of this initiative. The Campaign for Popular Education (CAMPE), a forum of over 1000 non-governmental organizations in the country working for education, serves as the secretariat for *Education Watch*. All the activities are carried out through a group of about 50 persons called *Education Watch Group* divided into three bodies, viz., Advisory Board, Working Group, and Technical Team.

Since its inception in 1998, the *Watch* team has studied a variety of issues addressing different sub sectors of education. The first report was published in 1999. The first five research explored different aspects of primary education and literacy situation of Bangladesh. Since 2007 the team started to examine the secondary education sector. In 2012, the *Watch* team investigated the status of skills development in Bangladesh and the focus of the following year was pre-primary education. Thus, during this two decades of research endeavour, the *Education Watch Group* has continued creating research based evidence of almost all sub-sectors of School education in Bangladesh. Year-wise titles of the reports and explored issues are listed in Annex 1.2.

Rigorous methodological approaches were adopted in each of the research initiatives under *Education Watch*, which validates the integrity and creditability of the evidences created by this platform. Large-scale national surveys were the basis for most of the *Education Watch* studies. No such attempt other than those of the government has created such a colossal database overtime, particularly focusing the education sector. A variety of research techniques have been employed in the surveys: household survey, institutional survey, teacher survey, parents' survey, and assessment of competencies of students and literacy of population. Along with quantitative approach different qualitative strategies were also used such as classroom observation, focus group discussion and in-depth interview etc. The big part of the analysis of these reports provides national estimation including analysis by division, location (urban-rural), school and group (gender, religion) types. The issue chosen for this year's research is new in Bangladesh context, because no large scale study was carried out on teachers; therefore, this study is expected to generate new knowledge for the education sector in Bangladesh.

E. Organization of the report

This report consists with fifteen chapters. Following the overview at the beginning, this first chapter presented a background of this year's study and relevant perspectives with regard to teachers of secondary education. Chapter 2 outlines detailed objectives, methodologies, and research techniques used for this study, including strengths and limitations. Review of policies with regard to teacher development in Bangladesh is provided in Chapter 3.

Chapters 4 and 5 present the secondary educational institutions sampled for this study and some basic information about the sample teachers, respectively. Chapter 6 highlights the state of education and training received by teachers and identifies gaps in this regard. Detailed analysis of teaching as profession, income of the teachers from various sources and job satisfaction are provided in Chapter 7. Teaching related activities and workload and supervision issues and the classroom teaching-learning provisions are portrayed in Chapters 8 and 9, respectively.

The use of Information and Communication Technologies and multimedia in classroom is the centre of discussion of Chapter 10 including institutional setting for such intervention and teacher's access to mass media. Chapter 11 makes a thorough investigation of use of guidebooks by the teachers and their involvement in private supplementary tutoring. Chapter 12 National Education Policy, secondary curriculum and the fourth Sustainable Development Goal (SDG 4) are presented in Chapter 13. An analysis of the role of teacher associations is provided in Chapter 14. The final chapter presents summary and conclusions based on findings of the study with some policy recommendations.

Chapter 2

Objectives and Methodology

Key Findings

The main aim of this study is to examine and document the state of secondary school and madrasa teachers and their roles in educational development in Bangladesh.

Three types of secondary educational institutions under general education stream, viz., Government school, Non-government school and School & College, and two types of madrasas, viz., Dakhil madrasa and senior madrasa (combining Alim, Fazil and Kamil) were looked at.

Permanent teachers teaching from grade VI to X were the subjects of this study. Benefits of a mixed-method approach using both quantitative and qualitative research techniques were harnessed to achieve the study objective.

The sample consists of 3,000 teachers from 600 educational institutions. Qualitative investigation was carried out in 10 institutions located in five upazilas. It included observation of 30 classrooms, and in-depth interviews with 10 heads of institutions and 30 Assistant Teachers.

The fieldwork was carried out during September-October 2018 and in January 2019.

This chapter provides details of the methodology applied in the *Education Watch* study 2018-19. Starting with the objectives and the specific issues dealt in this research, it presents the approaches of investigation, instruments used, sampling techniques, field operations, measures for quality of data, weighting procedure, and data analysis techniques. It also discusses the strengths and limitations of the study.

A. Objectives

Keeping the teachers in the centre, this study examined and documented the state of secondary school teachers and their roles in educational development in Bangladesh. The following specific issues were explored.

1. Policies related to development of teachers for secondary education in Bangladesh;
2. Social, educational, professional, and economic states of the teachers;
3. Teachers understanding of pedagogy and curriculum and their teaching competence;
4. Role and functions of teacher associations;
5. State of the teachers in Bangladesh with regard to the fourth Sustainable Development Goal (SDG 4); and
6. Co-relations among various issues related to teachers lives and their skills and understanding.

B. Methods

To achieve the objective, a mixed-method driven study with quantitative and qualitative research techniques was employed. It combined document analysis, sample survey and in-depth exploration. The research techniques were used considering their appropriateness in line with the issues for exploration under the broad research objective.

Document analysis was the main tool to explore the first and the fourth issues. In addition, some interviews and Focus Group Discussions (FGDs) were carried out to know the relevant practices. A teacher survey was conducted for addressing the second set of issues which included information on teachers' social, educational, professional, and economic lives. This also covered a section of the third, fourth, and fifth issues. The information were collected through one-to-one interview with a representative sample of teachers. A self-reported scale was developed particularly for this study to explore teachers' competence. A short module containing information on schools and teachers following SDG 4 was used to achieve the fifth issue. Information gathered for fulfilment of the second and the third issues were used to achieve the sixth issue. Of the various types of secondary educational institutions, only those that provided the full range of secondary education (grades VI to X) in Bangladesh were the subjects of this study. Therefore, the Government Primary Schools and the Junior Secondary Schools were excluded from study population as they provide education for the students up to grade VIII. Of the remaining, the public School & Colleges and Alia madrasas were not considered because of their small numbers. The two types of Vocational institutions were also not included for their different nature. Therefore, the remaining seven types of institutions were considered for this study grouping them into five. These are as follows:

- Government School,
- Non-Government School,

- School & College,
- Dakhil Madrasa, and
- Senior Madrasa (Alim, Fazil and Kamil together).

Note that the Government schools are fully financed and managed by the government. Majority of the others receive grants from the government and the teachers also receive salary subvention, but the institutions are managed privately through independent managing committees or governing bodies. A short description of these institutions are provided in Box 2.1.

Box 2.1

Various types of secondary educational institutions under study

Government school: The government established these institutions or took over under direct management of the Ministry of Education. Most of these schools offer education from grade VI to X; however, some provide from earlier grades as well. Full financing of these institutions is made by the ministry. There is no school managing committee in these schools. Deputy director of the zonal education office oversee these over the head teachers. Parent-teachers association exists.

Non-government school: These are privately established educational institutions managed by school managing committees. Likely to above, these institutions offer education from grade VI to X, but some offer from earlier grades. A vast majority of these institutions receive government subvention. Majority of the teachers receive salary and other benefits from government. Therefore, grant and non-grant institutions and teachers comprise this type of educational institution.

School & College: Likely to the Non-government schools, these institutions are privately established, but managed by governing bodies. Starting from an earlier or grade VI, these institutions provide education up to grade XII. A vast majority of these institutions also receive government subvention. Majority of the teachers receive salary and other benefits from government. Therefore, grant and non-grant institutions and teachers comprise this type of educational institution.

Dakhil madrasa: This is an Islamic faith based institution, established and managed privately. Starting from grade I, these institutions provide education up to grade X. These institutions follow national curriculum with emphasis on Arabic language and Islamic philosophy. As of above, grant and non-grant institutions and teachers comprise this type of educational institution with majority of them receiving such facility.

Senior madrasa: This is a composition of three categories of madrasas which provide Islamic faith based education up to Alim (grade XII), Fazil (Bachelor's) and Kamil (Master's) levels. Each of them are established and managed privately and provides education from grade I. As of Dakhil madrasas, these institutions follow national curriculum with emphasis on Arabic language and Islamic philosophy. Grant and non-grant institutions and teachers comprise this type of educational institution with majority of them receiving such facility.

Students of the first three types of institutions appear in secondary final examination under various Boards of Intermediate and Secondary Education. It is Bangladesh Madrasa Education Board for the rest two cases.

C. Management of research

The *Education Watch* group provided guidance to the implementation of the research through its Working Group and Technical Committee, with support from the Advisory Board. The Campaign for Popular Education (CAMPE) acted as the Secretariat. A team of researchers from the former Research and Evaluation Division (RED) of BRAC, BRAC Institute of Educational Development (BRAC IED) under BRAC University, and present and former faculties from the Institute of Education and Research (IER) of the University of Dhaka

and Noakhali University of Science and Technology (NUST) collectively implemented the research. Preliminary findings were shared in a series of *Education Watch* meetings. The final draft report was presented in a multi-stakeholder sharing meeting. The report was reviewed by a team of four experts on the subject.

D. The instruments

Instruments used in this study included two questionnaires, one scale and a number of checklists. The questionnaires were for the educational institution survey and teacher survey. The scale was Perceptual Teaching Competence Scale (PTCS). The following paragraphs present short description of the instruments.

Educational institution survey questionnaire: This was a 2-page instrument to collect some basic information of the sample educational institutions. The issues addressed in this instrument included general information of institutions, number of teachers by their categories and their attendance, stream of education, ICT facilities and their use, and number of students and their attendance. The questionnaire is provided in Annex 2.1.

Teacher survey questionnaire: It was a 12-page questionnaire developed for this study. Questions were selected on the basis of the broad research objective. The instrument was developed through several pre-testing of various versions of draft questionnaire prepared by the research team and several discussions among the team members, and a pilot survey. The sub-sections of the questionnaire included the following:

- a. Household members' demography and education
- b. Education of teachers
- c. Professional and other training
- d. Class routine and question paper preparation
- e. Classroom teaching and supervision
- f. Additional teaching
- g. Use of ICTs and multimedia in classroom teaching
- h. Private supplementary tutoring
- i. Education policy, curriculum and SDG 4
- j. Choice of occupation, income and satisfaction
- k. Teacher association

The teacher survey questionnaire is provided in Annex 2.2.

Perceptual Teaching Competence Scale (PTCS): A self-reported new scale was developed for this study. It contained 35 items related to teacher's competence. The items were written as statements. The statements were distributed into five components or sub-scales consisting of teachers' pedagogical, professional, motivational, ethical, and resilience levels. Each sub-scale contained statements from the domain of cognitive, affective and behavioural characters with positive and negative valence. Each of the items (statements) was composed of five response options: a) it applies to me completely, b) it applies to me partially, c) some time it applies sometimes not, d) it does not apply to me, and e) it does not apply to me

at all. The inter item consistency or reliability of the scale was calculated using Cronbach alpha (Cronbach 1951) and the value was found 0.743, and the scale score ranges from 35 to 175. Details of development of the scale is provided in Annex 2.3 and the scale in Annex 2.4.

Checklists: A number of checklists were developed and used for in-depth interviews and Focus Group Discussions (FGDs) with the teachers and for classroom observations. Issues for investigation were taken from the issues captured in the teacher survey questionnaire. A separate set of checklists were also used for teacher association leaders.

E. Sampling

Most of the indicators of this study are categorical in nature and a good number of them can be categorized dichotomously. Therefore, binary distribution fits better with them. It was considered that a half of the teachers fall in one category and the remaining fall in another category in each of the indicators. The other conditions include 5% error of precision and 95% confidence interval. It was decided to apply a multistage sampling strategy. Again, five separate estimates by institution type for each indicator were planned.

$$n = \frac{pqz^2}{e^2} \times d \times i$$

Following formula was therefore used to determine the sample size.

Here, n is the sample size to be determined, p is the probability of a teacher falling in any of the two categories in each indicator, q is the probability of a teacher falling in other category (i.e., $q = 1 - p$), z is the area under standard normal curve within certain confidence limit, e is the error of precision, d is the design

$$n = \frac{pqz^2}{e^2} \times d \times i = \frac{0.5 \times 0.5 \times (1.96)^2}{(0.05)^2} \times 1.5 \times 5 = 2,880$$

effect, and i is the type of institution. Considering $p = 0.5$, $q = 1 - p = 0.5$, $z = 1.96$ at 95% confidence limit, $e = 0.05$, design effect $d = 1.5$, and institution type $i = 5$; the sample size stood at 2,880 for the study.

The list of educational institutions prepared by the Bangladesh Bureau of Educational Information and Statistics¹ (BANBEIS) in 2016 was used as the sampling frame. A three-stage sampling strategy was applied. At the first stage, 60 upazilas/thanas were selected following a systematic random sampling strategy. In each selected upazila/thana, two institutions of each type – total 10, were selected following a simple random sampling technique. In each selected institution, the list of permanent teachers teaching in grades VI to X (any or all) were collected. Five teachers were selected from each list following the same technique. Therefore, the ultimate sample contained 3,000 teachers from 600 institutions (Table 2.1). Sample for each type of institution contained 600 teachers from 120 institutions. Of the 600 sample institutions, 65.7% came from rural and 34.3% from urban areas. Of the sample teachers, 34.5% were from the urban institutions. Overall, 22.4% of the sample teachers were females.

Information collection using qualitative techniques was carried out in five upazilas, conveniently selected from the above working areas. The upazilas were: Sylhet Sadar, Mehendiganj, Bagha, Muktagachha, and Birampur. Ten educational institutions were selected from them in such a way that each type of institution

¹ <http://banbeis.org>, accessed on 3 September 2018.

Table 2.1
The sampled institutions and teachers by institution type, gender and area

Institution type	Number of schools			Number of teachers				
				Gender		Area		All
	Rural	Urban	Total	Male	Female	Rural	Urban	
Government	15	105	120	452	148	72	528	600
Non-government	101	19	120	452	148	504	96	600
School & College	83	37	120	443	157	415	185	600
Dakhil madrasa	103	17	120	496	104	515	85	600
Senior madrasa	92	28	120	486	114	460	140	600
Total	394	206	600	2,329	671	1,966	1,034	3,000

is selected twice. In other words, the qualitative study was carried out in 10 institutions taking two from each of the above five types. Three teachers teaching three different subjects of grade IX were chosen from each institution, totalling 30. Classroom teaching of each teacher was observed for three consecutive days. Therefore, total number of observations was 90. Number of subjects were 17. These 30 teachers as well as the heads of 10 institutions were brought under in-depth interviews (Table 2.2).

F. Field operations

Field work was carried out in three parts. The first part included the survey of educational institutions, teacher survey, and administration of the Perceptual Teaching Competence Scale (PTCS). The second part included in-depth interviews with the head of institutions and assistant teachers, and classroom observations. The third part included interviews with teacher association leaders and members.

Table 2.2.
Sample for qualitative study

Issues	Sample
Upazilas	5
Institutions	10 [2 from each type]
In-depth interviews with heads of institutions	10 [same as above]
Classroom observation	30 [6 from each institution]
In-depth interviews with assistant teachers	30 [same as above]

Three groups of Research Assistants (RAs) were engaged for fieldwork. All were provided with adequate training to prepare for fieldwork. For the first part, 70 RAs were recruited who were provided training for five days during the second week of September 2018. Sixty-five of them were finally selected who carried out the fieldwork during September and October 2018. Sixty of them, dividing into 30 teams, collected the information from the sample institutions and teachers and the remaining five worked as supervisors. Therefore, each educational institution was visited by a two-member team. Seven RAs were recruited for the second part of fieldwork. They were provided two days training on the fourth week of September 2018. Five of them were finally sent to the field for three weeks. The third part of fieldwork was carried out by two members of the research team along with two RAs. They collected data during January 2019.

Only two types of institutions, viz., Non-government schools and Dakhil madrasas were successfully sampled from the selected upazilas/thanas because of having adequate number of institutions there. For others, nearby upazilas/thanas had to be selected. Major problem rose with the Government schools followed by School & Colleges and senior madrasas, respectively. This totally depended on the number of institution of particular type in the upazilas/thanas. There was only one Government school in each

upazila/thana. Forty-two Government schools, 71 School & Colleges, and 105 senior madrasas were sampled from the initially selected upazilas/thanas. Therefore, nearby upazilas/thanas had to be selected for 78 Government schools, 49 School & Colleges, and 15 senior madrasas. Overall, 458 educational institutions were selected from the sampled upazilas/thanas (76.3%) and 142 had to be sampled from the nearby upazilas/thanas (23.7%). The number of upazilas/thanas covered by this study was therefore 131, 71 more than the initial 60. The sampling of educational institutions was done by the research team at the study headquarters in Dhaka using the full list of institutions available in BANBEIS website.

Again, out of 600, intended five teachers had been sampled from 584 institutions. This was not possible in seven institutions due to lack of teachers or teachers being absent in institution on the survey day. Eleven teachers were short in these institutions. They were filled up from nine institutions sampling more teachers from them. Therefore, the number of institution had not to be increased in the sample. Note that sampling of the upazilas/thanas and the institutions therein was done by a research team member in Dhaka. Sampling of teachers was done at institution level by the RAs.

The head of the institutions were the principal respondents for the institution survey who were interviewed in their offices. Some of them provided information on their own, but a majority took help from their colleagues as some of the information had to be dug from school documents and registers. The sample teachers were also interviewed at the institution premises. As these were one-to-one interviews, at most two teachers were interviewed in an educational institution at a time. In most cases, the interviews could not be conducted at one go due to length of the questionnaire. Therefore, the sample teachers provided information in two to three sittings on the same day during gap period and mid-day breaks. Some of the teachers had to be interviewed after school hours and a few on weekends. The teacher survey questionnaire was administered first, and then the PTCS, which was self-administered.

Five RAs went to five selected upazilas, one in each, to collect qualitative data. A supervisor and research team members visited each of them to see their works as well as to work with them. The RAs took notes while observing a classroom activity or doing in-depth interviews. Detailed write-up of each of the events was prepared on the same day. The research team members also prepared write-ups on their own observations and interviews.

G. Quality assurance measures

Several steps were taken to ensure quality of data. First, for each of two-member survey team, one was made leader whose responsibility was to ensure fieldwork as per instruction. Both the members checked each other's filled-up questionnaires to find errors or inconsistencies, if any. A team of supervisors randomly visited the sample institutions to see whether the teams went to the right sample of institutions and teacher sampling was done in the right manner and questions are asked in the right way to the right respondents. They also randomly checked previous day's works. A five member team of the Field Management Unit of the former Research and Evaluation Division of BRAC also provided random visits to the field teams. They also checked whether the supervisors were doing their duties as expected. Finally, members of the core research team and the *Education Watch* group members visited some of the sampled educational institutions to check the overall field operations. The research assistants and the supervisors regularly communicated over cell phones with the research team in Dhaka.

H. Weighting and data analysis

Number of educational institutions and students of grades VI-X therein substantially varied by type of institution in the population. However, these were exactly equal in the sample. Such a deviation between

population and sample required some repairing to have correct results when data were pooled for national estimates as well as estimates for broader categories of schools and madrasas. Weights were used in pooling estimates at the above levels. Number of institutions and students in grades VI-X found from BANBEIS dataset were used in calculating the weights. Standard statistical procedure was used in calculating weights (Cochran 1977). Annex 2.5 provides detail of the procedure followed as well as the weights against each type of educational institution.

Data analysis

Data generated through surveys (institution, teacher and PTCS) were analysed using the Statistical Package for Social Sciences (SPSS) version 20. Data generated through using qualitative research techniques were analysed manually. Hundreds of bi-and-tri-variate cross-tabulations with appropriate statistical tests provided basic results. The statistical tests included chi-square, *t*, and *F*. Chi-square test was performed to detect differences among proportions, *t*-test was performed to do so between two means, and *F*-test was performed to do the same among three or more means. Many multivariate regression analysis were carried out following a stepwise approach to predict a number of situations (indicators) with regard to teacher characteristics. In most cases, qualitative findings were fitted into the report along with quantitative findings; however, a separate chapter was produced on a particular issue only with qualitative findings (Chapter 9).

I. Strengths and limitations

Although all necessary measures were taken to conduct the research in the best possible manner, like any other sample-based studies, this research bears both strengths and limitations. Strengths and limitations of the research are provided below.

Strengths

1. This is the first research exclusively on secondary school teachers in Bangladesh, which generated national as well as institution type-wise estimates on various aspects related to teachers. This research is timely because teachers are given much importance in the fourth Sustainable Development Goal (SDG4 or Education SDG). Findings of this study can help understand the teachers' lives better, which can be helpful in designing strategies on teachers so that quality of education can be improved.
2. Separate analysis of the situation of school and madrasa teachers as well as by residence (rural/urban) and gender for all the indicators produced valuable information for policy formulation. These can be valuable information for not only assessing current situation, but also determining what to be done in future for improvement of the status of teachers.
3. Although the quantitative method was the prominent one, but in most cases qualitative information supplemented the survey findings in a mutually complementary manner. This approach helped researchers to explain the issues better and therefore can be seen as an advantage of mixed method approach in educational research.
4. Establishment of relationship among various issues related to teachers' lives is totally a new addition in educational research in Bangladesh. Use of multivariate analysis made this possible.

5. Issues like teachers' involvement in private supplementary tutoring, use of guidebooks, engagement with teacher associations, and their knowledge on education policies, curriculum and SDG 4 are very much new for research in Bangladesh context. Exploration of these issues increased the merit and power of this study.
6. The national database produced by the Bangladesh Bureau of Educational Information and Statistics (BANBEIS) was used for sampling the educational institutions, which helped drawing accurate sample of institutions for teacher survey.

Limitations

1. This research did not consider public School & Colleges and Alia madrasas due to small numbers, the Junior Secondary Schools for not providing the full of secondary education, and the independent vocational institutions for their different nature and provision of partial of secondary education. Although these institutions collectively represent a small part of secondary education in Bangladesh (8.6% of institutions, 6% of teachers and 3.5% of students), but exclusion of them may raise question regarding full representation.
2. The sampling frame was readily available for simple random sampling in selecting the institutions, but it was not done for practical reasons such as shortage of time for field work. Such a strategy could have generated more accurate estimates. On the other hand, more than double the number of upazilas/thanas had to be visited to reach the intended number of institutions. Some errors due to such situations cannot be ruled out.
3. Qualitative part of the research was concentrated to only in 10 institutions located in five upazilas. This limits generalization of the findings for that part of the research.
4. Duration of classroom observations was only three days. Again, it was done almost at the end of the academic year. These seem to be inadequate to have the full picture combining varieties of topics on a particular subject. Limitations due to this cannot be ruled out.

Chapter 3

Review of Policies Related to Teacher Development

Key Findings

The Directorate of Secondary and Higher Education (DSHE) under the Ministry of Education is the key agency to implement secondary education in Bangladesh. The Bangladesh Madrasa Education Board is responsible for madrasa education.

The DSHE recruits teachers for Government secondary schools. The Managing Committees or Governing Boards do so for the other types. The applicants need to qualify the teachers' registration test administered by the Non-government Teachers Registration and Certification Authority (NTRCA).

Minimum educational qualification for secondary school teaching is a Bachelor's degree. The National Education Policy 2010 recommended Bachelor of Education (BEd) degree as the pre-requisite for teaching position alongside the above and introduction of co-curricular activities during the training. Both are yet to be materialized.

Government provides grant to a large majority of the private educational institutions (83%) and salary subvention to the teachers therein (89%). The amount was BDT 87,943.6 million for the FY 2015-16.

Teachers' promotion is almost impossible in the secondary education system. After a certain period of time, the grades of the teachers are increased which result in some addition in salary and benefits keeping the designation the same – Assistant Teacher. In case of the private educational institutions the promotional process is even worse.

Democratization of secondary education is one of the most significant achievements of Bangladesh in the past decades. Along with increased access of young people to secondary education, increase in the number of educational institutions and teachers, and reduction of gender inequality in access are some of the highlights of this success. There have also been up-gradation of curriculum, digitalization of secondary educational institutions through setting up of smart classrooms with ICT materials, and training of a large number of teachers (subject based and short courses on various educational issues). However, quality of education has not improved with equal pace of quantitative success. It is often said that the education system has become ‘exam-centric’ rather than ‘learning-centric’ (Nath et al. 2015).

Although there are many factors affecting learning achievement, a complex variable of particular significance is the teacher and the quality of teaching. Teachers play the most important role in the planning, delivery, management and ensuring the quality of education (World Bank 2013). Importance of teachers for better learning has seen demonstrated in a number of studies (Schacter & Thum 2004, Glewwe & Kremer 2006, Hanushek & Rivkin 2006, 2010). The role of teachers is more important when the fourth Sustainable Development Goal (SDG 4) is a concern. In SDG 4, teachers have been considered as a key agent for achieving quality of education (United Nations 2017). Teacher related issues are important for Bangladesh because their salaries constitute the largest single budgetary element in education (World Bank 2013). Addressing the teachers’ issues and improving their situation are linked to the efficient use of public resources. This chapter presents a review of policy documents relevant to the teacher recruitment, salary, promotion, training along with their status, rights and responsibilities that should be considered in order to support quality improvement in secondary education.

A. Teacher recruitment system

The Directorate of Secondary and Higher Education (DSHE) under the Ministry of Education is the recruiting authority against the approved positions of Assistant Teachers for the Government secondary schools. This is done on the basis of the applicants’ academic results, a written and an oral test. Four-fifths of the heads of these institutions are filled up through promotion of the Assistant Teachers and the remaining portion is filled up from outside. The Bangladesh Public Service Commission (BPSC) under the Ministry of Public Administration calls for application for these positions (heads) and take tests before selection. Earlier in 1983, based on a suggestion of an administrative reconstruction committee (known as Enam Committee), the government has created 14 subject-based teacher positions in each Government school. However, it was amended in 1989 and all positions are made Assistant Teachers (Rahman et al. 2010). Initially, position of the Assistant Teacher was equivalent to a class III government employee and the head of institution was equivalent to a class II government employee, which has now been upgraded to class II and class I, respectively.

The School Managing Committees (SMCs) are the recruiting authorities for the grant and non-grant based secondary schools (Non-government) and School & Colleges. However, the applicants are to prove their eligibility through a written test administered by the Non-government Teachers Registration and Certification Authority (NTRCA). NTRCA was formed in 2005 with the intention of ‘no person shall be considered eligible for the post of assistant teacher of the non-government schools unless s/he is listed, registered, and certified by NTRCA’. To be listed to NTRCA, the interested persons are to sit for a written test of 200 marks – half on compulsory subjects such as Bangla, English, Mathematics and General Science, and remaining on optional subjects as per choice of the candidates. The candidates who receive certificate from NTRCA are considered eligible to apply for the post of Assistant Teacher as per advertisement by the SMC where there is a vacant position.

As per rule, the SMC forms a recruitment committee of minimum five members; two of which must be the representatives of Director General (DG) of DSHE as may be nominated from nearby government school or college. The SMC Chairperson chairs this committee. The other members are head of the Institution, who is also the member secretary of the committee and any member as desired by the SMC – may be SMC member or a teacher of other educational institution or local community leader or an educationist. The committee prepares a list of qualified candidates in order of merit and then sends it to the SMC for final selection preferably of the better candidates. Note that in case of recruitment of head of institution, the DG-DSHE representative must be the head of a government institution (school or college).

The National Education Policy 2010, however, has proposed to set up a selection commission for the Non-government school teachers. This commission was proposed to be formed similar to BPSC for recruitment of teachers based on their capability and merit for the grant and non-grant educational institutions from primary to higher secondary education including the madrasas. According to this proposal, teachers will have to be selected by the non-government teachers' selection commission through an appropriate process of oral and written tests every year and be recruited as per local and institutional needs. However, the proposed central 'selection commission' could not be formed, but every school has got its own SMC which takes the responsibility of selecting a teacher. With the establishment of the proposed selection commission, NTRCA will be abolished.

There are established minimum educational qualifications for teachers to be recruited, set by DSHE. The minimum qualifications are as follows:

- The minimum educational qualification for recruitment of a teacher for secondary educational institution is a 2nd class Bachelor degree or equivalent.
- No pre-service training is needed for recruitment. The recruited teachers have to receive training and earn a Bachelor of Education (BED) degree within three years from their joining.
- For direct appointment for the post of head of institution, the minimum qualification is a Master's degree with a 2nd class and the person has to earn a BEd degree within 3 years of appointment.

The SMCs generally follow this. Note that fully independent institutions, who do not receive grant from the government, are not bound to follow the above criteria for teacher recruitment. They can set their own criteria as per the institutional need.

Teacher recruitment is crucial for success of any education system. It is important to recruit quality teachers through a fair and transparent procedure. A Transparency International Bangladesh (TIB) study by Mulcahy (2015) found that teacher recruitment is one of the main sources of corruption in the education sector of Bangladesh. Nepotism and political affiliation are common factors that influence recruitment and training processes of the teachers. To make recruitment procedure effective UNESCO (2015) has set a standard. It emphasized on a number of considerations that should be kept in mind while recruiting teachers. First of all, the need of teachers would have to be evident clearly and only those persons would have to be attracted and retained who possess a sound profile and strong commitment to teaching. It emphasised on teachers' professional enhancement and status. Regarding teachers' recruitment UNESCO (2015) suggested to ensure a fair selection process, which is transparent and does not exclude the disadvantaged groups. Suggestion was also made to introduce licensing of teachers, so that it ensures necessary knowledge, competence and attributes of those who are interested in teaching (Annex 3.1).

ILO/UNESCO (1996) outlined some recommendations regarding preparation of individuals for entering into teaching profession. The purpose of this would be providing society with sufficient number of teachers who are capable with necessary professional knowledge and skills of teaching and have moral, intellectual, and physical qualities. They also recommended ensuring completion of an approved course by the candidates from an appropriate teacher-preparation institution prior to entering into teaching. Proposal was also made to ensure completion of secondary education as minimum educational qualification for admission to those courses. Candidates lacking formal requirements of admission, but enriched with valuable experience of teaching and vocational skills would also be qualified for admitting to the teachers' preparation course. ILO/UNESCO also stressed on ensuring availability of financial grants for the students to pursue courses of teaching for preparation (Annex 3.2).

The ILO/UNESCO (1966) recommendation reflects that entering into teaching profession is a planned decision. However, in Bangladesh, the criteria for entering into the teaching profession are very low and required no professional training neither it requires rigorous preparation. A person in Bangladesh can enter into the teaching profession legitimately without any professional degree or training which might underestimate the importance of professional requirements of getting into this profession.

In a few cases, the Assistant Teachers of the Government schools may get promotion to higher positions. No such scope exists for those in grant and non-grant educational institutions. Teaching in Government institutions is a transferable job throughout the country, which is done on demand but not on a regular basis. This is not the case in grant and non-grant educational institutions. The teachers in these institutions can proceed in the same institution with initial designation until retirement. As per government rule, all teachers of government, grant or non-grant institutions retire at the age of 59 years with one-year pre-retirement leave.

B. Promotion of teachers

Promotion is an important issue in any service. However, it is almost non-existent in secondary education in Bangladesh. Only a few teachers, if lucky, get promotion in this system. If a graduate without a BEd degree enter in teaching job as an Assistant Teacher receives grade 11 in the service cadre and if anybody possesses a BEd degree with similar educational qualification also get Assistant Teacher position but receives one step higher grade i.e., 10th grade. After 8, 12 and 15 years of service the person receives grades 9, 8 and 7, respectively. Such an up-gradation only increases salary and other benefits as per national pay scale remaining their post as Assistant Teacher. A very few of the teachers can get promotion to the post of assistant head teacher which is equivalent to grade 8 and head teacher which is equivalent to grade 7.

Because of limited positions for head and assistant head teachers, most of the assistant teachers retire from service after 30 years or so (at age 59 years) from the same position of Assistant Teacher. As a result, except for the government service-length salary scale, there are very few opportunities to increase ones in-school earning potential. The situation of Non-government school teachers is worse as there is no provision for them to be promoted from the post of Assistant Teacher. In fact, the up-gradation of pay scale with years of service length is not applicable for them.

Teacher promotion policy as mentioned in the National Education Policy 2010 is more progressive than what is practiced on ground. Following are the main points from the policy.

- Teachers of the non-government educational institutions will be promoted to higher positions, ... through a competitive process that reviews their qualifications (higher degree, original research

works, improvement of teaching methods etc.). This process will be carried out according to the non-government teacher recruitment regulations. Increment of salary will be subject to successful completion of training and achievement of higher degree. On a broader context, the basic benefits will be met first, while other facilities will be connected with the acquisition of higher qualification and skills.

- It is necessary to connect promotion with the training received by teachers. Vacancy for higher posts will be filled in through direct appointment or accelerated promotion of higher degree holders and qualified and trained teachers. If necessary, up-gradation of posts will be done through appropriate rules and regulations.
- The positions of teachers of all streams and levels within the MPO [grant] system will be made transferable under specified policies. Teachers enjoying MPOs [grant status] may be transferred to equivalent position in similar institutions of identical streams, if the government feels it necessary.
- Teachers will be offered incentive through substantive packages and salary scale for different levels (i.e., assistant teacher, assistant head teacher, head teacher), with opportunities of promotion. Their pay and allowances will be fixed keeping in mind their dignity and their important role in nation-building. Simultaneously, their accountability must be ensured.
- Initiatives will be taken for teachers' training and scope of their in-service training will be broadened. Overseas training will be arranged depending on necessity and availability. The skill and capacity of the national training institutions will be improved.

The Education Commission 2003 also gave some suggestions regarding teachers' promotion which were not translated into policy, but are still relevant with regard to the present context of Bangladesh. Following are highlights from the commission report.

- A person will be appointed as an Assistant Teacher when s/he will enter into the profession. After 5 years/he will be promoted to a higher pay scale as Senior Assistant Teacher and after 10 years s/he will be promoted into another higher pay scale which will be recommended by a committee of DSHE. This scale would be for Assistant Head Teacher.
- There should be a career path for teachers, where apparently brilliant teachers can be appointed in higher secondary level teaching and even in higher administration of education system.
- There should be a separate pay scale for the teachers so that they can live their life with proper dignity.
- There should be a system for pension and gratuity for all government and private sector secondary school teachers.

It is observed in two important documents that teachers' promotion in service is an unsettled issue, which varies from commission to commission. There are no standard criteria for government and private educational institutions which are strictly followed by the authority round the years. In order to assist government, the ILO/UNESCO (1966) has recommended a guideline regarding promotion of teachers. In order to ensure teachers' professional growth, the ILO/UNESCO (1996) prescribed some criteria for teachers' promotion. First of all, they mentioned that teachers with necessary quality should be able to move to the better schools. Recognition of teachers' additional responsibility was strongly suggested there. ILO/UNESCO emphasized that teachers' scope of promotion should not be limited to the teaching position within the schools only. With adequate quality, teachers could be provided with various responsibilities of

educational administration as well. Finally, in consultation with the teachers' organization it would have to be ensured that teachers' promotion should be based on an objective assessment of teachers' qualification for the new post (Annex 3.3). If these criteria could be followed in the national promotion policy the national standard of education could have been much better.

C. Wage and other benefits

Wage and benefits are important for any service because it determines the life style, motivation, and helps develop planning for future development in the career. In the perspective of labour market, education that ensures higher income is considered to be successful for any profession (UNESCO 2015). Ironically, in Bangladesh, teachers' pay is not adequate and does not meet either the demands of the job or fulfil teachers' basic needs considering market value. Despite increase in remuneration, it remains low and does not adequately support teachers' cost of living. That's why teachers get involved in other income generating activities; of which private supplementary tutoring is the most common.

The fresh university graduates without a BEd degree start their job as Assistant Teacher in the secondary educational institutions at grade 11 with BDT 12,500 per month as basic salary. A teacher with a BEd degree starts at grade 10 and receives BDT 16,000 as per the national pay scale 2015. After eight years of service, the teacher is upgraded to grade 9 and at BDT 22,000. There is a provision to upgrade the teacher at grade 8 as an Assistant Head Teacher after four years, but due to scarcity of posts most of the teachers do not get that – they retire with change of one grade only (from 11 or 10 to 9) and with same designation like Assistant Teacher. Those few who are promoted to the posts of Assistant Head Teacher get grade 8 at BDT 23,000 as basic. Promotion to the position of Head Teacher is due after three years. This position is called grade 7 and the head teachers get BDT 29,000 per month as basic salary. There is a provision of house rent in accordance with the location of the institution and medical allowance as well. Medical allowance is BDT 1,500 per month and house rent ranges between 35% and 65% depending upon the amount of basic salary and location of institution. A comparative statement of teachers' wage and other benefits of both public and private schools are given in Table 3.1.

The public/Government school teachers receive all the above, but those who serve in the private/Non-government institutions don't. However, majority of the teaching force is with the private/Non-government institutions. Therefore, there exists a huge difference in terms of salary and other benefits between the teachers of public/Government and private/Non-government institutions and among the teachers of private institutions. The teachers in the private institutions join as a non-grant teacher. On fulfilling a set

Table 3.1
Wages and other benefits of teachers in public and private secondary institutions

Remuneration type	Public/Government Institution	Private/Non-Government Institution
Salary	Full basic salary	Full basic salary
House rent	35–65% of basic salary	BDT 1,000 per month
Medical allowance	BDT 1,500 per month	BDT 500 per month
Tiffin allowance	BDT 100 per month	-
Festival allowances	Two per year (100% of basic salary)	Two per year (25% of basic salary)
Rest and recreation allowance	Equivalent of basic salary every three years	-
Yearly increment and efficiency bar	As per provision of pay scale	5% of basic salary*
Time scale salary increase	After 8, 12 and 15 years of service	-
Pension	As per government rule	-

*This has been introduced from 2018 by Ministry of Education Gazette. Daily Sun, 15.11.18.

criterion, they are shifted as grant teachers. Therefore, both grant and non-grant teachers are available in the private educational institutions. This is actually government's salary subvention to the teachers of private educational institutions. Initially, the government provided 60% of monthly salary as grant to the grant teachers, which has raised to 90% in 2001 and the full afterwards (Rahman et al. 2010). When the government provided partial of basic salary, the remaining amount was supposed to be provided by the school authority. As the teachers reported in the interviews that in reality, the teachers had to satisfy with the government part only. The institution's part was rarely available based on its financial capability. Over the time, the government also provides 50% of basic salary as house rent, 25% of the same as medical and festival allowance, and short-term training and pension (ADB 2008, Rahman et al. 2010). The non-grant teachers receive none of these. They are to be satisfied with the financial ability of the educational institutions.

Billah (2018) observed that although there lies a standing decision of fifteen years back – to have the private educational institutions a grant status they must have government recognition to continue academic programmes, it was not included in the National Education Policy 2010, but over a thousand institutions were provided grant status at that time. At present, 5,242 educational institutions with about 80,000 teachers are waiting to have a grant status, the Finance Minister of the government has decided to do so for a thousand only in the upcoming fiscal year (Byron 2018, Billah 2018).

However, no institution has been given grant status since 2011. Therefore, the teachers and the staff working in the non-grant institutions have been passing very hard days because of financial constraints. Teachers and employees of government-recognized private educational institutions have been demanding for government subvention for the past few years. They also demonstrated in the capital on multiple occasions. Good news is that, the government has issued 'The Non-government Educational Institutions (School & College) Manpower Organogram' and MPO Policy, 2018 with the aim of enlisting the remaining non-government educational institutions for grants. A scheme will soon be implemented as per the policy (Byron 2018). Selection criterion of schools for MPO have been decided to four aspects such as: the grading will have 100 points. There are 25 points for academic recognition, 25 points for the number of students, 25 points for the number of examinees and 25 points for the number of successful students in public exams (The Independent, 2 August, 2018).

UNESCO (2015) has set some basic principles to follow prior to deciding teachers' salary and benefits. These are as follows.

- National income levels – measured in gross domestic product (GDP) per capita;
- Minimum living standards in very poor countries;
- Comparator professions: professions requiring similar qualifications, length of training, knowledge, skills and responsibilities; and
- Education authorities' fiscal or revenue capacity.

Unfortunately, this standard is not strictly followed in Bangladesh while determining the salary in the public sector. In private sector, this standard is seriously hampered for many obvious reasons like, poor financial condition of the institute, and/or lack of availability of qualified teacher in the remote areas.

In addition to basic salary, which may include retirement pension and social security provisions, other financial incentives forming part of teachers' reward packages include allowances for particular responsibilities, family benefits, housing provision or subsidies, transport subsidies and financial contributions towards further training and continuous professional development (CPD). Introduction of

such reward in response of teachers' excellence in his/her profession will be productive for creation of good quality teachers in this vocation. Not only financial benefits but teachers may provide non-financial incentives including various leave provisions (including study leave), enhanced promotion opportunities, access to different types of CPD, provision of smart phones, e-readers or laptops with Internet connections for CPD and housing. Financial and nonfinancial incentives should be part of a holistic strategy to attract teachers of hard-to-staff schools, including career progression (UNESCO 2015).

Apart from the salary there should be social security provision such as medical care, sickness benefit, unemployment benefit, old-age benefit, employment injury benefit, family benefit, maternity benefit, invalidity benefit and survivors' benefit (ILO/UNESCO 1966). The ILO/ UNESCO (1966) recommendations for determination of teachers' salary and benefits are provided in Annex 3.4. This can seriously be considered in Bangladesh for the betterment of the teachers as well as for quality of education.

It is to be mentioned that where teacher salaries do not reflect the levels of education, training and responsibilities required, or allow teachers to live decently without taking on second jobs, the teaching profession loses prestige, adversely impacting on recruitment, motivation and retention. Considering the situation of Bangladesh, it is therefore, a high time to take the salary issue of teachers with great concern and take necessary steps to mitigate the discrepancy between the salary and other benefits for the teachers of public and private educational institutions.

D. Opportunities for professional development

According to UNESCO (2015)'s Teacher Policy Development Guide, a career path which allows for progression and development over a teacher's career is crucial to attract, motivate and retain teachers, contributing to building a teaching force with necessary knowledge, competence and attitudes to enhance learning. Meaningful rewards and incentives, financial and non-financial, to motivate teachers to progress; be linked to significant continuous professional development (CPD) options; and be equitable, allowing equal opportunities in career progression are also there in the guide.

Teaching is a blocked job in Bangladesh because it has no vertical or horizontal transition in the whole profession. Once a person becomes a teacher remains there throughout his/her career except a few lucky who gets promotion to higher post like Assistant Head Teacher or Head Teacher (FREPD 2007). However, teachers are allowed to apply for higher positions and may join there if they survive the selection procedures. Usually very few teachers (ranging from 5 to 10%) get such opportunity in their life time. The major attraction of such teaching profession is the opportunity of getting students for private supplementary tutoring. It is a trend among the teachers that they do not take much care of the students in classrooms, they invite them at home to a small or large group where they teach with little more care and devotion. Usually school teachers largely prefer private coaching for it is another source of income.

The issue of teachers' professional development and higher education had been highlighted throughout the recommendations provided by ILO/UNESCO (1996). To ensure professional capacity of the teachers they strongly emphasized on in-service training to the teachers. The recommendations also included that the authority in consultation with the teachers' organization would promote a wide system of in-service training which would provide free in-service training to the teachers. For this, there should be collaboration among the teachers' preparation institutes, scientific and cultural institutes and so on. Ensuring availability of resource books and materials, and scope of participating to various courses were another recommendation there for keeping teachers update regarding the content and method of their respective subjects. Provision of using relevant research findings by the schools for enhancing teachers' capacity on

the subject they taught and the teaching methods they used. Finally, they recommended ensuring teachers' scope of pursuing higher education and the availability of financial and technical support for this purpose on an international or regional basis (Annex 3.5).

E. Professional status of teacher

As per recruitment rule, the position of Assistant Teacher was equivalent to class III government employee (non-cadre) for long and the head of institution was equivalent to class II (non-cadre), which have now been upgraded to class II and class I, respectively. Teachers of Government high schools have been demanding for a status of class I for long, but the situation still remains the same with class II (non-cadre). Despite the emphasis on this issue given by all the education commissions, no government pay commission heeded to this demand. Lack of such status made the profession less lucrative to the potential candidates.

After the independence of Bangladesh, the first Education Commission led by Dr Qudrat-e-Khuda (1974) drew the secondary school teachers' professional status to a significant position. The Commission said that the 'teachers should be able to live a minimum standard of prestigious life hence government should take initiative for increasing their salary and other facilities and they have to maintain consistency with everyday life standard. Ranks should be increased for teachers.' Later in 1988, another National Education Commission also suggested to give special attention to the teachers. This Commission suggested to introduce annual award for the successful teachers to be distributed by the President of the country and also to change the warrant of precedence in order to establish teacher's social and national honour. The Education Commission of 2003 for the first time observed some discrepancies regarding the professional status of secondary school teachers. Following are the Commission's observations.

- Though teachers of Cadet College get recognition as first class gazetted officer, but the secondary school teachers with the same qualification dignity of position is much lower than them.
- Assistant teachers get salary same as 2nd class officer but they don't get the same reputation as them.
- Assistant teachers received 8, 12- and 15-year time scale but they don't get promoted. This is the main reason why qualified youngsters are not interested in teaching profession.

The National Education Policy 2010 has given much emphasis on teachers' status and acknowledged the issue by providing it in a separate chapter along with teachers' rights and responsibilities. In order to increase teacher status, the policy considered that honour and honorarium are interrelated. Teachers' social status can't be increased without increasing their professional rank and pay scale. Moreover, other avenues of professional development and provisions are suggested for teachers to endorse their status as well as quality education. According to the policy, 'if the issue of the status of teachers is limited to rhetoric and the teachers do not enjoy a respectable social status in real terms, the quality of education cannot be improved.' The document has suggested several provisions for reducing the existing gap between Government and private/Non-government educational institutions in terms of their financial benefits. Such as:

- In order to increase the benefits of the teachers of private/non-government institutions to the level of the government institutions, the government will gradually increase the salary and other benefits on the basis of availability of funds and the academic and training skills of the incumbent.
- The benefit trust for the teachers of non-government institutions will be strengthened. Medical expenses of teachers, one-time [financial] assistance on the occasion of premature death of the teachers/employees, pension and financial benefits on their retirement will be increased.

- There must be specific policies to nationalize the non-government educational institutions. These policies will include the service rules of the teachers/officials/staff of the nationalized institutions. The policies will protect the interests of the teachers recruited through the selection commission. Similar protection will cover the interests of the officials and staff.

F. Rights and responsibilities

The Quadrat-e-Khuda Commission gave directions regarding responsibilities of the teachers and specified job responsibilities and working hour of the teachers of secondary educational institutions. The commission suggested 45 hours' work per week for the teachers of grades VI-X. The suggestion also includes its division by activity such as, 21 hours for teaching, 10 hours for preparation, 8 hours for teacher's rectification and managing student behaviour, and 6 hours for co-curricular activities.

According to the National Education Policy 2010, the major duties of the teachers include inspiring and encouraging the students to cultivate good habits; to build-up their diligence, tolerance, perseverance, patience, respect for religion of their own and of others; to build them up as patriotic and efficient citizens free from any superstitions. Their responsibilities would include delivery of lessons within the classroom with sincerity and involvement in activities related to education. They should feel responsible to build-up the future of the learners. It is expected that the teachers will remain present in their respective institutions for some fixed hours. It also states that the weekly working time for secondary teachers (Grade VI-XII) should be 45 hours. Of which 24 hours for teaching, 6 hours for counselling and welfare activities, 6 hours for preparation of exercise, and 4 hours for other activities.

Regarding rights of the teachers, the National Education Policy 2010 promised the followings, though many of them did not see the light of implementation yet.

- Female teachers will not be discriminated for any reason whatsoever particularly in matters of recruitment. Equally qualified female teachers will enjoy priority particularly in primary and secondary education.
- Promotion of teachers at all levels of education will depend on seniority and their teaching qualities. Methods to measure the teaching proficiency will be introduced. Training courses received by them will also be considered in case of their promotion at all levels of education.
- Teachers will be honoured and encouraged for any special contribution to the field of education, society, creative writing and publications.
- Teachers selected on the basis of merit, efficiency and experience will be posted at different levels of educational administration and there will be opportunities of promotion for them.
- Teachers' organizations should introduce some ethical/moral codes and rules and regulations and ensure that these are being followed. The government may also play an active role in this regard.
- Teachers of government and non-government educational institutions will enjoy earned leave (EL) like others.

The above shows the intention of the government, but in order to transform the policy into act is not visible. Despite a complete draft of education act yet it was not adopted by the parliament.

Regarding the rights and responsibilities of teachers the ILO/UNESCO (1966) charter also recommended some activities that are ideal for teachers of any secondary level education. These recommendations are

provided in Annex 3.6. On the other hand, according to UNESCO (2015) work hours should be based on all dimensions of teachers' work, which include instruction time, instructional support, CPD, administrative and co-curricular activities and parent/guardian interaction, as well as personal and family needs.

G. Teachers' accountability

The word 'accountability' often means 'answerability' for someone's duties. It also refers to someone's responsibility for assigned duties towards achieving a target. The bureaucracy in Bangladesh focuses more on a set of rules and regulations or processes rather than the outcomes or citizens' satisfaction. The notion of accountability may, in practice, be simplistically applied to maintaining rules since poor performance and quality of the service delivery often do not affect the job security of the officials, be they administrators or teachers in public educational institutions (Mukherjee 2001, Rahman 2013). Teachers' accountability for their performance and the quality of their teaching is a key to a high-status teaching profession and to enhancing learning. There is a reciprocal principle that education systems should be accountable to teachers, providing effective support and acceptable working conditions (UNESCO 2015).

According to UNESCO (2017), the secondary teachers do not have the autonomy to decide on teaching curricula, materials, or tests used to assess the students taught by them. Given that every decision regarding curricula comes from the centralized administration; 'teachers and school administrators do not have the authority...to innovate beyond the textbook' (Moyer 2014). This long-lasting centralized practice, in turn, has created an 'inherent inactiveness' among the stakeholders. Accountability appears as an 'alien' concept (UNESCO 2017).

Moreover, the performance of teachers is poorly monitored as the internal monitoring system is not well functioning (Al Mamun 2014). Therefore, teacher absenteeism, negligence of duties and other types of irregularities are commonly practiced. A World Bank (2013) study found that on average, 13-17% of the teachers are absent from their duties for authorized and unauthorized reasons, and 30% of the teachers come late to their duty stations (Chaudhury et al. 2004).

The local policy implementing agency functions poorly because: first, no policy related power is delegated to the local administration at the district and upazila levels; and second, poor monitoring system of District Education Offices. The District Education Offices are responsible for academic supervision and inspection of secondary schools and madrasas, as well as the particular inspection of newly established schools under each district. The district office is also responsible for monitoring of stipend programmes for girls, academic supervision, and data collection of annual surveys for BANBEIS. There is an Assistant Supervisor at District Education Office and an Upazila Academic supervisor at Upazila Secondary Education Office. Their main job is to visit the cluster wise secondary schools determined by District Education Office on a monthly basis for academic improvement and provide assistance to the schools and monitoring them. They are also responsible to send monthly monitoring report for achieving overall quality of the educational institutions on the specific form to respective Deputy Directors' Office through intensive supervision. On an average, the number of visits is mainly around 11-20 per month. However, considering the number of schools and area it becomes difficult to visit all the assigned schools in a month.

H. Teacher training

Teacher training has been considered as an effective means of improving the competence of teachers, but how far these institutes are achieving their intended purpose – is a big question. All the Education Commissions since the independence of Bangladesh and the National Education Policy 2010 emphasized on the issue of teacher training. Concerns about the teacher training quality have been at the forefront of

efforts to reform secondary education since the early 1970s. For the first time, the important role of training in the teaching profession have been emphasized in the Qudrat-e-Khuda Education Commission (1974), which reported, ‘in our country we have yet to fully realize that teaching is a profession and it requires training as much as any other profession.’ The Commission mainly put emphasis on providing in-service training of teachers and suggested to popularize teacher training by providing additional allowance and salary increment in cases who have such professional training. Later in the National Education Commission (1988), it was suggested that pre-service training for teachers and refreshers training should be started along with in service training for the secondary school teachers.

In order to provide training to the teachers of secondary educational institutes, there are 14 government teacher training colleges (TTCs), one National Academy for Educational Management (NAEM), one training institute for the madrasa teachers, five Higher Secondary Teacher Training Institutes (HSTTIs) for the subject-based training of higher secondary college teachers, and five educational and research institutes (under Dhaka, Rajshahi, Chattogram, Khulna and Jagannath universities) for higher education and research. The government teacher training colleges offer BEd courses and some of them also offer MEd degree to the teachers. The Bangladesh Open University also awards BEd and MEd degrees through distance learning. Besides, there are 106 private secondary teachers’ training colleges situated in different parts of the country. These offer courses under National University.

From the very beginning, TTCs focus was solely on pre-service teacher preparation and these were incapable of conducting in-service training programmes (ADB 2015). Though some teachers had completed teacher education programmes at TTCs, yet, these programmes were of poor quality (ADB 1999). Eventually the quality of teaching method used in the secondary schools was also of poor quality. The World Bank Education Sector Review (2000, 2013) noted the same that the most common teaching style in Bangladesh is lecturing and reading the textbook to the students and having them memorizing the answers to the questions already given at the end of the chapters (World Bank 2000, 2013). Asking new questions was seldom practiced. One of the problems lies with the quality of teaching at the secondary level is the low percentage of trained teachers, although many are of highly qualified with university degrees (World Bank 2000). Therefore, both the National Education Policy documents of 2000 and 2010 have emphasized on teacher training both in pre-service and in-service.

Despite efforts to improve the quality of pre-and-in-service teacher training through various development projects, the quality of teaching continues to be a significant problem as noted in the NEP 2010: ‘The existing teacher training system of our country is very traditional, insufficient, certificate-based, loaded with theoretical knowledge, incomplete in practical learning, based on rote learning and conventional testing system.’ In addition, the practice of obtaining a BEd from low-quality private institutions rather than a higher-quality national TTC continues to be popular. Thus, the teacher training programme implementation strategies in the NEP 2010 mentioned:

- Immediately after recruitment, the secondary teachers will undergo two months foundation training. They must take part in BEd course within 3-years of joining.
- A basic training will be organized for the teachers of non-government institutions.
- Extensive co-curricular programmes will be included in the training and the role of the trainees will be properly evaluated.
- Teachers' organizations should be encouraged to play their roles in upgrading the standard of teachers and not just in realizing their professional demands.

However, many of above-mentioned recommendations of NEP 2010 regarding teacher development have been implemented, but the quality of implementation is yet to be improved to its highest extent. With this regard, it may be mentioned that, despite the government's effort of a good teacher recruitment policy some less qualified teachers managed to get in with the help of some corrupted officials in the system both in government and private sectors. Another aspect of disadvantage of teaching profession is lack of promotion in teaching positions. Hardly, few teachers get promotion in their 30-40 years of teaching profession even though they work with limited wages.

Epilogue

Teachers' competence in terms of their education and training is an essential factor of quality of education, but this factor did hardly receive proper attention from any quarter of the government or non-government initiatives. In order to achieve the SDG 4 by 2030 it is imperative to attain the quality of teachers to its highest level. Developing teachers' competence is a challenging issue because of their huge number, diversified background and 'socio-commercial' culture of the education provider. Because of large number of teacher community government look at them from economic point that, their salary raise would cost a big sum on the other hand political element like parties and agents utilize teachers' collective power to fulfil their power game agenda. Interplay of these factors somehow creates complex situation in the process of transforming teaching profession into an effective career difficult. In order to establish a sustainable and comparably effective education these teachers have to be enhanced by their professional quality. Besides teachers' long-standing demand of improving their service status has to be upgraded to a respectable one.

Efficiency in the profession of teaching starts from selection of teachers; any misappropriation in the process of selection would bias or compromise with the subsequent stages of teaching-learning activities in school. Unless the teachers' union or professional bodies would appreciate these bottlenecks and fight to stop the corruption the overall education in general and teaching in particular will never excel. Along with these, honoraria plays a great role in the process of competency development. As most of the education commissions recommended, government and other providers of education must take the issue into serious consideration; otherwise, the qualitative change that we want to bring in the total education sector will not be possible.

Chapter 4

The Educational Institutions in Sample

Key Findings

The size of the educational institutions in terms of number of students varied substantially from 58 to 4,775 with a mean 498. The mean was highest in Government schools (900) and lowest in Dakhil madrasas (210). Over 90% of the institutions were co-ed. About 53% of the students were girls.

The number of teachers per institution varied from 5 to 84. It was 12 for a quarter of the institutions, 11 for 18.3% and 10 for 11.9%. On average, the Government schools had 25.5 permanent teachers and the others had 10-14 teachers.

The institutions, on average, had 13.4 approved positions, but 11.6 were actually filled up. A half of the institutions recruited temporary teachers thereby shooting the average to 13.5. A quarter of all teachers were females. Whereas a third of the teachers of Government schools and School & Colleges were females, it was much lower in the madrasas (18%).

There were 46 students against a permanent teacher, which decreased to 39 on recruitment of temporary teachers. The highest student-teacher ratio was found in School & Colleges, followed by Non-government schools, Government schools, senior madrasas and Dakhil madrasas, respectively. The ratio was more than 40:1 in 56% of the institutions before recruitment of temporary teachers, which decreased to 39.6% on recruitment of them.

This chapter provides some basic information on the 600 educational institutions under study. This shows information on the year of establishment, distance from upazila/thana headquarters, government grant status (MPO), and grades of students which are served by the institutions with stream of education. The distribution of students and teachers in the institutions and the student-teacher ratio are also presented.

A. Setting of institutions

Year of establishment

The sampled educational institutions were established between 1832 and 2016. Of them, 1.1% were established in the 19th century (1832-1900), 10.7% from the start of 20th century to the end of the British rule (1901-1947), 24.1% during the Pakistan period (1948-1971), 29.1% during the first two decades of Bangladesh (1972-1990), and remaining 35% afterwards (1991-2016) (Table 4.1). Therefore, 64.1% of the sampled institutions were established after the liberation of Bangladesh. The Government schools were established much earlier than the others with over half of those founded during the British period – 24.2% in 19th century and 30% in 20th century. Over a quarter of the Government schools were established during the Pakistan period, 15% during the first two decades of Bangladesh and 4.2% afterwards. On the other hand, the Dakhil madrasas were relatively new institutions with none of them establishing under the British rule or before. Two-fifths of the Dakhil madrasas were established during 1991-2016, nearly 46% during 1972-1990, and the remaining 13.3% before (1948-1971). A portion of the other types of institutions were also established during the British period – 14.1% of Non-government schools, 22.5% of School & Colleges, and 16.7% of senior madrasas. A significant proportion of the School & Colleges and senior madrasas were established during Pakistan period and the Non-government schools in recent years (1991-2016) – 40%, 38.3% and 39.2%, respectively. Forty five percent of the senior madrasas were founded in post-independence Bangladesh.

Whereas, 38% of the rural institutions were established before the independence of Bangladesh, only a quarter of the institutions in urban locations were established during that period (Annex 4.1). Similarly, about three-quarters of the madrasas were established after the liberation of Bangladesh, less than 60% of the schools were established during that period.

Table 4.1

Percentage distribution of institutions by type and year of establishment

Year of establishment	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
1832–1900	24.2	0.8	3.3	0.0	1.7	1.1
1901–1947	30.0	13.3	19.2	0.0	15.0	10.7
1948–1971	26.6	25.0	40.0	13.3	38.3	24.1
1972–1990	15.0	21.7	15.0	45.9	40.0	29.1
1991–2016	4.2	39.2	22.5	40.8	5.0	35.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Distance from upazila/thana

Distance of the sampled institutions from the upazila/thana headquarters ranged from 0-30 kilometres with a mean 8.5 kilometres and standard deviation 5.6 kilometres (Table 4.2). On average, a fifth of the institutions were within 3.5 kilometres of upazila/thana headquarters, another fifth between 3.5 and six kilometres, another fifth within 6-9 kilometres, another fifth within 9-13 kilometres, and the remaining quintile were beyond 13 kilometres (not shown in table). The Government schools were much closer to

the upazila/thana headquarters and the Dakhil madrasas far-off. The average distance of the Government schools from the respective upazila/thana headquarters was 1.8 kilometres which was 7.4 kilometres for School & Colleges, 7.7 kilometres for senior madrasas, 8.5 kilometres for Non-government schools, and 9.4 kilometres for Dakhil madrasas (Table 4.2).

An inverse U relationship was observed between year of establishment of institutions and their distance from upazila/thana headquarters. The institutions established in the 19th century were, on average, 7.9 kilometres away from respective upazila/thana headquarters, it was 9.1 kilometres for those which were established during 1901-1947, 9.5 kilometres for those which were established during 1948-1971, 8.2 kilometres for those which were established during 1972-1990, and 7.9 kilometres for those which were established during 1991-2016.

Table 4.2
Distance (in kilometres) of institutions from upazila/thana headquarters by type and area

Institution type	Range	Mean	Standard deviation	Coefficient of variation
Government	0-16	1.8	2.4	133.3
Non-government	0-30	8.5	5.4	63.5
School & College	0-22	7.4	5.4	73.0
Dakhil madrasa	0.5-26	9.4	5.6	59.6
Senior madrasa	0-25	7.7	6.0	77.9
Rural institutions	0-30	9.7	5.3	54.6
Urban institutions	0-12	3.1	3.0	96.8
All	0-30	8.5	5.6	65.9

Grant institutions

The Government schools by default were getting full support from the state to meet their financial needs. But the private institutions had to fulfil a number of criteria or get a political favour to be listed for getting such support. Once listed, in most cases, it continues forever. The majority of the four types of private institutions were receiving government grant, popularly known as monthly pay order or MPO. They were 94.2% of the Non-government schools, 90% of the School & Colleges, 98.3% of the senior madrasas, and 67.5% of the Dakhil madrasas – totalling 87.8%. All the institutions established in the British period were getting government grants. However, 1% of those which were established in Pakistan period, 4.3% of those which were established in the first two decades of Bangladesh, and 30.2% of those which were established during 1991-2016 were not getting government grants. This means that likely to be enlisted for government subvention is linked with the age of the educational institutions.

B. Inside institutions

The Co-ed institutions

Majority of the educational institutions were co-ed (91.6%); however, a few of them were for girls only (7.1%) and a fewer for boys only (1.3%). The above was also true for the four types of private institutions where 93.3% of the Non-government schools, 90% of the School & Colleges, 89.2% of the Dakhil madrasas, and 95.8% of the senior madrasas were co-ed. A far different scenario was observed among the Government schools. Only a fifth of them were co-ed, 36.7% exclusively for boys, and 43.3% exclusively for girls.

The highest proportion of co-ed institutions was established during 20th century before the birth of Bangladesh – over 96% in both 1901-1947 and 1948-1971 periods. The figure gradually reduced to 92% during 1972-1990 and 86.7% during 1991-2016. This figure was 83.3% during the 19th century British period. An interesting difference between the British period and after the liberation of Bangladesh is that

the most of the institutions established during the former period were predominantly for boys and those established during Bangladesh period were for girls. Proportion of institutions established exclusively for girls was significantly higher in Bangladesh period than any other previous periods.

Grades of offering instructions

The majority of the schools offered instructions from grade VI, the first grade of secondary education. They were 65% of the Government schools, 92.5% of the Non-government schools, and 79.2% of the School & Colleges. None of the Government schools offered instructions from pre-primary, but 6.7% of the Non-government schools and 11.7% of the School & Colleges did so. A good proportion of the Government schools (22.5%) offered instructions from grade III. On the other hand, 79.2% of the Dakhil madrasas and 84.2% of the senior madrasas offered instructions from grade I and the remaining of these types of institutions offered instructions from pre-primary. All the Government and Non-government schools and the Dakhil madrasas offered instructions up to the final grade of secondary education (grade X), and it was up to the higher secondary level (grade XII) for the School & Colleges. The senior madrasas were much different than these. Three-fifths of the senior madrasas offered instructions up to higher secondary level (Alim), 29.2% up to a Bachelor's level (Fazil), and 10% up to a Master's level (Kamil).

Stream of education

All the madrasas, 96.7% of the Non-government schools, 91.7% of the School & Colleges, and 80.8% of the Government schools were offering Humanities education at secondary level (Table 4.3). Science education was offered most of the Government schools and School & Colleges, and 91.7% of the Non-government schools. It was less in the madrasas, where 48.3% of the senior and 16.7% of the Dakhil madrasas had the provision of Science education. None of the madrasas were offering Business Studies. This was offered by 77.5% of the School & Colleges, 72.5% of the Government schools, and 62.5% of the Non-government schools. A very small section of the madrasas (less than 4%) were offering instructions on Mujabbid or Hifjul Quran – the two specialised stream for madrasa education. A small portion of the educational institutions were offering vocational education; they were 10% of the School & Colleges, 2.5% of the Non-government schools, and 0.8% of the senior madrasas. Whereas, most of the rural educational institutions were offering Humanities, it was 88.7% among the urban institutions ($p < 0.001$) (Annex 4.2). On the other hand, the urban institutions were much ahead of the rural institutions in offering Science (80.2% versus 67%; $p < 0.01$) and Business Studies (62.3% versus 37%; $p < 0.01$). All the madrasas and 96% of the schools were offering Humanities ($p < 0.01$) and Science education was offered by 25.6% of the madrasas and 92.2% of the schools ($p < 0.001$).

Overall, 37.5% of the educational institutions were offering education in all the three major streams of secondary education – Humanities, Science, and Business Studies. Over 69% of the School & Colleges, 57.5% of the Government schools, 56.7% of the Non-government schools, and none of the madrasas had

Table 4.3

Percentage of educational institutions by stream of education and type

Stream of education	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Humanities	80.8	96.7	91.7	100.0	100.0	97.4
Science	99.2	91.7	100.0	16.7	48.3	69.3
Business Studies	72.5	62.5	77.5	0.0	0.0	41.5
Mujabbid	0.0	0.0	0.0	2.5	4.2	1.0
Hifjul Quran	0.0	0.0	0.0	2.5	2.5	0.9
Vocational	0.0	2.5	10.0	0.0	0.8	2.0

such provision. Over half of the urban and 34.6% of the rural educational institutions had the provision of all three major streams.

Laboratory is an essential part of Science education. Of the institutions offering Science education, 15.3% had three separate laboratories for Physics, Chemistry and Biology, 71.7% had a combined laboratory, and 13% had none. Separate laboratories for three Science subjects were available in 61.3% of Government schools, a quarter of School & Colleges, and below 15% of each of the three other types of institutions. Though offered Science education, 30% of Dakhil and 12.1% of senior madrasas, 12.7% of Non-government schools, 5.8% of School & Colleges, and 1.7% of Government schools had no laboratory.

C. Number of students and teachers

Number of students

The educational institutions varied to a large extent in terms of number of students admitted. A large variation was also observed among the institutions within each type. Overall, the number of students per institution varied from 54 to 4,775 with a mean 530 and standard deviation 430 (Table 4.4). The coefficient of variation (CV) was therefore 81%. This means that the standard deviation of the number of students in the institutions was 81% of the mean number of students per institution. Overall, 23.4% of the institutions had 200 or less number of students, 35.7% had 201-400 students, 16.6% had 401-600 students, 13.8% had 601-800 students, and 10.5% had more than 800 students (Annex 4.3). Following paragraph highlights some information on the smallest and the largest institutions, in terms of number of secondary students, in the sample.

The smallest institution was a girls' Dakhil madrasa with 54 students and the largest one was a co-ed School & College with 4,775 students (42.8% girls). The former was located in rural Tangail district and the latter in Dhaka city. Both the institutions were established in early 1980s. Starting from the first grade of primary education (which is called Ebtedayee there), the madrasa provided education up to grade X and the School & College up to grade XII. The madrasa was not enlisted for government subvention, but the School & College was. The madrasa recruited three females and four males against seven approved positions and the School & College recruited 21 females and 34 males against 55 positions. None of them had any temporary teacher. Student-teacher ratio was therefore 8:1 in the madrasa and 87:1 in the School & College.

The large institutions, in terms of number of students, were predominantly the Government secondary schools followed by the School & Colleges. The madrasas were relatively smaller institutions. Half of the Government schools and a third of the School & Colleges had more than 800 students (Annex 4.3). On the other hand, 55.8% of the Dakhil madrasas and 30% of the senior madrasas had 200 or less number of students (Annex 4.3). On average, the Government schools had 900 students, School & Collages had

Table 4.4
Survey institutions by type and number of students

Type of institution	Number of students					
	Range	Mean	SD	Median	CV	% girls
Government	139–1,907	900	487	817	54.0	49.4
Non-government	100–2,878	564	409	476	72.5	52.9
School & College	134–4,775	795	659	573	82.9	52.5
Dakhil madrasa	54–543	210	90	185	42.8	57.5
Senior madrasa	102–624	273	119	254	43.6	50.6
Schools	100–4,775	594	446	489	75.1	52.7
Madrasas	54–624	233	106	203	45.5	54.6
Rural institutions	54–2,878	498	385	339	77.3	53.4
Urban institutions	102–4,775	670	566	418	84.5	51.4
Total	54–4,775	530	430	345	81.0	52.9

SD = Standard deviation, CV = Coefficient of variation

795 students, Non-government schools had 564 students, senior madrasas had 273 students, and Dakhil madrasas had 210 students (Table 4.4). Highest variation among the institutions, in terms of number of students, was observed in the School & Colleges followed by the Non-government and Government schools, respectively. The madrasas were relatively homogeneous with this regard. The urban institutions were relatively more heterogeneous than the rural institutions (CV = 84.5% and 77.3%, respectively).

Girls occupied about 53% of the seats in the institutions under study. They were 52.7% in the schools and 54.6% in the madrasas (Table 4.4). The proportion of girls was highest in the Dakhil madrasas (57.5%) and the lowest in the Government schools (49.4%). The girls share was 52.9% in the Non-government schools, 52.5% in the School & Colleges, and 50.6% in the senior madrasas. This was 53.4% in the institutions in rural areas and 51.4% in urban areas.

The institutions established in the 20th century were much larger as well as homogeneous than the others in terms of number of students with mean 1,384 and Coefficient of Variation (CV) 42.1% (Table 4.5). Newer institutions had smaller number of students, which gradually increased as they became older. No such trend was observed with regard to homogeneity. A similar level of heterogeneity was observed among the institutions established during 20th century British rule and those during the first two decades of Bangladesh. The same can be noticed among the institutions established during Pakistan period and those during 1991-2016. However, the latter groups of institutions were more homogeneous in terms of number of students than those of the former groups. Otherwise, the proportion of girls was highest in those institutions which were established in Bangladesh (55.4%) followed by those which were established during 1901-1971 and the 20th century British period, respectively.

Table 4.5
Some statistics on number of students by year of establishment

Year	Mean	Standard deviation	Coefficient of variation	Percentage of girls
1832-1900	1,384	582	42.1	41.6
1901-1947	801	663	82.8	50.2
1948-1971	581	374	64.4	51.8
1972-1990	455	386	84.8	55.5
1991-2016	412	265	64.3	55.4

Number of teachers

The educational institutions had two types of teachers – permanent and temporary. The permanent teachers were recruited against approved positions at the institution level. The temporary teachers were recruited mostly against vacant positions; however, more temporary teachers were observed in a number of cases than the vacant positions.

The number of approved positions in the institutions varied from 5 to 84. Over a quarter of the institutions had 12 such positions, 18.3% of the institutions had 11 positions and 11.9% had 10 positions. Therefore, 55.5% of the institutions had 10-12 approved positions. Approximately a third of the institutions had 13-19 approved positions. It was less than 10 in 6.6% of the institutions and 20 or more in 4.4% of the institutions. Following example shows an educational institution having a favourable student-teacher ratio with a large number of approved positions (highest in the sample).

A Dhaka city School & College was established in 1998. It offered education to the students of grades I to XII and was getting government grant. All the 84 approved positions of the institution were filled up with 44 females and 40 males. Fifteen of these teachers were getting salary subvention from the government. Over and above, five temporary female teachers were recruited there. The institution had 2,820 students admitted in grades VI to X; 48.6% of whom were girls. Compared to

a majority of the institutions, the student-teacher ratio was very good with the permanent teachers (34:1); with the temporary teachers it became even more favourable (32:1).

The institutions, on average, had 13.4 approved positions; 14.1 for the schools and 12 for the madrasas ($p < 0.001$) (Table 4.6). The mean number of approved positions was 17.6 for the urban institutions and 12.4 for the rural institutions ($p < 0.001$). The Government schools were much ahead of the others with 31.7 approved positions per school. This was 16 for the School & Colleges, 13.2 for the Non-government schools, and 12 for each type of madrasas.

Overall, the standard deviation of the number of approved positions in the institutions was 45.5% of its mean. The variation in the number of approved positions was more in urban institutions than those in rural areas (67.6% versus 22.6%) and the madrasas were more homogeneous than the schools (27.5% versus 50%). The degree of variation was much higher in the Government schools and the School & Colleges – 56.8% and 58.7%, respectively. This was a bit

lower but equal in the Non-government schools and in the senior madrasas (around 34% in each). Comparatively a high degree of homogeneity was observed in the Dakhil madrasas (21.7%).

Not all the approved positions were filled up. Overall, 86.2% of the total approved positions were filled; 86.8% in the schools and 84.8% in the madrasas. Eighty-eight percent of the approved positions of the urban institutions and 85.5% of those of rural areas were filled. About a fifth of the approved positions were found vacant in the Government schools, which was 16.4% in the Dakhil madrasas, 13.4% in the senior madrasas, 12.9% in the Non-government schools, and 11% in the School & Colleges. Therefore, the mean number of permanent teachers in the educational institutions came down to 11.6; 12.2 in the schools and 10.2 in the madrasas, and 10.6 in rural educational institutions and 15.5 in urban institutions (Table 4.6). The mean number of permanent teachers was 25.5 in the Government schools, 14.3 in School & Colleges, 11.5 in Non-government schools, 10.4 in senior madrasas, and 10 in Dakhil madrasas.

A half of the institutions under study recruited temporary teachers. This was 57.5% among schools and 37.1% among madrasas ($p < 0.001$), and 47% among rural and 65% among urban institutions ($p < 0.001$). Sixty-five percent of the School & Colleges, 57.5% of the Non-government schools, and 36-37% of each of the other three types of institutions recruited temporary teachers. The number of temporary teachers recruited by the institutions ranged from one to 37. About 8% of these institutions had more temporary than permanent teachers. The following example shows how recruitment of a huge number of temporary teachers improved student-teacher ratio in a sample institution.

Table 4.6
Mean number of approved positions and appointed teachers and their percentage deviation by type of institution

Type of institution	Mean				% more or deficit ¹
	Approved positions	Permanent teachers	Temporary teachers	Total teachers	
Government	31.7	25.5	1.7	27.1	-14.5
Non-government	13.2	11.5	2.3	13.8	+4.8
School & College	16.0	14.3	4.0	18.3	+14.1
Dakhil madrasa	12.0	10.0	0.9	10.9	-9.9
Senior madrasa	12.1	10.4	0.9	11.3	-5.9
Schools	14.1	12.2	2.5	14.7	+4.4
Madrasas	12.0	10.2	0.9	11.1	-7.8
Rural institutions	12.4	10.6	1.6	12.2	-1.9
Urban institutions	17.6	15.5	3.6	19.1	+8.4
Total	13.4	11.6	1.9	13.5	+0.7

¹Compared to approved positions, even after recruitment of temporary teachers

A co-ed School & College was established in Kishoreganj district in 1986, which had 24 approved positions for teachers. Twenty-three of these positions were filled up with 13 female and 10 male teachers. The institution had 1,564 students. The student-teacher ratio was therefore as high as 68:1. The Governing Body recruited additional 37 temporary teachers – 24 females and 13 males. Therefore, the staff strength increased 2.6 fold and the student-teacher ratio improved to 26:1.

On average, the institutions recruited 1.9 temporary teachers to fill up the gap between approved positions and permanent recruitment (Table 4.6). This was 2.5 teachers in the schools and 0.9 in the madrasas, and 1.6 in rural institutions and 3.6 in urban institutions. The highest number of temporary teachers was observed in the School & Colleges, which was followed by Non-government and Government schools, respectively. No difference was observed in this between the two types of madrasas. The figures would be much higher if only the institutions which recruited temporary teachers were considered – 3.8 instead of 1.9 and so on.

It seems that the educational institutions recruited a few more temporary teachers than the vacant positions. Overall, 13.8% of the approved positions were found vacant in the institutions, but the temporary recruited teachers were 14.5% of the permanent teachers. Therefore, 0.7% more teachers were recruited in the institutions. Educational institution wise analysis shows that including the temporary teachers the Government schools still had 14.5% deficit, Dakhil madrasas had 9.9% and senior madrasas had 5.9% (Table 4.6). It was 14.1% more in the School & Colleges and 4.8% more in Non-government schools. Whereas the rural institutions had 1.9% deficit, the urban institutions had 8.4% more. The schools collectively had 4.4% more teachers than approved positions, the madrasa had 7.8% deficit.

The females were 23.8% of the permanent teachers and 31.1% among the temporary teachers (Table 4.7). Therefore, the proportion of females increased to 24.9% in the total teaching staff due to increased proportion of female teachers recruited temporarily. Proportion of female teachers has increased in the institutions irrespective of type and area. Proportion of female staff was more in the schools than the madrasas, and in the urban institutions than the rural institutions. Proportion of female teachers was highest in the School & Colleges closely followed by the Government schools. A third of the teachers of School & Colleges and 32.3 of those in Government schools were females. It was 26.2% in the Non-government schools, and around 18% in the madrasas.

The government provides salary subvention to a large section of the permanent teachers of private educational institutions. The teachers have to fulfil a number of criteria to get such support. On average, 82.8% of the secondary teachers were receiving salary subvention from the government; 85.3% among the males and 78.8% among the females (Table 4.8). The proportion of such teachers was much higher among those who were posted in rural institutions than those posted in urban institutions (88.7% versus 69.9%). Proportionately, more teachers in the schools were getting government salary subvention than those in madrasas (85.8% versus 79.4%). Institution

Table 4.7
Percentage of female teachers by type of institution and teacher

Type of institution	Teachers' type		
	Permanent	Temporary	All
Government	32.0	37.4	32.3
Non-government	25.5	29.9	26.2
School & College	30.4	45.4	33.7
Dakhil madrasa	17.4	23.8	17.9
Senior madrasa	17.6	23.1	18.0
Schools	26.5	32.5	27.5
Madrasas	17.5	23.6	17.9
Rural institutions	19.8	23.4	20.2
Urban institutions	35.5	45.3	37.3
Total	23.8	31.1	24.9

type wise, 96.5% among the teachers of senior madrasas, 86.4% of those of Non-government schools, 80.9% of those of School & Colleges, and two-thirds of those of Dakhil madrasas were receiving salary subvention from government. Male teachers were ahead of their female counterparts in each type of institution.

Student-teacher ratio

Student-teacher ratio was calculated. It is the number of students per teacher. The ratio was found to be 46:1 considering the permanent teachers only, but 39:1 when all the teachers were taken into consideration (Table 4.9). This means that addition of temporary teachers in the educational institutions improved the ratio significantly. The student-teacher ratio was highest in the School & Colleges and lowest in the Dakhil madrasas. The number of students per teacher in School & Colleges was 2.6 times of that in Dakhil madrasas. The Non-government schools were at the second position and the Government schools third. It was higher in the senior madrasas than the Dakhil madrasas. The gap between the schools and the madrasas was therefore much higher – the former having double the students per teacher than the latter. The rural institutions had a higher student-teacher ratio than the urban institutions. Two extreme examples of high and low student-teacher ratio are given below.

A Non-government co-ed high school was established in 1946 within five kilometres of an upazila headquarter in Chattogram district. All 12 approved positions were filled with two female and 10 male teachers. The school as well as all the teachers were getting salary subvention from government. The school had 2,879 students; therefore the student-teacher ratio was 240:1. The school recruited 25 temporary teachers (two females and 23 males); so the ratio came down to 78:1. It is still very high.

A Dhaka city co-ed School & College was established in 2010. It was not getting any government subvention. The institution had 36 approved positions, all of which were filled up with 14 female and 22 male teachers. None of them were getting salary subvention from the government. The institution had only 134 students with student-teacher ratio of 4:1. No temporary teacher was required there.

Percentage distribution of institutions by student-teacher ratio is provided in Annex 4.4, which also shows changes in the situation before and after recruitment of temporary teachers. Overall, a third of the institutions had 25 or less number of students per teacher and 16.3% had more than 60 students when only the permanent teachers were considered. The first figure increased and the second figure decreased on recruitment of temporary teachers. The figures became 38.3% and 8.5%, respectively. Even after recruitment of temporary teachers, 26.7% of Government, 41.7% of Non-government, and 51.7% of School & Colleges had more than 40 students per teacher. Such a situation was observed 4.1% of Dakhil and 12.5% of senior madrasas. Over three-quarters of Dakhil and 55.5% of senior madrasas had 25 or less number of students per teacher.

Table 4.8
Percentage of teachers receiving salary subvention from government by institution type and gender

Type of institution	Gender		
	Male	Female	Both
Non-government	88.0	81.8	86.4
School & College	83.5	74.9	80.9
Dakhil madrasa	68.6	58.4	66.8
Senior madrasa	97.6	91.4	96.5
Schools	87.5	80.8	85.8
Madrasas	80.9	72.4	79.4
Rural institutions	88.1	85.7	88.7
Urban institutions	68.4	65.6	69.9
Total	85.3	78.8	83.8

Table 4.9
Student-teacher ratio by type of institution

Type of institution	Permanent teachers only	All teachers
Government	35:1	33:1
Non-government	49:1	41:1
School & College	56:1	49:1
Dakhil madrasa	21:1	19:1
Senior madrasa	26:1	24:1
Schools	49:1	40:1
Madrasas	23:1	21:1
Rural institutions	47:1	41:1
Urban institutions	43:1	35:1
Total	46:1	39:1

The student-teacher ratio was observed much lower in those institutions which did not appoint any temporary teacher (30:1). On the other hand, it was more than double in the institutions which had at least one temporary teacher (62:1). The ratio decreased to 46:1 in these institutions when both permanent and temporary teachers were taken into account. Therefore, after recruitment of 3.8 temporary teachers per institution the student-teacher ratio was still much higher in these institutions. Table 4.10 shows that of the institutions which had no temporary teachers, a half of them had 25 or less number of students per teacher. Of the institutions which recruited temporary teachers, 18.2% of them had such number of students per teacher (≤ 25), which increased to 27.4% after recruitment of temporary teachers. Proportion of such institution with more than 60 students per teacher halved (from 31.5% to 15.5) due to recruitment of temporary teachers. Following are some examples of institutions which had high student-teacher ratio, but no temporary teacher was recruited there.

Table 4.10
Percentage distribution of institutions by student-teacher ratio

Number of students per teacher	Institutions having no temporary teacher	Institutions having temporary teachers	
		Permanent teachers only	Both permanent and temporary teachers
≤ 25	49.5	18.2	27.4
26-40	31.0	25.8	33.0
41-60	18.5	24.5	24.1
61+	1.0	31.5	15.5
Total	100.0	100.0	100.0

A Government boys' school, established in 1937, was located three kilometres of respective upazila sadar of Khulna district. The school offers instruction to 1,773 secondary students. Of the 29 approved positions, 27 were recruited – 14 females and 13 males. The student-teacher ratio was therefore 66:1.

A Fazil madrasa, established in 1925, was located 2.5 kilometres of respective upazila sadar under Chattogram district. It was a co-ed institution and was getting government subvention. It offers instruction to 445 secondary students. Five teachers were recruited against eight approved positions. The student-teacher ratio was therefore 89:1.

A School & College, established in 1962, was located nearby an upazila town in Gaibandha district. It is a co-ed institution and was getting government subvention. It offers instruction to 1,088 secondary students. Against 20 approved positions five males and 12 females were recruited. The student-teacher ratio was therefore 64:1.

Chapter 5

The Teachers and their Families

Key Findings

Age of the teachers varied from 21 to 60 years with a mean 42.2 years. Over 94% of them were married, 17.8% were non-Muslims, and 1.5% came from small ethnic groups. Average family size was 4.2. Overall, 12.5% of the teachers were first generation learners in their families.

A fifth of the spouses of the teachers had a Master's degree, a quarter had a Bachelor's degree, another fifth completed higher secondary education, another fifth completed secondary education, and remaining 15% did not complete secondary level.

Over 53% of the teachers had at least one person in the family who chose teaching as profession, beside themselves. They include parents, elder siblings, younger siblings, spouses, and offspring. S/he was the first person in the family who took teaching as a profession for remaining of the teachers.

This chapter presents selected background information on the sample teachers. These include age, marital status, ethnicity, religion and family size of them. Education of their parents, spouses and offspring are also provided. The final section includes information of other persons in the families who chose teaching as profession, which includes parents, siblings, wives, and offspring.

A. Demography, ethnicity and religion

Age distribution

Age of the teachers in the sample ranged from 21 to 60 years with a mean 42.2 years and median 42 years. The age of the youngest quarter of the teachers ranged from 21-36 years, followed by another quarter from 37-42 years, third quarter from 43-48 years, and the fourth or eldest quarter from 49-60 years. The female teachers were younger than their male counterparts with mean 39.1 and 43.1 years, respectively. Though no such variation was observed between the teachers of rural and urban institutions, the madrasa teachers were relatively younger than the school teachers. The mean age of the teachers of Government and Non-government schools, School & Colleges, and senior madrasas was over 42 years, but it was 40.5 years among those of Dakhil madrasas (Table 5.1). The median of age was highest among the teachers of Government schools (43 years) and lowest among those of Dakhil madrasas (40 years).

Marital status

Most of the teachers were married (94.4%). Less than 5% were unmarried, and 1% had other status such as widow, widower, divorced or separated (Annex 5.1). Nearly 95% of male and 92.8% of female teachers were married. It was 94.8% among the teachers of rural and 92.4% among those of urban institutions, and 94.4% among

Table 5.1
Age, marital status, ethnicity and religion of teachers by institution type

Institution type	Age (in years)		% married	% from small ethnic groups	% Non-Muslim
	Mean	Median			
Government	42.7	43.0	92.5	2.5	16.8
Non-government	42.7	42.0	94.5	2.3	25.7
School & College	42.6	42.0	94.3	1.0	25.7
Dakhil madrasa	40.5	40.0	92.8	0.0	3.0
Senior madrasa	42.2	41.0	96.2	0.0	2.5
All	42.2	42.0	94.4	1.5	17.8

those of schools and 94.2% among those of madrasas. This rate was highest in senior madrasas and lowest in Government schools – 96.2% and 92.5%, respectively (Table 5.1). Among others, 94.5% of the teachers of Non-government schools, 94.3% of those of School & Colleges, and 92.8% of those of Dakhil madrasas were married. Percentage of teachers with other marital status by institution type is provided in Annex 5.2.

Ethnicity and religion

Most of the teachers in the sample were from mainstream Bangali community and a vast majority of them were Muslim by faith. Overall, 1.5% of the teachers were from small ethnic groups and 17.8% were non-Muslims (Table 5.1). Proportion of teachers from small ethnic groups was 1.4% among the males and 1.8% among the females, and 1.8% among the teachers of rural institutions and 0.2% among those of urban institutions (Annex 5.3). All of them were from the schools (2.2% among the school teachers), and there was none in the madrasas from the small ethnic groups. School type wise, 2.5% of the teachers of Government schools, 2.3% of those of Non-government schools, and 1% of those of School & Colleges were from small ethnic groups (Table 5.1).

Although there were a few teachers belonging to Buddhist and Christian communities, majority of them were believers of Islam followed by Hinduism. As such, the data were grouped into two categories, viz., Muslim and non-Muslim. No statistically significant difference was observed in the religion of the teachers with regard to gender or area of institution (Annex 5.3). On the other hand, whereas, over a quarter of the school teachers were non-Muslims, it was 2.8% among the teachers of madrasas ($p < 0.001$). Institution type wise, over a quarter of the teachers of Non-government schools and School & Colleges, 16.8% of the teachers of Government schools, 3% of those of Dakhil madrasas, and 2.5% of those of senior madrasas were non-Muslims (Table 5.1).

Teacher's own family

This section considers only the teachers, their spouses and offspring. Overall, about a quarter of their own family members were the teachers themselves, another quarter was their spouses, and the remaining half was their offspring. Though not much variation was observed in this distribution when data were analysed by gender of teachers and area of institutions; the proportion of offspring was found more in the families of madrasa teachers than those of school teachers (52.1% versus 48.6%).

The family size of the teachers ranged from one to 11. The mean of this was 3.9 and both the median and mode were 4 (Table 5.2). Family size of 40.2% of the teachers was four, it was three for 22.5% of the teachers, and five for 17.7% of the teachers. The average family size was 3.7 for the teachers of Government schools, 3.8 for each of Non-government schools and School & Colleges, four for Dakhil madrasas, and 4.2 for senior madrasas. The family size was more than four for 19.2% of the teachers of Government schools, 22.5% of those of Non-

government schools, 21% of those of School & Colleges, 32% of those of Dakhil madrasas, and 36.8% of those of senior madrasas (Table 5.2).

Table 5.2
Family size of teachers by institution type

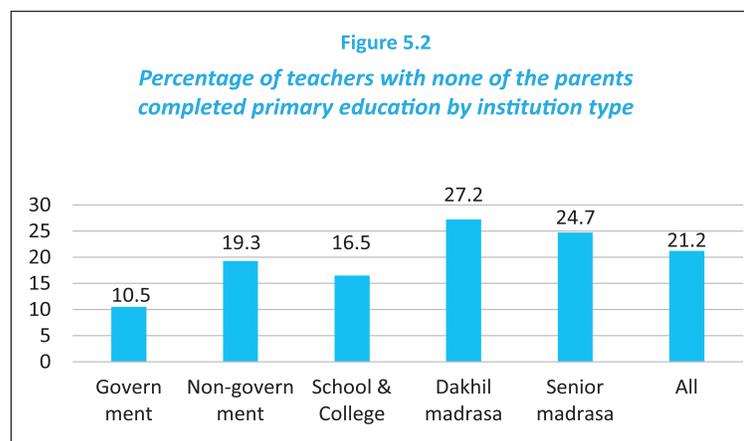
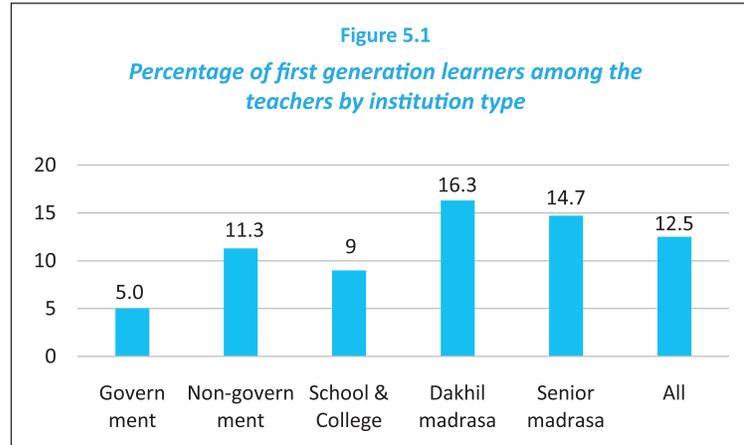
Institution type	Family size		% of family with size 5+
	Mean	Median	
Government	3.7	4.0	19.2
Non-government	3.8	4.0	22.5
School & College	3.8	4.0	21.0
Dakhil madrasa	4.0	4.0	32.0
Senior madrasa	4.2	4.0	36.8
All	3.9	4.0	26.2

B. Education of parents, spouse and offspring

Parental education

Among the mothers of the teachers, 23.9% had no schooling, 15% admitted in school but left it before completing primary education, 54% completed primary education but kept secondary education incomplete, and 7.1% completed secondary education or more (Annex 5.4). These proportions were 15.1, 9.5, 40.9 and 34.5%, respectively among the fathers' of the teachers (Annex 5.6). More information on these by gender, area and institution type is available in Annexes 5.4 to 5.7. Considering the proportions of fathers and mothers having no schooling, it was calculated that both the parents of 12.5% of the teachers had no schooling (Figure 5.1 and Annex 5.8). These teachers were the first generation learners in their families. The first generation learners were found more among the males than females (15.1% versus 3.3%; $p < 0.001$), among the teachers of rural institutions than those of urban areas (13.7% versus 7.3%; $p < 0.001$), and among the teachers of madrasas than those of schools (15.7% versus 10.9%; $p < 0.001$) (Annex 5.8). The highest proportion of the first generation learners was found among the teachers of Dakhil madrasas (16.3%) and lowest among those of Government schools (5%) (Figure 5.1). Among others, 9% of the teachers of School & Colleges, 11.3% of those of Non-government schools, and 14.7% of those of senior madrasas were first generation learners.

Both the parents of 21.2% of the teachers either had no schooling or admitted in school but left it before completing primary education (Figure 5.2 and Annex 5.8). Proportionately, more of such parents were found among the male teachers than the female teachers (24.8% versus 9%; $p < 0.001$), among the teachers of rural institutions than those of urban areas (22.9% versus 14.4%; $p < 0.001$), and among the teachers of madrasas than those of schools (26.2% versus 18.8%; $p < 0.001$) (Annex 5.8). Over 27% of the teachers of Dakhil madrasas had both the parents who had not cross the threshold of primary education (Figure 5.2). This was 24.7% among the teachers of senior madrasas, 19.3% among the teachers of Non-government schools, 16.5% among those of School & Colleges, and 10.5% among those of Government schools.



Education of spouse

Overall, 14.6% of the spouses of the teachers had an education below than completion of secondary level, 19.8% of the spouses completed secondary education, 20.7% completed higher secondary education, 25.5% had a Bachelor's degree, and 19.3% had a Master's degree (Figure 5.3). Spouses of the female teachers were much ahead of those of the male teachers in terms of educational qualifications (Annex 5.9). For instance, about a half of the female teachers had a spouse with a Master's degree and another 36% had a spouse with a Bachelor's degree. These figures were 10.4% and 22.4%, respectively for the male teachers. Therefore, nearly 86% of the female teachers and about a third of the male teachers had a spouse with at least a Bachelor's degree ($p < 0.001$). Spouses of over three-fifths of the teachers of urban institutions and 41.2% of those of rural institutions had at least a Bachelor's degree ($p < 0.001$). Such an educational qualification was observed among the spouses of a half of the school teachers and over a third of the madrasa teachers ($p < 0.001$).

Whereas, 71.7% of the spouses of the teachers of Government schools had at least a Bachelor's degree, it was 53.5% among those of School & Colleges, 49% among those of Non-government schools, 38.8% among those of senior madrasas, and 30.9% among those of Dakhil madrasas (Table 5.3). Whereas less than 3% of the spouses of the Government school teachers had an education below secondary level, over a fifth of the teachers of both types of madrasas had such spouses.

Education of offspring

Age of offspring of the teachers ranged from zero to 42 years. Of them, 16.9% was of age 0-4 years, 20.2% was of age 5-9 years, 23.9% was of age 10-14 years, 18.4% was of age 15-19 years, 12% was of age 20-24 years, and 8.6% was of age 25 years or more. Over 96% of the offspring aged 5-19 years were currently enrolled in any educational institutions. Most of the others were of age five years and therefore did not admit in any educational institution. Of the offspring aged 20-24 years, 81.3% were currently in any educational institution and 18.1% dropped out. Among those of 25-29 years, 31.9% were in any educational institution and 67.8% dropped out.

Overall, 3% of the offspring of the teachers had a Master's degree, 5% had a Bachelor's degree, 15.2% completed higher secondary school education, 9.1% completed secondary school education, 22.7% were at various grades of secondary education, 22.3% were at various grades of primary education, 3.6% in pre-primary education, and 1.6% in kaomi madrasas.

Net enrolment rates of the offspring aged 6-10 years and 11-15 years were calculated. Both of them were much higher than the respective national averages. The primary and secondary net enrolment rates of the offspring of the teachers was 98.3% and 99.3%, respectively. No variation was observed in these with respect to gender of teachers, area of institutions or institution type.

C. Teacher in the family

An attempt was made to know whether any of the family members of the teachers of secondary education choose teaching as profession. Here, the family includes the parents, siblings, spouses, and offspring. The analysis shows that in majority of the cases, the sample teachers were not alone in their families in terms of choosing teaching as profession. Overall, 53.1% of the teachers had at least one of the above family members who choose teaching as profession (Figure 5.4). For the remaining, s/he was the first person in the family who choose teaching as profession. Proportion of teachers having at least one family member

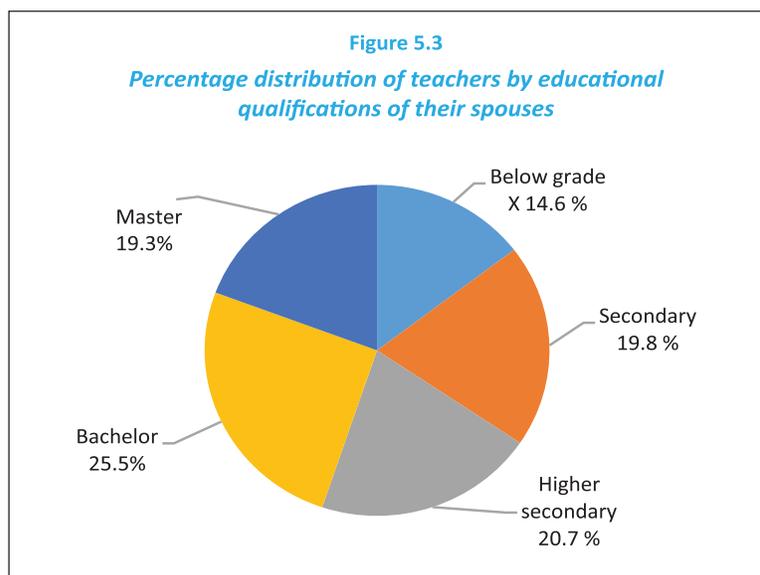


Table 5.3
Percentage distribution of teachers by level of education of their spouses and institution type

Level of education	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Nil – Grade IX	2.8	11.7	8.8	21.5	21.3
Secondary	8.0	18.8	15.5	25.7	19.6
Higher secondary	17.4	20.4	22.1	21.9	20.4
Bachelors	25.4	29.5	26.5	17.5	19.9
Masters	46.3	19.5	27.0	13.4	18.9
Total	100.0	100.0	100.0	100.0	100.0

in teaching profession was more among the females than the males (66.1% versus 49.4%; $p < 0.001$) (Annex 5.10). No statistically significant variation was observed in this with regard to area of institution; however, more school teachers had such family members than their counterparts in the madrasas (55.7% versus 47.9%; $p < 0.001$). Institution type wise variation also existed in this. Nearly 69% of the teachers of Government schools had at least one teacher member, which was for 56.3% of the teachers of School & Colleges, 55.2% of the teachers of Non-government schools, 53.7% of the teachers of senior madrasas, and 43.8% of those of Dakhil madrasas (Figure 5.4).

Separate analysis for each of the relationships was also carried out. Overall, 11.8% of the teachers had at least one or both the parents' teachers – 11.3% among the fathers and 1.2% among the mothers (Table 5.4 and Annex 5.11). Elder siblings of 19.1% of the teachers and younger siblings of 18.9% of the teachers also choose teaching profession. They were 14.1% of the elder and 13.1% of the younger brothers, and 6.2% of the elder and 7.2% of the younger sisters. Spouses of 23.7% of the teachers also choose teaching profession. Separately, 39% of the husbands of the female teachers and 20.9% of the wives of the male teachers were also teachers ($p < 0.001$). Whatever the relationship was, proportionately more government school teachers had members with a teaching profession than those of the other types of institution (Table 5.4). Analysis of the above by gender of teachers, area of institution and institution type is available in Annexes 5.11 and 5.12.

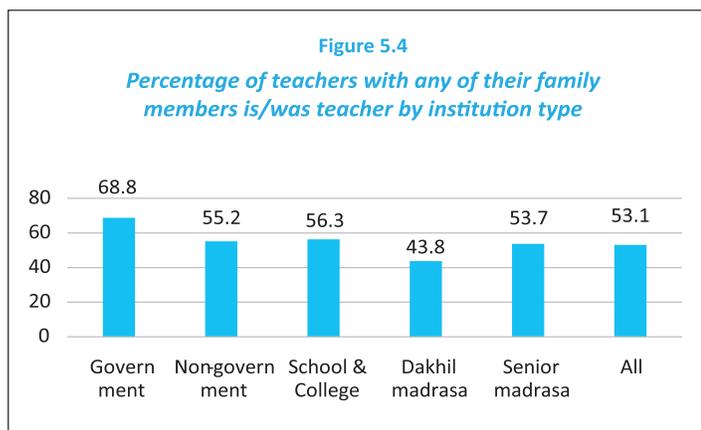


Table 5.4
Percentage of teachers having another family member who choose teaching profession by institution type

Relationships of person in the family	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Parents	13.7	11.8	13.2	10.2	13.2	11.8
Elder siblings	28.0	18.8	18.5	18.5	20.0	19.1
Younger siblings	25.8	20.3	18.3	13.3	19.7	18.9
Spouses	33.5	25.7	29.0	17.3	20.8	23.7
Offspring	1.2	2.2	1.8	1.8	2.5	2.1
Any	68.8	55.2	56.3	43.8	53.7	53.1
None	31.2	44.8	43.7	56.2	46.3	46.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: 1. Family members include parents, siblings, spouse and offspring
2. Multiple responses counted

Chapter 6

Education and Training of Teachers

Key Findings

The highest educational qualification of 48.8% of the teachers' was a Master's degree, 48.2% had a Bachelor's degree, and the remaining 3% had only higher secondary schooling. Over three-quarters of the teachers studied exclusively under general stream, a third studied in madrasa stream, and the remaining in both. Educational qualifications of the teachers increased over time.

Majority of the teachers studied Humanities in their educational life. Proportion of teachers studying Humanities was 49.1% at secondary level, which went up to 74.8% at Master's level. A reverse direction was therefore observed in their study of Science.

Nearly 58% of the teachers achieved at least a second division in each of the first three public examinations (secondary, higher secondary and Bachelor's), which declined to 33.2% when all four examinations were considered (including Master's).

Two-thirds of the teachers got professional training 78.2% got subject based training and 83.6% got various short courses. Teachers had more training in Mathematics, English, and Religion as against Science, Accounting, Bangla, and Bangladesh & Global studies.

The main short training courses included Information and Communication Technology (ICT), creative question preparation, teachers' curriculum guide, teaching quality improvement, skills based training, and national curriculum. None of these courses reached more than a third of the secondary teachers.

A mixed impact was observed regarding use of training in classroom teaching. A section of the teachers reported that they were getting benefits of training through using those in classrooms; however, another section blamed the school context or themselves for not using them.

A. Education

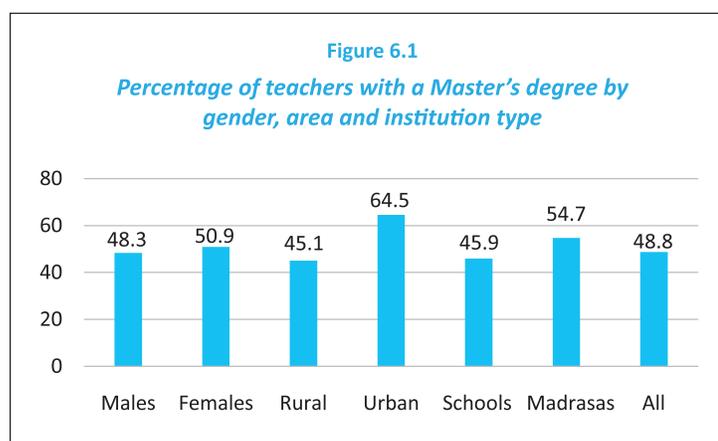
This study collected educational history and experiences of the sampled teachers, which include the levels of education they have passed. Type of institution attended, stream of education and performance in examination sat the end of each level of education were also collected. Data were analysed in terms of gender, Institution type, and location of institution.

Highest educational qualifications attained

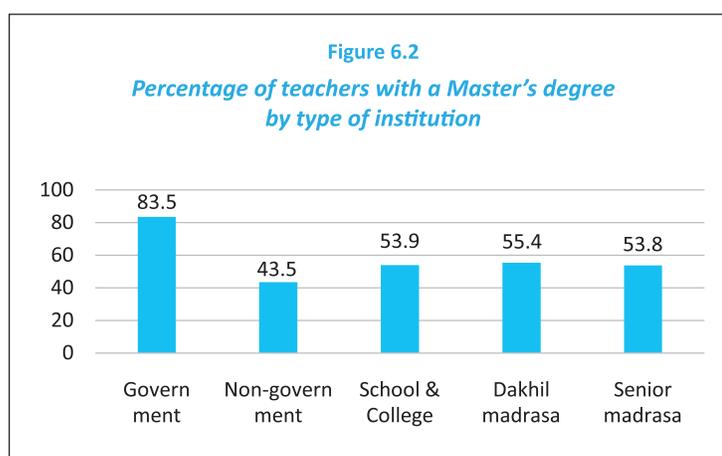
In Bangladesh, the minimum educational qualification for being a secondary school teacher is a Bachelor's degree in a relevant subject from any recognised higher educational institution. In the sample, a small proportion had an education below than this and a large proportion had more than this (Master's). Note that Fasil in madrasa stream is considered as equivalent to a Bachelor's degree in general stream and Kamil is equivalent to a Master's degree.

Overall, the highest educational qualifications of 48.8% of the teachers' was a Master's degree; 48.2% of them had a Bachelor degree and the remaining 3% completed higher secondary schooling (Annex 6.1). As

Figure 6.1 shows, a higher proportion of female teachers had a Master's degree (nearly 51%) compared to male teachers (48.3%). Such a level of educational qualification was observed among 45.1% of the teachers in rural educational institutions and 64.5% of those in urban institutions ($p < 0.001$). About 46% of the school teachers and 54.7% of those in the madrasas had a Master's degree ($p < 0.001$).



A statistically significant difference was observed in educational qualifications of the teachers when it was analysed by type of educational institution ($p < 0.001$). The Government school teachers were much ahead of the others with 83.5% of them having a Master's degree (Figure 6.2). This was 53.9% among the teachers of School & Colleges and 43.5% among those of Non-government schools. This proportion was 55.4% in Dakhil and 53.5% in senior madrasas. About 6% of the teachers



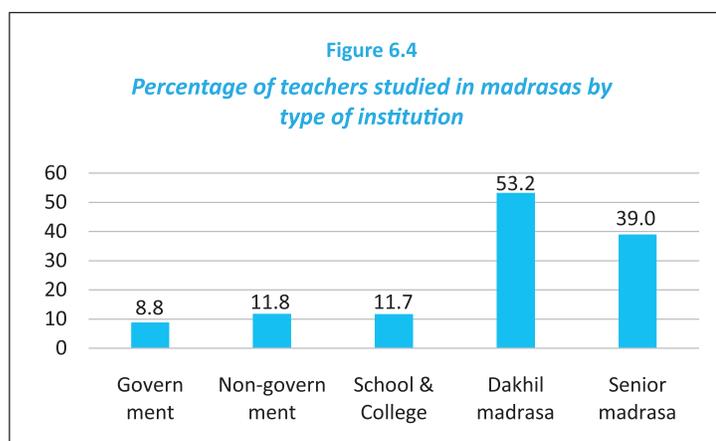
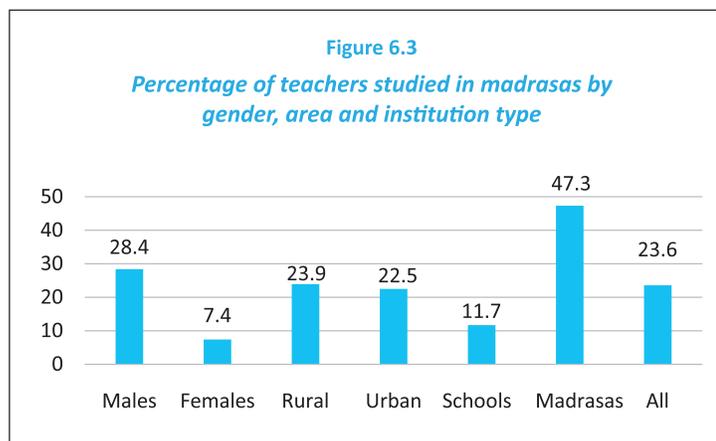
in Dakhil madrasas, 4.7% of those in senior madrasas, 1.8% of those in Non-government schools, 1.3% of those in School & Colleges, and 0.5% of those in Government schools only completed higher secondary education (Annex 6.2).

Madrasa educated teachers

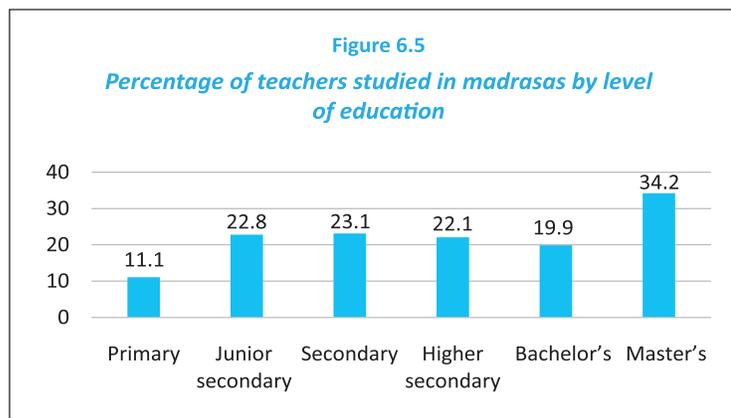
A portion of the teachers of the educational institutions under general stream had their studies in the madrasas and received degrees from there. An opposite trend was also observed among the teachers of madrasa stream. Overall, 76.4% of the teachers studied exclusively in institutions under general stream throughout their educational life and 8.2% did so in madrasa stream (Annexes 6.3 and 6.4). Among others, 13.3% of them though started their education in general stream, but moved to madrasa stream at some point; 2.7% of these teachers again moved to general stream. On the other hand, 2.1% of the teachers started their educational life in madrasa stream and then moved to general stream; 0.1% of them again moved to madrasa stream. Therefore, nearly a quarter of all teachers studied in the madrasas at any point of their educational life – a third of whom studied there exclusively. Figure 6.3 shows, the tendency to study in the madrasas at least once was more among the males than the females (28.4% versus 7.4%; $p < 0.001$), and among the madrasa teachers than those in the schools (47.3% versus 11.7%; $p < 0.001$). No such difference was observed between the teachers in rural and urban educational institutions. A small section of the teachers (2.8%) changed the stream of education twice.

Proportion of the teachers studied at least once in the madrasas was mostly equal (about 12%) in two types of private schools, viz., Non-government and School & College, which was a bit higher than that of the Government schools (8.8%) (Figure 6.4). Over 53% of the Dakhil madrasa teachers and 39% of those in the senior madrasas also fall in this category. Further analysis shows that nearly a fifth of the madrasa teachers – 22% of those in Dakhil and 15.8% of those in senior madrasas– had their education from the madrasas only, which was below 3% in each of the school types under general stream.

Overall, 11% of the teachers completed their primary education (ebtedayee) in the madrasas, 22.8% completed junior secondary education, 23.1% completed secondary education, and 22.1% completed higher secondary education in the madrasas (Figure



6.5). A fifth of the teachers earned a Fazil degree (equivalent to Bachelor's) and over a third of the teachers earned a Kamil degree (equivalent to a Master's) from the madrasas. The proportion of teachers studying in the madrasas was much higher among the males than the females at every level of education (Annex 6.5). A similar pattern of relationship was observed between the school and the madrasa teachers, where the



madrasa teachers had a higher tendency to study in the madrasas. However, the proportions for rural and urban school teachers were close to each other from primary to graduation (Bachelor's) level, a difference was observed at Master's level. Whereas, 36.6% of the teachers in rural educational institutions earned their Master's degree from the madrasas, it was 27.1% among the teachers in urban educational institutions ($p < 0.001$).

The above analysis by institution type is provided in Annex 6.6. It shows that the proportions of madrasa educated teachers at every level of education was highest in the Dakhil madrasas followed by the senior madrasas. The proportions were mostly equal in Non-government schools and School & Colleges; however, these figures were much lower than those of the madrasas. The Government schools had the least proportion of madrasa educated teachers at every level of education – below 5% at primary and Bachelor's levels and below 9% at other levels of education.

Change of stream of education mostly occurred at grade VI – the first year of secondary education (Annexes 6.7 and 6.8). Three-quarters of the stream-change cases occurred at this grade. Among others, nearly 7% of the cases occurred during primary education (grades I to V) and 17.5% occurred at grade VII or afterwards. Not much variation was observed in this among the teachers of five types of educational institutions.

Along with studying in the mainstream/recognised educational institutions, a small portion of the teachers (2.3%) studied in the Kaomi madrasas at some point of their educational life (Annex 6.9). They were 4.8% of the madrasa and 1% of the school teachers. This figure was 2.8% among the males and 0.6% among the females, and 2.2% among the rural and 2.6% among the urban teachers. Institution type wise, 5.3% of Dakhil madrasa, 4.2% of senior madrasa, 1.5% of Non-government school, 1% of School & College, and 0.5% of Government school teachers studied in Kaomi madrasas at some point of their life.

Study in public educational institutions

On average, 82.6% of the teachers completed their primary education from the public educational institutions (Figure 6.6). This was 5.3% at junior secondary level and 5.2% at secondary level. Nearly a quarter of the teachers completed their higher secondary education from the public educational institutions, and 44.9% earned a Bachelor's degree and 58.9% earned a Master's degree from such institutions. The female teachers were more likely to study in the public educational institutions than their male counterparts at every level of education (Annex 6.10). The same was observed more among the school

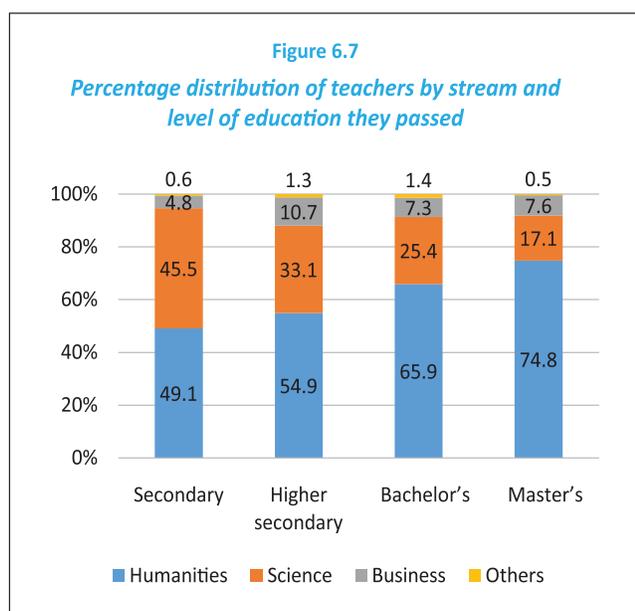
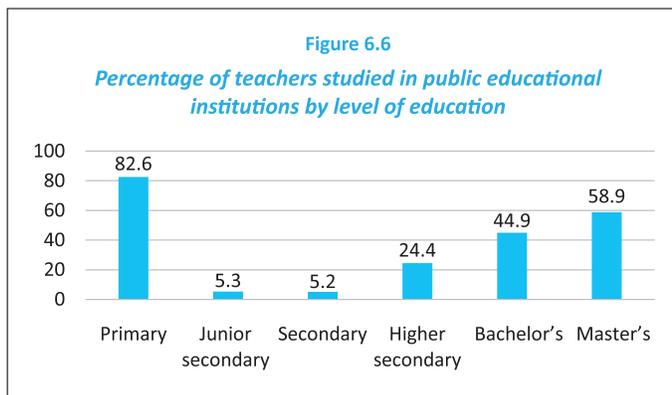
teachers than those in the madrasas, where the school teachers were ahead of the madrasa teachers in studying in the public educational institutions. Though the rural school teachers were ahead of the urban school teachers in studying in the public educational institutions at primary level, an opposite scenario was observed afterwards with an increasing trend in urban-rural gap.

Mostly an equal proportion of the three types of school teachers studied in the public educational institutions at primary level (over 88%). They were followed by those in senior (73.2%) and Dakhil (69.3%) madrasas, respectively (Annex 6.11). Proportionately more teachers of the Government schools continued to keep them at the top in studying at all other levels in the public educational institutions followed by those in School & Colleges, Non-government schools, senior madrasas and Dakhil madrasas, respectively.

Stream of education

Although the madrasa students take some additional subjects focusing on Islam than the students of general education, all the students, in general, take the same subjects up to grade VIII. Therefore, they are divided in to streams of education at grade IX which continues up to the end of education life. The major streams are Humanities, Science, and Business studies. In addition, the madrasa students may take Mujabbid or Hifjul Quran. Vocational education is another stream, which also starts at grade IX. Therefore, the level of education for this analysis include secondary, higher secondary, undergraduate, and graduate.

Majority of the secondary teachers studied Humanities at every level of education followed by Science. A small proportion of the teachers studied Business, vocational subjects or others. Whereas, the proportion of teachers studying Humanities gradually increased from one level to another, a decreasing trend was observed in the case of studying Science. For instance, a half of the teachers studied Humanities at secondary level, 54.9% at higher secondary level, 65.9% at undergraduate level, and 74.7% at graduate school (Figure 6.7). These figures were 45.5, 33.1, 25.4 and 17.1%, respectively for the case of Science. The above trends were observed irrespective of institution type, gender of teacher, and location of institution (Annexes 6.12 and 6.13).



Proportion of teachers studied Science was higher among the male teachers than their female counterparts at the first three levels of education (secondary to undergraduate); however, it was equal at graduate school (Table 6.1 and Annex 6.12). On the other hand, proportion of teachers studied Science was higher among the school teachers than those in the madrasas at each of the four levels of education. The school teachers were also more likely to study Business than their counterparts in the madrasas (Annex 6.12). A different scenario was observed among the school teachers in studying Science and Humanities at secondary level. Whereas, at the aggregated level, the proportion of teachers studying Humanities was higher than that of studying Science at secondary level, it was other way around among the school teachers. Of the school teachers, 51.8% studied Science and 42.3% studied Humanities at secondary level; these figures were 32.8% and 62.9%, respectively among the teachers of madrasas. The urban teachers were more likely to study Science than their counterparts in rural areas at every level of education. The same was observed in the case of studying Business.

An increasing trend of studying Humanities and a decreasing trend of studying Science by level of education was observed among the teachers of each of the five types of educational institutions (Annex 6.13). The Government school teachers were much ahead of their counterparts in other educational institutions in studying Science (Table 6.2). They were followed by the teachers of School & Colleges, Non-government schools, senior madrasas and Dakhil madrasas, respectively. A reverse ranking of educational institutions by type was observed in terms of teachers' studying Humanities (Annex 6.13).

On the other hand, the teachers of the School & Colleges were at the front line in studying Business followed by those in Non-government schools, Government schools and the madrasas, respectively.

Performance in examinations

Performance of the teachers in the public examinations they have participated at the end of various levels of education was collected. These include secondary, higher secondary, undergraduate, and graduate levels. Examination results of majority of the teachers were found in traditional method whereby the examinees

Table 6.1
Percentage of teachers who studied Science by gender, area, institution type and level of education

Gender/area/ institution type	Level of education			
	Secondary	Higher secondary	Bachelor's	Master's
Gender				
Males	46.8	35.6	26.6	17.0
Females	40.7	24.4	20.7	17.5
Area				
Rural	44.9	32.1	24.4	15.7
Urban	47.5	37.2	28.5	21.4
Institution type				
Schools	51.8	37.1	28.5	21.0
Madrasas	32.8	25.1	18.7	10.8

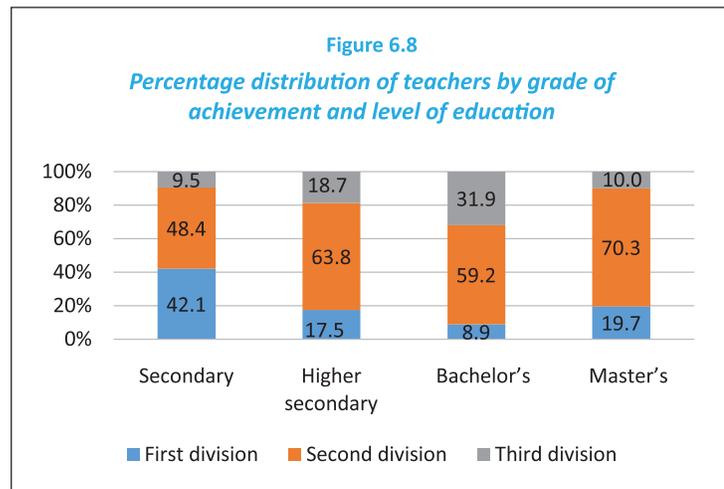
Table 6.2
Percentage of teachers studied Science by institution type and level of education

Institution type	Level of education			
	Secondary	Higher secondary	Bachelor's	Master's
Government	64.5	55.0	34.3	30.7
Non-government	51.0	36.0	28.0	19.9
School & College	55.0	41.0	30.7	22.9
Dakhil madrasa	26.5	20.6	15.1	9.0
Higher madrasa	41.8	31.5	23.6	13.3

were categorized into four levels according to their performance, viz., first division, second division, third division, and fail. Results of a small section of the teachers (12.3% at secondary level, 12.4% at higher secondary level, 4% at Bachelor's level, and 8% at Master's level) were reported in grade point average (GPA) system. Official conversion method was applied here to report the teachers' performance in traditional method.

At each level, majority of the teachers earned a second division (Figure 6.8). Proportion of teachers received a second division was 48.4% at secondary level, 63.8% at higher secondary level, 59.2% at Bachelor's level, 70.3% at Master's level. Proportion of teachers earned a first division was 42.1% at secondary level, 17.5% at higher secondary level, 8.9% at Bachelor's level, 19.7% at Master's level. Proportion of teachers who earned a third division increased from 9.5% at secondary level to 31.9% at Bachelor's level and then declined to 10% at Master's level.

The female teachers, in general, had better performance in the first two examinations than their male counterparts in terms of earning a first division and not getting a third division (Table 6.3 and Annex 6.14). No difference was observed between them in terms of earning a first division in latter two examinations. However, compared to their male counterparts, proportionately more females earned a second division and less proportion of females earned a third division in these two examinations. It is to be noted that 35.2% of the males and 20.5% of the females earned a Bachelor's degree, which is minimum requirement to be a secondary school teacher, with a third division.



Examination results of the teachers located in urban institutions were much better than those in rural areas. Over 53% of the teachers of urban institutions earned a first division at secondary level, 26.2% showed similar performance at higher secondary level, 10.3% at Bachelor's level, and 22.8% at Master's level (Table 6.3). These figures for the rural teachers were 39.5, 15.4, 8.5 and 18.7%, respectively. Proportionately more teachers of the rural educational institutions earned a third division compared to their counterparts in urban areas at each of the four levels of education (Annex 6.14).

Table 6.3
Percentage of teachers who earned a first division by gender, area, institution type and level of education

Gender/area/ institution type	Level of education			
	Secondary	Higher secondary	Bachelor's	Master's
Gender				
Males	39.0	15.7	9.1	19.8
Females	52.7	23.5	8.2	19.4
Area				
Rural	39.5	15.4	8.5	18.7
Urban	53.1	26.2	10.3	22.8
Institution type				
Schools	53.6	17.3	7.6	17.4
Madrasas	39.0	17.8	11.5	23.6

School type wise analysis shows that the Government schools were much ahead of the others in terms of earning a first division and less in earning a third division at each level of education (Table 6.4 and Annex 6.15). The position of the School & Colleges was the second at the first two levels. The two types of madrasas and the Non-government schools secured the rest of the positions at these two levels without any common chronology and closeness of performance. The two types of madrasas were close to each other at the third and the fourth levels of education. The Non-government schools and the School & Colleges were also close to each other at these. However, the former couple of institutions showed better performance than the latter.

Proportion of teachers who earned at least a second division in each of the examinations was calculated in two ways – firstly, considering the first three examinations and

secondly, considering all four examinations. Overall, 57.8% of the teachers earned at least a second division in each of the first three examinations and 33.2% earned at least a second division in all four examinations (Table 6.5). Although no significant variation was observed between the schools and the madrasas, the performance of the female teachers was significantly better than their male counterparts – 71.3% of the female and 53.9% of the male teachers earned at least a second division in each of the first three public examinations ($p < 0.001$). These were 38.3% and 31.7%, respectively when all four examinations were considered ($p < 0.001$). Similarly, the teachers of urban institutions had better performance than the teachers of rural institutions. About a half of the urban and 29.3% of the rural teachers earned at least a second division in each of the four examinations. Over 70% of the urban and 54.8% of the rural teachers achieved at least a second division in each of the first three public examinations.

The teachers of the Government schools were much ahead of the others in earning at least a second division in each of the examinations followed by those in School & Colleges and Non-government schools, respectively. Examination results of the Dakhil madrasa teachers were close to that of Non-government schools, and the results of the senior madrasa teachers were close to that of School & Colleges (Table 6.5).

Second Master's degree

A small portion of the teachers earned a second Master's degree; however, none of them had a Doctor of Philosophy (PhD) degree. Overall, the proportion of a second Master's degree holders was 2.6%; 3.1% among the males and 0.2% among the females (Annex 6.16). Two percent of rural and

Table 6.4
Percentage of teachers who earned a first division by institution type and level of education

Type of institution	Level of education			
	Secondary	Higher secondary	Bachelor's	Master's
Government	72.0	47.5	16.4	28.6
Non-government	41.8	15.7	7.3	16.1
School & College	49.8	21.0	7.4	20.7
Dakhil madrasa	36.3	16.4	11.8	21.7
Senior madrasa	42.8	19.8	11.1	26.3

Table 6.5
Percentage of teachers who earned at least a second division in each examination

Type	Number of examinations	
	First three	All four
Government	83.5	72.7
Non-government	55.5	29.5
School & College	64.5	40.0
Dakhil madrasa	56.0	33.2
Senior madrasa	62.8	38.7
Schools	57.3	32.0
Madrasas	58.8	35.4
Males	53.9	31.7
Females	71.3	38.3
Rural Institutions	54.8	29.3
Urban Institutions	70.4	49.5
All	57.8	33.2

4.8% of urban teachers had this. It was 4.5% among the madrasa teachers and 1.7% among the school teachers. Institution type wise, this figure was 4.8% in Dakhil madrasas, 3.8% in senior madrasas, 3.3% in Government schools, 2% in School & Colleges, and 1.5% in Non-government schools. Whereas, 17.1% of the first Master's was in Science and 7.6% in Business, 98.5% of the second Master's was in Humanities or Social Sciences.

Service length and education

The teachers were divided into four equal groups (quartiles) based on their length of service, and educational qualifications of each of the groups were analysed. The analysis shows that educational qualifications as well as performance in public examinations have improved over time. For instance, whereas, 39-40% of the teachers belonging to the upper half in terms of length of service had a Master's degree, such an education was 46.5% of those belonging to the second quartile and 68.7% among those belonging to the first quartile ($p < 0.001$). Proportion of teachers with a first division in the public examinations has increased and proportion of teachers with a third division has decreased over time. An example of it is provided in Table 6.6 which shows that 2.7% of the teachers belonging to the fourth quartile had a first division at Bachelor's level and 63.8% had a third division. The first category of teachers gradually increased and the second category decreased. Therefore, among the first quartile of teachers – the youngest group, the proportion of them getting a first division has increased to 21.4% and the proportion of teachers getting a third division has decreased to 10.6%.

Table 6.6
Percentage distribution of teachers according to their performance at Bachelor's level and service length

Division	Service length (quartiles)			
	First (younger)	Second	Third	Fourth (older)
First	21.4	8.0	3.1	2.7
Second	68.0	74.9	60.9	33.5
Third	10.6	17.1	36.0	63.8
All	100.0	100.0	100.0	100.0

B. Training

This section provides information on three categories of training. The first of this is the professional training, which is basic for teaching in secondary educational institutions in Bangladesh. The other two includes subject based training and educational short courses. The first one is a general training to prepare any person for teaching and the latter two types are focused on various subjects taught at secondary level and various educational issues, respectively to facilitate the teachers in better teaching.

Professional training

Bachelor of Education (BEd) is the basic professional training for teaching in secondary educational institutions in Bangladesh. The other equivalent degrees include Bachelor of Physical Education (BPEd) and Bachelor of Madrasa Education (BMEd). These are followed by Master of Education (MEd). Along with the above, a small section of the sampled teachers received two other training, which are designed for teaching in primary educational institutions. These are Certificate in Education (C-in-Ed) and Diploma in Education (DipEd).

Overall, 66.1% of the teachers reported that they have received any of the above professional training (Figure 6.9). Majority of them received only one training (61.1%) and a small portion received more than

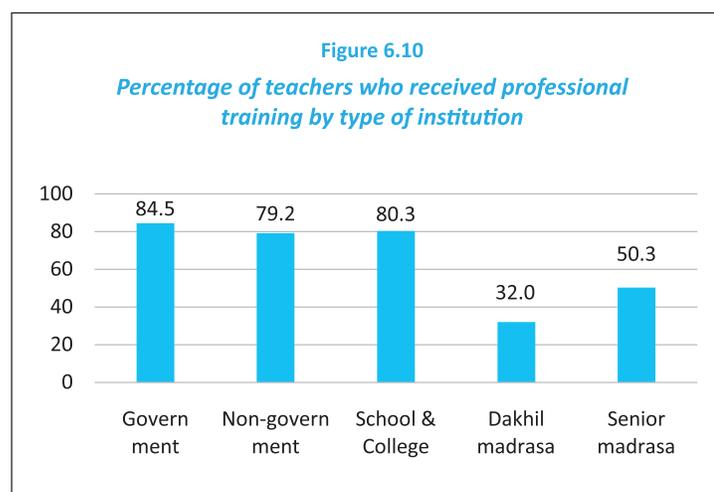
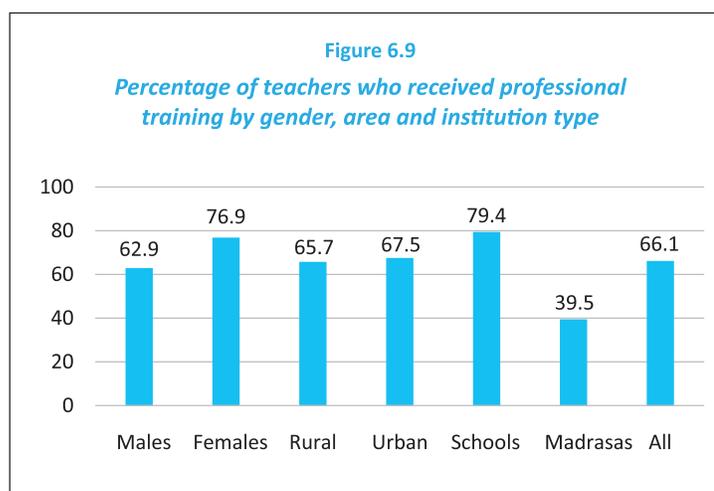
one (5%). At the aggregated level, 59.8% of the teachers received a BEd degree, 5.5% received a BPEd degree, 0.4% received a BMed degree, and 4.3% received a MEd degree (Annex 6.17). Moreover, 0.7% of the teachers completed C-in-Ed course and 0.4% had a DipEd. A statistically significant gender difference persisted in teachers' receipt of professional training where the females were ahead of the males (76.9% versus 62.9%; $p < 0.001$) (Figure 6.9). However, mostly an equal proportion of the teachers of rural and urban educational institutions had professional training (65.7% versus 67.5; ns).

A big gap was observed in the receipt of professional training by the teachers of schools and madrasas (Figure 6.9). Whereas, 79.4% of the school teachers had professional training it was 39.5% among the madrasa teachers ($p < 0.001$). Similar to educational qualifications, the teachers of the Government schools were at the top in receiving professional training. The teachers of the other two types of schools were close to each other with a distance of 4-5 percentage points from the top. Figure 6.10 shows that 84.5% of Government, 79.2% of Non-government, and 80.3% of School & College teachers were trained. Whereas, a half of the teachers of senior madrasas were trained, it was 32% among the Dakhil madrasa teachers.

Let us have a look at the teachers with an MEd degree. The Government school teachers were far ahead with this regard. Whereas 16.5% of the Government school teachers earned an MEd degree, it was 5.5% among the Non-government school teachers and 4.8% among the School & College teachers (Annex 6.17). The two types of madrasas were equal with 1.3% of each having teachers with an MEd degree. This proportion was 4.3% among males and 4.4% among females, 5.8% among school teachers and 1.3% among madrasa teachers, and 3.1% among rural and 9.7% among urban teachers (Annex 6.18).

Over two-thirds of the teachers who were not getting any government subvention against their salary and benefits (non-grant) had no professional training, this was 29.5% among those who were receiving such facility. Again, 4.1% of the grant teachers and 3.6% of the non-grant teachers had an MEd degree.

Majority of the teachers received training after joining the service. Of



the total professional training, 77.6% was received after joining service and 22.4% before joining. Eighty percent of the males and 70.7% of the females received professional training in service ($p < 0.001$). This was 78.8% among rural and 72.8% among urban teachers ($p < 0.01$). Institution type wise, 68.9% of the Government school teachers, 72.6% of those in senior madrasas, 73.4% of those in Dakhil madrasas, 78.9% of those in Non-government schools, and 81.2% of those in School & Colleges received professional training after joining their service (Figure 6.11).

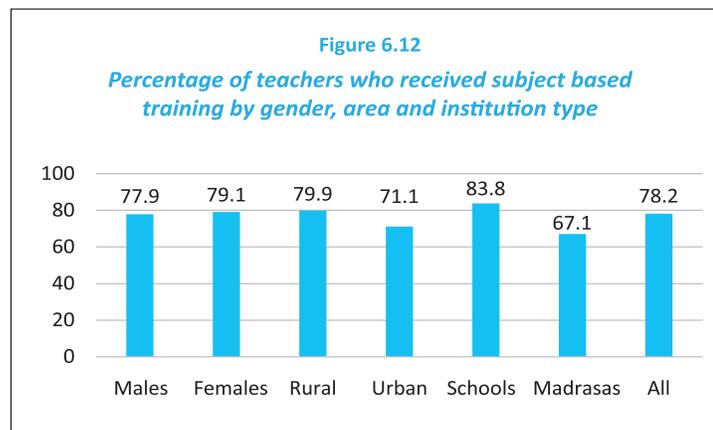
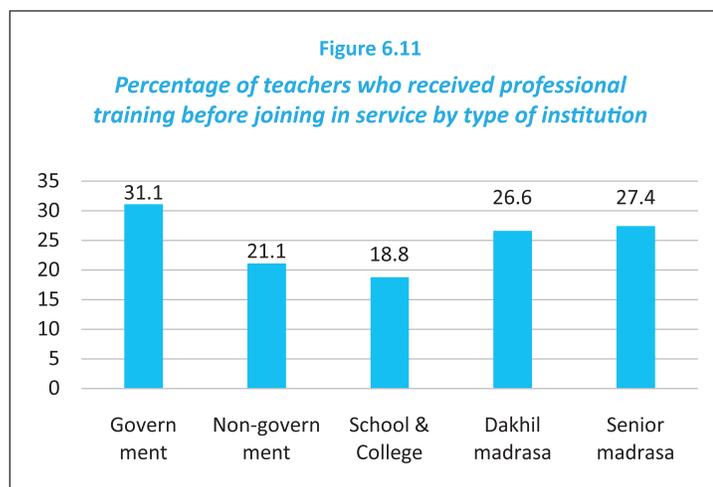
The teachers received 58% of their professional training from any public institution. Although, no gender difference was observed in this (male 57.1% and female 60.9%), proportionately more urban teachers received training from public institutions than those in rural areas (68.8% versus 55.2%; $p < 0.001$). The Government school teachers were much ahead of the others in this case too, with 86.6% of them receiving professional training from public institutions. This figure was 61.9% among the teachers of School & Colleges, 57.2% among those of Non-government schools, 56.1% among those of senior madrasas, and 54.2% among those of Dakhil madrasas ($p < 0.001$).

According to the secondary recruitment rule, the appointee teachers are supposed to earn a Bachelor of Education degree within three years of appointment. This was not the case in practice. Service length of 85% of the non-trained teachers was more than three years. This was seven years or less for a third of the non-trained teachers, 8-18 years for another third of them, and 19-40 years for the remaining one third of them. Average service length of the non-trained teachers was 14.7 years compared to 17.2 years for the trained teachers ($p < 0.001$).

Subject based training

Thirty different subjects were mentioned by the teachers in which they received training. Duration of about a half of these training courses were one week or less, 30% were of two weeks, and the remaining were of various duration.

Overall, 78.2% of the teachers got at least one subject based training. This was 77.9% among the males and 79.1% among the females with no statistically significant difference (Figure 6.12). The rural teachers were more likely to receive subject based training than those of the urban areas (79.9% versus 71.1%; $p < 0.001$). Whereas, about two-thirds of the madrasa teachers received such

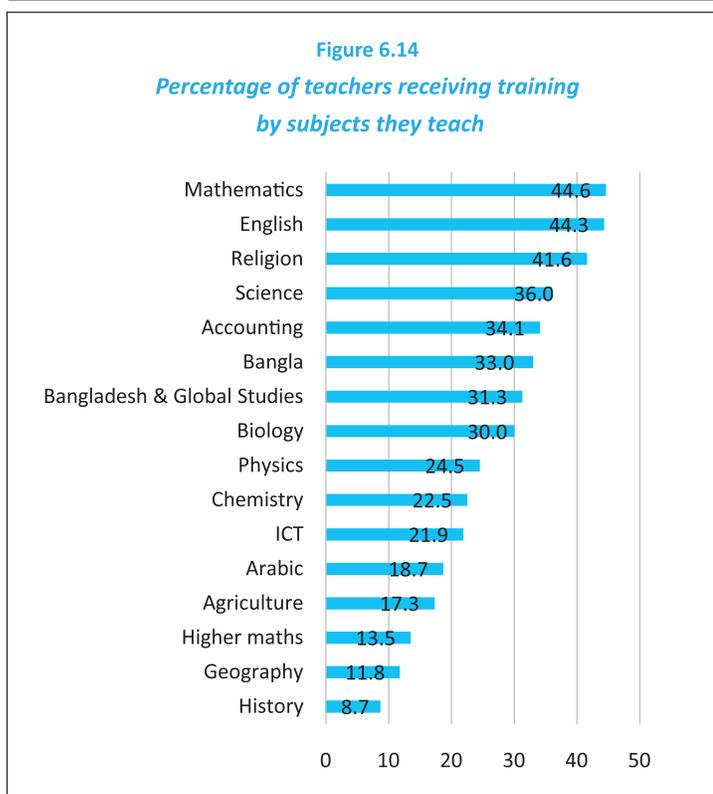
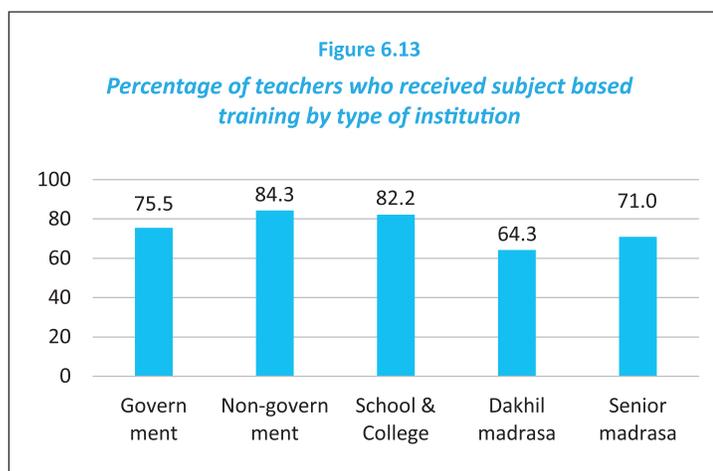


training it was 83.8% among the school teachers ($p < 0.001$). Institution type wise difference was persisted with a statistically significant margin ($p < 0.001$). Non-government schools were at the top with 84.3% of their teachers receiving subject based training followed by those in School & Colleges (82.2%) and Government schools (75.5%), respectively (Figure 6.13). This figure was 64.3% among the teachers of Dakhil madrasas and 71% among those of senior madrasas.

The teachers varied in terms of number of subject based training they received. Overall, 37.8% of the teachers received one training, 23.5% received two, 11.8% received three, 5.1% received four or more, and 21.8% received none (Annex 6.19). The mean number of subject based training received by the teachers was 1.8 with no variation by gender, area, or institution type. Forty-two percent of the teachers who were not getting government salary subvention (non-grant) did not get any subject based training, which was 18.7% among those who were getting government salary subvention (Annex 6.20).

A much different scenario was observed when data were analysed in terms of the subjects taught by the teachers. Not a single subject was found, a half of the teachers teaching a particular subject received training on that subject. The teachers of English and Mathematics were at the top in pursuing training followed by those who teach Religion. Nearly 45% of the Mathematics teachers, 44.3% of English teachers, and 41.6% of the teachers who teach Religion received subject based training on the specific subjects (Figure 6.14). This was observed among 36% of Science, a third of Bangla, 34.1% of Accounting, 31.3% of Bangladesh & Global Studies teachers. Thirty percent of Biology, 24.5% of Physics and 22.5% of Chemistry teachers also received subject based training.

Data from the in-depth interviews with the teachers revealed that the teachers faced challenge in being



selected for participation in subject based training relevant to them. Though the head of a Government school in Dinajpur said that he considered teachers' seniority, subject(s) they teach and their merit while selecting them for training, an assistant teacher of his school had a different opinion. The assistant teacher's opinion unfolded a significant malpractice in trainee selection at institution level. This teacher demanded for a strict monitoring so that right people can be trained in relevant subjects. Following is his statement.

It is important to strictly monitor the trainee selection process. Aim should be to provide necessary training to each of the teachers relevant to the subjects s/he teaches. Sometimes because of nepotism, one particular teacher is sent to the training repeatedly, especially those who are favourite to the head teacher. On the other hand, the teachers who left out remain untrained year after year.

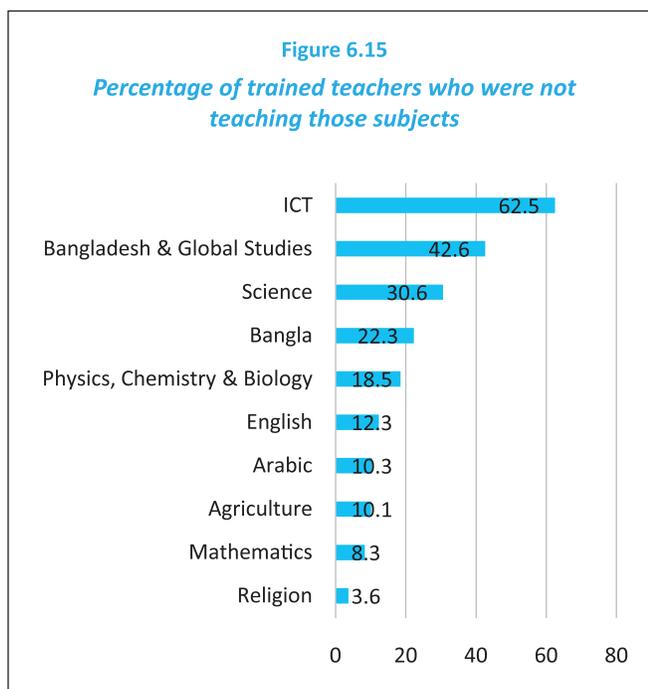
On the other hand, a section of the teachers who were not teaching a specific subject also received training on that subject. For instance, 42.6% of those who received training on Bangladesh & Global studies were not teaching it (Figure 6.15). This was 30.6% for Science, 22.3% for Bangla, 12.3% for English, and 8.3% for Mathematics. Three-fifths of the teachers trained in ICT were not teaching it.

The teachers reported the same during in-depth interviews. For instance, an English teacher of a senior madrasa in Rajshahi who participated in a training on ICT teaching, but did not get any scope to implement training in classroom as already a trained teacher on ICT was there who was conducting all the ICT lessons. The head of the institution did not give him a chance to conduct an ICT lesson or this teacher did not attempt to use his knowledge on ICT for the subject he was teaching. Teachers trained in ICT may use their knowledge in teaching other subjects as well, therefore, not conducting ICT classes by them may not be considered as wastage. But for others this is a wastage of scarce resources.

More than 90% of the subject based training reported by the teachers were held in 2006 or onwards. Overall, 37.5% of the training was held in the past three years (2016-18), 29% during 2011-15, 25.1% during 2006-10, 5.4% during 2001-05, and 3% in 2000 or before (Figure 6.16). Compared to the schools, the madrasa teachers were trained in the most recent years. For instance, a half of the madrasa teachers and a third of the school teachers training were held during the past three years. Separate analysis on this by gender, area and institution type is provided in Annexes 6.21 and 6.22.

Of the total subject based training, 88.1% was provided by the public institutions, 9.5% by private institutions, and 2.1% by the non-government organizations (NGOs). No gender difference was observed among the teachers by provider of subject based training; however, the teachers of rural educational institutions were more likely than their urban counterparts in receiving subject based training from private

Figure 6.15
Percentage of trained teachers who were not teaching those subjects



institutions or NGOs¹ (13% versus 7%). The teachers of rural institutions received 10.3% of their training from private institutions and 2.7% from NGOs.¹ The Government school teachers were ahead of the others in getting training from the public institutions.

The heads of the institutions were the major decision makers in selecting the teachers for subject based training. They selected trainees for 72.6% of the above training. The Upazila Secondary Education Officers selected 14.4% of the cases, District Education Officer selected 4.7%, the ministry 4.6%, and 1.3% by Upazila Academic Supervisors or school managing committees. Self-selection occurred in 2.4% of the cases. Such a distribution of trainee selecting authority was

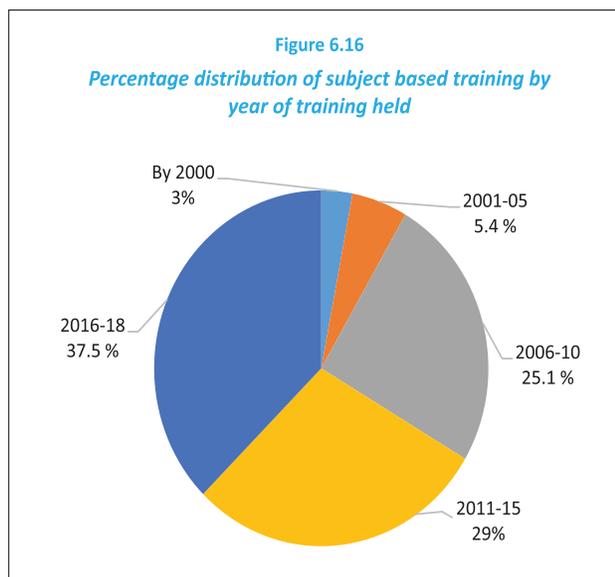
observed irrespective of gender, area and institution type. The District Education Officers and the ministry had a tendency to select more teachers from the Government schools than the other types of institutions.

Short courses

Nineteen various issues were chosen to provide short courses to the teachers. Duration of majority of them were of three days (31.7%), one week (16%) or two weeks (19%), and the others were of various duration. Duration of two-thirds of the courses was one week or less and it was more than two weeks for 7% of the courses. A list of short training courses that the teachers received is provided in Box 6.1.

Overall, 83.6% of the teachers received at least one educational short course (Figure 6.17). No gender difference was observed in this. The school teachers were more likely to receive these training than the madrasa teachers (89.2% versus 72.8%; $p < 0.001$) and teachers of rural educational institutions were ahead of their urban counterparts in receiving these training (84.4% versus 80.4%; $p < 0.05$). Similar to subject based training, the Non-government school teachers were at the top with 89.3% of them receiving short training courses followed by those in School & Colleges (88.7%), Government schools (85.8%), senior madrasas (75.7%) and Dakhil madrasas (70.7%), respectively (Figure 6.18).

Figure 6.16
Percentage distribution of subject based training by year of training held



Box 6.1

List of short training courses that the teachers received

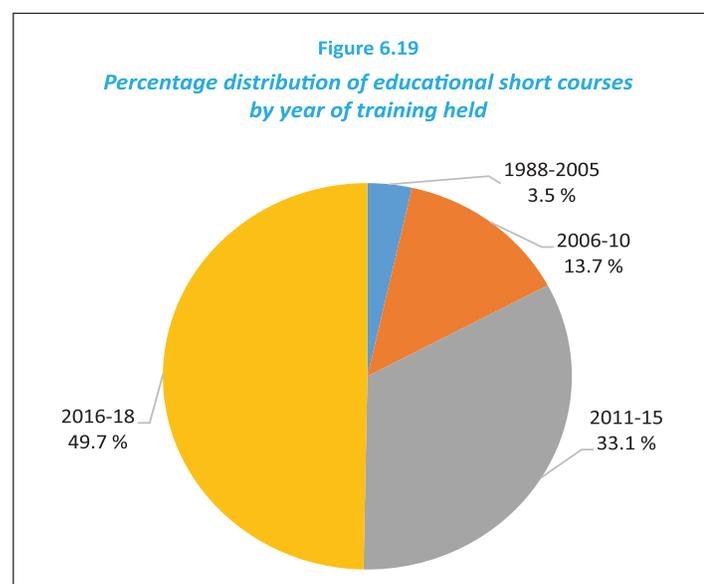
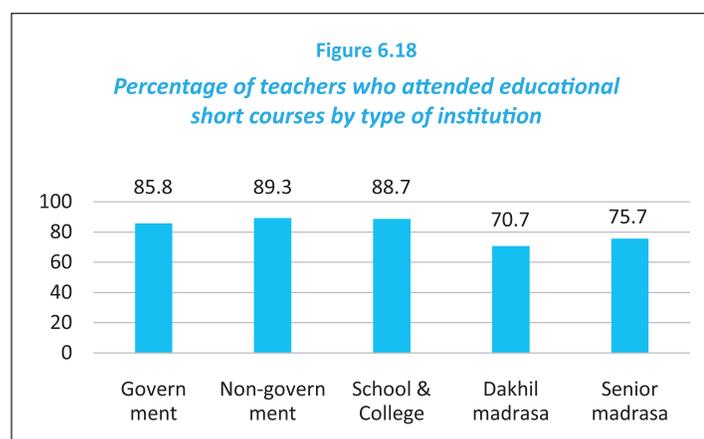
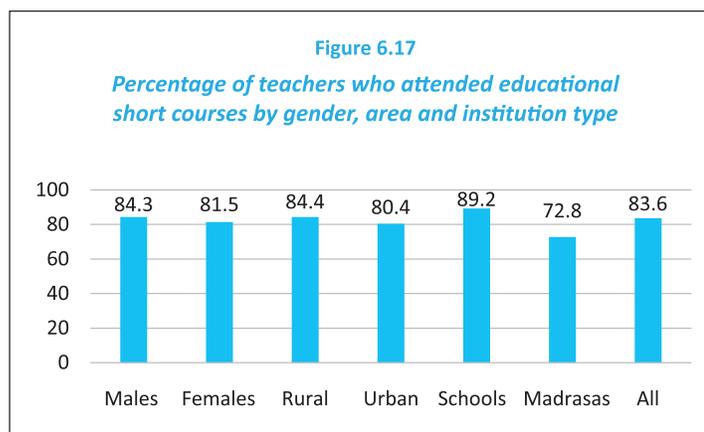
1. Information and Communication Technology
2. Digital content development
3. Teaching learning material development
4. Educational administration and management
5. Life skills based education
6. National curriculum dissemination
7. Teachers Curriculum Guide
8. Performances based management
9. Creative Question
10. School based assessment
11. English Language Teaching
12. Communicative English Training Course
13. Satellite Training Course
14. Practical Science Education
15. Computer Training
16. Training of Scouting
17. Training on School Health
18. Teaching Quality Improvement

¹BRAC had secondary teacher training programme under its Post Primary and Continuing Education (PACE) initiative

Variation was observed among the teachers in terms of number of short courses they received. Overall, 31.7% of the teachers received one such course, 23% received two, 14.1% received three, 6.6% received four, 8.2% received five or more, and 16.4% none (Annex 6.23). Proportion of teachers with no such training was highest in Dakhil madrasas (29.3%). Whereas, 14.1% of the teachers who were getting government salary subvention (grant) did not get any training on educational issues, it was 32.6% among those who were not getting government salary subvention (non-grant) (Annex 6.24).

About a half of the educational short courses were held during the past three years (2016-18), a third during 2011-15, 13.7% during 2006-10, and the remaining 3.5% in 2005 or before (Figure 6.19). No gender difference was observed in this (Annexes 6.25 and 6.26). Proportionately more teachers of the madrasas and the rural educational institutions received these training in recent years than their respective counterparts. For instance, 60.9% of the madrasa and 46.4% of the school teachers got such training during the past three years (2016-18). This was 51.9% of the teachers in rural educational institutions and 41.1% of those in urban institutions.

The most popular short courses that the teachers attended include information and communication technology, creative question preparation, teachers' curriculum guide, teaching quality improvement, life skills based training, and national curriculum (Table 6.7). Training on



information and communication technology (ICT) was at the top in this category with about a third of the teachers receiving this. A slightly lower proportion of the teachers (31%) received a training on preparation of creative questions. Nearly 22% of the teachers received training on teachers' curriculum guide, 18% on teaching quality improvement, 15.8% on life skills based training, and 12.9% on national curriculum. No significant preference was observed in receiving these training by gender of teachers. However, it was there in terms of area of institution and institution type. The rural teachers were more likely to get training on ICT than the urban teachers (34.1% versus 24.4%) and an opposite situation was observed in the training on creative question preparation (29.6% versus 36.9%). Proportionately more school teachers received each of these training compared to their counterparts in the madrasas.

About 91% of the short courses were organised by public institutions, 8.3% by private institutions, and 0.8% by NGOs. The females, teachers of rural educational institutions and those of madrasas were more

Table 6.7
Percentage of teachers who received major short courses by gender, area and institution type

Name of training	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Information and communication technology	31.5	34.8	34.1	24.4	34.4	27.8	32.2
Creative question preparation	31.3	29.9	29.6	36.9	34.3	24.3	31.0
Teachers curriculum guide	21.4	22.3	22.0	19.7	24.1	16.8	21.6
Teaching quality improvement	18.2	17.2	17.3	20.9	23.6	7.1	18.0
Life skills based training	16.3	14.2	16.4	13.7	17.7	12.1	15.8
National curriculum	13.3	11.8	12.1	16.3	15.4	8.1	12.9

likely to receive short training courses from private institutions or the NGOs than their respective counterparts. Such a tendency was least among the teachers of Government schools followed by those of private schools and the madrasas. The heads of the institutions nominated the trainees in 69.7% of the cases, Upazila Secondary Education Officers nominated 16.1% of the cases, and District Education Officers or the ministry nominated 10% of the cases. Box 6.2 presents an example of a teacher equipped with lots of training of all three categories discussed above.

Multivariate regression analysis

Three regression models were built to predict teachers availing three different types of training discussed above. Each of them were dichotomously measured – having a particular type of training and not having it. The predictor variables were institution type, geographical location of institution (urban or rural), gender of teacher, religion, parent as teacher, elder sibling as teacher, aim in life as

Box 6.2

An assistant teacher who attended multiple trainings

A male assistant teacher with teaching experience of about 16 years was working in a Government Girls' High School in Faridpur district. He had an MSc and was appointed as a teacher of Mathematics. He did BEd and MEd on service from a private teacher training institution. He was teaching to a wide range of students; for instance, Mathematics to the students of grades VI, VII and IX, Science to those of grades VII and VIII, Physics to those of grade X, Biology to those of grade IX, and ICT to those of grades VII to X – indicating a perfect match with his appointment. He received seven subject based training during 2010-16 covering all the subjects he was teaching. The head of his institution nominated him for the first three training courses, but the Directorate of Secondary and Higher Education nominated him for the remaining four. He also participated in 13 short courses on variety of issues related to broader areas of education.

teacher, educational qualifications, and length of service. Each of them was categorically measured. As the dependent variables were dichotomously measured, logistic regression was considered appropriate. A stepwise approach was considered and therefore only the statistically significant predictors came out in the three final models. The models are provided in Tables 6.8 to 6.10.

Out of nine predictor variables, six came out in the model for predicting receipt of profession training and five variables in each of the remaining two models. Institution type and length of service were common in each of the three models; area of institution, gender, educational qualification of teachers, and elder sibling as teacher appeared in two each; and aim in life as teacher and religion appeared in one each. Parents as teacher did not appear in any of the models. The predictor variables explained 32% of the variation in teachers' receipt of professional training (Nagelkerke statistic), but it was only 10% in the rest two cases.

Following are the major findings from this analysis.

- No difference was found between the teachers of Government schools and School & Colleges in receipt of any type of training. The teachers of Non-government schools join with them in the cases of subject based training and educational short courses. The teachers of each of the two types of madrasas were less likely to receive training than those of the schools.
- The teachers belonging to the third quartile in terms of length of service had the highest possibility of receiving each of the three types of training. Those belonging to the fourth

Table 6.8
Logistic regression analysis predicting teachers' receipt of profession training

Explanatory variables	Regression coefficient	Odds ratio	95% CI for odds ratio
Institution type			
Government	0	1.00	
Non-government	-0.71	0.49*	0.25 – 0.98
School & College	-0.54	0.59	0.27 – 1.26
Dakhil madrasa	-2.62	0.07***	0.04 – 0.15
Senior madrasa	-1.80	0.16***	0.08 – 0.33
Gender of teacher			
Males	0	1.00	
Females	0.85	2.33***	1.85 – 2.93
Religion of teacher			
Muslim	0	1.00	
Non-Muslim	0.73	2.07***	1.57 – 2.73
Aim in life: teacher			
Yes	0	1.00	
No	0.43	1.54***	1.28 – 1.84
Educational qualifications			
Master's	0	1.00	
Bachelor's or below	0.64	1.89***	1.58 – 2.26
Length of service (quartiles)			
First	0	1.00	
Second	0.60	1.82***	1.44 – 2.32
Third	1.37	3.93***	3.02 – 5.12
Fourth	0.75	2.12***	1.66 – 2.71
Constant	0.56		
-2 Log likelihood	3068.92		
Cox & Snell R ²	0.23		
Nagelkerke R ²	0.32		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

quartile followed them in receiving professional and subject based training, but it was the second quartile in the case of educational short courses. The teachers belonging to the first quartile were least likely to have each type of training.

- Female teachers were more likely to receive professional training than the male teachers, but it was the other way around in the case of receipt of short training courses. No gender difference was found in subject based training.
- Although no variation was observed between the teachers of rural and urban institutions with regard to receipt of professional training, the teachers of rural institutions were more likely to avail the other two types of training than those of urban institutions.
- The Master's degree holders were less likely to attend professional or subject based training than the teachers holding a Bachelor's degree or below. No relationship with teachers' educational qualification was observed in the case of their receipt of short training courses.
- Those who aimed to be a teacher were less likely to have professional training than those who did not aim so. But who had an elder sibling as teacher were more likely to have the rest two types of training than those who had no elder siblings.
- The non-Muslims were more likely to have professional training than those who belonged to Muslim community.

Table 6.9
Logistic regression analysis predicting teachers' receipt of subject based training

Explanatory variables	Regression coefficient	Odds ratio	95% CI for odds ratio
Institution type			
Government	0	1.00	
Non-government	0.05	1.05	0.58 – 1.90
School & College	0.03	1.03	0.52 – 2.04
Dakhil madrasa	-1.02	0.36***	0.20 – 0.66
Senior madrasa	-0.66	0.52*	0.28 – 0.96
Area of institution			
Urban	0	1.00	
Rural	0.52	1.69***	1.35 – 2.11
Elder sibling as teacher			
No	0	1.00	
Yes	0.32	1.38**	1.09 – 1.76
Educational qualifications			
Master's	0	1.00	
Bachelor's or below	0.37	1.45***	1.20 – 1.75
Length of service (quartiles)			
First	0	1.00	
Second	0.34	1.41**	1.11 – 1.80
Third	0.72	2.05***	1.57 – 2.68
Fourth	0.39	1.48**	1.16 – 1.90
Constant	0.62		
-2 Log likelihood	2951.10		
Cox & Snell R ²	0.06		
Nagelkerke R ²	0.10		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

It was seen earlier that about a quarter of the teachers received professional training prior to joining the service. A question may be asked on the predictive characteristics of such behaviour of the teachers. Another regression was therefore performed with the same set of predictors and following the same method as mentioned earlier. Here too, the dependent variable was dichotomously measured – received

professional training before joining in service and received it while in service. Those who did not have professional training were not considered for this analysis. The final model is provided in Table 6.11. Of the nine predictors considered, only two came out as statistically significant in predicting receipt of professional training before joining in service. These are area of institution and length of service of the teachers. These two variables explained 14% of the variation in dependent variable (Nagelkerke statistic). Following are the summary of findings.

- The teachers of the urban institutions were more likely to receive professional training before joining in service than those in rural areas.
- A negative relationship was observed between length of service and receipt of professional training before joining in service. The teachers belonging to the first quarter in terms of length of service were more likely to receive professional training than those who belonged to the remaining three quartiles. The fourth quartile of teachers were least likely to do so.

Need of further training

The teachers, in general, showed their interest in receiving subject based training and to attend short courses on various educational issues. This was true for those who had some training as well as those who had not. In order to express the necessity of training a principal of a senior madrasa in Rajshahi said, 'Training can change teachers'. Those who do not get any training should not be allowed to conduct lessons.'

During in-depth interviews with the teachers, a good number of them blamed their heads of institutions, the managing committees or the upazila or district level officials for not nominating them for training or not taking any initiative for this. A lecturer of Hadith Sharif in a senior madrasa in Dinajpur expressed his

Table 6.10
Logistic regression analysis predicting teachers' receipt of educational short courses

Explanatory variables	Regression coefficient	Odds ratio	95% CI for odds ratio
Institution type			
Government	0	1.00	
Non-government	0.06	1.07	0.52 – 2.20
School & College	0.07	1.07	0.47 – 2.44
Dakhil madrasa	-1.23	0.29***	0.14 – 0.61
Senior madrasa	-0.89	0.41*	0.20 – 0.86
Area of institution			
Urban	0	1.00	
Rural	0.35	1.43**	1.11 – 1.84
Gender of teacher			
Females	0	1.00	
Males	0.32	1.37**	1.08 – 1.75
Elder sibling as teacher			
No	0	1.00	
Yes	0.31	1.37*	1.04 – 1.79
Length of service (quartiles)			
First	0	1.00	
Second	0.61	1.84***	1.39 – 2.42
Third	0.76	2.13***	1.58 – 2.87
Fourth	0.24	1.27	0.97 – 1.66
Constant	1.12		
-2 Log likelihood	2493.13		
Cox & Snell R ²	0.06		
Nagelkerke R ²	0.10		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

indignation by saying that ‘I did not get any training till date although I was keen to participate.’ Another senior madrasa teacher in Dinajpur said, ‘During my 38 years of life as a teacher, I did not get any opportunity to participate in any training.’ A similar expression was obtained from a teacher of Accounting in a School & College and a Science teacher of a Non-government school in Sylhet, and another teacher of Accounting in a Non-government school in Mymensingh. Some of the teachers of the institutions which were not getting government grant/subvention were blaming their non-grant status for not being selected for training or not getting priority. A

Dakhil madrasa teacher in Mymensingh expressed his frustration in the following way – ‘neither the governing body nor the Superintendent took any initiative for enhancing my capacity. This madrasa is a non-grant institution, the process is very slow here.’

The heads of the institutions, with an intention to save themselves, clarified the situation. According to them, they had very passive role in the selection process. Upazila or district education offices or the directorate sometimes asked them to send the names of prospective un-trained teachers. They just sent the list of teachers, but final selection remained with the officials. However, a head teacher of a Government High School in Sylhet stated his position by saying that ‘I do not have direct involvement with trainee selection process, but I have the authority to not to send any particular teacher for training if I feel his/her absence might hamper regular teaching-learning activities of my school.’

There are also examples that after nominating for training, the teachers did not show their interest to participate in those. Some of the reasons were personal or family-related, and some were just for nothing or for no reason. An example of refusal of nomination can be seen from the expression of a Non-government school teacher – ‘the managing committee nominated me for a training on life skills, but I did not show any interest because I thought I am too old for such a training.’

Analysis of data from the teacher survey shows that over 89% of the teachers felt the need of further training (Table 6.12). Such a demand was more among the females than males (92% versus 88.3%; $p < 0.01$), among the madrasa teachers than school teachers (91.5% versus 87.9%; $p < 0.01$), and among the teachers in rural educational institutions than the urban institutions (90.2% versus 84.6%; $p < 0.001$). Of the teachers who had no professional training, all of them wanted to carry out such training of Bachelor's level (i.e. BEd). Those who had a Bachelor's level professional training, wanted to have such training of Master's level (i.e. MEd). On the other hand, a mixture of those who had and who did not have the other two types of training wanted to take those. Over three-quarters of the teachers wanted subject based training and two-thirds wanted educational short courses.

Table 6.11
Logistic regression analysis predicting teachers' receipt of professional training before joining in service

Explanatory variables	Regression coefficient	Odds ratio	95% CI for odds ratio
Area of institution			
Rural	0	1.00	
Urban	0.54	1.72***	1.33 – 2.24
Length of service (quartiles)			
First	0	1.00	
Second	-0.70	0.50***	0.38 – 0.66
Third	-1.60	0.20***	0.15 – 0.28
Fourth	-1.86	0.16***	0.11 – 0.22
Constant	-0.30		
-2 Log likelihood	1983.95		
Cox & Snell R ²	0.09		
Nagelkerke R ²	0.14		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Institution type wise analysis of demand of training is provided in Table 6.13. Whereas 46.5% of the Dakhil madrasa teachers wanted professional training, 30-33% of the teachers of other two types of institution wanted it. Demand for short training courses was also more among the teachers of Dakhil madrasas followed by those of senior madrasas. The madrasa teachers, in in-depth interviews, repeatedly mentioned that they require training because they were seriously deprived in this aspect. They expected training opportunity not only from the government but also from their heads of institutions. For instance, a lecturer of a senior

madrasa said, 'I am a hafez. The principal can arrange training for me on the area that is new to me, for example, a training on computer application. But I don't see any symptom of it.'

Some more information on demand of further training are as follows.

- Overall, 53.3% of the teachers who wanted professional training wanted to do a MEd course, 39.4% wanted to do a BEd course, 8.2% wanted a BMed course, 5.3% wanted a C-in-Ed course, 2.8% wanted a DipEd course, and 1.9% wanted BPEd course.
- English was at the top for which the teachers wanted to have a subject based training, which was followed by Mathematics. Proportion of teachers wanted these were 21.7% and 17.4%, respectively. In addition, 16.1% of the teachers wanted training on Bangla, 12.3% on Bangladesh & Global Studies, 12.3% on ICTs, and 11.3% on Science subjects.
- Regarding short courses more than a half of the teachers wanted training on ICTs (51.3%), and another 13.4% wanted training on computer application, and 16.2% on digital content development. A good proportion of the teachers (29.7%) wanted to learn how to prepare creative questions, 13.2% wanted training on life skills based education, and 11.9% wanted training on teachers curriculum guide.

Use of training in classroom teaching

A mixed reaction was observed regarding use of training in classroom teaching. A section of the teachers reported that they were getting benefits of training through using those in classroom teaching; however, another section blamed their circumstances or themselves for the cause of not using those. A Government school teacher of Chemistry in Sylhet said:

Table 6.12

Percentage of teachers wanted training by type of training, gender, area and institution type

Type of training	Gender		Area		School type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Professional	34.6	31.4	34.5	31.4	30.3	40.8	33.9
Subject based	76.2	79.4	78.4	70.6	74.5	81.7	76.9
Short courses	67.3	68.3	67.8	66.3	65.9	70.8	67.5
Any	88.3	92.0	90.2	84.6	87.9	91.5	89.2

Table 6.13

Percentage of teachers who wanted training by type of training and institution

Type of training	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Professional	33.8	30.2	30.8	46.5	32.8
Subject based	64.8	75.2	71.7	83.8	78.5
Short courses	68.7	65.8	65.7	72.2	68.7
Any	83.2	88.3	86.3	93.8	88.2

My school has every facilities of high standard, therefore I can use my training properly. After getting ICT training I developed contents for Physics and Chemistry, which I use in my classroom. My students are getting better idea about their contents, I believe. I got a master trainer training on curriculum which helped me to provide training in local teacher training college. I also help my colleagues to fill up EMIS form. I uploaded 38 digital contents to *Shikhhok Batayan*.

Another teacher of the same institution who was teaching Bangla shared his situation in the following way:

Though I have received a number of training, but I am not using those in classrooms. Actually this is my shortcoming. I have every opportunity in my school to implement my training, but I do not know why I do not do that. Actually the strong will of doing anything is the key force.

A Science teacher of a Non-government school in Mymensingh reported that he got training on three different issues. He tried to use training in classroom teaching, but could not use it due to a number of reasons. These include large class size, lack of equipment like multimedia, laptop, projector, etc. A Dakhil madrasa teacher reported that when he was in another madrasa, he got training on teaching Bangla. He also claimed that he used to teach Bangla well. After changing institution, he was asked to teach Islamic History and some other madrasa specific subjects. He wished that 'If there is any scope to teach Bangla, I would try my best to use my knowledge acquired from the training.' A General Science teacher of a Non-government high school in Rajshahi could not use his training on ICT because he found it was inadequate.

No provision of assessing teachers' teaching skills was identified as a core reason of teachers' reluctance in applying training in classrooms. A Mathematics teacher of a Government school in Sylhet argued that the teachers do not find motivation for applying the training in classroom as they do not have to face any criticism for their weak teaching. He expressed his perception by saying that 'there is a lack of motivation among the teachers for applying training in classroom because there is no evaluation of our teaching skills. It does not matter whether teaching-learning process is good or bad in school.'

Chapter 7

Choice of Profession, Income and Job Satisfaction

Key Findings

Majority of the teachers (58.7%) had aimed to take teaching as profession; the others wanted to be a doctor, an engineer, a government servant, a police/defence officer, a banker, or a businessperson. A small section (3.3%) had no aim in life.

Teaching in the present institution was the first job for 53.2% of the teachers. A fifth of the teachers had taught in other institutions, 16.5% moved to teaching from a number of non-teaching jobs, and 10% experienced both teaching and non-teaching jobs before their current job.

The length of service was eight years or less for a quarter of the teachers, 9-16 years for another quarter, 17-22 years for the third quarter, and 23-40 years for the fourth quarter. Overall, the mean length of service was 16.3 years with a standard deviation of 9 years.

Teaching was reported to be the principal occupation of all of the teachers. Two-thirds of them claimed to have a second occupation. These include agriculture, private supplementary tutoring, small or medium business, aquaculture, and others.

The teachers reported to earn 85.5% of their income from teaching. A wide variation existed in income. Teachers belonging to the highest quintile of income earned about 3.5 times of those belonging to the lowest quintile. The Government school teachers were the top earners – 1.9 times of the grant (MPO) and 3.8 times of the non-grant (non-MPO) teachers.

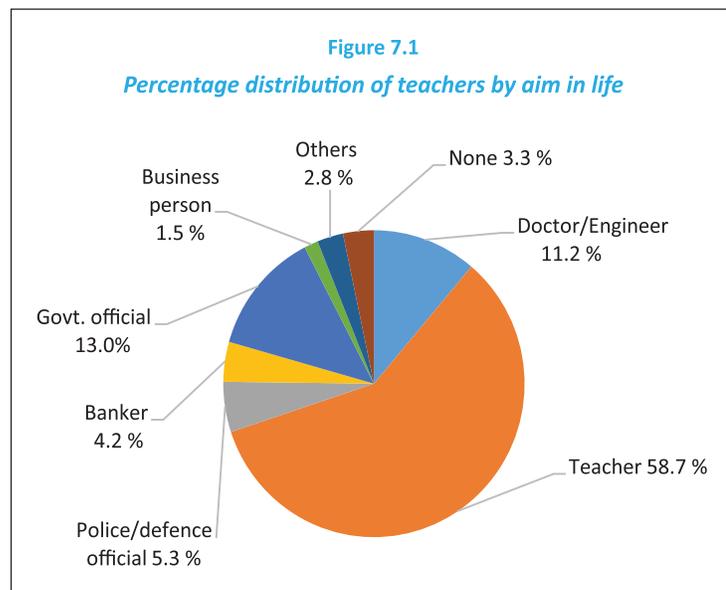
Majority of the teachers were satisfied with their profession and institutions, but not with the remuneration. Overall, 26.3% of the teachers were 'satisfied' with each of the three issues concerned, 46.4% were 'satisfied' with current profession and institution, but not with remuneration, 16% were 'satisfied' only with profession, but not with the rest two issues, and 11.3% fell in other categories.

This chapter covers a number of characteristics and background of teachers. These include their intended aim in life, previous professional engagement and their service length in teaching. Teachers were asked about their second occupation, annual income and self-perceived yearly food security status, and analysis on these are presented here. Satisfaction of the teachers with regard to present profession, institution and remuneration package are also discussed.

A. Aim in life

In general, people start to think about their aim in life when they are students or at the latest after completing a certain level of education. The teachers were asked to disclose their thoughts on their career before entering into job market. Majority of the teachers wanted to see themselves in the same profession as they were at the time of interviewing, i.e., teaching. They comprised 58.7% of the sampled teachers (Figure 7.1). Thirteen percent of the teachers wanted to be a government official and 11.2% wanted to be a doctor or an engineer. The other professions that the teachers wanted to be are: a police or a defence officer (5.3%), a banker (4.2%), a businessperson (1.5%), and others (2.8%). A small section of the teachers (3.3%) did not have any aim in life.

Those who considered teaching as their aim in life had various motivational factors behind this. In general, the respondents perceived teaching as one of the most dignified professions. For a few teachers of Sylhet and Mymensingh regions, prior experience of teaching, which they gathered in student life through offering private supplementary tutoring significantly motivated them for thinking teaching as life’s aim. Some of them linked mental peace, financial stability and social dignity with teaching profession. Some other respondents informed that they met some great teachers in their student



life who ultimately turned teaching into a passion to them. Some of them, however a few, opined that those teachers helped them to find out an aim in life. An assistant teacher of a Dakhil Madrasa from Barisal region stated the following:

I did not have any aim in life for long. Once my teacher asked me what I wanted to be in future, but I could not provide any answer. In reply, I asked my teacher what he thinks I should be. He suggested teaching, justifying that this is an honourable profession. Another of my teacher also helped to think in a similar line. I then planned to be a teacher in future.

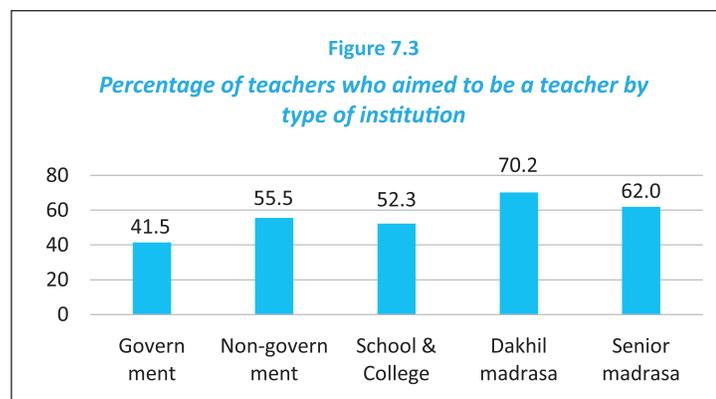
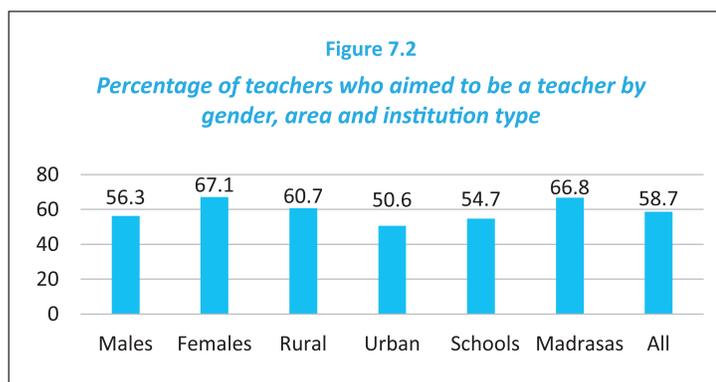
Figure 7.2 shows that more females than males had an aim to be a teacher (67.1% versus 56.3%; $p < 0.001$). This was 60.7% among the teachers of rural and 50.6% among those of urban institutions ($p < 0.001$). Two-

thirds of the madrasa teachers wanted to be a teacher compared to 54.7% of those of schools ($p < 0.001$). Whereas, over 70% of the teachers of Dakhil and 62% of those of senior madrasas wanted to be a teacher, it was 55.5% among those of Non-government schools, 52.3% among those of School & Colleges, and 41.5% among those of Government schools (Figure 7.3). At an opposite direction to the above, a higher proportion of the teachers of Government schools wanted to be a doctor, an engineer, a government official or a police/defence official and a least proportion of the teachers of Dakhil madrasas wanted to take these professions (Annex 7.1). Over 21% of the Government school teachers wanted to be a government official, 16.8% of the same wanted to be a doctor or an engineer, and 8.5% of them wanted to be a police/defence official. Detail information on aim in life of the teachers analysed by gender, area and institution type is provided in Annexes 7.1 and 7.2.

A section of teachers reported in in-depth interviews that from childhood they dreamed for such a profession which would help them to serve the society directly. Therefore, many of them intended to be a doctor. However, failure in the first choice led them to think of teaching as an alternative. They chose teaching because this profession also creates a room for serving the society. A Bangla teacher of a Government school said, 'When I was not successful in medical admission test I felt that another alternative way of serving humanity is teaching. From then I dreamed to be a teacher.'

Some of the respondents wanted to join in public service because of job security, honour and many other facilities to live a decent life. A section of such dreamers entered teaching after being unsuccessful to reach their initial goal. However, their interest on teaching increased gradually when they started to realize that teaching also provide honour, and scope for contributing to the society. One of the teachers said, 'I was interested in a government job. When I got a job in this school I felt that this is a respectable profession and there is opportunity to serve people. Therefore, I joined this school.' A few others also felt the same way.

The madrasa teachers often referred to the religious point of view as their inspiration behind thinking of teaching as their profession. For instance, a lecturer of Hadith Sharif in a senior madrasa in Dinajpur said, 'I read a hadith in my childhood, which says, he is the best who acquire knowledge and share it with others. Therefore, from my student life I wanted to be a teacher'. Another assistant teacher of Akaid and Fikah in a Dakhil madrasa in Mymensingh said, 'I dreamed to be a teacher from my childhood because our prophet was a teacher.'



Because of many reasons such as less hassle, short working hours, long vacations there is a perception in the society that teaching is a suitable profession for women. Women teachers also often preferred to be in teaching considering the scope for flexible office timing, getting time to take care of children, and doing household works. In this aspect a female teacher of Arabic in a senior madrasa in Rajshahi said,

I wanted to be a teacher and I am happy with teaching, because I have to stay at the madrasa from 8 am to 2 pm. For women, I think this is the best profession. If I worked elsewhere I would have to stay at least until 5 pm. Spending outside home for such a long period is not good for taking care of children. Now I can work as well as take care of my child.

Another female teacher of Civics in a Non-government girls’ high school in Rajshahi perceived teaching suitable from a religious point of view. She believed that teaching was such a profession which allows women to maintain their privacy and sanctity most. She stated,

I love teaching from my childhood. It is a prestigious profession. Everybody knows a teacher. This profession provides a freedom of choice, for example, maintaining ‘purdah’. In teaching profession, you can avoid the persons you do not want to meet.

Multivariate regression analysis

A multivariate regression analysis was performed to find out the variables predicting the aim to be a teacher in life. The dependent variable was categorized dichotomously – wanted to be a teacher or did not want. Number of dependent variables was seven. These are gender, educational qualifications, fathers’ education, mothers’ education, elder sibling as teacher, parent as teacher, and religion. These were also categorical variables. As the dependent variable was dichotomously measured, a logistic regression analysis was carried out. A stepwise approach was considered and therefore only the statistically significant predictors appeared in the final model.

Of the seven independent variables, the final regression model took four. These are gender, fathers’ education, sibling as teacher, and educational qualifications (Table 7.1). No statistically significant contribution of mothers’ education, parent as teacher and religion was found in predicting the respondents aiming to be a teacher. Following are the major findings.

- The female teachers were more likely to aim teaching as profession than the male teachers.

Table 7.1
Logistic regression analysis predicting respondents aim to be a teacher

Explanatory variables	Regression coefficient	Odds ratio	95% CI of Odds ratio
Gender of teacher			
Males	0	1.00	
Females	0.54	1.72***	1.42 – 2.08
Fathers education			
Nil	0	1.00	
Grades 1-4	-0.06	0.94	0.70 – 1.27
Grades 5-9	0.12	1.13*	1.06 – 1.41
Grades 10+	-0.18	0.84	0.66 – 1.05
Elder sibling as teacher			
Yes	0	1.00	
No	0.24	1.28**	1.06 – 1.54
Educational qualifications			
Bachelor’s or below	0	1.00	
Master’s	-0.27	1.31**	1.06 – 1.54
Constant	-0.07		
-2 log likelihood	4001.84		
Cox & Snell R ²	0.02		
Nagelkerke R ²	0.03		

***p<0.001, **p<0.01, *p<0.05

- The teachers who had a father with 5-9 years of schooling were more likely to be a teacher than those having fathers with other educational qualifications (more or less than this).
- Those teachers who have an elder sibling in teaching profession were less likely to be a teacher than those who had no such sibling.
- The teachers with a Master's degree were more likely to be a teacher than those who had a Bachelor's degree or less educational qualifications.

B. Previous profession and institution

A good proportion of the teachers passed through a number of professions and institutions prior to their present state during interviews for this study. A section of them had other jobs before entering into teaching profession, and another section changed educational institutions within teaching profession.

Over a quarter of the teachers (26.5%) switched to their present profession (i.e., teaching) from other professions. Nature of occupation in the previous profession varied— 20.5% had some salaried job, 2.4% were doing business, 2.1% were engaged in private supplementary tutoring, and 1.5% were involved with some other self-employed activities. During in-depth interviews, the teachers mentioned some reasons of shifting from other jobs to teaching profession. Mismatching between educational background and the job considered was a strong reason for an assistant teacher of Biology of a Non-government School & College in Barishal. In this regard he said,

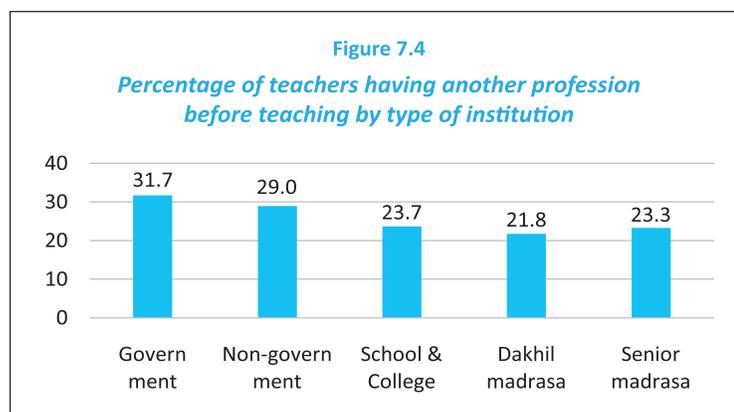
I preferred independent business. Therefore, I started a small business after graduation. At once, I started to think that there is no connection between my academic background and the profession I was engaged with. Then I noticed the circular of teacher recruitment. I applied there and got it.

Another assistant teacher of Hadith in a Dakhil madrasa in Barishal reported that he struggled to cope with the culture of development sector which he started after graduation; thus, expected teaching badly as his career. In this point he said,

I dreamed to be a teacher. However, I started my career with an NGO in 2012. I worked there for a year and experienced several problems. My colleagues and the visitors to that office often criticized me for my attire. They told this religious attire is not appropriate for working in this field. I felt bad and prayed to almighty for getting a teaching job.

Having a professional job prior to joining as a teacher was more among the males than the females (29.7% versus 15.7%; $p < 0.001$), among the teachers of rural educational institutions than their urban counterparts (27.5% versus 22.5%; $p < 0.01$), and among the teachers of schools than the madrasas (28.6% versus 22.4%; $p < 0.001$). Such a tendency was the highest among the teachers of Government schools and the lowest among those of Dakhil madrasas – 31.7% and 21.8%, respectively (Figure 7.4).

Three in every 10 teachers changed their institution keeping them in the same profession i.e., teaching. They



were more among the male teachers than the female teachers (31.3% versus 26.9%; $p < 0.001$). Over 41% of the teachers of urban educational institutions and 27.7% of those of rural institutions also changed institution within teaching profession ($p < 0.001$). This was 32.1% among the teachers of schools and 26.8% among those of madrasas ($p < 0.01$). Nearly a half of the teachers of Government schools, 38.7% of those of School & Colleges, 30.7% of those of Non-government schools, 29% of those of senior madrasas, and 25.2% of those of Dakhil madrasas fall in this category (Figure 7.5).

Combining the above two, it can be said that a fifth of the sampled teachers were teaching in other institutions before joining their present institution, 16.3% were engaged in another job (other than teaching), and 10% were involved in both (Figure 7.6). Therefore, the present job was the first occupation for 53.2% of the sampled teachers. Changes in profession or institution occurred more among the teachers of urban educational institutions than their counterparts in rural institutions (52.3% versus 45.5%; $p < 0.001$). Whereas a half of the male teachers changed their profession or institution before joining their present institution, it was 37.6% among the female teachers ($p < 0.001$). Such a situation has occurred more among the teachers of schools than those of madrasas (49.8% versus 40.9%; $p < 0.001$). Institution type wise analysis shows that 64.5% of the teachers of Government schools, about half of the teachers of Non-government schools and School & Colleges, 42.2% of those of senior madrasas, and 40% of those of Dakhil madrasas got changes in profession or institution ($p < 0.001$). Detail on this is available in Table 7.2 and Annex 7.3.

As reported by the teachers, the current job was at least

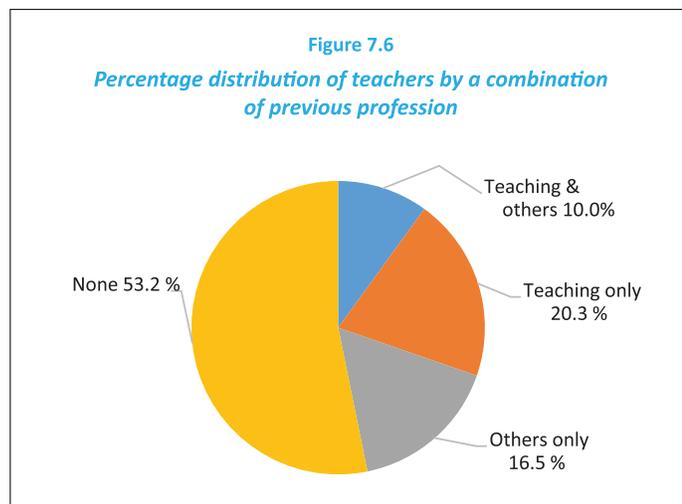
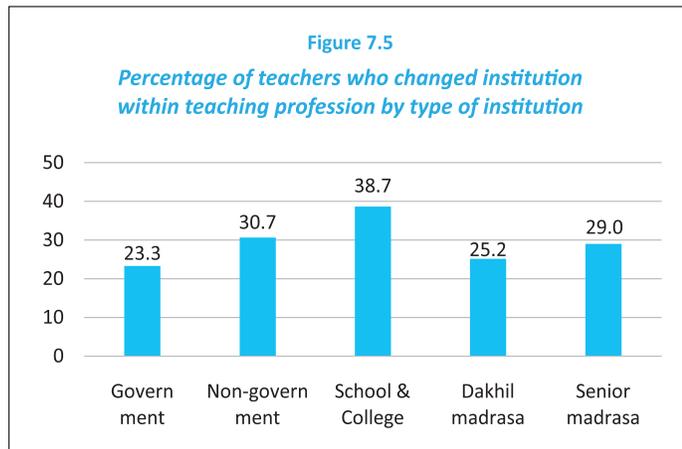


Table 7.2
Percentage distribution of teachers by a combination of previous profession and type of institution

Previous job	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Teaching + others	16.8	10.3	13.2	7.0	10.2
Teaching only	32.8	20.3	25.5	18.2	18.8
Others only	14.8	18.7	10.5	14.8	13.2
None	35.6	50.7	50.8	60.0	57.8
Total	100.0	100.0	100.0	100.0	100.0

the second teaching job for 30.3% of them. This was the second teaching job for 21.5% of the teachers, the third teaching job for 6.8% of them, and the fourth or above for 2% of them. Therefore, the current one was the first teaching job for 69.7% of the teachers. Again, 16.5% of the teachers had at least a job other than teaching before entering into their current job. Therefore, the current teaching job was the first job for 53.2% of the teachers.

Getting the present job

In getting their present job, nearly 90% of the teachers had to sit for both written and oral examinations. However, it was only an oral examination for 6% of the teachers, only a written examination for 1.3%, and none for 2.7% of them. Not much variation was observed in this with respect to institution type or area. The male teachers were more likely to get their job only based on an oral test compared to the female teachers. An opposite scenario was observed in the case of getting their job facing both types of test.

A very high proportion of the teachers (91.2%) reported that they did not have to pay any bribe or speed money in order to get their present job; however, 8.3% reported oppositely and the remaining were unwilling to disclose this. Though, no difference was observed between the teachers of schools and madrasas; proportionately more rural as well as female teachers had to pay bribe compared to their respective counterparts (urban and male teachers, respectively). Paying bribe for getting a job in Government schools was much less than others. Separately, 9.5% of the teachers of Dakhil madrasas, 8.8% of those of Non-government schools, 6.7% of those of senior madrasas, 6% of those of School & Colleges, and 1.8% of those of Government schools reported to pay bribe for their present job.

C. Service length in teaching

The teachers' length of service was calculated considering their job in present and previous educational institutions as teachers. The length of service of the teachers varied from less than one year to 40 years. It was eight years or less for a quarter of the teachers, 9-16 years for another quarter of them, 17-22 years for the third quarter of the teachers, and 23-40 years for the fourth quarter of the teachers. Overall, the mean length of service of the teachers was 16.3 years with a standard deviation of 9 years. The male teachers were more experienced than the female teachers with mean 17.3 and 13.2 years, respectively (Annex 7.4). Not much variation was observed in mean length of service by area or institution type. This was 15.5 years for the teachers of Government schools and Dakhil madrasas, 16.5 years for those in Non-government schools, 16.6 years for those of senior madrasas, and 16.9 years for those of School & Colleges (Annex 7.5). Coefficient of variation (CV) was calculated to know the variation in length of service of different subgroups of teachers. The overall CV was 55.2%. Variation in length of service was more among females than males, among rural teachers than their urban counterparts, and among madrasa teachers than school teachers (Annex 7.4). This was highest among the teachers of senior madrasas (62%) followed by those of Government schools (60.6%) and Dakhil madrasas (56.1%), respectively (Annex 7.5). An equal variation in length of service was observed among the teachers of two other types of school (53.3%).

The mean length of service was 17.2 years among those who had a teaching job prior to the current one and 16 years for the remaining teachers. The former group of teachers, on average, worked in their previous institutions for 5.8 years. Therefore, they spent a third of their length of service there.

it was ‘other activities’ for the madrasa teachers. However, this study did not collect any information on the activities categorized as others.

Educational institution wise variation also existed ($p < 0.001$). Whereas, about three-quarters of the teachers of Dakhil madrasas and two-thirds of those of senior madrasas and Non-government schools had a second occupation, it was 60.7% among those of School & Colleges and 42.2% among those of Government schools (Table 7.4). Household management was prominent as the second occupation among the teachers of each

type of institutions. Each of agriculture and private supplementary tutoring was prominent among the teachers of four types of institutions except those in the Government schools. Agriculture was not prominent among those of Government schools and private supplementary tutoring was not in Dakhil madrasas. The ‘other activities’ came out as a prominent second occupation of the teachers of Dakhil madrasas.

Table 7.4
Percentage distribution of teachers by their second occupation and institution type

Occupation	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Agriculture	6.7	23.3	17.5	26.8	23.8
Business	1.3	3.3	4.7	7.2	5.7
Aquaculture	0.2	3.2	0.5	3.3	2.2
Private tutoring	12.0	12.2	12.8	8.7	10.8
Household activities	21.0	21.3	22.7	15.2	16.3
Others	1.0	2.9	2.5	13.0	8.2
None	57.8	33.8	39.3	25.8	33.0
Total	100.0	100.0	100.0	100.0	100.0

Multivariate regression analysis

A multivariate regression analysis was performed to predict teachers’ having a second occupation. The dependent variable was dichotomously categorized – having a second occupation or did not have a second occupation. Fourteen predictor variables were considered in this analysis; all of them were categorically measured. The variables are institution type, gender of teacher, area of institution, educational qualification of teachers, service length, teaching as aim of life, having professional training, having subject based training, having educational short courses, religion, fathers’ education, mothers’ education, parent as teacher, and elder sibling as teacher. Two regression models were built – the first one considering household management as an occupation (because the respondents mentioned it as occupation), and the second one not considering it as an occupation (because such activities did not give direct financial benefit). As the dependent variable was dichotomously measured a logistic regression analysis was carried out. A stepwise approach was considered and therefore only the statistically significant predictors appeared in the final models.

Of the 14 predictor variables considered, five came out as statistically significant predictors in the final model for the first analysis (Table 7.5). It was seven for the second analysis – the five of the first analysis and additional two (Table 7.6). The five common predictors of having a second occupation by the teachers were institution type, gender, area of institution, religion of teacher, and educational qualification of teacher. The two additional variables in the second model are fathers’ education and receipt of educational short courses. No significant contribution of the following variables was found: service length, aim of life as teacher, having professional training, having subject based training, mothers’ education, parent as teacher, and elder sibling as teacher.

The following are the major observations from the above analysis (Tables 7.5 and 7.6).

- The teachers of the two types of madrasas and the Non-government schools were more likely to have a second occupation than those of the Government schools. No difference between the teachers of the Government schools and those of School & Colleges was observed when household management was considered as occupation. The latter group of teachers were observed to be more likely to have a second occupation than the former group when household management was not considered as occupation.
- Teachers of rural educational institutions and Muslims were more likely to have a second occupation than their respective counterparts in both the situations. The same was observed among those who had a Bachelor's degree or below educational qualifications than those of Master's degree holders.
- Teachers who possessed educational short courses were less likely to have a second occupation than those who did not possess it, when household management was not considered as occupation.
- An opposite relationship of the variable 'gender' was observed in two situations. When household management was considered as occupation, the female teachers were found more likely to have a second occupation than the male teachers. On the other hand, when household management was not considered as occupation, the male teachers were found more likely to have a second occupation than the female teachers.

The above analyses were also carried out excluding the teachers of Government schools, i.e., taking only the teachers of private educational institutions and adding grant status of the teachers as a predictor variable. The other predictor variables remained the same. The findings of new analysis are provided in Annexes 7.6 and 7.7. The previous and the new models are compared in the following paragraphs.

Table 7.5
Logistic regression analysis predicting having a second occupation of teachers (model 1)

Explanatory variables	Regression coefficient	Odds ratio	95% CI of Odds ratio
Institution type			
Government	0	1.00	
Non-government	0.75	2.12**	1.22 – 3.68
School & College	0.52	1.73	0.93 – 3.20
Dakhil madrasa	1.23	3.42***	1.92 – 6.07
Senior madrasa	0.87	2.40**	1.35 – 4.27
Gender of teacher			
Males	0	1.00	
Females	1.91	6.76***	5.16 – 8.86
Area of institution			
Urban	0	1.00	
Rural	0.43	1.53***	1.24 – 1.89
Religion of teacher			
Non-Muslim	0	1.00	
Muslim	0.28	1.33**	1.07 – 1.64
Educational qualifications			
Master's	0	1.00	
Bachelor's or below	0.22	1.25*	1.06 – 1.47
Constant	-1.11		
-2 log likelihood	3482.87		
Cox & Snell R ²	0.10		
Nagelkerke R ²	0.14		

Note: Household management was considered as occupation
*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Similar to the previous model, the new model considering household activities as occupation also considered institution type, gender, area of institution, and religion of teacher as predictor variables (Table 7.5 and Annex 7.6). The conclusions from the findings were also similar in nature. Educational qualifications of the teachers did not appear in the new model; instead, length of service and grant status of them appeared. The findings reveal that the teachers belonging to above the median of service length of the teachers were more likely to have a second occupation than those belonging to below the median. Again, the non-grant teachers were more likely to have a second occupation than those who were receiving grant from the government.

When household activities were considered as occupation, as in the previous model, gender of teacher, area of institution, religion of teacher and having educational short courses came out as significant predictors in the new model too (Table 7.6 and Annex 7.7). The conclusions from the findings were also similar in nature. Three variables viz., institution type, fathers' education, and teachers' educational qualifications, did not appear in the new model; instead length of service of the teachers and their grant status appeared. This new model also shows that the teachers belonging to above the median of service length were more likely to have a second occupation than those belonging to below the median; and again, the non-grant teachers were more likely to have a second occupation than those who were receiving grant from the government.

Table 7.6
Logistic regression analysis predicting having a second occupation of teachers (model 2)

Explanatory variables	Regression coefficient	Odds ratio	95% CI of Odds ratio
Institution type			
Government	0	1.00	
Non-government	1.04	2.83**	1.47 – 5.35
School & College	0.79	2.20*	1.09 – 4.44
Dakhil madrasa	1.47	4.34***	2.25 – 8.38
Senior madrasa	1.12	3.07***	1.59 – 5.95
Gender of teacher			
Females	0	1.00	
Males	3.59	36.21***	24.14 – 54.33
Area of institution			
Urban	0	1.00	
Rural	0.24	1.27*	1.01 – 1.60
Fathers education			
Nil	0	1.00	
Grades 1-4	0.29	1.34*	1.03 – 1.82
Grades 5-9	0.22	1.25*	1.02 – 1.56
Grades 10+	-0.08	0.92	0.71 – 1.18
Religion of teacher			
Non-Muslim	0	1.00	
Muslim	0.31	1.36**	1.08 – 1.70
Educational qualifications			
Master's	0	1.00	
Bachelor's or below	0.22	1.25**	1.05 – 1.48
Educational short training			
Yes	0	1.00	
No	0.35	1.42**	1.12 – 1.81
Constant	-5.00		
-2 log likelihood	3246.20		
Cox & Snell R ²	0.26		
Nagelkerke R ²	0.36		

Note: Household management wasnot considered as occupation

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

E. Annual income and food security status

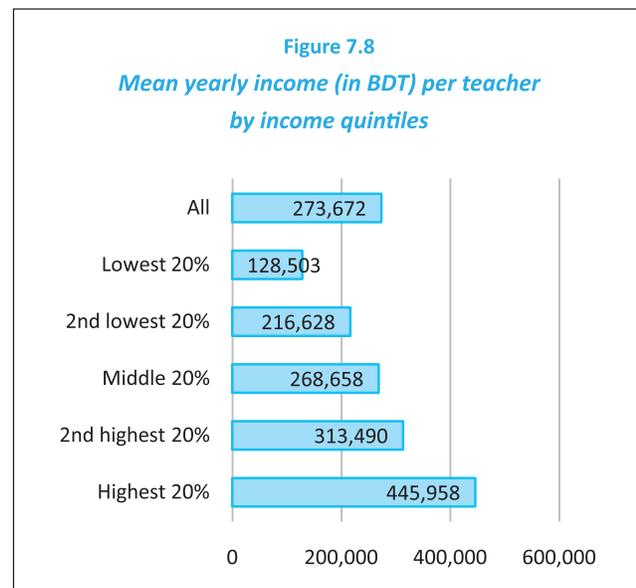
Annual income

The teachers reported their yearly income, referring to the past one year of interview, in seven specific sources. These are salary and benefits from own institution, the same from other institution, additional teaching in own institution, private supplementary tutoring, agriculture, fisheries and livestock rearing, and small and medium business. In addition, there was a category called 'others' to put income from all other sources together. Of the respondents, 97.3% reported income from salary and benefits from own institution, 0.4% from other institution, 18.3% from additional teaching in school, 24.5% from private tutoring, 28.2% from agriculture, 8.8% from fisheries and livestock rearing, 4.8% from business, and 7.1% from other sources. Considering the lower intensity, some of these were merged into broad categories. The first two sources were merged into salary and benefits, the third and the fourth were merged into private supplementary tutoring, agriculture was kept stand alone, and the remaining were put together with the title 'others'.

The average yearly income of the secondary teachers in Bangladesh was BDT 273,672, of which 85.5% was borne from salary and benefits, 5.9% from additional teaching including private supplementary tutoring, 5% from agriculture, and 3.6% from other sources (Annex 7.8). This means that a very high portion of the teachers' yearly income came from salary and benefits. Salary and benefits was the principal source of income of the teachers irrespective of gender, area of institution, and type of institution (Annexes 7.8 and 7.9). Though 0.6% of the teachers had no income, it varied from BDT 10,000 to BDT 1,459,656 for rest of the teachers with a standard deviation BDT 121,964. The coefficient of variation was therefore 44.6%. This means that standard deviation of yearly income of the teachers was 44.6% of their average income.

The teachers were divided into their income quintiles and the mean income of each of these groups were calculated to see the variation. The lowest quintile of the teachers earned BDT 200,000 or less, the second quintile from BDT 200,001 to BDT 238,980, the middle quintile from BDT 238,981 to BDT 287,160, the fourth quintile from BDT 287,161 to BDT 344,160, and the highest quintile earned BDT 344,161 or more. The average income of these five groups of teachers were BDT 128,503, BDT 216,628, BDT 268,658, BDT 313,490, and BDT 445,958, respectively (Figure 7.8). The annual income of the highest quintile of the teachers was about 3.5 times of that of the lowest quintile. Coefficient of variation (CV) of annual income of each of the above five groups of teachers was calculated. Whereas, the standard deviation of annual income of the middle three quintiles of teachers was about 5% of their mean annual income; it was 48.3% for the first quintile and 25.7% for the fifth quintile.

The average annual income of the male teachers was higher than that of the female teachers with a difference of BDT 44,798



(Table 7.7). Although, no gender variation was observed in salary and benefits of the teachers; the male teachers surpassed the female teachers in income from additional sources. Additional income of the male teachers constituted 17.3% of their total income, which was 3.2% of that of the female teachers. The male teachers earned 6.3 times of their female counterparts from the sources beyond salary and benefits. Variation in yearly income of the female teachers was more than that of the male teachers (48.1% versus 43%).

The teachers of urban educational institutions earned BDT 63,240 more than that of the teachers of rural institutions (Table 7.7). They did not only get more salary and benefits from the rural teachers, income from additional tutoring and other sources were also more for them. However, the rural teachers earned more from agriculture than the urban teachers. The rural teachers earned 14.6% of their annual income from beyond salary and benefits, which was 4.5% for the urban teachers. More variation was observed in the yearly income of the urban teachers than their counterparts in rural institutions (49.9% versus 40.8%).

The school teachers' average annual income was BDT 70,142 more than that of the madrasa teachers (Table 7.7). The former got more income from salary and benefits as well as from additional tutoring (together 1.4 times) than the latter. The average income from agriculture was mostly close for school and madrasa teachers, but the madrasa teachers earned double of that of school teachers from 'other' sources. Income beyond salary and benefits constituted 13.4% of the total income of the school teachers and 17.3% of that of the madrasa teachers. Yearly income of the school teachers was more homogeneous compared to that of the madrasa teachers (41.6% versus 45.6%).

The teachers of the Government schools were at the top of all other institutions not only in terms of total yearly income, they also topped in terms of income from salary and benefits (Table 7.8). Their salary and benefits was nearly double of that of those in School & Colleges and more than triple of that of those in Dakhil madrasas. The highest income from additional teaching was secured by the teachers of School & Colleges, which was BDT 1,000 less for the Government school

Table 7.7
Mean yearly income (in BDT) of the teachers by sources, gender, area and institution type

Income sources	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Salary	234,802	231,230	223,570	277,703	257,263	187,736	233,998
Additional tutoring	19,501	4,823	12,702	30,832	19,394	9,871	16,194
Agriculture	17,235	866	15,855	3,875	13,288	14,069	13,547
Others	12,226	2,048	9,344	12,401	7,102	15,329	9,933
Total	283,765	238,967	261,470	324,710	297,147	227,005	273,672
Standard deviation	122,102	114,998	106,776	161,976	123,573	103,449	121,964
Coefficient of variation	43.0	48.1	40.8	49.9	41.6	45.6	44.6

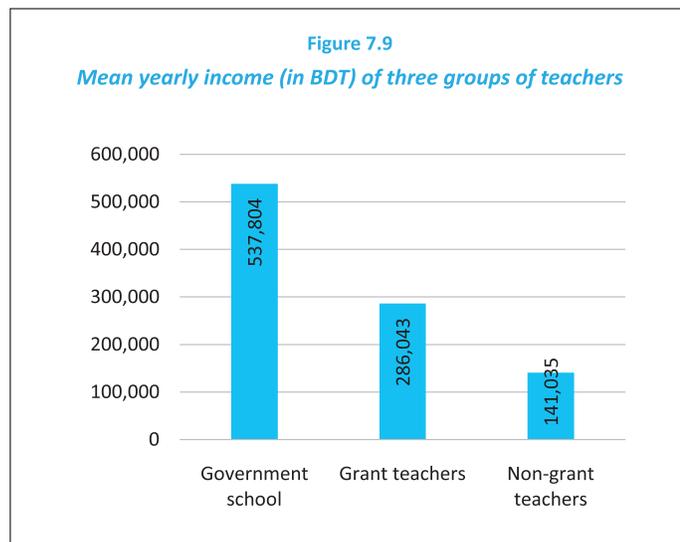
Table 7.8
Mean yearly income (in BDT) of teachers by sources and institution type

Income sources	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Higher madrasa
Salary	503,148	247,182	261,384	160,669	226,047
Additional tutoring	22,341	18,850	23,238	9,752	10,041
Agriculture	4,756	13,593	13,543	15,752	11,688
Others	7,560	7,041	8,519	17,805	11,825
Total	537,804	286,667	306,684	203,977	259,601
Standard deviation	226,703	107,958	117,305	109,397	84,350
Coefficient of variation	42.2	37.7	38.2	53.6	32.5

teachers. The teachers of Dakhil madrasas earned least from this source. However, they were at the top with regard to income from agriculture and ‘other’ sources. The salary and benefits secured 87% of the total income of the teachers of senior madrasas, it was 78.8% for the teachers of Dakhil madrasas, 85.2% for the teachers of School & Colleges, 86.2% for the teachers of Non-government schools, and 93.5% for the teachers of Government schools. The teachers of senior madrasas were the most homogeneous group in terms of total income (CV = 32.5%) and the teachers of Dakhil madrasas were the least (CV = 53.6%). The CVs of the total income of the teachers of two private schools were close to each other (37.7% for Non-government schools, 38.2% for School & Colleges) and it was a bit higher for the Government school teachers (42.2%).

The average yearly income of the teachers of private educational institutions who were receiving government salary subvention (grant) was 53% of that of the Government school teachers. The teachers of private educational institutions who were not receiving government subvention (non-grant) were earning 26% of the total income of those who were receiving it (grant teachers). Therefore, the non-grant teachers were earning half of the total income of the grant teachers. Figure 7.9 provides mean yearly income of these three groups of teachers. Whereas, the standard deviation of yearly income of the Government school teachers and the private institutions grant teachers was 42.2% and 33.5%, respectively; it was 88% for the non-grant teachers of private educational institutions. This means that the non-grant teachers of private educational institutions were much heterogeneous in their annual income compared to the other two groups of teachers.

During in-depth interviews, the Government school teachers were found happier than those of private institutions with the salary and benefits they were getting. Some of them however showed sympathy to the teachers of private institutions for their vulnerability regarding the salary structure and other benefits. For instance, a Botany teacher of a Government girl’s high school in Dinajpur said, ‘I am happy with the benefits that we enjoy being a government school teacher, but the teachers of non-government schools are deprived. Their residence and medical allowances should be increased.’



The teachers of the private educational institutions showed their dissatisfaction with salary and benefits they were getting. While talking on this, each of them were comparing their salary and benefits with that of the Government school teachers. Some of them however added irregularities in payment. To explain the irregularity in providing salary, an English teacher in Mymensingh said that ‘Teachers do not get their salary on time. They would be happy if salary is provided timely.’ Another assistant teacher of Chemistry from a School & College in Sylhet, to highlight the inadequate amount of salary opined that he could not manage most of his daily needs with the salary he was obtaining from his institution. Therefore, he was frustrated. A Mathematics teacher of a Dakhil madrasa in Barishal perceived huge discrimination between

the salary structure of teaching and other professions, and the same between the madrasa and the general stream. To express his anxiety regarding the uncertainty of life after retirement he stated,

Compared to the other professions, teaching has much discriminated salary and other benefits. This raises frustrations. How will I survive at my old age and whether I will have enough money to buy medicine are the big questions in my mind.

Food security status

The teachers were asked to determine their household food security status in a four point scale considering total income and expenditure of the household members over the past one year period. The points in the scale were *always in deficit*, *sometimes in deficit*, *breakeven*, and *surplus*. Overall, 5% of the teachers rated their households as *always in deficit*, 20.2% as *sometimes in deficit*, 34.8% as *breakeven*, and 40% as *surplus* (Table 7.9). A positive relationship was observed between yearly income and food security status. For instance, the average income was BDT 178,429 for those who rated them as *always in deficit*, BDT 238,582 for those who rated them as *sometimes in deficit*, BDT 262,668 for those who rated them as *breakeven*, and BDT 312,890 for those who rated them as *surplus* ($p < 0.001$). The average annual income of the teachers belonging to the *surplus* households was 1.75 times of that of those belonging to *always in deficit* households. The teachers belonging to *always in deficit* households were much heterogeneous than others in terms of annual income.

As was observed in yearly income, the teachers of the Government schools were at the top in terms of yearly food security status followed by those of School & Colleges, Non-government schools, senior madrasas, and Dakhil madrasas, respectively (Table 7.10). Sixty-nine percent of the teachers of Government schools, 46.2% of those of School & Colleges, 43.3% of those of Non-government schools, 35.8% of those of senior madrasas and 27.5% of those of Dakhil madrasas rated their households as *surplus*. Proportionately more surplus households was observed among the males than the females (63.1% versus 53.3%; $p < 0.001$), among the teachers of urban institutions and those in rural institutions (47.4% versus 38.2%; $p < 0.001$), and among the teachers of schools than those in madrasas (44.5% versus 30.9%; $p < 0.001$). More information on this is available in Annex 7.10.

Similar to yearly income, a big difference was observed between the teachers who

Table 7.9

Percentage distribution of teachers by household food security status and some statistics of yearly income (BDT) against each category of household

HH food security status	% of teachers	Yearly income (in BDT)		
		Mean	Standard deviation	Coefficient of variation
Always in deficit	5.0	178,427	111,607	62.5
Sometimes in deficit	20.2	238,582	96,499	40.4
Breakeven	34.8	262,668	108,416	41.4
Surplus	40.0	312,890	131,701	42.1
Total	100.0	273,672	121,964	44.6

Table 7.10

Percentage distribution of teachers by household food security status and institution type

HH food security status	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Always in deficit	0.5	3.7	2.5	11.0	3.8
Sometimes in deficit	6.0	18.8	19.8	23.3	23.7
Breakeven	24.5	34.2	31.5	38.2	36.7
Surplus	69.0	43.3	46.2	27.5	35.8
Total	100.0	100.0	100.0	100.0	100.0

were getting government salary subvention (grant) and those who were not (non-grant) (Table 7.11). Whereas, only 3.4% of the grant teachers rated their households as *always in deficit*, it was 16.3% among the non-grant teachers. Again, 41.1% of the grant and 27% of the non-grant teachers rated their households as *surplus* ($p < 0.001$). The average annual income of the non-grant teachers was 21% less than that of the teachers belonging to *always in deficit* households. The grant teachers, on average, earned in between the average income of those who rated their households as *breakeven* and *surplus*. The average annual income of these teachers was 8.9% more than that of the teachers rating them as *breakeven*, but 8.6% less than those who rated them as *surplus*. The Government school teachers, on average, earned 72% more than average income of the teachers belonging to *surplus* households.

F. Job satisfaction

The teachers were asked to provide their level of satisfaction in a five point scale regarding present profession, institution, and remuneration package. The points in the scale were *highly satisfied*, *satisfied*, *roughly okay*, *dissatisfied*, and *highly dissatisfied*.

Overall, mostly a similar pattern was observed in the distribution of teachers by level of satisfaction on two issues, viz., profession and institution (Table 7.12).

However, the teachers were found more satisfied with their profession than with their institution. For instance, whereas 64.3% of the teachers were found 'highly satisfied' with their profession and 26.6% 'satisfied' – totalling 90.9%; these figures, in terms of satisfaction with institution, were 42.8% and 32%, respectively – totalling 74.8%. Over a fifth of the teachers expressed their satisfaction level with institution by saying 'roughly okay', which was only 8% in the case of profession. On the other hand, it was a bit different in the case of remuneration package. Only 8.6% of the teachers were 'highly satisfied' with the remuneration package offered to them and 20.9% were 'satisfied' – totalling 29.5%. Satisfaction with remuneration package was 'roughly okay' for a much larger proportion of the teachers (37.3%). About a third of the teachers were found dissatisfied with the remuneration package offered to them – 22.5% 'dissatisfied' and 10.7% 'highly dissatisfied'. The latest three figures with regard to profession and institution were much lower than these.

The teachers, during in-depth interviews, explained a number of reasons behind their satisfaction with profession. In general, they liked their profession because it is considered a noble, decent and dignified profession in Bangladeshi culture. They also perceived that a teacher is a respected person – people show their respect to the teachers even after retirement. An assistant teacher of Quran Majid and Tajveed of a Dakhil madrasa in Mymensingh said, 'Teaching is the most dignified profession in the society. Once the

Table 7.11
Percentage distribution of teachers of private educational institutions by household food security and grant status

HH food security status	Grant status		All
	Grant	Non-grant	
Always in deficit	3.4	16.3	5.1
Sometimes in deficit	19.9	24.4	20.5
Breakeven	35.6	32.3	35.1
Surplus	41.1	27.0	39.3
Total	100.0	100.0	100.0

Table 7.12
Percentage distribution of teachers by satisfaction level with profession, institution and remuneration package

Level of satisfaction	Present profession	Present institution	Remuneration package
Highly satisfied	64.3	42.8	8.6
Satisfied	26.6	32.0	20.9
Roughly okay	8.0	21.3	37.3
Not satisfied	0.9	2.6	22.5
Not at all satisfied	0.2	1.3	10.7
Total	100.0	100.0	100.0

students grow up they will acknowledge my contribution to their lives with respect. They will remember me. That is my pleasure.'

As a point of satisfaction another teacher mentioned that their students demonstrated huge respect to them even they hold very significant positions in the society. To express her joy an assistant teacher of Bangla of a Government girls' high school in Dinajpur said:

Teaching is a good profession. The students respect their teachers wherever they meet them. Some of my students are doctors, some are engineers and some are police officers. I am proud of them! I feel very good when they leave their seats for me in public buses or in any other places and say, 'I was your student of that batch'.

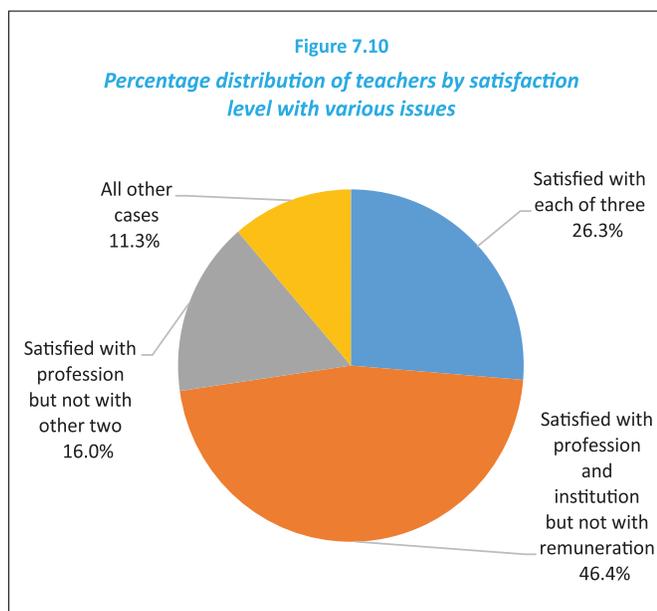
Few teachers expressed gratification regarding teaching because it created opportunities for self-learning as well as transmit that learning to the society through the students. A Bangla teacher of a Government school and a Chemistry teacher of a School & College in Sylhet division were talking in this line. One of them said,

I love this profession. This profession has fulfilled my dream. I can learn continuously. Therefore, I like this profession a lot. My satisfaction comes when I see that I can transfer my knowledge and understanding to my students and can show them the path of acquiring knowledge.

A good number of teachers had an opinion that teaching as a profession gave them the opportunity to balance between the family life and profession. Moreover teachers may enjoy freedom. These respondents valued these more than the financial benefits. Scope of contribution for building the nation was also a reason of satisfaction for a few number of teachers.

The teachers can be categorized into three relatively large groups considering their level of satisfaction on the three issues discussed above. Majority of them belong to the first group, who expressed their satisfaction ('satisfied' or 'highly satisfied') with their current profession and institution, but not with the remuneration package offered to them. They were 46.4% of the sampled teachers (Figure 7.10). The second largest group, containing 26.3% of the teachers, were at least 'satisfied' with each of the three issues concerned. Another 16% of the teachers were at least 'satisfied' only with their profession, but not with the rest two issues – they constitute the third group.

Not much variation was observed among the teachers in terms of above categorization with regard to gender or area (Annex 7.17). However, the school teachers were found more satisfied than those of madrasas – 27.7% of the school and 23.5% of the madrasa teachers were found satisfied with all three issues concerned ($p < 0.001$). A wide variation in



satisfaction, with a statistically significant margin, was observed by type of institution where the teachers of Government schools were much ahead of the others (Table 7.13). Following are the observations from the analysis.

About 55% of the teachers of Government schools expressed their satisfaction in all three areas concerned, which was 30.2% among the teachers of School & Colleges, 27% among those of senior madrasas, 26.3% among those of Non-government schools, and 21% among those of Dakhil madrasas. The difference of the top from the second type of institution was 24.6 percentage points and from the bottom was 33.8 percentage points. The above proportion of the Government school teachers was more than double of that collectively for the teachers of all other institutions.

Again, whereas, the majority of the teachers (45-50%) of each of the four types of institution (except Government) fell in the second category mentioned above (satisfied with profession and institution but not with remuneration), only a fifth of the teachers of the Government schools were in that category.

Over a fifth of the teachers of Dakhil madrasas, 12-15% of those of Non-government schools, School & Colleges and senior madrasas were satisfied only with their profession, but not with the other two; this was only 5.8% among the Government school teachers.

Satisfaction level of the teachers' who were not receiving government subvention against salary and benefits (i.e. non-grant) was much lower than that of those who were receiving it (i.e. grant). For instance, 28.4% of the grant teachers showed their satisfaction with all the three areas concerned against 6.2% of the non-grant teachers (Annex 7.18). Again, 13.4% of the grant and 35.9% of the non-grant teachers showed their satisfaction with profession only, but not with institution or remuneration.

Table 7.13
Percentage distribution of teachers by various satisfaction level with three issues combined and institution type

Various satisfaction level	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Satisfied with each three issues	54.8	26.3	30.2	21.0	27.0
Satisfied with profession and institution but not with remuneration	20.8	46.7	47.5	45.1	50.7
Satisfied with profession but not with others	5.8	15.7	13.5	21.7	12.0
All other cases	18.6	11.3	8.8	12.2	10.3
Total	100.0	100.0	100.0	100.0	100.0

Multivariate regression analysis

Three multivariate regression models were built predicting the teachers' satisfaction with their profession, institution, and remuneration. In doing so. The level of satisfaction in each of the areas was categorized into two. Those who reported to be 'highly satisfied' or 'satisfied' were consolidated and considered as satisfied for this analysis; the others ('roughly okay', 'dissatisfied' and 'highly dissatisfied') were categorized as not satisfied. This was done to fit the analysis with the principle of logistic regression analysis.

Total number of predictor variables was 16. These are institution type, gender of teacher, area of institution, teachers' educational qualifications, religion, fathers' education, mothers' education, parent as teacher, elder sibling as teacher, service length, teaching as aim in life, having professional training, having subject

based training, having educational short courses, having a second occupation, and income. All of these were also categorical variables. A stepwise approach was followed and therefore only the statistically significant predictors appeared in the three final models.

Five of the 16 predictor variables did not appear in any of the final regression models as statistically significant predictors of satisfaction. These include gender of teacher, fathers' education, mothers' education, elder siblings as teacher, and having professional training. Of the others, teaching as aim in life and having a second occupation came out as statistically significant predictors in each of the models. Type of institution, area of institution, teachers' educational qualifications and income came out in two models each; and parents as teacher, religion, length of service, having subject based training and having education short courses came out in one model each. The predictive variables could not explain more than 10% of the variations in the dependent variables in any of the models. The findings are provided in Tables 7.14 to 7.16.

Following are the findings in short.

- The teachers who aimed to take teaching as profession were more likely to be satisfied with each of the three issues than those who did not aim to be a teacher. A similar result was observed with regard to teachers having a second occupation. Those who had a second occupation were more likely to be satisfied than those who had teaching profession only.
- Teachers of the rural institutions were more likely to be satisfied with their institution and remuneration than those in urban institutions. No such difference was observed by area of institution with regard to satisfaction with profession.
- Master's degree holders were less likely to be satisfied with their profession and institutions than those who had a Bachelor's degree or below educational qualifications. No such case was observed with regard to satisfaction with remuneration.
- Satisfaction level with present institution or remuneration package significantly increased with the increase in income of the teachers, which was not the case with profession. However, half of the teachers who belonged above median in terms of length of service were more likely to be satisfied with their profession than the remaining half belonging to below the median.
- The Government school teachers were more likely to be satisfied

Table 7.14
Logistic regression analysis predicting satisfaction with present profession

Explanatory variables	Regression coefficient	Odds ratio	95% CI of Odds ratio
Educational qualifications			
Master's	0	1.00	
Bachelor's or below	0.36	1.43**	1.10 – 1.86
Service length (quartiles)			
Lowest	0	1.00	
2nd lowest	0.04	1.04	0.75 – 1.45
2nd highest	0.65	1.92***	1.31 – 2.82
Highest	0.55	1.74**	1.21 – 2.51
Aim in life: teaching			
No	0	1.00	
Yes	1.20	3.31***	2.54 – 4.32
Have second occupation			
Yes	0	1.00	
No	0.33	1.38**	1.07 – 1.79
Constant	1.13		
-2 log likelihood	1722.80		
Cox & Snell R ²	0.04		
Nagelkerke R ²	0.08		

***p<0.001, **p<0.01, *p<0.05

with their institution and remuneration package than the teachers of other institutions. The teachers of the other four types of institutions showed an equal level of satisfaction in these two areas. Type of institution was not a factor for satisfaction with profession.

- The teachers who had no other occupation than teaching were less likely to be satisfied with their profession than those who had a second occupation. The teachers, who had a teacher-parent, were less likely to be satisfied with present institution than those who had no such parents. The Muslim teachers were more likely to be satisfied with their remuneration than the non-Muslim teachers.
- Those who received educational short courses were more likely to be satisfied with their present institutions than those who did not receive such training. On the other hand, those who received subject based training were more likely to be satisfied with remuneration package than those who had no such training.

Table 7.15
Logistic regression analysis predicting satisfaction with present institution

Explanatory variables	Regression coefficient	Odds ratio	95% CI of Odds ratio
Institution type			
Government	0	1.00	
Non-government	-0.33	0.72	0.38 – 1.36
School & College	-0.03	0.97	0.47 – 1.98
Dakhil madrasa	-0.46	0.63	0.33 – 1.23
Senior madrasa	0.16	1.17	0.60 – 2.32
Area of institution			
Urban	0	1.00	
Rural	0.42	1.52***	1.21 – 1.90
Parents as teacher			
Yes	0	1.00	
No	0.31	1.36*	1.06 – 1.75
Aim in life: teaching			
No	0	1.00	
Yes	0.37	1.44***	1.21 – 1.72
Educational short training			
No	0	1.00	
Yes	0.28	1.33**	1.06 – 1.66
Have second occupation			
No	0	0	
Yes	0.27	1.30**	1.09 – 1.56
Income (quintiles)			
Lowest	0	1.00	
2nd lowest	0.45	1.58***	1.22 – 2.04
Middle	0.46	1.58***	1.22 – 2.05
2nd highest	0.81	2.26***	1.71 – 2.99
Highest	0.98	2.67***	2.00 – 3.57
Educational qualifications			
Master's	0	1.00	
Bachelor's or below	0.19	1.21**	1.01 – 1.44
Constant	-0.43		
-2 log likelihood	3251.89		
Cox & Snell R ²	0.04		
Nagelkerke R ²	0.07		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

G. Intention to change profession and institution

With the above state of satisfaction, 5.2% of the teachers expressed their intention to change the current profession, 32.3% wanted to change institution keeping them in the same profession, and 62.5% did not think of any change (Figure 7.11). Intention to change profession was more among males than females (5.8% versus 3%; $p < 0.01$), but no gender difference was observed in their intention to change institution

(males 32.8% and females 30.5%; ns). Proportionately more teachers of the urban educational institutions wanted to change profession than those of rural areas (7.4% versus 4.7%; $p < 0.01$), but an opposite scenario was observed in the case of intention to change institution (33.4% versus 27.3%; $p < 0.01$) (Annex 7.19). The madrasa teachers were more likely to change profession as well as institution than their counterparts in the schools (6.8% versus 4.3%; $p < 0.01$ and 35.2% versus 30.8%; $p < 0.01$).

Although the teachers of Government schools were not comparable to others in terms of satisfaction, they were also at the top with regard to intention of changing profession. Whereas, 8.2% of the Government school teachers wished to change profession, it was 7.8% of those of Dakhil and 5.5% of those of senior madrasas, 4.5% of those of School & Colleges, and 4.2% of those of Non-government schools (Table 7.17). On the other hand, the teachers of Dakhil madrasas were at the top with regard to intention to change institution and the teachers of Government schools were at the bottom. No statistically significant difference was observed between grant and non-grant teachers of private educational institutions with regard to their wish to change institution, but proportionately more non-grant teachers wished to change profession than the grant teachers (9.8% versus 4.4%; $p < 0.001$).

Whatever the case – teachers' intention to change institution or profession – significantly increased with the decrease in the level of satisfaction on profession,

Table 7.16
Logistic regression analysis predicting satisfaction with present remuneration

Explanatory variables	Regression coefficient	Odds ratio	95% CI of Odds ratio
Institution type			
Government	0	1.00	
Non-government	-1.19	0.30***	0.18 – 0.53
School & College	-1.12	0.33***	0.18 – 0.61
Dakhil madrasa	-1.25	0.29***	0.16 – 0.51
Senior madrasa	-1.15	0.32***	0.18 – 0.57
Area of institution			
Urban	0	1.00	
Rural	0.29	1.34**	1.07 – 1.68
Religion of teacher			
Non-Muslim	0	1.00	
Muslim	0.29	1.33**	1.06 – 1.67
Aim in life: teaching			
No	0	1.00	
Yes	0.32	1.38***	1.16 – 1.63
Have subject based training			
Yes	0	1.00	
No	0.23	1.26*	1.02 – 1.55
Have second occupation			
No	0	1.00	
Yes	0.18	1.20*	1.01 – 1.43
Income (quintiles)			
Lowest	0	1.00	
2nd lowest	0.61	1.85***	1.37 – 2.49
Middle	0.92	2.52***	1.88 – 3.37
2nd highest	1.23	3.42***	2.55 – 4.61
Highest	1.67	5.32***	3.94 – 7.18
Constant	-1.46		
-2 log likelihood	3426.89		
Cox & Snell R ²	0.07		
Nagelkerke R ²	0.10		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

institution or remuneration package (Annex 7.20). Among those who were 'highly satisfied' with their profession, 3.3% of them also wanted to move on. Again, three in every 10 teachers who were 'highly satisfied' with their institution also wanted to change it. Those who were 'highly satisfied' with the remuneration package, 3.1% of them wanted to change profession and 18.5% wanted to change institution. It is surprising to note that of the teachers who were satisfied with all three phenomena (profession, institution and remuneration), a fifth of them intended to change institution and 3.7% wanted to change profession.

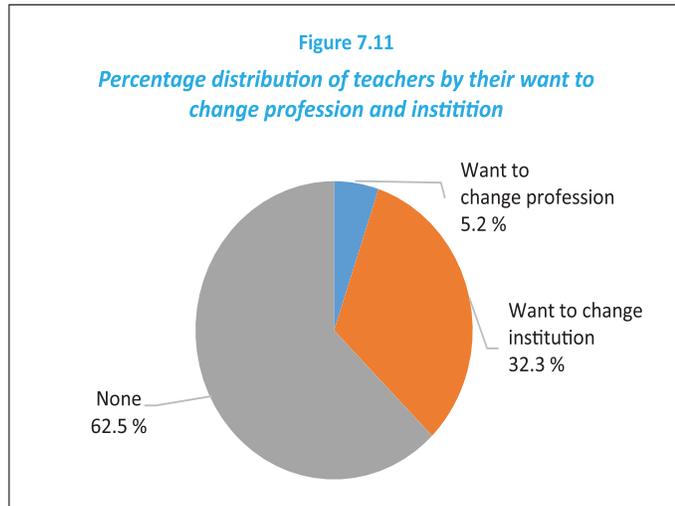


Table 7.17
Percentage of teachers who wanted to change profession or institution by institution type

	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Profession	8.2	4.2	4.5	7.8	5.5
Institution	26.3	31.2	29.0	37.7	31.7
None	65.5	64.6	66.5	54.5	62.8
Total	100.0	100.0	100.0	100.0	100.0

Multivariate regression analysis

In order to find out the factors predicting teachers' intention to change their profession or institutions – two regression models were built. As before, the dependent variables were dichotomously categorized such as intended to change and did not intend. Seventeen predictive variables were brought into this analysis. These are institution type, gender of teacher, area of institution, educational qualifications of teachers, service length, teaching as aim of life, having professional training, having subject based training, having educational short courses, religion, parent as teacher, elder sibling as teacher, having second occupation, income, satisfaction with profession, satisfaction with institution, satisfaction with remuneration. Here too, a stepwise approach to logistic regression analysis was adopted, and therefore only the statistically significant predictors came out in the final models.

Of the 17 variables considered in the analysis, seven predicted teachers' intention to change profession and nine predicted teachers' intention to change occupation with only three common variables in both (Tables 7.18 and 7.19). The common predictors in both the models were institution type, area of institution and service length of teachers. Gender, teaching as aim in life, educational qualifications of teachers and satisfaction with profession added with the above in predicting teachers' intention to change profession. On the other hand, parent as teacher, having professional training, having a second occupation, income, satisfaction with institution and satisfaction with remuneration added with the above in predicting teachers' intention to change institution. Following are the summary of findings.

- As expected, length of service was the most important predictor of having intention to change profession followed by satisfaction with teaching profession. Similarly, satisfaction with present

institution came out as the most important predictor of having intention to change institution followed by length of service. Length of service of the teachers' had a negative relationship with intention to change. Intention to change decreased with the increase in length of service in both the cases.

- The teachers who were not satisfied with their profession were more likely to have an intention to change profession than those who were satisfied with this. On the other hand, those who were not satisfied with their institution as well as with remuneration package were more likely to have an intention to change institution than those who were satisfied with these.
- The madrasa teachers were more likely to have an intention to change both profession and institution than the school teachers. The teachers of urban institutions were more likely to have an intention to change profession than their counterparts in rural areas. However, an opposite result was observed in the case of teachers' intention to change institution.
- The male teachers were more likely to have an intention to change profession than the female teachers. Again, those who had an aim to be a teacher in life were less likely to have an intention to change profession than those who did not aim it. On the other hand, the teachers who had a parent as teacher, had professional training, and had a second occupation were more likely to have an intention to change institution than those who did not have the above.

It was also observed during in-depth interviews that the younger teachers preferred teaching because of its flexible nature, which allowed them to take preparation for searching new jobs. For instance, a young Chemistry teacher of a School & College mentioned, 'being a teacher I can take preparation for other jobs which would not be possible if I belonged to other profession. Teaching Mathematics and Science at high school level will help me to perform well in recruitment tests.'

Table 7.18

Regression analysis predicting teachers' intention to change profession

Explanatory variables	Regression coefficient	Odds ratio	95% CI of Odds ratio
Institution type			
Schools	0		
Madrasas	0.52	1.68**	1.19 – 2.38
Area of institution			
Rural	0	1.00	
Urban	0.41	1.51*	1.03 – 2.23
Gender of teacher			
Females	0	1.00	
Males	0.86	2.35***	1.45 – 3.82
Service length (quartiles)			
Lowest	2.31	10.03***	4.92 – 20.45
2nd lowest	1.60	4.93***	2.34 – 10.38
2nd highest	1.11	3.04**	1.39 – 6.66
Highest	0	1.00	
Teaching as aim in life			
Yes	0	1.00	
No	0.64	1.89***	1.32 – 2.69
Educational qualifications			
Bachelor's or below	0	1.00	
Master's	0.47	1.59**	1.11 – 2.30
Satisfaction with profession			
Yes	0	1.00	
No	0.91	2.48***	1.64 – 3.74
Constant	-6.17		
-2 log likelihood	1064.73		
Cox & Snell R ²	0.05		
Nagelkerke R ²	0.15		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

It was also observed that most of the teachers were dissatisfied with their poor salary structure, lengthy promotional process and lack of facilities compared to the other professions. Such kind of feeling triggered their intention to search for new jobs. Therefore, to grow peoples' interest on teaching and to retain the existing teachers in profession, some of them suggested to take necessary measures.

The respondents of this study believed that to attract people in teaching, the recruitment process should be transparent, should offer handsome salary and other benefits and ensure job security. Moreover, society should value the teachers properly and parents should encourage their children to be a teacher from their childhood. In this regard, an assistant head teacher of a non-government school in Mymensingh stated, 'Families can talk about teaching profession to the children from their early ages. If the contribution of this profession is properly discussed with the children they would be interested in teaching from childhood.' Another head teacher of a School & College in Sylhet perceived that along with handsome salary and other benefits if the teachers are provided with scope to take preparation for other jobs, young people would then be interested in teaching.

Table 7.19
Regression analysis predicting teachers' intention to change institution

Explanatory variables	Regression coefficient	Odds ratio	95% CI of Odds ratio
Institution type			
Schools	0	1.00	
Madrasas	0.34	1.40***	1.16 – 1.70
Area of institution			
Urban	0	1.00	
Rural	0.38	1.46***	1.16 – 1.82
Parent as teacher			
No	0	1.00	
Yes	0.3	1.40**	1.09 – 1.78
Service length (quartiles)			
Lowest	1.21	3.36***	2.57 – 4.40
2nd lowest	0.91	2.49***	1.93 – 3.20
2nd highest	0.64	1.90***	1.48 – 2.44
Highest	0	1.00	
Having professional training			
No	0	1.00	
Yes	0.39	1.47***	1.20 – 1.81
Having second occupation			
No	0	1.00	
Yes	0.23	1.25**	1.05 – 1.49
Income (quintiles)			
Lowest	0	1.00	
2nd lowest	0.35	1.42**	1.10 – 1.85
Middle	0.36	1.43**	1.08 – 1.89
2nd highest	0.55	1.73***	1.28 – 2.34
Highest	0.47	1.59**	1.16 – 2.19
Satisfaction with institution			
Yes	0	1.00	
No	1.28	3.60***	2.99 – 4.33
Satisfaction with remuneration			
Yes	0	1.00	
No	0.27	1.31**	1.08 – 1.59
Constant	-3.20		
-2 log likelihood	3406.30		
Cox & Snell R ²	0.12		
Nagelkerke R ²	0.16		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Chapter 8

Teaching, Workload, and Supervision

Key Findings

All teachers did not teach in each secondary grade. They on average, taught 3.3 subjects. As per class routine, they were supposed to conduct 23.7 periods per week involving 16 hours 10 minutes. Majority of the teachers expressed their satisfaction with the class routine. The teachers thought they were overloaded, therefore proposed to reduce the workload by 21.5%.

Question papers for internal examinations were prepared in many different ways. Whereas, 43.7% of the teachers claimed that they themselves prepared the question papers, 36.8% bought them from Teachers Union, 14.4% bought from open market, and 10.3% reported to prepare by the other teachers themselves in the school.

Additional teaching was arranged in two-thirds of the institutions, mostly for the students of grades VIII and X. A half of the teachers of these institutions were engaged in it. Such teaching is provided before school hours (63.9%), after school hours (17.8%), on holidays (15.3%), and during school hours (3%).

Over 78% of the teachers reported that their classroom teaching was observed for monitoring purpose. The institution heads were the top supervisors. Providing no feedback to the teachers was a common practice, written feedback was seldom given. Oral feedbacks were very basic in nature with little consequences for pedagogic performance.

The issues discussed in this chapter are very much from internal to the educational institutions. The chapter starts with a discussion on workload of teachers as per class routines and their suggestions in this regard. The question of classroom supervision also comes. Preparation process of class routines, distribution of subjects and periods among the teachers, and the process of question paper preparation for in-school examinations are presented. Additional teaching, outside class routine, where a good section of teachers participate, was also brought into analysis.

A. Teachers' workload

Workload of the teachers can be analysed from two angles – first, through calculating the student-teacher ratio and second, from the information on number of periods they have to conduct in a week and the time spent for this. The educational institution survey provided data on number of students and teachers in each of the institutions under study. As mentioned in a previous chapter, the institutions had two types of teachers – permanent and temporary. Detailed analysis of the student-teacher ratio (number of students per teacher) is provided in Chapter 4. Two estimates were produced – considering the permanent teachers only and considering both types of teachers. The second estimate may reflect the actual workload of the teachers.

The secondary educational institutions are open for six days a week. This includes five full working days from Saturday to Wednesday and a half working day on Thursday. The educational institutions, in general, start at 10am each day, and conclude at 4pm on full working days and at 1pm on Thursdays. There is a break for 45 minutes on the full working days. Some institutions, however, operates in two shifts.

Except for a very few, all the teachers reported that they have provided classroom teaching regularly. However, the number of periods they had to conduct varied significantly. Not all the teachers offered teaching to the students of each of the grades of secondary education. Over 63% of the sampled teachers taught at grade VI, 71.1% at grade VII, 83.4% at grade VIII, and over 90% at grades IX and X (Annexes 8.1 and 8.2). Although the sampled teachers were recruited to teach the students of secondary grades, a section of them taught to the students of primary and higher secondary levels as well. Of the total teachers, 16.8% taught at primary level and 2.9% at higher secondary level (Table 8.1). Secondary level teachers teaching at primary level was much prominent in both types of madrasas and Government schools. The proportion of teachers teaching at primary level was 42.7% in Dakhil madrasas, 40.3% in senior madrasas and 22% in Government schools. This was 7.7% in School & Colleges and 3.2% in Non-government schools. On the other hand, 16.3% of the teachers of senior madrasas and 9.5% of those of School & Colleges were teaching at higher secondary level. No such case was observed in Government and Non-government schools and Dakhil madrasas. A similar analysis by gender and area is provided in Annex 8.2.

The teachers, on average, taught 3.3 subjects of secondary education with a range from one to nine. The mean number of subjects taught was in between three and four for the teachers of each type of institutions (Annex 8.3). The same was observed

Table 8.1
Percentage of teachers teaching at primary and higher secondary levels by institution type

Grades	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Primary	22.0	3.2	7.7	42.7	40.3	16.8
Higher secondary	0.0	0.0	9.5	0.0	16.3	2.9

for male and female teachers and the teachers of rural and urban institutions as well. Institution type wise, it was 3.6 for the teachers of Government schools and 3.1 for those of School & Colleges. At the aggregated level, 10.8% of the teachers taught one subject, 20.3% taught two subjects, 25.8% taught three, 22.5% taught four, 12.4% taught five, and 8.2% taught six or more subjects (Figure 8.1). Proportion of teachers offering six or more subjects was highest in Government schools (13.8%) and lowest in School & Colleges (4.8%) (Annex 8.4). This was 16.8% among the teachers of urban institutions and 6.1% among those of rural institutions, and 12.1% among the female teachers and 6.9% among the male teachers (Annex 8.5).

The teachers, on average, were supposed to conduct 23.7 periods per week as per class routine with a standard deviation of 6.6 periods. As the teachers reported, they, on average, conducted 23 periods during the week previous to interview. Therefore, the teachers were able to conduct 97.5% of the periods in the routine. No difference was observed in the deviation between the number of periods in the routine and actual conduct of periods with regard to gender, area or institution type.

According to the class routine, a fifth of the teachers were supposed to conduct 3-18 periods per week, the second quintile of them were supposed to conduct 19-22 periods, the third quintile 23-25 periods, the fourth quintile 26-28 periods, and the fifth quintile 29 or more periods (Table 8.2). The mean number of period per teacher also increased sharply with the increase of quintile position – 14.4 periods for those who belonged to the first quintile to 32.5 periods for those who belonged to the fifth quintile. The coefficient of variation was much higher for the first quintile of teachers followed

by those belonging to the fifth quintile. It was much lower among the teachers belonging to the three middle quintiles. Three-fifths of the teachers were supposed to conduct 19–28 periods per week as per routine.

Table 8.3 provides some statistics on workload of teachers in terms of number of periods they have conducted per week and hours involved in it. The mean number of periods per teacher had no variation by gender and area of institution. However, the madrasa teachers had to conduct more periods than the school teachers (25.8 versus 22.6; $p < 0.001$). Institution type wise variation existed with a statistically significant margin ($p < 0.001$). Whereas, the Dakhil madrasa teachers were scheduled to conduct 26.3 periods per week,

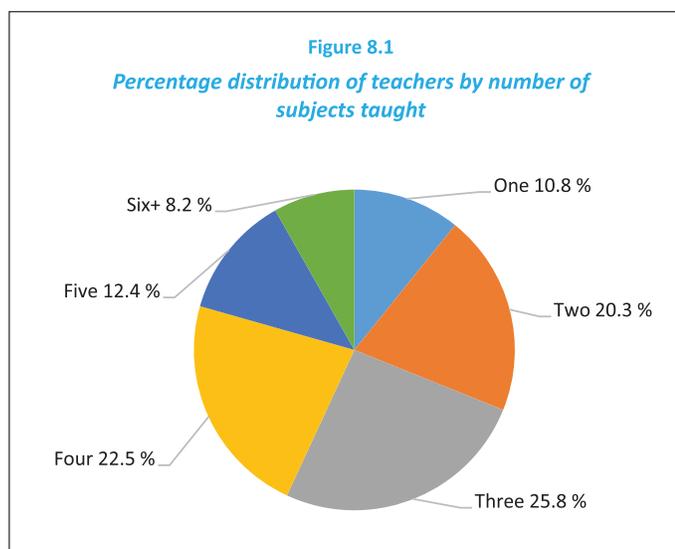


Table 8.2
Some statistics on number of periods offered per week by its quintiles

Quintiles	Range	Mean	Standard deviation	Coefficient of variation
First	3–18	14.4	3.93	27.3
Second	19–22	20.7	1.04	5.0
Third	23–25	23.9	0.71	3.0
Fourth	26–28	27.1	0.81	3.0
Fifth	29–58	32.5	4.17	12.8
Total	3–58	23.7	6.60	27.8

it was 21 for Government school teachers. The figure was 25.2 for senior madrasa teachers, 22.7 for Non-government school teachers, and 22.2 for School & College teachers. The heads of the institutions were scheduled to conduct 11.7 periods per week, the Assistant heads 19.5 periods, and the Assistant teachers 24.7 periods ($p < 0.001$). Of them, the heads were not able to conduct 11.7% of their scheduled periods, which was about 2.3% among the other teachers. The grant teachers (those receiving salary subvention from government) of the private educational institutions were conducting two periods less than the non-grant teachers (23.5 versus 25.5).

As reported by the teachers, they were scheduled to spend 16 hours 10 minutes per week in the classrooms with no difference by gender and area (Table 8.3). However, the madrasa teachers were scheduled to spend 30 minutes more than those of the schools (16 hours 30 minutes and 16

hours). This was higher in the Dakhil madrasas (16 hours 40 minutes) than the senior madrasas (16 hours 15 minutes), but equal in two types of private schools – Non-government and School & College (16 hours each). The teachers of Government schools were scheduled to spend the least amount of time in the classrooms than those in all other types (15 hours 15 minutes). The heads of the institutions were scheduled to spend less than half of the time of the assistant teachers in classroom teaching – 8 hours 10 minutes versus 16 hours 50 minutes. It was 13 hours 30 minutes for the assistant heads. A difference of 40 minutes was observed between the grant and non-grant teachers, where the latter had to stay more time in classrooms.

The reasons of not conducting the classes included leave for personal/family affairs (44.6%), busy in school with other activities (24.9%), illness (11%), engagement in official activities outside school (10.1%), attending training (4.5%), students' leaving school early (2.3%), and early closure of school (2.1%). Although the teachers were not able to conduct 2.5% of their scheduled periods, they had to conduct 2.3% of the scheduled periods of other teachers.

The teachers were asked to state the number of periods per week they would prefer to conduct ensuring a minimum standard of quality teaching. They, on average, preferred 18.6 periods per week with a standard deviation of 5.7 periods (Table 8.4). This is 21.5% less than their present workload. A moderate level of

Table 8.3
Some statistics on workload of teachers by various categories of them

Categories of teachers	Number of periods per week		Hours per week
	Mean	Sd	
Institution type			
Government	21.0	5.3	15.15
Non-government	22.7	6.5	16.00
School & College	22.2	5.5	16.00
Dakhil madrasa	26.3	7.2	16.40
Senior madrasa	25.2	5.4	16.15
Gender			
Males	23.7	6.9	16.10
Females	23.5	5.6	16.10
Area			
Rural	23.8	6.9	16.10
Urban	23.4	5.7	16.10
Institution type			
Schools	22.6	6.4	16.00
Madrasas	25.8	6.5	16.30
Designation			
Head	11.7	7.5	8.10
Assistant head	19.5	6.7	13.30
Assistant teachers	24.7	5.7	16.52
All	23.7	6.6	16.10

positive correlation was observed between the number of periods in present routine and the number of preferred periods ($\rho = 0.68$; $p < 0.001$). The mean number of periods the teachers preferred to conduct was close between males and females, and between rural and urban teachers. The madrasa teachers preferred two more periods than their counterparts in schools (19.9 versus 17.9). No difference was observed between the two types of madrasas (19.9 each), and between Non-government schools and School & Colleges (18 and 18.1, respectively). The Government school teachers preferred the least—only 16.8 periods per week. The heads of the institutions thought that it would have been better if they had to conduct 8.7 periods per week, the assistant heads thought of 15.4 periods, and the assistant teachers 19.4 periods. These were respectively 25.6, 21 and 21.5% less than their present workload. Both grant and non-grant teachers proposed to reduce an equal proportion of their workload (21-22%), but the difference between their suggestions still exist (18.5 and 19.7 periods, respectively).

Table 8.4
Some statistics on expected workload of teachers by various categories of them

Institution type	Number of periods per week		% Less than present
	Mean	Sd	
Institution type			
Government	16.8	4.0	20.0
Non-government	18.0	5.7	20.7
School & College	18.1	4.5	18.5
Dakhil madrasa	19.9	6.3	24.3
Senior madrasa	19.9	4.7	21.0
Gender			
Males	18.5	5.8	21.9
Females	19.1	5.2	18.7
Area of institution			
Rural	18.6	5.9	21.8
Urban	18.8	4.8	19.7
Institution type			
Schools	17.9	5.6	20.8
Madrasas	19.9	5.7	22.9
Designation			
Head	8.7	5.2	25.6
Assistant head	15.4	5.2	21.0
Assistant teachers	19.4	5.1	21.5
All	18.6	5.7	21.5

It is to be noted that teaching was not the only task that teachers are expected to accomplish in their educational institutions. During in-depth interviews, the teachers reported that they had to accomplish many other academic and administrative works besides conducting lessons which ultimately added additional workload on their shoulders. Two teachers of a School & College listed a number of activities that they were doing in addition to classroom teaching which were question papers preparation, assessment of answer scripts, result sheet preparation, communication with parents, etc. Some of the teachers also talked about after-hour 'detention classes'. Some of the teachers, particularly the heads of their institutions and their assistants, mentioned about meetings on administrative issues in the institutions and relevant government offices.

B. Supervision of teaching

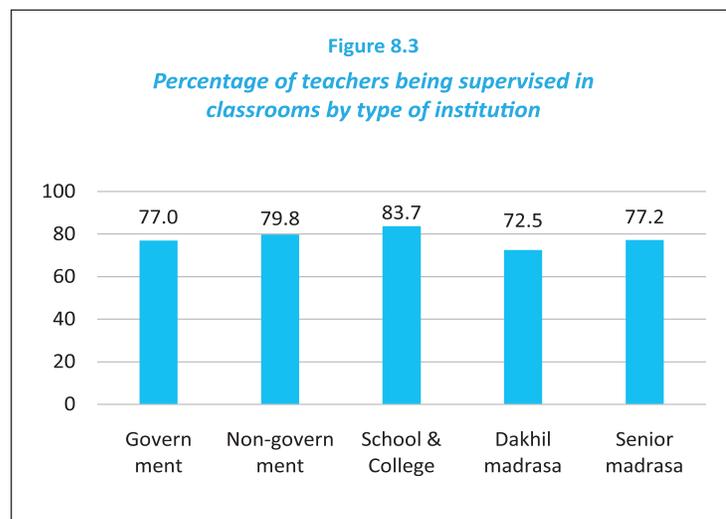
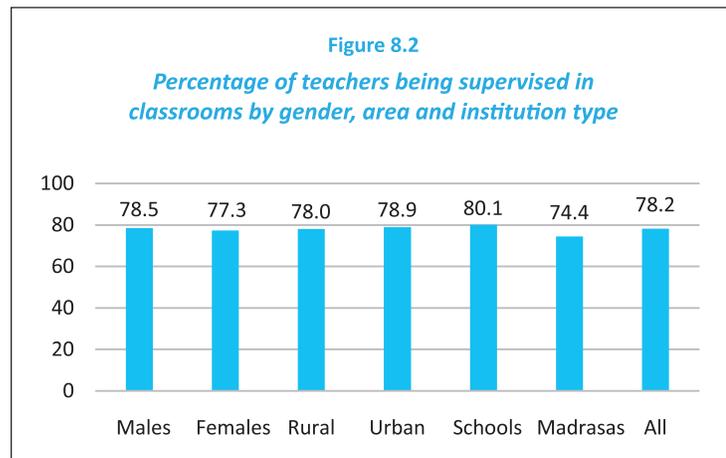
Supervision of classroom activities, at the time of teaching, by an authority and providing feedback are important in order for improving quality of education. Although no attempt was made to understand the quality of supervision, an attempt was made to know whether such thing existed. Overall, 78.2% of the teachers claimed that their classroom teaching was observed (for monitoring) at least once during the past

three months of interview (Figure 8.2). Although no difference was observed in terms of gender of teacher or area of institution, the school teachers claimed more supervision compared to their counterparts in the madrasas (80.1% versus 74.4%; $p < 0.001$). The proportion of teachers claimed to have been observed was highest in School & Colleges (83.7%) and lowest in Dakhil madrasas (72.7%) (Figure 8.3). Among others, this was 77% in Government schools, 79.8% in Non-government schools, and 77.2% in senior madrasas.

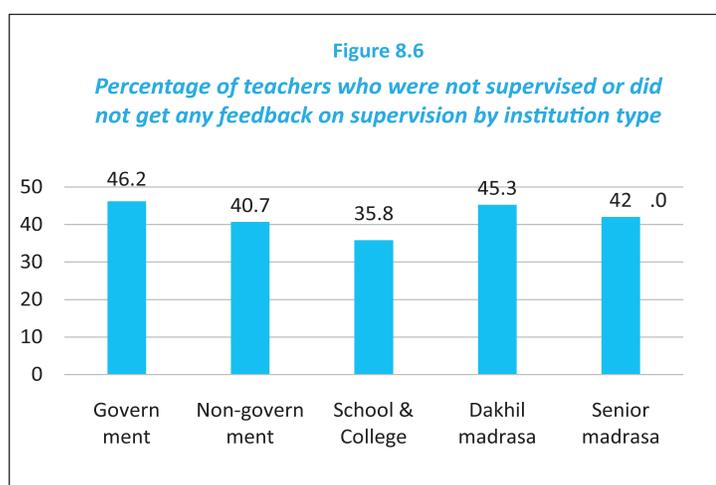
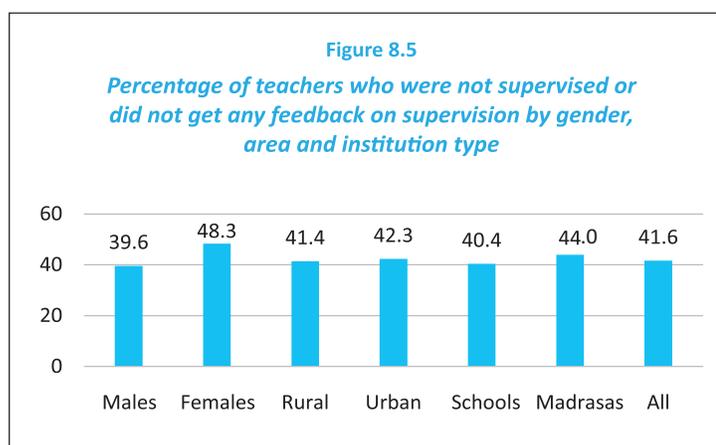
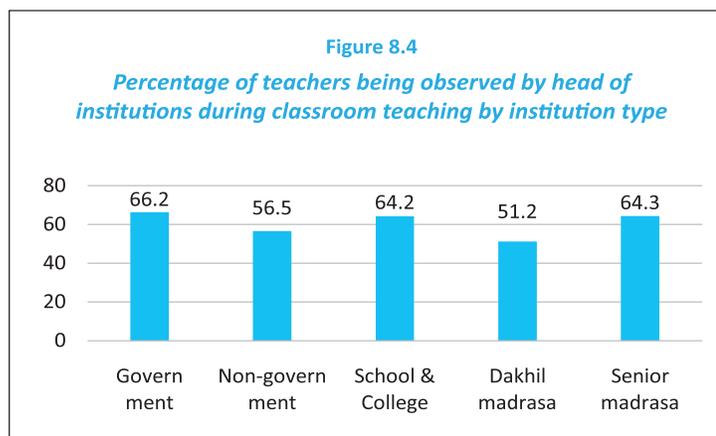
The teachers also mentioned the positions of the persons who observed/monitored their classroom teaching. The teachers provided multiple responses as it was a case of three months. The heads of the institutions were at the top as observers of classroom teaching. They, on average, observed classroom teaching of 57.4% of the teachers. The Upazila Education Officers and the Upazila Academic Supervisors were at the second and the third positions in doing so. The proportion of teachers observed by them were 13.9 and 11.1%, respectively. The assistant heads of the institutions observed 8.5% of the teachers' classrooms, the Zila Education Officers observed 6.8%, and the chairperson and the members of school managing committees observed 6.7% of the teachers' classroom activities.

No surprise that the heads of the institutions and their assistants are the key in this process because they are closest to the teachers. They are also responsible for maintaining an

acceptable level of teaching quality in the institutions. Overall, the heads of the institutions or their assistants were active in observing classroom teaching of 65.9% of the teachers (Annex 8.6). Such a case was found for 73.1% of female and 63.7% of male teachers ($p < 0.001$), and 78.5% of the teachers of urban and 62.8% of those of rural educational institutions ($p < 0.001$). Broadly, no statistically significant difference was observed between the schools and madrasas. The heads of the institutions or their assistants were active in observing classroom teaching of 79.5% of the teachers in Government schools, 75.4% of those in School & Colleges, and 72.5% of those in senior madrasas (Annex 8.7). Such a situation was observed in 65% of the teachers in Non-government schools and 59% of those in Dakhil madrasas. Figure 8.4 provides proportion of teachers who were observed at their classrooms by their heads of institutions by institution type.



The classroom observers provided their feedback orally to about 70% of the observed teachers and there was no feedback to a quarter of the cases. The observers provided written or both (oral and written) type of feedback to 5.3% of the observed teachers. Classroom observation without any feedback are seldom helpful to the teachers. Overall, 41.6% of the teachers in the sample did not get any observation or got an observation without any feedback (Figure 8.5). Such a situation has occurred for 48.3% of the female and 39.6% of the male teachers ($p < 0.001$). Although no statistically significant difference was observed between rural and urban teachers, the madrasa teachers were more likely to not be benefitted from classroom observation system than the school teachers (44% versus 40.4%; $p < 0.05$). The Government schools were at the top with a closer second position of the Dakhil madrasas in not providing observation or feedback on observation to the teachers activities in the classrooms (46.2% and 45.3%, respectively) (Figure 8.6). Such a situation was observed for 42% of the teachers of senior madrasas and 40.7% of those of Non-government schools. This was 35.8% for the teachers of School & Colleges. Classroom observation by the Upazila Education Officers was highest in the School & Colleges and they were more likely to provide written feedback on observation. Therefore, the teachers of the School & Colleges got more written feedback compared to the teachers of other types of institutions. Detail of this is provided in Annexes 8.8 and 8.9.



The silent role of heads of the institutions in their direct and indirect observation came out from the in-depth interviews with a good number of teachers. Some of them suggested for more supervision from their immediate supervisors. An assistant teachers of a Government school said, 'My head teacher observed my classroom teaching twice in the week I joined in service, but he did not tell me anything verbally or in writing. I did not see him in my class anymore.' Following statement from another assistant teacher in Mymensingh shows how the heads of the institutions silently supervise their staff:

Our Head teacher does not enter into the classrooms, he walks through the corridors every day several times. I am sure he keeps his eyes and ears open on what is happening inside the classrooms. He talks on various issues including teaching techniques when we don't have classes.

The heads of the institutions also spoke on this issue. According to them, they remain busy with administrative matters for a good amount of time, and therefore are not able to provide classroom observation on a regular basis. However, they claims that they try to do it when they have time. Following is a statement from the super of a Dakhil madrasa in Barisal:

I observe classroom teaching of my colleagues on a regular basis. I don't talk with them in the classrooms. If I have something to say, I tell them afterwards when they are free.

The assistant teachers were asked to tell the nature of feedback they received from their heads of institutions. Following are some of those.

- To be more attentive in noise management
- To use teaching aids specifically for the Science subjects
- To engage students in discussion
- To be more caring to the students
- To write basic information such as date, day, number of students present etc. on a corner of blackboard
- To write clearly with big fonts on the blackboard
- To complete classes on time

The above feedback seems to be very basic and the teachers must know these a prior. The teachers felt the need for supervision from the local government officials for education, who include UEO, USEO and DEO. The head of a Non-government girls' high school in Rajshahi expressed his views in the following way:

The education officers at upazila and district levels should visit schools regularly. They should also enter into the classrooms. They should see if the classes are held timely and the multimedia are used. Unfortunately they are reluctant in visiting schools. They come to visit occasionally when they pass by the schools. Their visits should be pre-planned and on a regular basis.

C. Class routine and question paper preparation

Preparation of class routine

As part of curriculum instruction, there is a prescription from the National Curriculum and Textbook Board (NCTB) as well as from the Directorate of Secondary and Higher Education (DSHE) about class routine. This is not mandatory to follow. The educational institutions have the freedom to customise it considering the number of teachers and student groups (based on grades and sections). In general, the head of the

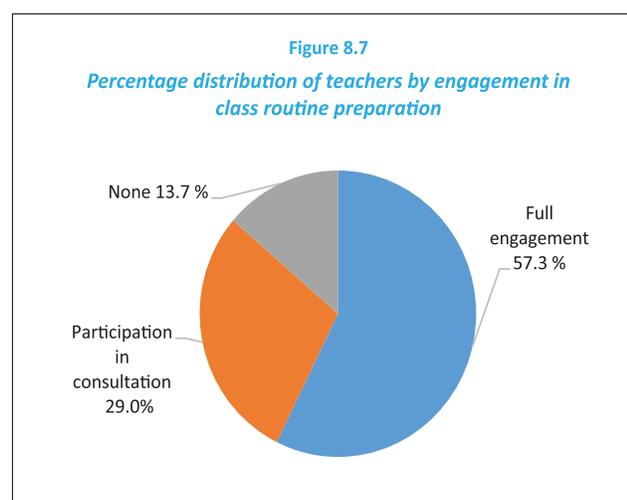
institution give responsibility to a team of teachers to prepare class routine for each of the grades and distribute the periods among the teachers. Though the senior teachers are the members of this committee, representation of both gender, junior teachers and teachers of various streams is included. This is done before the start of each academic year preferably in December. A head teacher of a Government school made the following statement while he was asked to say about preparation of class routine in his school. Teachers of other institutions also spoke mostly in the same direction.

We formed a committee with senior teachers, subject teachers and female teachers to prepare class routine. I am simply a member there. We tried to follow the standard rules. For instance, NCTB instructed not to engage a teacher for more than four periods per day. Most of the cases we have maintained this, but because of scarcity of teachers it could not be done for all the teachers. We also tried to distribute subjects according to the educational background and training of the teachers. Subjects like Mathematics, English and Science are kept for the morning because we believe that these subjects require more attention and the students remain more attentive at this time of day.

The madrasa teachers had a different practice. Firstly, as they claimed, all the teachers participated in routine preparation. Secondly, they collected routines from nearby three madrasas and analyzed those. Based on the ideas they get, they prepared their own routine. These practices show that madrasa teachers prepared routine in a more democratic way and they had a tendency to maintain coherence in academic culture with the other madrasas of their kind.

Overall, 57.3% of the teachers reported that they were directly engaged in preparing class routine and distribution of subjects among the teachers, 29% reported that they were not engaged with the process but were consulted before finalization, and 13.7% reported no involvement at all (Figure 8.7). The male teachers were more likely to be involved with the process than their counterpart females (Annex 8.10). Similarly, involvement of the teachers of rural educational institutions was much more than those in urban institutions. No such variation was observed between the teachers of the schools and the madrasas. Educational institution type wise variation existed in this (Annex 8.11). The Dakhil madrasas were at the top in involving their teachers with this process followed by the Non-government schools. The School & Colleges and the senior madrasas jointly secured the third position. The Government schools were at the bottom of these five types of institutions in involving teachers with the process of class routine preparation and distribution of periods among the teachers.

The teachers were asked on how much of the existing class routine they liked. Majority of the teachers reported that they fully liked it (54.8%), 27% reported that they liked major portion of the class routine, 14.3% liked halfway, 2.4% liked less than half, and 1.5% did not like it (Figure 8.8). The proportion of teachers liked less than half of the class routine or did not like at all was mostly equal in each type of educational institutions (Annexes 8.12 and 8.13). A positive relationship between teachers' involvement



with preparation of class routine and liking it was observed ($p < 0.001$). For instance, 65.2% of the teachers who were engaged in preparation of class routine fully liked it, which was 52.3% among those who were not engaged in its preparation but were consulted before finalization, and 16.1% among those who were not engaged in preparation or consulted (Table 8.5). Again, proportion of teachers involved in preparing class routine was highest in the Dakhil madrasas, the proportion of teachers fully liked their class routine was also highest there. Similarly, both the proportions were the lowest in Government schools. The situation of other types of institutions was in between.

Annex 8.12 shows that proportionately more males than females fully liked the class routine (56.8% versus 47.8%; $p < 0.001$). This was 59.9% among the teachers of madrasas and 52.1% among their counterparts in the schools ($p < 0.001$). More teachers of rural educational institutions fully liked their class routines than those in urban educational institutions (58.8% versus 38.1%; $p < 0.001$).

A major reason for disliking class routine was related to being asked to teach those subjects which they did not like to do or they did not even study during their student life. Some of those, however, considered it as *fait accompli* and therefore tried their best to accommodate. A section of the teachers who were relatively young expressed their anger as well. Box 8.1 presents some of the statements, which the teachers made as background to show their disliking on class routine.

Not only for anomaly in subject distribution, but not being involved

with the routine preparation process was another reason for dissatisfaction for a section of teachers. Showing his unhappiness with the process, an assistant teacher of Biology from a School & College in Barishal said, 'it would have been better, if the head teacher had a prior discussion with me or involve some of the senior teachers with the process. Unfortunately, our head teacher prepared the class routine himself.' A female teacher of the same institution added, 'I have some health related complications. After conducting two periods I need some rest, but there is no gap. I wanted a gap prior to the third period, but I did not get.'

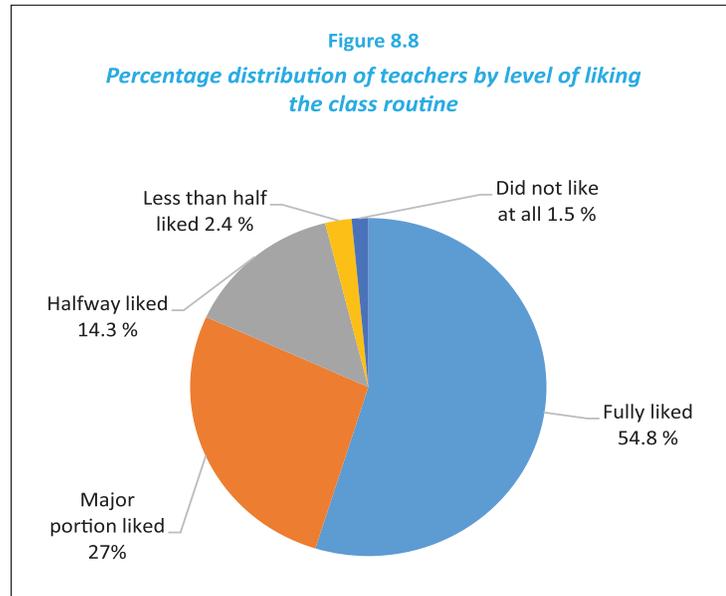


Table 8.5
Percentage distribution of teachers by level of engagement in class routine preparation and level of liking it

Level of engagement	Level of liking			
	Fully liked	Major portion liked	Halfway liked	Less than half liked or did not like at all
At preparatory stage	65.2	24.2	9.4	1.2
At consultation stage	52.3	30.3	15.4	2.0
None	16.1	32.2	32.7	19.0

Box 8.1***Some examples showing why the teachers dislike class routine***

Maths is my subject, but I was asked to teach Bangladesh & Global Studies in grades VI and VII. A Chemistry teacher is assigned to teach Mathematics in those grades.

– *An assistant teacher from a Government school in Sylhet*

Bangla and Civics are okay with me because I have studied these. I have also been assigned to teach Agricultural Education. How do I do it? I don't like it at all, I don't enjoy it.

– *An assistant teacher from a Government school in Sylhet*

I am a teacher of Agricultural Education, but I have been teaching Science.

– *An assistant teacher from a Non-government school in Rajshahi*

I teach Religion. In addition, I have to offer English second part in grades IX and X. It is hard for me to accommodate, but I enjoy.

– *An assistant teacher from a Non-government school in Rajshahi*

I am a Bangla teacher, but I have to teach Science too because of shortage of teachers. It is reality.

– *An assistant teacher from a Non-government school in Dinajpur*

The head teachers often saw disliking of class routine by some of the teachers as 'obvious'. Regarding this, one of them said, 'complain and dissatisfaction of the teachers are unavoidable because of scope of private tutoring.' Explaining the matter further, he said, 'if a maths teacher is assigned to teach the students of grade VIII or X, due to public examination at these stages, his/her demand among the students and their families would increase automatically.' He also said, 'if the Mathematics teacher is asked to teach the students of grade VI or VII, s/he would naturally complain about the routine.' With this regard, the other head teacher reported that he chose those teachers to teach the students of grades VIII and X who are capable. He also claimed that he considers students opinion in selecting teachers specifically at this two grades.

An interesting strategy was adopted in a senior madrasa in Dinajpur in distributing subjects when there was more than one candidate to offer a specific subject like Mathematics. The super of the madrasa explained this process in the following manner.

We first consider the educational qualifications of the teachers in assigning subjects. If any teacher is expert in a second subject we consider that as well. If more than one teacher want to offer a particular subject we distribute the periods between them. The relatively harder part of the contents is assigned to the senior teacher and the rest to the other. If any teacher is on leave, we distribute the teacher's periods among the existing teachers after a mutual discussion.

Question paper preparation

The next issue of analysis is the ways question papers are prepared for the examinations held at educational institution level. The teachers were asked to mention how the question papers for the recently held half yearly examinations were prepared (in 2018). They provided multiple responses. Four of them were prominent. The teachers themselves prepared the question papers was at the top followed by the question papers were bought from Teacher Association. Overall, 43.7% of the teachers claimed that they prepared the question papers themselves and 36.8% reported that they bought those from local office of Teacher Association (Table 8.6). Another 14.4% reported that they bought question papers from open market and

10.3% reported that they prepared a section of the question papers and the rest by the other teachers in the school. The other teachers fully prepared question papers for 1.5% of the teachers. About 2% of the teachers reported that they bought those from other schools. While asked, the head of a Non-government school in Narshingdi said, 'our teachers prepare question papers most of the time, but we sometimes collect those from outside. Our teachers do it for subjects like Mathematics, Physics and Chemistry. English questions are usually collected from outside.' Justifying the matter he also added, 'There are some expert teachers on various subjects in the local Teacher Association. We share our exam syllabus with the association leaders and accordingly collect questions from the association.'

The above responses can be divided in two categories, viz., the question papers prepared in school by teachers and those that were bought from outside. Clearly the first option is better as it engages the subject teachers in the process and helps to maintain examination standard aligned with school standard. No gender difference

was observed among the teachers in line with the above category. The school teachers were more likely to prepare question papers and the madrasa teachers had a tendency to buy those from others. Again, the teachers of rural educational institutions were more likely to buy question papers and the teachers of urban institutions were more likely to prepare those by themselves. A sharp difference was observed between the public and the private schools. Whereas, the Government school teachers were likely to prepare question papers of their own, the teachers of other two types of schools had a tendency to buy those from outside. See Annex 8.14 for detail information.

D. Additional teaching in schools

The heads of two-thirds of the educational institutions under study reported that they organize additional teaching in the institution premises for the betterment of students. These are held outside the regular class routine and class-hour. This arrangement was observed mostly for the students of grades VIII and X, which are often called 'special classes'. Nearly 65% of the institutions had such arrangements for the students of grade VIII and 58% of the institutions had this for the

Table 8.6
Percentage distribution of teachers' responses on who prepared question papers for the last half yearly examination, by institution type

Who prepared question paper	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Self	76.8	44.3	53.5	35.5	42.8	43.7
Self + other teacher	17.2	9.5	12.5	10.0	12.0	10.3
Other teacher	3.8	1.8	0.8	0.7	1.2	1.5
Open market	3.3	14.2	8.2	17.2	16.0	14.4
Teacher Association	4.0	36.8	33.0	43.8	34.0	36.8
Other school	1.8	2.0	3.7	1.8	1.4	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 8.7
Percentage of institutions having additional classes by grade and institution type

Grade	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
VI	13.3	5.0	9.2	2.5	2.5	4.3
VII	12.5	5.8	9.2	3.3	2.5	5.0
VIII	31.7	70.0	66.7	55.8	57.5	64.7
IX	10.0	7.5	10.0	5.8	5.0	7.0
X	23.3	61.7	58.3	54.2	50.0	58.0
None	64.2	29.2	30.0	40.8	39.2	33.6
All	10.0	5.0	7.5	1.7	2.5	4.2

Note: Multiple responses counted

students of grade X (Table 8.7). The reason was simple and very much demand oriented. The students of these two grades appear in countrywide public examinations (Junior School Certificate or Junior Dakhil Certificate and Secondary School Certificate or Dakhil Certificate). The educational institutions arranged additional teaching with an intention to earn better results for the institutions in those examinations. However, a few institutions offer such education for the students of other grades too. About 70% of Non-government schools and School & Colleges, 60% of Dakhil and senior madrasas, and 35.7% of the Government schools have arranged additional teaching for the students.

Questions were asked to teachers regarding the need of additional classes when the routine classes were regularly held. They justified such arrangement by saying that the students, particularly the weaker ones, needed it. Following explanations were given by two of the interviewed teachers.

There is a provision of organising special classes in our madrasa, but we don't do it regularly. These must be based on the students demand. If they don't want we don't go for any extra classes other than the routine classes. The weaker students participate in these special classes. I strongly believe, if the students pay full attention to the routine classes there would not need any special class.

– *An assistant teacher of a Dakhil madrasa in Mymensingh*

If any teacher feels that s/he would not be able to complete the syllabus on time, they can start teaching thirty minutes prior to the regular class time. For example, before SSC examination the Mathematics teacher started taking class thirty minutes earlier than the scheduled. It was very useful for the students. The weak students felt a pressure and they studied more. This approach helped to complete the syllabus timely as well as to gain good results in the public examination. This is not any special class, but an extension of the regular class.

– *Head of a Non-government school in Rajshahi*

A section of the teachers argued in favour of special classes referring to two issues. They tried to say that long vacations and the natural calamities often hinder completing the syllabus timely. They claimed that 'as a result the students remain weak in those contents.' Their institutions arranged special classes to help the students to cover the contents in the syllabus.

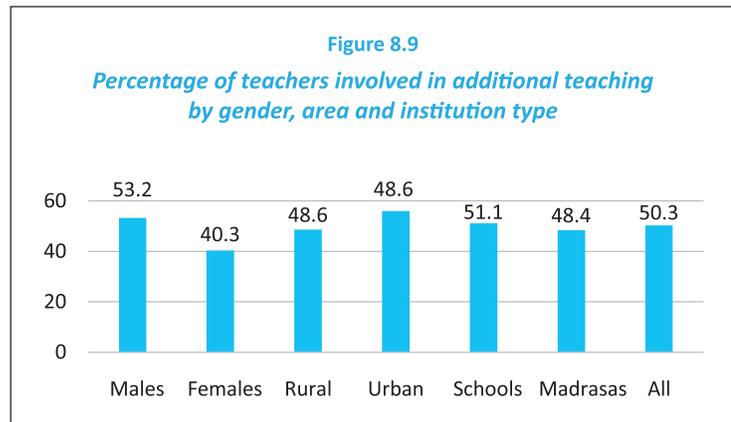
The teachers were asked to differentiate between the regular and the additional classes. Some of them did not notice much difference between the two because of engagement of the same teachers in both. However, a section of them saw it as an opportunity for the students for revision as these are arranged, in most cases, before the examinations. The others differentiated by saying, 'all students participate in regular classes, but the weaker students participate in additional classes.' Following is a statement from a Chemistry teacher of a Government school in Sylhet.

I don't see any mentionable difference between the routine classes and the special classes. Moreover, I use multimedia and digital contents in the regular class, but do not do that for the special classes. I only verbally explain the contents. However, it is very true that through listening the topic repeatedly the learners can understand these better.

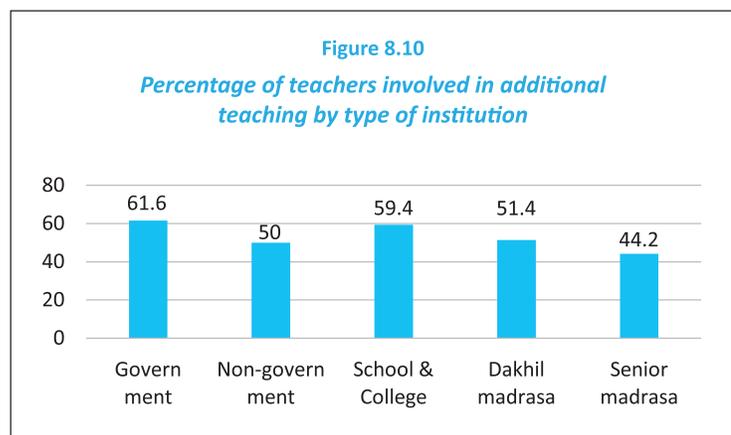
Raising an issue related to pedagogical aspect of education, a Mathematics teacher said, 'a small number of students participate in special classes; therefore, the teachers can provide more attention to each of them individually, and can use the extended time as per need.' Financial aspect of special classes is also mentioned by some teachers, as is from a head teacher:

Quality of teaching is better in special classes because the teachers' pay more attention there as they are financially benefitted. Both the students and their parents perceive such classes as important. That's why they are willing to pay. Students also actively solve their problems with the help of the teacher in these classes.

Overall, half of the teachers of the educational institutions, where additional teaching was arranged, were engaged in this. They were a third of all teachers under study. Following analysis will be carried out among the teachers of the institutions in which additional teaching was offered. Proportionately more male than female teachers were engaged in additional teaching (53.2% versus 40.3%; $p < 0.001$) (Figure 8.9). Again, the urban educational institutions engaged proportionately more teachers to teach in these initiatives than those in rural institutions (56% versus 48.6%; $p < 0.01$). An equal proportion of the teachers of schools and madrasas were engaged in these. Engagement of the teachers with the additional teaching was much spread in the Government schools and the School & Colleges – around three-fifths of the teachers of these institutions were involved in it (Figure 8.10). About half of the teachers of Non-government schools and Dakhil madrasas were found in this role. This was observed among 44.2% of the teachers of senior madrasas.



Note: Only those teachers were considered whose institution had such provision



Note: Only those teachers were considered whose institution had such provision

Two-fifths of the heads of the institutions, 56.7% of those of the assistant heads, and half of the assistant teachers were involved in additional teaching ($p < 0.05$). The non-grant teachers were more likely to be engaged in this than the grant teachers (56.7% versus 49%; $p < 0.05$).

Timing of additional teaching was the choice of respective teachers. However, in majority of the cases, the additional teaching was held before the start of official school hours irrespective of institution type and area. Nearly 64% of the cases, the additional teaching was offered before the start of school hours; in 17.8% of the cases, it was offered after school hours, 15.3% on holidays (weekends and/or long holidays), and about 3% during official school hours (Table 8.8). The male teachers were more likely to offer additional teaching before the start of official school hours than the female teachers (65.4% versus 56.6%; $p < 0.01$). Such a relationship was observed when data were analysed by area – the teachers of urban educational institutions had a tendency to offer additional teaching before the start of official school hours over their counterparts in rural areas (68.4% versus 50.1%; $p < 0.001$). This figure was 64.7% for the teachers of schools and 62% for those of madrasas. The teachers of urban educational institutions were more likely to offer additional teaching after school hours than those in rural areas (37.9% versus 11.3%). Rural teachers preferred holidays than their urban counterparts (17.1% versus 10.1%).

Tendency to offer additional teaching during school hours was more among the madrasa teachers than those in the schools (5.6% versus 1.7%; $p < 0.001$). This was 2.7% among the males and 3.9% among the females, and 3.2% of rural and 1.9% of urban teachers (Table 8.8). Over 6% of such cases in Dakhil madrasas, 4.8% in senior madrasas, 4.3% in Government schools, 3% in School & Colleges, and 1.5% in Non-government schools also held during official school hours ($p < 0.05$) (Table 8.9).

The teachers, on average, spent five hours per week in providing additional teaching in the institution premises. Whereas, the male teachers were engaged for 5 hours 10 minutes, it was one hour less for the female teachers. Teachers of the rural educational institutions engaged for 5 hours 15 minutes per week and their counterparts in urban areas spent 4 hours. Duration of additional teaching per teacher was highest in the Dakhil madrasas (5 hours 15 minutes) which was followed jointly by Non-government schools and senior madrasas (5 hours each). This was 4 hours 40 minutes for the teachers of School & Colleges, and 4 hours for those of Government schools.

Table 8.8
Percentage distribution of teachers by timing of additional teaching, gender, area and institution type

Additional teaching time	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Before school hours	65.4	56.6	68.4	50.1	64.7	62.0	63.9
During school hours	2.7	3.9	3.2	1.9	1.7	5.6	2.9
After school hours	17.2	20.7	11.3	37.9	16.8	20.1	17.8
On holidays	14.7	18.8	17.1	10.1	16.8	12.3	15.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 8.9
Percentage distribution of teachers by timing of offering additional teaching and institution type

Additional teaching time	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Before school hours	53.5	65.5	61.2	62.4	61.7
During school hours	4.3	1.5	3.0	6.1	4.8
After school hours	21.9	15.7	23.7	18.6	22.7
On holidays	20.3	17.3	12.1	12.9	10.8
Total	100.0	100.0	100.0	100.0	100.0

A reverse relationship was observed between teachers spending time in routine and additional teaching with regard to their designation. Though the heads of the institutions were found in regular teaching with only 8 hours per week, they were at the top in offering 6 hours of additional teaching in their institutions. This was 5 hours 20 minutes for the assistant heads and 4 hours 50 minutes for the assistant teachers. A similar relationship was observed with regard to government subvention to the teachers. Whereas the non-grant teachers were likely to spend 40 more minutes in the routine classes than the grant teachers, they were likely to spend one hour less than the grant teachers in additional teaching.

Chapter 9

Teaching-Learning in Classroom

Key Findings

One-way lecture was the main method of teaching in classrooms, irrespective of subject and topic; and without engaging students. Class captains were engaged for disciplinary matters only.

Teachers started talking on the day's topic without linking it with previous lessons or any introductory note. No motivational or inspirational words were used while delivering lessons on national heritage or important personalities.

Classroom teaching was centred into identifying answers to set of questions probable to appear in examination. Homework just followed it. Teachers were seen to be happy with memorization capability of the students.

Teaching aids were hardly used. Teachers asked questions mostly belonging to the 'remembering' subdomain of Bloom's Taxonomy, to the students in order for assessing them. Students hardly asked questions.

A teacher's main task is to teach and the classroom is the main place to make this happen. Classroom is thus the main focus of any educational institution. This chapter presents a snapshot of classroom teaching-learning provisions in 10 secondary educational institutions of five types. The issues presented here are infrastructure, teacher attendance, method of teaching, students' engagement in classroom activities, use of teaching aids, questioning, feedback system, and provision of homework.

Infrastructure

Good infrastructure as well as a proper classroom setting with minimum facilities are essential to create an enabling environment for teaching. The 10 educational institutions of five types, which were selected for observation of classroom teaching, widely varied in terms of infrastructure and facilities. The Government schools had the best infrastructure including clean surface, sufficient airflow and light, big classrooms with adequate seating arrangement, electricity facility, and provision for using digital technology, and so on. The other types of institutions, unfortunately, had much limited facilities. Madrasas and the School & Colleges were the worst sufferers with this regard. The madrasas were not sufficiently clean. Dusts were seen here and there throughout the premises. Lack of electricity facility was also a reality. The madrasas had no classrooms with facilities like multimedia, projector or any other ICT devices. As the fences of the classrooms were made of tin-coated iron sheets, the classrooms become unbearably hot during summer, which hindered classroom teaching-learning process. One School & College was operated in a rented house and the building structure of the other was very old. Classrooms of the latter institution were risky as the roof of the classroom was broken and the iron rods inside the roof were visible. The students felt insecure. Moreover, the teachers had very limited space to move around in the classroom. None of the classrooms in any of the schools and madrasas were disability-friendly.

Duration of period and teachers' attendance

According to the class routine, duration of most of the periods was forty minutes; however, a few were more and some were less. The teachers were often late in attending the classrooms irrespective of institution type. They, on average, were late by six minutes; ranging from one to twenty-eight minutes. For instance, the teacher of Bangladesh & Global Studies in a School & College was late by twenty minutes and in a Government high school the Bangla teacher entered into his classroom after twenty-eight minutes of the scheduled time. It is worth mentioning that the madrasa teachers were relatively more punctual. Delay in starting lessons has implications on total contact hour as well as shortening of following period. Average duration of the observed periods was thirty-four minutes, which was supposed to be forty minutes. Due to late attendance, some teachers conducted lessons for shorter period than expected. For instance, a fifty minutes' Bangla lesson was conducted for thirty-five minutes in a Government high school. On the other hand, some teachers surpassed their time limit and took the time allocated for following periods. In a Non-government high school, a thirty minutes' lesson of Islam & Moral Education was continued for forty-four minutes.

Consequence of late attendance

The teachers who entered into the classrooms late faced some challenges in smooth operation of classroom teaching. They were seen doing their duty bypassing issues like classroom management and disciplinary matters. However, in general, the teachers of the observed institutions hardly dealt with the disciplinary issues. Those who attempted to deal, were not able to maintain discipline. For instance, the teachers in

the Non-government schools and the Dakhil madrasas asked their students to wear school dresses and not to sit in back benches keeping front benches empty. The students were not seen to obey these instructions. Teachers also ignored such behaviour of the students. This indicates a kind of power relationship between some students and the teachers. These students could carry on with their regular habits ignoring the teachers' instruction. In such classes, the teachers did not have control over the students thus they created noise. These kinds of situations hindered a proper classroom environment. In most of the cases, the teachers of these institutions started their classroom activities by asking for homework and then directly moved into the contents of the day's lessons without any greetings or introductory remarks on the specific topic. No motivational words were heard while delivering the lessons. Although the above was common in the institutions under study, a few of the teachers were however exceptional. In a School & College and a senior madrasa, the teachers were seen to greet the students cordially after entering into the classrooms, they then took initiative to fill up the empty spaces of the front benches bringing students from the back benches and when all the students sat properly they asked for homework. Such an action did not take more than a minute, but was very useful in terms of discipline – the whole class of students came under a disciplined manner.

Lecture being the principal method

The purpose of classroom management is to create a proper environment for better teaching-learning activities. Selection of teaching method is one of the most important task with this regard. A similarity was observed among the sampled teachers regarding the selection of teaching method and technique. The principal method of teaching was lecture irrespective of subject, content and institution type. For instance, teachers of a School & College used lecture method while teaching Social Science, Accounting and Chemistry; teachers of Government schools taught Trigonometry and Physics through lecture method; teachers of Non-government high schools used lecture method to teach Civics & Citizenship, General Science, and Islam & Moral Education. The teachers in the madrasas taught Mathematics, Arabic grammar and Hadith Sharif following the same method.

Being one of the most traditional teaching methods – lecture was predominantly preferred by the teachers and it was difficult for them to come out of that practice. As we know, the lecture method carries a number of limitations. It is a teacher dominant method and does not create scope for the students to express their thoughts. It is monotonous and goes against the learner centric teaching methodology. Smart teachers try to minimise these limitations by embedding various techniques along with lecture. The techniques include group and pair work, asking questions to each other individually or in groups and using teaching aids for engaging learners to the lessons.

Most of the teachers were found reluctant to adopt such pedagogical initiatives while conducting lessons through lecture method. Especially the teachers of School & Colleges applied lecture method in the weakest manner. Most of the time, they started the lesson without any warm up activities; as a result, students could not prepare themselves mentally to capture what the teachers were saying. Many teachers reported in interviews that they could not prepare lesson plan or had time to take preparation for conducting lessons. This seemed truer in the case of the teachers of School & Colleges. Their teaching practise indicated that they entered into the classrooms without adequate preparation. They asked about the homework and then directly announced the lesson title all on a sudden without judging students' prior knowledge on the topic or motivating them towards that. Most of them directly read out the contents from the textbooks and were hardly comfortable in delivering the lessons. Such an evidence indicates that they did not have proper preparation. Similar scenario was observed in a Bangla lesson at a Government secondary school which

was delivered by a female teacher. In such classes, the students did not have anything to do other than listening to the teachers. Naturally they lost their interest and attention after a while. As a result, they either whispered to each other or put their attention outside the classrooms. Surprisingly, the teachers did not notice such activities of the students.

Engagement of students

Comparatively a better scenario was observed where the teachers were a bit more caring about engaging students in teaching-learning activities. For instance, in a Non-government high school, teachers in Civics & Citizenship, General Science, and Islam & Moral Education classes connected the topic to students' real life through some examples and stories and then announced the lesson title. They shared the lesson objectives and often asked questions to the students and at a stage assigned students to group work. These teachers properly guided the students for group formation and instructed them about the group task and its duration comprehensively. They monitored the students in group work and guided to reach the goal of such activity. After the task is over, teachers invited the group leaders for presenting the findings and appreciated them for their work. Similar scenario was observed in a Physics lesson in a Government high school. Here, the teacher used multimedia projector and demonstrated an image on screen which attracted the students attention a lot. In such lessons, students enjoyed as well as participated in classroom activities.

A teacher of a Government high school took initiatives to ensure a proper seating arrangement of the students. He engaged students in singing the national anthem in a disciplined way and checked students' attendance in such a way that nobody could cheat. Another unique exercise from his side was involving the class captain for facilitating him in classroom management. The captain assisted fellow students in approving the leaves in advance so that the teachers did not have to spend time for this purpose. The captain also ensured the availability of necessary classroom materials, therefore, the teachers did not have to wait to start the teaching-learning activities. This is important, but no other teacher was seen to involve students in classroom management. This kind of activity might help students to master some leadership skills too.

Some of the madrasa teachers asked questions to the students while lecturing. They demonstrated some strengths as well during teaching. For instance, an English teacher of a senior madrasa was seen to be cordial and helpful to the students. He greeted the students properly and asked about their health and mind. He did not practise direct teaching as well. For instance, when students asked for meaning of any word he uttered some similar known words and asked them to guess the meaning of the word they asked. This was found inspiring to the students. He emphasized on mastering pronunciation and encouraged students not to use the guidebook because English pronunciation was written there in Bangla. He also encouraged students to practise free-hand writing based on ideas obtained from the textbook. The other madrasa teachers also demonstrated some good practises while lecturing. For instance, in a lesson of Quran Majid & Tajweed, one teacher explained the background of the holy Quran's teachings and also explained its application in real life. In such lesson, students could realise the rationale of the contents and felt interested to learn. Teachers also involved students in group work. A Mathematics teacher of a madrasa also exercised a similar norm, i.e. explained the importance of the topic to the students and grew their interest to it. However, a tendency to readout from the textbooks was observed among majority of the madrasa teachers. Classrooms of these teachers were found more chaotic and therefore there was less scope for proper teaching or learning.

It was observed that the students were more engaged and attentive to those lectures where the teachers communicated with a smiling face, body language, eye-contact, calling them by names and moving to them off and on. Majority of the madrasa and Government school teachers communicated to the students in this way. However, some flaws were there too. For instance, a Bangla teacher was found in a Government school who talked very harsh especially to the boys. She used to talk in low voice and hardly moved around the classroom. She also did not do any eye-contact with the students and rarely called them by name. Lecturing in such disconnected manner did not work in the classroom to hold students' attention. Similar kind of limitation was noticed in the Chemistry and Bangladesh & Global Studies lessons in the School & College. Teachers of such institutions had problems with pronunciation and they used local dialect while teaching.

Use of teaching aids

Though use of teaching aids and ICT based digital contents were perceived useful for delivering a lesson effectively, the sample teachers hardly used them. In most of the classes, irrespective of institution type, no teaching aids was used, although there were good opportunities for their use. For instance, in a Civics lesson at a Non-government high school, the teacher was teaching about 'family'. She could use a picture of family easily. Use of multimedia was noticed in two lessons only. In a Government high school a Physics teacher used a self-made digital content. Students enjoyed that class and participated enthusiastically. Another teacher of Islam & Moral Education in a Non-government high school showed a video of holy Hajj. He demonstrated some related posters which ensured students participation. The classrooms of madrasas and the School & Colleges were not equipped with digital technology. So, the teachers sometimes used some posters there. For instance, the teacher of History of Bangladesh & World Civilisation used two posters which she made by herself. The Biology teacher of the same school used a poster of human skeleton and a real skeleton in classroom. Students could see the bones in poster and could touch the real bones simultaneously in that class. A very few teachers used teaching aids in classrooms and they had a number of limitations in using these. For instance, some teachers used posters, but quality of those were very poor in terms of font size, colour contrast of the text, spelling and the amount of contents presented. Moreover, the teachers hung the posters in such a position that most of the students could not see those properly and because of inappropriate font size many could not read the messages. Therefore, expected benefits of using these teaching aids were not fully achieved.

Questioning as a method of teaching

Questioning is a common way of classroom communication. Teachers of every type of institution asked questions to their students during lecture. It was generally the teachers who asked questions to the students, but not vice versa. The teachers were not seen to create any scope for the students to ask questions. Another observation was that questions were mostly asked to specific individual students not to the whole class. It is obvious that when teacher asked question to any particular student, the others do not think about it seriously. Thus, they cannot participate in classroom interaction. Such scenario was observed more in the School & Colleges. However, an appreciable aspect of the questioning practise of such school was that teacher engaged other students to assess whether the answer was correct, and they did not discriminate among the boys and girls while selecting them for asking questions.

Another purpose of classroom questioning was to assess students' learning. An analysis of the asked questions by the teachers showed that almost every question belonged to the lowest sub-domain of cognitive domain, i.e., remembering, irrespective of subject from Literature to Higher Mathematics. No

thought provoking exercise was required to answer those questions except the recalling capability. This indicates that the way classroom questioning is done actually promoted the culture of rote memorization. A very few teachers assessed students' learning using higher order questions. Some of the teachers of Government and Non-government high schools assessed students based on group works. On the other hand, the teachers of School & Colleges and madrasas assessed students through writing task and homework.

Feedback to students

The teachers demonstrated a variety of approaches in providing feedback to students' works. When the students provided correct answers to the teachers or accomplished the group task well, the teachers uttered 'good' as an appreciation mark. If the students failed to do so, some teachers warned them for not studying well. The Government school teachers were found asking the same question to other students if anybody fail to provide correct answer. A practise of providing negative feedback was observed in an English lesson of a madrasa, and a provision of psychological punishment was noticed in a Non-government school. One day, a student laughed during presenting their group task. The teacher replaced her by another group member and stopped other students from clapping at the end of their presentation. A Mathematics teacher of a madrasa used to identify the best and worst homework and then compared those in front of the whole class of students and demonstrated the difference between bright and dull students. Such kind of practise was embarrassing for the students and went against the ethics of teaching.

Homework

Assigning homework was another common culture of classroom teaching-learning process. Asking students to prepare homework was identified as a common tendency of the teachers irrespective of institution type. For instance, the teachers of Bangladesh & Global Studies in a School & College and a Government school, and the Chemistry teacher of a School & College assigned their students to prepare short and multiple choice questions on the lessons discussed in a particular day. None of the teachers was found assigning any thought provoking, creative, and investigation based homework that could stimulate learners for thinking critically. Preparing questions as home task might be an impact of using creative questions in the teaching-learning process. Such questions should belong to the higher domains of Bloom's taxonomy (Bloom 1956). It was observed that the students were not able to prepare such questions because classroom questioning was limited to the remembering sub-domain only. Therefore, students also thought about memory-based questions and ultimately were caught in the net of rote memorisation.

The above practises were the integral part of the whole teaching methodology applied in the classrooms which was mostly lecture based. Other than lecture, only one teacher attempted to initiate a discussion method of teaching in a lesson of a School & College. However, it was not successful as the students did not participate. The teacher, instead of encouraging students to participate in the discussion, continued lecturing.

A variety of teaching methods are available in the pedagogical world which the teachers could use keeping in mind the topics they wanted to teach. For instance, to teach Mathematics the heuristic method can be a good choice (Abonyi and Umeh 2014, Calucag 2016). Similarly, to teach Science, experimentation and project methods might be useful. However, teachers were not found to select teaching methods according to the nature of the topics they brought to the students, but applied lecture method everywhere. As a result, students also could not practise thought provoking and creative exercises other than listening to

the teachers passively. On the other hand, lecturing continuously is tiring for the teachers as this consumes huge physical and mental energy.

Although lots of shortcomings were observed in the classrooms of secondary education, a few good examples were also observed. This can be an inspiring message for the education professionals. A number of areas to improve was identified irrespective of the type of educational institution. The classroom activities were very much limited to the basic practises including some group work and questioning. These were also erroneous. In addition, both the teachers and the students missed enjoying the benefits of teaching aids. Interestingly, most of the teachers got various trainings on all these aspects, but they were not seen to practise those in their classrooms. Therefore, investment was there, but expected outcome could not be achieved. During the observation period no classroom supervision was noticed. Therefore, a serious need of academic supervision is there to ensure the implementation of learner and content appropriate teaching methodology in the secondary classrooms.

Chapter 10

ICT, Mass Media and use of Multimedia

Key Findings

Of the institutions, 31% had a multimedia classroom but not an ICT lab, 5.2% had an ICT lab but not a multimedia classroom, 22.5% had both, and 41.3% had none. The Government schools and the School & Colleges were better facilitated and the Dakhil madrasas worse.

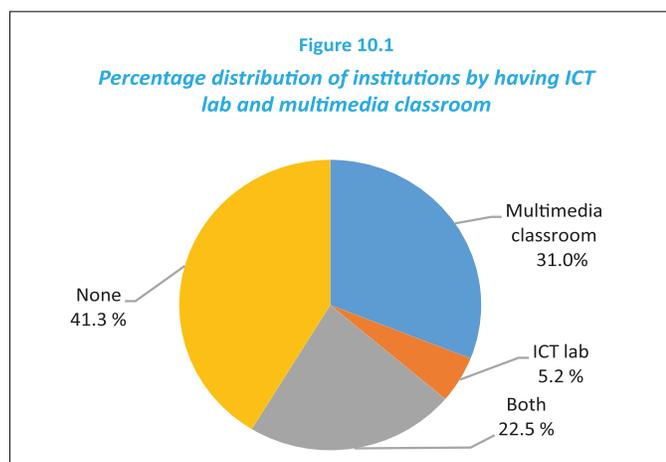
About 80% of the teachers had an ordinary mobile phone, 64.3% had a smart phone or a tablet, and 29.3% had a desktop or a laptop computer. Talking, sending SMS, internet browsing, photo/videography, listening to music, drama etc., listening to Islamic preaching, money transfer/mobile banking, preparation of contents for students, self-study, occupational writing, gaming, and listening radio programmes were the purposes of using these devices. Over a half of the teachers used ICT devices for purposes related to their profession.

Nearly 40% of the teachers reported to using multimedia at least once in 2018. Two-thirds of these teachers reported to face various difficulties in using multimedia in classroom teaching. Not a single subject was found where a third of the teachers used multimedia in teaching. Subjects like ICT, Accounting, and Mathematics were at the top where multimedia classroom teaching was provided.

Access to Information and Communication Technologies (ICTs) and mass media among the teachers and use of these in the classrooms are the focus of this chapter. This chapter starts with presenting information on availability of multimedia classrooms and ICT lab facilities in the educational institutions under study. This is followed by teachers' access to ICTs and mass media, use of ICTs in classroom teaching, difficulties faced in using, and reasons of not using.

A. The institutional setting

The heads of the educational institutions reported that 27.7% of the institutions had an ICT lab and 53.5% had a multimedia classroom. In most cases, an ICT lab means a number of computers placed in a dedicated room with regulated access of the students and open or regulated access of the teachers. On the other hand, a multimedia classroom comprises of a desktop or a laptop computer and a projector. Overall, 31% of the institutions had a multimedia classroom but not an ICT lab, 5.2% of the institutions had an ICT lab but not a multimedia classroom, 22.5% had both, and 41.3% had none (Figure 10.1). Describing the facilities regarding ICTs and multimedia in his school, the head of a well-equipped Government school in Sylhet said,



This school is one of the seven most modern schools in the country. This six storied building [showing the structure] has all the facilities as in developed countries. We have 25 projectors, 25 smart boards, 25 laptops, and a lab with 34 desktop computers and Wi-Fi facilities. We have three sources of electricity in the school to keep these facilities run all the time. The school gets electricity from national grid, and it has its own generator and a solar panel.

An opposite scenario was heard from an assistant head teacher of a Non-government school in Mymensingh. Explaining the situation in his school, this teacher noted the following.

In this era of ICT, one cannot ignore it. But there is a question about its proper use. The government has provided only a laptop and a projector. These are insufficient. Our teachers want to use these, but cannot do so due to lack of electricity facility and training.

The above two statements highlight the digital divide that exists among the secondary educational institutions under study. The urban educational institutions were much ahead of the rural institutions and the schools were ahead of the madrasas in having ICT labs and multimedia classrooms (Figure 10.2). The Government schools were at the forefront of all others in having both the facilities followed by the School & Colleges (Figure 10.3). The Dakhil madrasas were at the bottom in both the cases. Whereas, 83.3% of the Government schools had ICT lab, it was only 27% in other four types of institutions collectively. This figure was 28.7% in the private institutions receiving government subvention (grant) and 15.3% in the non-grant institutions ($p < 0.05$). A similar situation was observed in the case of multimedia classroom. This was

found in 56.7% of the grant and 25.4% of the non-grant institutions, whilst 93.3% of the Government schools had multimedia classrooms.

A small section of the institutions had no dedicated multimedia classroom, but had a portable projector to carry it to the classrooms as and when necessary. Therefore, 69.7% of the heads of the institutions reported to have teaching-learning in place using multimedia (Table 10.1). Two-thirds of the institutions in rural areas and 85.7% of those in urban areas had classroom teaching using multimedia ($p < 0.001$). Heads of over three-quarters of the schools and 58% of the madrasas reported the same ($p < 0.001$). Almost every Government school (99.2%), 95.8% of School & Colleges, 78.3% of senior madrasas, 74.2% of Non-government schools, and half of the Dakhil madrasas offered multimedia classroom teaching in 2018 ($p < 0.001$). Grade wise analysis shows a variation of 65-69% in having multimedia classroom teaching (Annexes 10.1 and 10.2).

Only 3% of the institutions received both public and private support to build multimedia classroom facilities, 40.2% received support from public sources only, and 10.2% from private sources only. In other words, 43.3% of the institutions received support from public sources and 13.3% from private sources.

B. Teachers' access to ICTs

The information and communication technologies (ICTs) considered in this section include ordinary mobile phone, smart phone, tablet

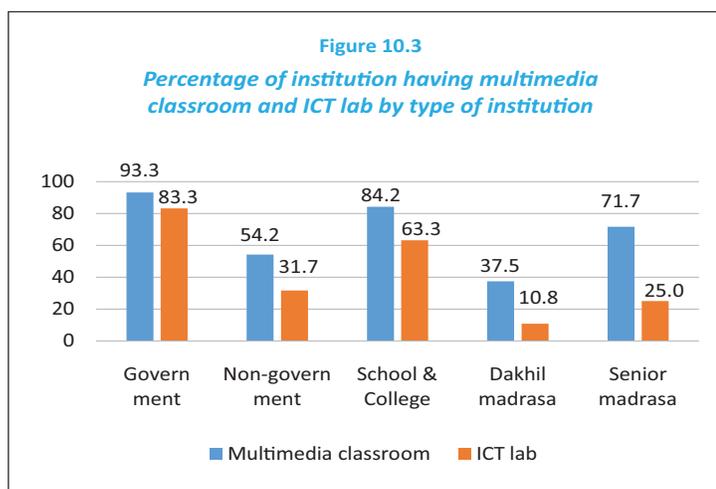
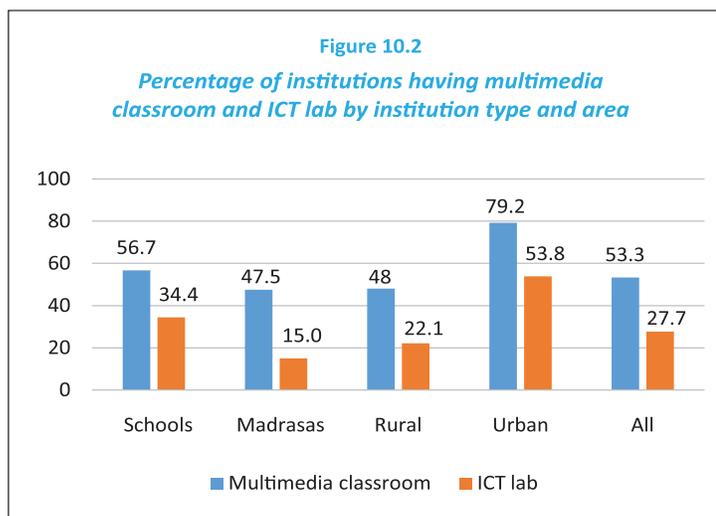


Table 10.1
Percentage of institutions having classroom teaching by using multimedia by institution type and area

Institution type	Percentage of institutions	Level of significance
Government	99.2	$p < 0.001$
Non-government	74.2	
School & College	95.8	
Dakhil madrasa	49.2	
Senior madrasa	78.3	
Rural institutions	66.3	$p < 0.011$
Urban Institutions	85.7	$p < 0.001$
Schools	75.8	
Madrasas	57.9	
All	69.7	

computer, desktop computer, and laptop computer. The teachers were asked whether they knew how to use these devices and whether they have these devices of their own. Over 90% of the teachers claimed that they knew how to operate an ordinary mobile phone, 72.8% knew how to use a smart phone, and 27.6% knew how to use a tablet computer. Nearly a half of the teachers knew how to operate a desktop computer and 36.7% knew how to operate a laptop computer. Overall, each of the teachers under study knew how to operate at least one of the devices concerned. Above information by gender of teacher, area of institution and institution type is provided in Annexes 10.3 and 10.4.

With regard to having own devices, 79.8% of the teachers had an ordinary mobile phone, 64.3% for a smart phone or a tablet, and 29.3% for a desktop or a laptop computer (Table 10.2). Only 0.2% of the teachers had none of these. No gender difference was observed in teachers having an ordinary mobile phone, but the female teachers were more likely to have a smart phone or a tablet (69.4% versus 62.9%; $p < 0.01$) and a desktop or a laptop (36.8% versus 27.1%; $p < 0.001$) than their male counterparts. Similarly, the rural and urban teachers had no difference in having an ordinary mobile phone, but proportionately more teachers of urban institutions had the remaining devices than those of rural institutions – 76.9% of urban and 61.3% of rural teachers had own smart phone or tablet ($p < 0.001$), and 51.2% of urban and 24% of rural teachers had own desktop or laptop computer ($p < 0.001$). The madrasa teachers were ahead of the school teachers in having an ordinary mobile phone (84.2% versus 77.4%; $p < 0.001$), but an opposite scenario was observed in rest of the devices. Two-thirds of the school teachers and 57.9% of the madrasa teachers had a smart phone or a tablet ($p < 0.001$), and 32.2% of the school and 23.3% of the madrasa teachers had a desktop or a laptop computer ($p < 0.001$).

Educational institution type wise analysis shows that having ordinary mobile phone was negatively related to having a smart phone or a tablet (Table 10.3). Again, having a desktop or a laptop was positively related to having a smart phone or a tablet. In terms of having a smart phone or a tablet or a laptop or a desktop, the teachers of the Government schools were at the top followed by those of School & Colleges, Non-government schools, senior madrasas and Dakhil madrasas, respectively.

The teachers reported multiple uses of their ICT devices during the previous

Table 10.2
Percentage of teachers having own ICT devices by gender, area and institution type

ICT devices	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Ordinary mobile phone	80.4	77.4	79.7	79.6	77.4	84.2	79.8
Level of significance	ns		ns		p<0.001		
Smart phone/Tablet	62.8	69.4	61.3	76.9	67.5	57.9	64.3
Level of significance	p<0.01		p<0.001		p<0.001		
Desktop/Laptop computer	27.1	36.8	24.0	51.2	32.2	23.3	29.3
Level of significance	p<0.001		p<0.001		p<0.001		

Note: Multiple responses counted; ns = not significant at $p = 0.05$

Table 10.3
Percentage of teachers having own ICT devices by institution type

ICT devices	Institution type					Level of significance
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Ordinary mobile phone	66.3	78.2	76.4	86.3	81.3	p<0.001
Smart phone/Tablet	86.8	66.2	73.2	54.6	62.8	p<0.001
Desktop/Laptop computer	64.3	30.2	39.9	21.0	26.7	p<0.001

Note: Multiple responses counted

one month of interview. The highest use was for talking – almost every teacher used their devices for talking (Table 10.4). This was followed by sending short messages or SMS with three-fifths of the teachers doing so. The other purposes include internet browsing (57.4%), photo/videography (50.7%), amusement such as listening music, drama etc. (48.8%), multimedia use for teaching (37.1%), listening Islamic preach (35.7%), money transfer/mobile banking (34.8%), preparation of contents for students (29.4%), self-study (24.5%), occupational writing (18%), gaming (15%), and listening radio programmes (13.2%).

Table 10.4
Percentage of teachers by purposes of using ICT devices, gender, area and institution type

Purpose of using ICT devices	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Talking	99.8	99.5	99.7	100.0	99.8	99.6	99.7
SMS	60.1	59.6	58.1	68.1	61.7	56.7	60.0
Internet browsing	57.7	56.4	54.7	68.7	59.9	52.3	57.4
Photo/videography	48.7	57.4	49.8	54.1	53.5	45.0	50.7
Amusement	46.4	56.9	47.4	54.8	54.6	37.4	48.8
Teaching using multimedia	36.0	41.0	35.2	45.4	41.8	27.9	37.1
Listening Islamic preach	37.6	29.1	36.2	33.7	28.7	49.6	35.7
Money transfer/banking	37.3	26.2	32.7	43.8	36.4	31.6	34.8
Prepare contents for students	29.7	28.3	27.4	38.0	32.1	24.1	29.4
Self-study	25.4	21.2	22.5	32.8	25.1	23.2	24.5
Occupational writing	19.6	12.5	15.7	27.6	19.5	15.0	18.0
Gaming	14.6	16.5	15.4	13.4	16.4	12.4	15.0
Listening radio programme	14.2	9.9	13.8	11.1	12.6	14.5	13.2

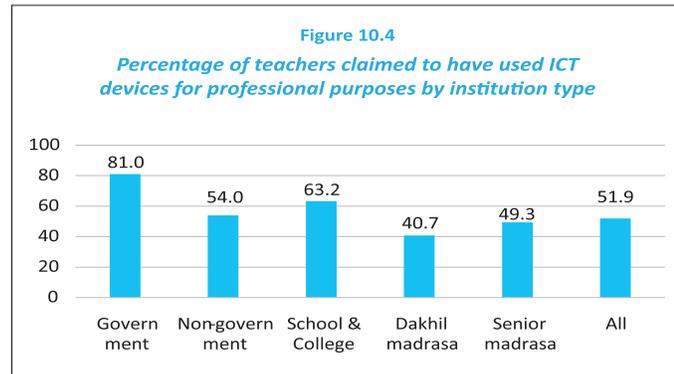
Note: Multiple responses counted

Purpose of using ICT devices varied by gender, area and institution type (Table 10.4). For instance, the male teachers were more likely to listen to Islamic preaching and doing mobile banking by using ICT devices than the female teachers. The female teachers were more likely to use multimedia for teaching, use of ICTs for amusement and photo/videography than the male teachers. No purpose of use of ICT devices was observed in which the rural teachers surpassed their urban counterparts. However, the urban teachers were ahead of their rural counterparts in doing the following activities using ICT devices: sending short messages, internet browsing, self-study, content preparation for teaching, multimedia use, occupational writing, amusement, photography/videography, and mobile banking. The madrasa teachers were ahead of the school teachers only in listening Islamic preach. But the school teachers were ahead of madrasa teachers in sending short messages, internet browsing, content preparation for teaching, multimedia use, amusement, and photo/videography. More analysis on this is provided in Annex 10.5.

Four of the above uses can be considered as directly linked to teaching profession. These are self-study, content preparation for students, multimedia use for teaching, and occupational writing. The Government school teachers were ahead of the others in each of the above uses followed by those of School & Colleges, Non-government schools, senior madrasas and Dakhil madrasas, respectively. Overall, 18.9% of the teachers used their ICT devices for any of these purposes, 16.8% used those for two, 9.2% for three, and 7.2% for all four purposes. The Government schools were at the top with 15.3% of its teachers using ICT devices for all the above purposes, which was 4.2% among those of Dakhil madrasas.

Over a half of the teachers (51.9%) used ICT devices for any of the above four purposes related to their profession (Figure 10.4). This was 51.7% for male and 52.7% for female teachers with no statistically significant difference (Annex 10.6). The teachers of the urban educational institutions were much ahead of those in rural institutions in using ICT devices for purposes related to profession (63.3% versus 49.2%;

$p < 0.001$). A similar finding was observed among the school teachers over their counterparts in the madrasas (55.8% versus 44.2%; $p < 0.001$). This was 81% among the teachers of Government schools, 63.2% among those of School & Colleges, 54% among those of Non-government schools, 49.3% among those of senior madrasas, and 40.7% among those of Dakhil madrasas ($p < 0.001$) (Figure 10.4).



The teachers who reported internet browsing as a purpose of using ICT devices during the past month were asked a supplementary question on the activities they did with internet. Responses of the teachers were analysed by their gender, area and institution type and results are provided in Table 10.5. Connecting people through social media was observed as the most popular use of internet with over 93% of the teachers doing so. This was followed by searching for general contemporary news (79%), teaching related information (70.2%), amusement

elements such as music, drama, etc. (61.7%), and occupational information (52.1%), respectively. The other purposes of internet browsing were searching for sports news (45.8%), doing personal email (37.6%), and doing school related activities (36.5%). Such analysis for the teachers of each type of institution is provided in Annex 10.7.

Table 10.5
Percentage of teachers by reasons of internet browsing, gender, area and institution type

Reasons of internet browsing	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Social media	93.5	91.8	93.0	93.4	94.3	90.4	93.1
General news	81.7	69.4	80.5	74.0	79.0	79.0	79.0
Teaching related information	70.4	69.8	68.1	77.2	69.5	71.9	70.2
Amusement	60.2	66.8	61.9	60.9	63.0	58.6	61.7
Occupational information	54.1	45.2	50.1	58.7	52.6	50.9	52.1
Sports news	50.6	29.0	49.2	34.5	46.0	45.4	45.8
Personal email	40.1	29.1	33.6	51.2	37.7	37.6	37.6
School related activities	37.4	33.4	33.5	46.6	36.8	35.8	36.5

Note: Multiple responses counted

C. Access to mass media

The teachers were asked whether they had access to three specific mass media during the week prior to interview. The mass media included radio, television and newspaper. A much higher proportion of the teachers had access to newspapers and television compared to the radio. This is not unexpected because of rapid expansion of cable television networks and electricity in the country. Whereas, 95% of the teachers read newspapers during the past week and 91.3% watched any programme on television during the same period, only 13.2% listened any radio programme (Table 10.6).

The male teachers were ahead of the female teachers in having access to each of the three mass media with a statistically significant margin of at least $p < 0.01$ (Table 10.6). Although no difference was observed between the teachers of rural and urban educational institutions, in access to radio and television; proportionately more urban teachers had access to newspapers than their counterparts in rural schools (97.6% versus 94.3%; $p < 0.001$). No statistically significant difference was observed between the teachers

of schools and madrasas with regard to listening radio programme and reading newspapers. However, proportionately more teachers of the schools watched programmes on television than those in the madrasas (95% versus 83.9%; $p < 0.001$).

No statistically significant variation was observed by educational institution type with regard to teachers' listening to radio programmes during the past week of interviewing them (Table 10.7). However, a very high level of variation ($p < 0.001$) was observed among the teachers by their institution type with regard to watching programmes on television and reading

newspapers. The Government school teachers were at the top in both and the Dakhil madrasa teachers at the bottom.

D. Multimedia use in classrooms

The teachers had a mixed reaction regarding the potentials of using ICTs and multimedia in classroom teaching. Some of their understanding can be treated as misconception. Some of them, however, identified a number of obstacles in proper use of technologies. The teachers, in general, observed that use of multimedia can help in making the lessons easy to the students and therefore can be effective for learning.

Nearly two-fifths of the teachers reported that they offered classroom teaching through using multimedia at least once in 2018 (Figure 10.5). This was 39% among the males and 42.5% among the females with no statistically significant difference. Whereas over a half of the teachers of urban educational institutions used multimedia in the classrooms, it was 37.1% among the teachers in rural institutions ($p < 0.001$). The schools were ahead of the madrasas in this – 44.6% of the school teachers and 30.2% of the

Table 10.6
Percentage of teachers having access to mass media by gender, area and institution type

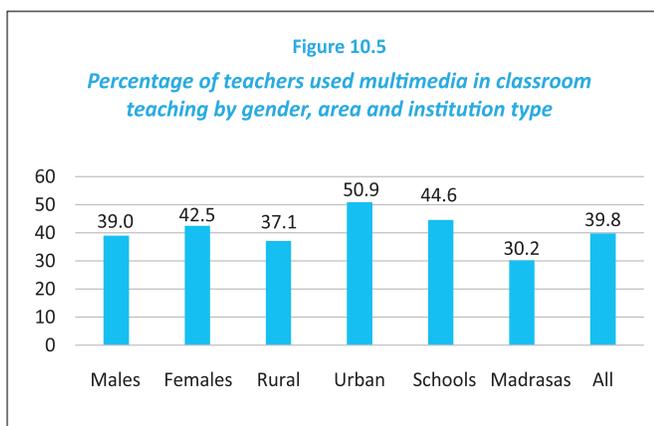
Mass media	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Radio	14.5	8.4	13.0	13.7	12.5	14.5	13.2
Significance	$p < 0.001$		ns		ns		
Television	90.5	93.8	90.9	92.9	95.0	83.9	91.3
Significance	$p < 0.001$		ns		$p < 0.01$		
Newspapers	96.1	91.0	94.3	97.6	95.5	93.9	95.0
Significance	$p < 0.001$		$p < 0.001$		ns		

Note: Not significant at $p = 0.05$

Table 10.7
Percentage of teachers having access to mass media by institution type

Mass media	Institution type					Level of significance
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Radio	12.0	12.5	12.8	16.5	11.7	ns
Television	95.7	95.0	94.8	82.2	86.2	$p < 0.001$
Newspaper	99.3	95.2	97.3	92.2	96.3	$p < 0.001$

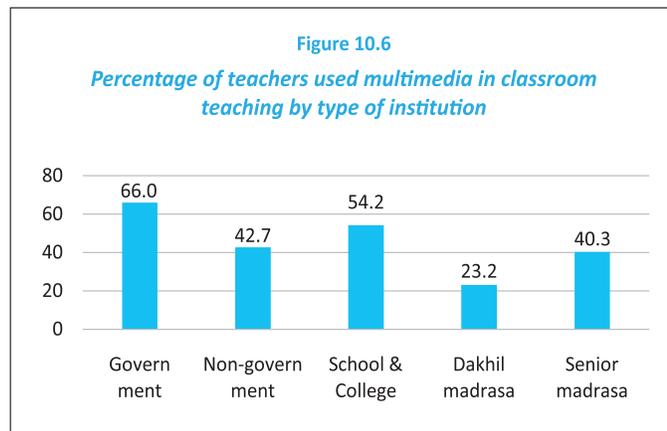
Note: ns = not significant at $p = 0.05$



madrasa teachers used multimedia in classrooms ($p < 0.001$). About two-thirds of the teachers of Government schools, 54.2% of those of School & Colleges, 42.7% of those of Non-government schools, 40.3% of those of senior madrasas, and 23.2% of those of Dakhil madrasas conducted classroom teaching using multimedia ($p < 0.001$) (Figure 10.6). Although no statistically significant difference was observed

between the teachers of Non-government schools and senior madrasas in conducting classroom teaching by using multimedia, they were significantly more likely to do so than those of Dakhil madrasas, but less likely to do so than the teachers of School & Colleges. A significantly higher proportion of the teachers of Government schools conducted classroom teaching using multimedia than those in School & Colleges.

The teachers, on average, taught 5.9 periods in the past month of interviewing them. Although no significant difference was observed in terms of gender and area, the madrasa teachers taught one more period than school teachers (6.6 versus 5.6; $p < 0.01$). Institution type wise variation persisted as well.



The teachers' offer of classroom teaching using multimedia was analysed with regard to their highest educational qualifications, length of service, having own ICTs, and receipt of training on ICT. Proportion of teachers using multimedia in classroom teaching significantly increased with increase of their educational qualifications ($p < 0.001$). For instance, 28% of the teachers who had completed higher secondary education conducted classes using multimedia. This was 37.6% among those who had a Bachelor's degree and 42.6% among those who had a Master's degree. Not much variation was observed in conducting classes using multimedia among the first three quartiles of teachers in terms of length of service. For instance, 40.6% of the first (0-8 years), 43.9% of the second (9-16 years) and 42.8% of the third (17-22 years) quartiles of the teachers used multimedia in classroom teaching. The proportion dropped to 32.2% among those who were belonging to the fourth quartile in terms of length of experience (23-40 years).

Teachers' owning an ordinary mobile phone had a negative relationship with their use of multimedia in classroom teaching (Annex 10.8). However, owing a smart phone or a tablet computer and a laptop or a desktop had positive relationship with multimedia use in classrooms. Thirty-eight percent of the teachers who own an ordinary mobile phone taught in classrooms using multimedia, which was 46.7% among those who had no such equipment ($p < 0.001$). Such a tendency was observed among 47.7% of the teachers owing a smart phone or a tablet, and 63.3% of those who own a laptop or a desktop computer. These rates were 25.4% and 30.1%, respectively among those who did not own these equipment.

Training on ICT was also positively correlated with conducting classroom teaching using multimedia. A half of the ICT trained teachers used multimedia in classroom teaching, which was 34.8% among those who did not receive such training (Table 10.8). This analysis in terms of gender of teachers, area of institution and type of institution also produced a similar result (Annex 10.9). Table 10.8 also shows that a good proportion of the non-trained teachers were also offering classroom teaching using multimedia. They were 61.6% of the non-trained teachers of Government schools, 48.8% of those of School & Colleges, 39.5% of

those of Non-government schools, 34% of those of senior madrasas, and 16% of those of Dakhil madrasas. The schools, in general, were ahead of the madrasas in providing lessons using multimedia without trained teachers. This was also more in the urban institutions than those in rural areas.

A question may be raised about educational qualifications of those teachers who were using multimedia without having ICT training. Analysis shows that 52.5% of them had a Master's degree, 45.2% had a Bachelor's degree, and 12.3% completed higher secondary education. More than half of them studied

Humanities and 8.2% studied Social Sciences at their highest qualification level; however, 28.8% studied Science and 11.2% studied Business studies.

Table 10.8
Percentage of teachers offering classroom teaching using multimedia by having ICT training and institution type

Having ICT training	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
No	61.6	39.5	48.8	16.0	34.0	34.8
Yes	75.7	48.6	66.5	42.6	55.7	50.2
Significance	p<0.001	p<0.05	p<0.001	p<0.001	p<0.001	p<0.001

Multivariate regression analysis

A multivariate regression analysis was performed to predict teachers' use of multimedia in classroom teaching. The dependent variable was dichotomously categorized – used multimedia and not used. There were nine predictive variables each of which were categorical. The variables are institution type, gender, area of institution, teachers' educational qualifications, length of service, having ICT training, having own ordinary mobile phone, having own smart phone/tablet, and having own laptop/desktop. As the dependent variable was dichotomously measured, a logistic regression analysis was carried out. A stepwise approach was considered and therefore only the statistically significant predictors appeared in the final model.

Of the nine predictor variables considered, the final model considered five. No significant contribution of area of institution, teachers' gender, educational qualification and having own ordinary mobile phone was observed in predicting the use of multimedia in classrooms. Chronology of appearance of the predictor variables in the regression model was as follows: having own laptop of desktop, institution type, having own smart phone or tablet computer, having training on ICT, and length of service. The final model is provided in Table 10.9. Following are the major observations.

- Regarding the type of institution, the teachers of the Government schools and the School & Colleges were equally likely to offer lessons using multimedia. The teachers of Non-government schools and senior madrasas were significantly behind the above two ($p<0.05$). The Dakhil madrasa teachers were at the bottom; they were far behind the Government school teachers ($p<0.001$).
- Teachers having own smart phone or tablet computer and those having a laptop or a desktop were more likely to offer classroom teaching using multimedia than those who did not own such equipment (both at $p<0.001$).
- Teachers with ICT training were more likely to conduct classes using multimedia than those who had no such training ($p<0.001$).
- Teachers belonging to the middle two quartiles in terms of length of service were equally likely to use multimedia in classroom teaching. Teachers belonging to the other two quartiles were also equally likely to use multimedia. However, the former half of the teachers were more likely to offer lessons using multimedia than the latter half with a statistically significant margin ($p<0.05$).

In terms of Cox and Snell measure, the six predictor variables collectively explained 15% of the variation in the dependent variable, which was 20% in terms of Nagelkerke measure.

Subject specific analysis

The teachers were asked to report the subjects in which they used multimedia in classroom teaching. This was then cross tabulated with the teachers who taught that specific subjects. A wide range of subjects came out. The Mathematics teachers were at the top with 30.1% of them using multimedia in classroom teaching (Figure 10.7). They were followed by those taught Accounting (29.6%) and ICT (29.4%), respectively. Among others, 26% of the English teachers, 23.9% of the Chemistry teachers, 22.9% of the Biology teachers, a fifth of the Bangla, General Science, and Physics teachers, and about 15-16% of the teachers of Bangladesh & Global Studies, Agriculture and Religion used multimedia. Much lower proportion of the teachers of Higher Mathematics, History, Arts & Crafts, Quran Mazid, Hadith, Akayed, Arabic, Creative Education, and Physical Education used multimedia in classroom teaching.

While doing in-depth interviews, some of the teachers, however, raised questions

regarding appropriateness of multimedia for each of the subjects taught in secondary education. Although three in ten Mathematics teachers reported to use multimedia in classroom teaching, a Chemistry teacher of a senior madrasa in Dinajpur said, 'teaching mathematics cannot be done using a multimedia. In teaching mathematics, you must use blackboards, otherwise the students would not fully understand it.' An assistant teacher of Botany from a Non-government school in Dinajpur made the following statement.

If human digestive system is demonstrated on screen, it would appear lively to the learners and they would learn easily with joy. There are some problems as well. For example, it is not very useful in the case of teaching Mathematics. Suppose you want to teach the steps of a formula generation. If you show it in multimedia it would not be helpful for the students, but if you explain each step and simultaneously write those on board it would be much helpful for the students to learn.

The above clearly shows the presence of misconception among the teachers regarding use of multimedia in classroom teaching. The teachers have questions on its potentiality in teaching each of the subjects of secondary education.

Table 10.9
Logistic regression analysis predicting teachers' use of multimedia in classroom

Explanatory variables	Regression coefficient	Odds ratio	95% CI of odds ratio
Institution type			
Government	0	1.00	
Non-government	-0.58	0.56*	0.33 – 0.96
School & College	-0.17	0.84	0.46 – 1.55
Dakhil madrasa	-1.37	0.25***	0.14 – 0.45
Senior madrasa	-0.57	0.56*	0.32 – 0.98
Having smart phone/tab			
No	0	1.00	
Yes	0.58	1.78***	1.48 – 2.14
Having desktop/laptop			
No	0	1.00	
Yes	1.14	3.14***	2.63 – 3.74
Having ICT training			
No	0	1.00	
Yes	0.54	1.72***	1.46 – 2.03
Service length (quartiles)			
First	0	1.00	
Second	0.16	1.17*	1.02 – 1.46
Third	0.21	1.24*	1.03 – 1.55
Fourth	-0.15	0.87	0.68 – 1.10
Constant	-0.72	0.49*	
-2 log likelihood	3565.13		
Cox & Snell R ²	0.15		
Nagelkerke R ²	0.20		

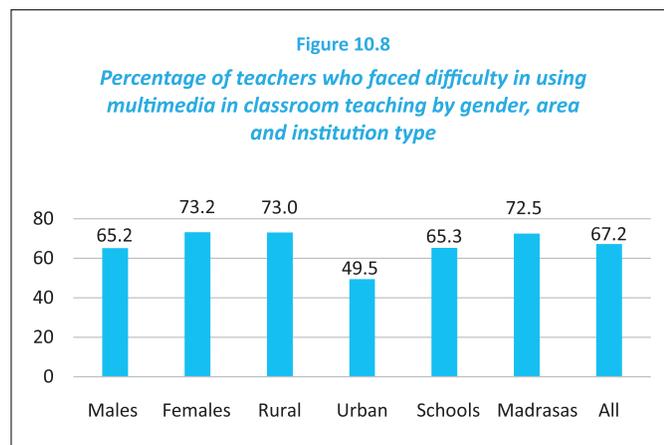
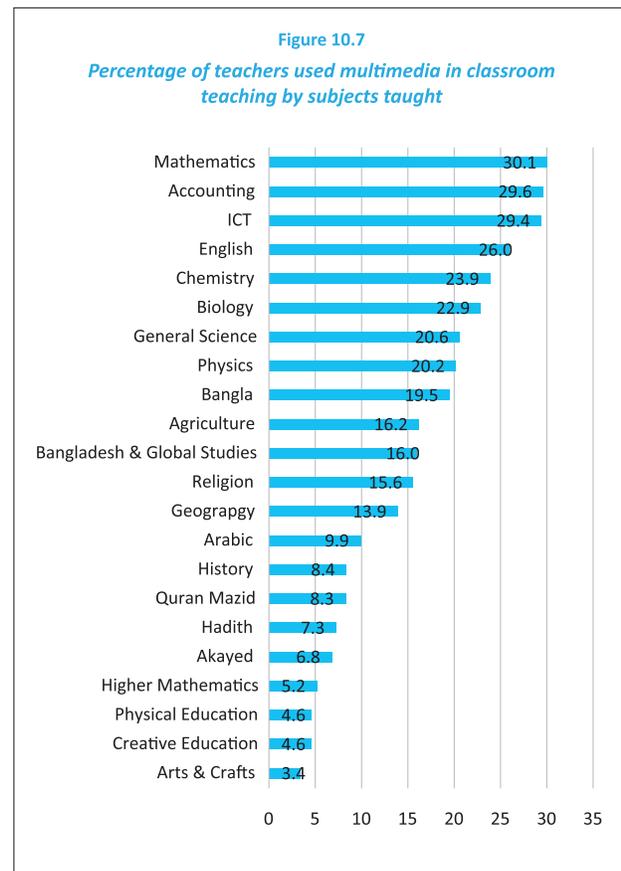
***p<0.001, **p<0.01, *p<0.05

Challenges in multimedia use in classrooms

Among those who conducted classroom activities using multimedia were asked whether they faced any difficulty in their work. Two-thirds of these teachers reported to have faced difficulty; 65.2% among males and 73.2% among females ($p < 0.01$) (Figure 10.8 and Annex 10.10). Rural teachers were more likely to face difficulty than the urban teachers (73% versus 49.5%; $p < 0.001$). Proportionately more teachers of the madrasas faced difficulty than those in the schools – 72.5% and 65.3%, respectively ($p < 0.001$). A substantial variation was observed by type of institution, where 77.7% of the teachers of Dakhil madrasas, 68.2% of those of senior madrasas, 66.8% of those of Non-government schools, 60.3% of those of School & Colleges, and 53.3% of those of Government schools faced difficulty in conducting classroom activities using multimedia ($p < 0.001$) (Figure 10.9 and Annex 10.10).

The teachers who faced difficulty in conducting classroom activities using multimedia, were asked to mention the types of difficulty. Though the teachers provided multiple responses, no variation was observed among them in the types of difficulty by gender, area of institution or institution type (Table 10.10 and Annex 10.11). Electricity failure was the most cited difficulty, which was faced by 53.1% of the teachers. A closer proportion of the teachers highlighted the lack of training (46.1%). A quarter of the teachers mentioned inadequacy of classrooms and another quarter mentioned lack of adequate equipment. The other difficulties include lack of skills (12.3%), defective equipment (10.2%), lack of time to get prepared (8.1%), and defective materials (6.4%).

Regarding constraints of using multimedia, the teachers highlighted two more issues in in-depth interviews. The first one is related to class size. According to them, multimedia is suitable in a class of 30-40 students. If the class size increases, all the students' sometimes unable to see the projected contents.



Some teachers reported that they had to teach in a class of size 70-80 and found that it was difficult to manage even with multimedia.

The teachers who did not use multimedia in their classrooms cited three major reasons for not using it. Over 45% of these teachers did not use multimedia because of absence of any provision of it in their institutions, 30.5% did not use as they had no training on this, and 20.8% complained about defective equipment (Table 10.11 and Annex 10.12). Here too, the teachers cited these reasons irrespective of school type, area and gender.

A good number of the teachers participating in in-depth interviews – some of whom were the heads of their institutions, reported some challenges in classroom teaching using multimedia. A range of their challenges was related to non-functioning equipment such as modem, mouse, hard drive, and projector. It was also known that in some areas there were no maintenance facility available and they had to carry damaged equipment to nearby towns or call someone from there. Low internet speed and having no connection of it were related challenges. Failure of electricity off and on was also reported as a common challenge faced by many institutions. Most of the institutions had no backup provision for electricity. The other major challenge was inadequate number of equipment or classrooms with

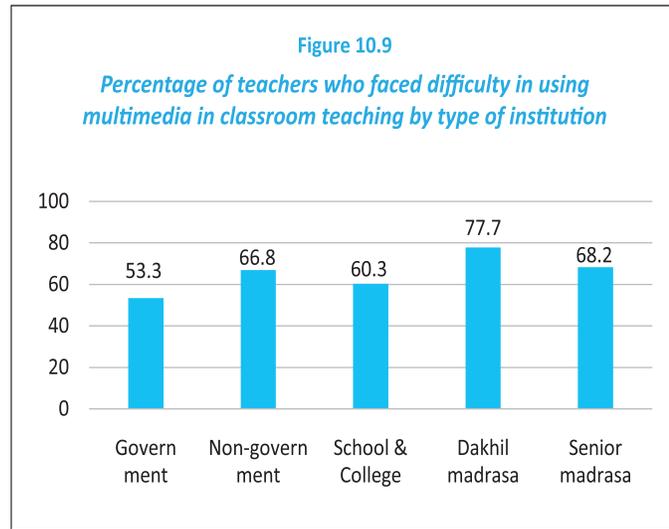


Table 10.10
Percentage of teachers facing difficulties in using multimedia by type of difficulties

Difficulties in use of multimedia	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Electricity failure	45.5	53.8	50.5	55.6	50.9	53.1
Lack of training	38.9	48.5	40.3	44.4	41.8	46.1
Don't have enough classroom	17.1	28.7	24.0	20.4	17.0	25.2
Lack of adequate equipment	30.3	21.6	22.4	32.4	31.5	24.8
Lack of skills	10.0	11.7	13.8	12.0	15.2	12.3
Defective equipment	14.2	8.8	12.8	11.1	13.3	10.2
Lack of time to take preparation	10.9	8.8	9.7	5.6	6.1	8.1
Defective materials	6.6	7.6	3.1	5.6	3.6	6.4
Network problem	1.9	1.8	2.6	4.6	3.6	2.5
Others	2.4	0.0	0.5	0.0	0.0	0.1

Note: Multiple responses counted among those who conducted classes

Table 10.11
Percentage of teachers by reasons of not using multimedia and type of institution

Reasons of not using multimedia	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
No provision in school	13.7	43.0	19.3	65.3	31.0	45.4
Had no training	37.3	29.9	48.7	21.5	41.9	30.5
Defective equipment	22.5	24.4	21.5	11.5	22.6	20.8
Did not feel necessary	15.7	5.8	8.7	5.4	9.2	6.5
School authority did not want	14.7	5.5	10.9	2.4	10.1	5.7
Others	1.5	0.9	1.5	1.7	0.6	1.1

Note: Multiple responses counted among those who did not conduct classes

equipment. In most cases there was only one classroom per institution with such facilities, which was occupied by the ICT teacher and his/her students. Therefore, the other subject teachers were not getting any scope to teach using multimedia. While interviewing, an assistant teacher of a madrasa from Rajshahi described his situation in the following way.

I received training on ICT. I don't use any material in classroom teaching, not even multimedia. I know it would definitely be wonderful if I could use multimedia in conducting my English classes. If I want to teach new words to my students I only pronounce them and rarely write them on blackboard. But if I had the opportunity to use multimedia I could demonstrate them by clicking only. Again, for instance, if I want to teach about 'Zainul Abedin' to my students, I can show them copies of some of his paintings on the screen along with his significant contributions. Such kind of activities would attract the learners to the lessons. Unfortunately there is only one multimedia classroom in our madrasa which remains occupied most of the time for ICT period. Moreover, the computer is used for other tasks as well such as typing letters, browsing internet and so on. Therefore I do not have any scope to use multimedia for teaching.

The other teacher of the same madrasa who was an assistant teacher of Arabic was aware about the potentials of ICTs in education, but informed that he could not use multimedia in classroom because he did not know how to type Arabic. He claimed that the training he received was a generic one and was not adequate for conducting classes using multimedia. He suggested for subject specific training on ICT.

There were also a number of cases where the ICT-trained teachers were not using multimedia facilities. These teachers had lack of motivation in using technologies. They carried their old styles. It seemed that the heads of the institutions were also not that much serious in promoting the use of multimedia facilities among the teachers.

According to some of them, use of technologies attracts students' attention, they can see and listen simultaneously, and therefore, can learn better and faster. From his own experience an Accounting teacher of a Non-government school in Mymensingh roughly estimated that 'students pay 80% more attention in the ICT based classrooms than the traditional classrooms.' Some of the teachers highlighted that seeing the contents on the screen along with images, the students can memorise those quickly. Comparing this with watching programmes on television, a Non-government school teacher from Barishal said, 'learners can watch and listen simultaneously as they do it with television. They can understand the contents of their textbooks as they understand drama or movie.' Another teacher from a Dakhil madrasa located in the same area expressed his views in the following way.

Use of multimedia is very important because it engages students in the classroom with their eyes and brain. They start thinking when they see. They remain active and attentive. Another huge benefit is that teacher can deliver lesson equally to each and every student. Learning can be made joyful and sustainable as well.

A good number of the teachers strongly shared their views by saying that 'in the era of ICT, our education system should seriously take good advantage of it.' They felt the need for more serious effort from both the government and the teachers' sides. They demanded for adequate number of quality equipment to the educational institutions and high quality training to all the secondary level teachers.

Chapter 11

Teachers' Perceptual Teaching Competence

Key Findings

Only 0.4% of the teachers assessed themselves as *highly competent*, 15% as *competent*, 39.8% as *moderately competent*, 27.6% as *averagely competent*, 13.7% as *limited competent*, and 3.5% as *incompetent*.

The highest score was recorded in professional development (93.6%), closely followed by ethical aspects (88%), and the lowest in pedagogical skills (69.7%). The teachers scores in the remaining two sub-components (motivational and resilience) were in between the highest and the lowest performing sub-components.

Students' learning is a function of teacher's teaching competence in the classrooms. Assessment of such competence is the main purpose of this chapter. As mentioned in the methodology chapter, a self-rated teachers' Perceptual Teaching Competence Scale or PTCS was developed and implemented on all teachers sampled for this research. The scale provided teaching competence scores of the teachers that tell us the level of self-reported perceptual teaching skills. Teaching competence is not all observable phenomena, it contains large amount of cognitive and affective components as well. Therefore, it's assessment by an observer is hardly feasible rather it can be ascertained introspectively by self-assessment. In our case, teachers were asked to assess their own competences distributed in five teaching skills such as pedagogy, professional development, motivation, ethics, and resilience. All these skills were transformed into 35 action oriented statements that the teachers had to endorse through a five point Likert type scale. They were needed to examine all of those statements and mention the degree of competences found in them through the self-reported scale. This scale measured a compact score of competence ranging between 35 and 175. The higher the score the better is the competence among teachers and vice versa.

A. Overall teaching competence

The actual score of the teachers in PTCS ranged from 78 to 171. The teachers on average got a score of 142.8 with a standard deviation of 11.8. The median was 144 and mode 150. Though the mean and median values of the scores were closer to each other, the modal value was a bit higher. This indicates somewhat negative skewness of the distribution of scores. The calculated value of skewness was -0.31. Therefore, the distribution of scores can be termed as 'weakly' skewed or close to normal. Percentage distribution of teachers spread over ten class intervals of scores is provided in Annex 11.1, which also shows an approximate normal distribution of PTCS scores.

The overall PTCS scores is a summative measure of five sub-scales and in order to calibrate the competence, the total score was needed to be sub-divided into some categories so that any score can be attributed to a certain level of performance. In this case, the scores were categorized into six levels by following the principle of normal distribution. The distribution of competency score by various levels of competency is shown in Table 11.1.

Table 11.1 can be considered as the norm and can be used for describing the level of competence of a teacher in the PTCS. Therefore, in order to analyse the scale scores to further details, the data were analysed according to the types of respondents and their comparative achievements.

Distribution of teachers with regard to the levels mentioned in Table 11.1 is provided in Figure 11.1. Overall, only 0.4% of the teachers assessed them as highly competent, 15% as competent, 39.8% as moderately competent, 27.6% as averagely competent, 13.7% as limited competent, and 3.5% as incompetent. The first two and the last two categories can be considered as important in terms of two extreme

Table 11.1
The range of competency level by scores

Competency level	Principle	Range of scores
Highly competent	Above Mean +2 σ	>166.4
Competent	Mean + 1 σ to Mean +2 σ	>154.6 to 166.4
Moderately competent	Mean to Mean +1 σ	>142.8 to 154.6
Average competent	Mean -1 σ to Mean	>131.0 to 142.8
Limited competent	Mean -1 σ to Mean -2 σ	>119.2 to 131.0
Incompetent	Less than Mean -2 σ	119.2

Note: σ = standard deviation

cases. Adding those it can be said that 15.4% of the teachers assessed them at least as competent and 17.2% as limited competent or incompetent. Majority of the teachers (over two thirds or 67.4%) belonged to two middle levels of competency such as moderately or averagely.

The distribution of teachers of different types of institution by level of competency was close to each other (Table 11.2). This shows, around a fifth of the teachers of Government schools and School & Colleges assessed them as competent or highly competent. Such a level was reported for 16.8% of the teachers of senior madrasas, 14.8% of those of Non-government schools, and 13.6% of those of Dakhil madrasas. Adding those who assessed them as moderately competent with the above, it was observed that 64.1% of the senior madrasa teachers got a score more than aggregated mean. This was 62.3% among the teachers of Government schools, 59.3% among those of School & Colleges, 54.3% among those of

Non-government schools, and 49.1% among those of Dakhil madrasas. This has happened because of a higher proportion of senior madrasa teachers assessed them as moderately competent and a less proportion of the teachers of School & Colleges did so. The positions of the Dakhil madrasas and the Non-government schools remained unchanged – the fifth and the fourth, respectively. A close tie of the teachers of Government schools and senior madrasas was also observed with regard to the mean PTCS score, where the Dakhil madrasas and Non-government schools secured the last two positions. Again, the mean scores of the three types of institutions, viz., the Government school, senior madrasa and School & College fell at moderately competent level, but those of the remaining two types fell at averagely competent category. Relatively a much higher proportion of the teachers of these two types of institutions assessed them as limited competent or incompetent – 20.2% for Dakhil madrasa and 18.4% for Non-government school. All these confirm that the teachers of Dakhil madrasas and Non-government schools perceive them relatively less competent than those of other institutions.

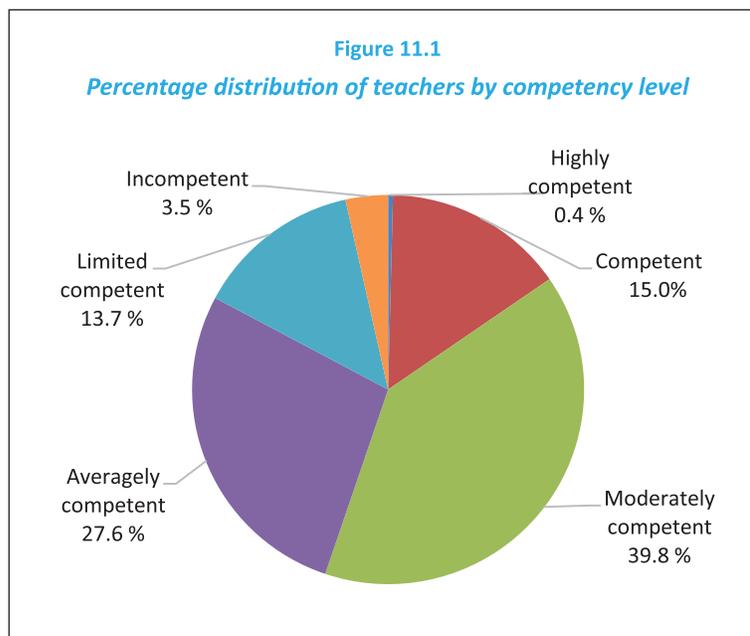


Table 11.2
Percentage distribution of teachers by competency level and institution type

Competency level	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Highly competent	0.5	0.3	0.3	0.3	0.5
Competent	19.7	14.5	20.3	13.3	16.3
Moderately competent	42.3	39.5	38.7	35.5	47.3
Averagely competent	24.8	27.3	28.2	31.0	24.2
Limited competent	10.0	15.2	10.5	14.7	8.5
Incompetent	2.7	3.2	2.0	5.5	3.2
Total	100.0	100.0	100.0	100.0	100.0
Mean score	144.7	142.6	144.5	141.3	144.6

A similar analysis of PTCS scores by gender, area of institutions and broad institution type is provided in Table 11.3. No difference was observed among the teachers with regard to gender and broad type of institution when the proportions of teachers belonging to the first two or three levels of competency were added together. A similar result was observed for the teachers of rural and urban institutions when the proportions of them belonging to the first two levels of competency were added. As a much higher proportion of the teachers of rural institutions assessed them moderately competent than those of urban institutions, difference between the teachers of rural and urban institutions was noticed when the proportions of the teachers belonging to the first three levels were added. This shows that whereas 57% of the teachers of rural educational institutions gave them a score more than the aggregated mean, 47.2% of the teachers of urban institutions did so. Again, over a quarter of the teachers of urban institutions claimed to be limited competent or incompetent against 15.2% of their rural counterparts. The mean score of the teachers of urban institutions and the females fell in averagely competent level and the others in moderately competent level.

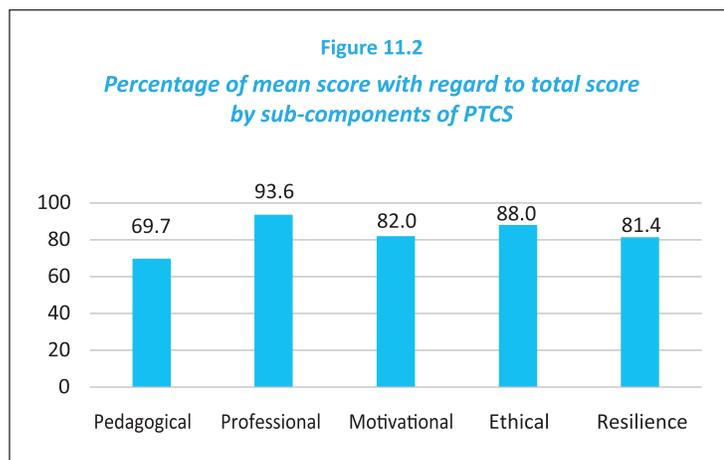
Table 11.3
Percentage distribution of teachers by competency level, gender, area and institution type

Competency level	Gender		Area		Institution type	
	Males	Females	Rural	Urban	Schools	Madrasas
Highly competent	0.4	0.3	0.4	0.2	0.3	0.4
Competent	15.8	12.0	15.1	14.5	15.2	14.4
Moderately competent	39.5	41.0	41.6	32.6	39.5	40.4
Averagely competent	27.5	27.8	27.7	27.0	27.3	28.2
Limited competent	13.3	15.1	12.8	17.6	14.6	12.1
Incompetent	3.5	3.8	2.4	8.1	3.1	4.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean score	143.1	141.9	143.4	140.4	142.9	142.8

B. Sub-component wise analysis

Mean score of the teachers in various sub-components of PTCS was calculated and percentage of each of them was found out with regard to the total score of respective sub-components and is provided in Figure 11.2. The highest score was noticed in professional development sub-component (93.6%); closely followed by ethical aspects (88%), and the lowest in pedagogical skills (69.7%). The teachers scores in the remaining two sub-components (motivational and resilience) were in between the highest and the lowest performing sub-components. The gap between the highest and the lowest performing sub-components was 23.9 percentage points.

The sub-component of motivation and resilience among teachers competence is little low because of the socio-economic status of the teachers in the community is comparatively poor. Compared to these aspects, the professional and ethical competence of the teachers are high because these qualities are expected to be high among the people; so, it is found that teachers rated themselves high in the assessment as well. A similar result was observed when the above



analysis was carried out separately for the teachers of various types of institutions, gender of teachers, area of institutions, and broad type of institution (Table 11.4 and Annex 11.2).

As was observed in all the above analysis, the teachers lagged behind in pedagogical, motivational and resilience skills compared to other sub-components of the competence. These three components are interlinked in the way that when motivation is weak then pedagogical skill and professional development cannot prosper; similarly it is directly related to ethical and resilience aspects, i.e., when motivation is high teachers' ethics and resilience would increase as well. Teacher's pedagogical skill also depends on the level of motivation, ethical and resilience aspects (Table 11.5). However, it is not justified to show direct link between Tables 11.4 and 11.5 because Table 11.4 shows the result of perception of teachers in different sub-components. On the other hand, Table 11.5 demonstrates the consistency of responses among the sub-components of the PTCS scale.

A summary of the teachers' assessment of their competence in each of the 35 statements in the scale is provided in Annex 11.3. This shows that more than 80% of the teachers choose any of the two extreme values of the five point scale (fully agreed in case of positive statement or did not agree at all in case of negative/unexpected statement) for them in each of 13 of the 35 statements. The proportion of teachers reached at 80% or more in the case of another 10 statements, if the nearest points were added with the extreme points. These 23 statements can therefore be stated as 'certain' or 'obvious' with regard to perception of the teachers of secondary education. A mixed reaction of the teachers was observed in remaining 12 statements, 10 of which are negative or unexpected in nature. Of these statements, three fall in pedagogical skills sub-component, four in motivational aspects, two in ethical aspects, and another three in resilience aspects. Table 11.6 provides percentage distribution of teachers by their response regarding level of fitting those statements with them.

Table 11.4
Mean and percentage of scores by sub-components, and institution type

Sub-scales	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Pedagogical skills (Maximum score is 45)	31.3 (69.5)	31.3 (69.5)	31.8 (70.6)	31.1 (69.1)	31.6 (70.2)
Professional development (Maximum score is 25)	23.3 (93.2)	23.4 (93.6)	23.6 (94.4)	23.3 (93.2)	23.5 (94.0)
Motivational aspects (Maximum score is 35)	30.1 (86.0)	28.7 (82.0)	28.9 (85.4)	28.4 (81.1)	29.2 (83.4)
Ethical aspects (Maximum score is 35)	31.5 (90.0)	30.9 (88.3)	31.5 (90.0)	30.0 (85.7)	31.3 (89.4)
Resilience aspects (Maximum score is 35)	28.6 (81.7)	28.3 (80.8)	28.8 (82.2)	28.6 (81.7)	29.0 (82.8)

Table 11.5
Correlation coefficients among various sub-scales

Sub-scales	Pedagogical skills	Professional development	Motivational aspects	Ethical aspects	Resilience aspects
Pedagogical skills	1.00	0.23*	0.26*	0.39*	0.42*
Professional development		1.00	0.16*	0.29*	0.14*
Motivational aspects			1.00	0.33*	0.34*
Ethical aspects				1.00	0.33*
Resilience aspects					1.00

* $p < 0.01$

Table 11.6
Percentage distribution of teachers by their response regarding level of fitting of some selected the statements with them in PTCS

Serial	Statements	Sub-scale	Level of fitting of the statements with the teachers				
			Fully	Partially	Some times	Not exactly	Not at all
3V	I believe that a trained teacher do not need any plan for making teaching-learning effective.	Et	16.2	13.6	9.5	10.1	50.7
4V	I am frustrated about my future as teacher.	Mo	14.4	15.6	10.4	12.2	47.3
8V	I can't tolerate unexpected behaviour of students.	Re	23.1	24.3	22.3	12.7	17.6
10	I am happy with remuneration as teacher.	Mo	17.0	29.8	7.5	19.0	26.5
14V	I am scared about changing demand of my profession.	Re	13.7	24.4	14.4	16.2	31.3
16	I feel me indifferent from my profession.	Mo	65.0	12.0	4.1	3.6	15.3
20V	To make my teaching effective I mostly use lecture method.	Pe	13.8	26.8	32.7	13.6	13.2
23V	I believe, a trained teacher do not need any teaching aid.	Et	8.5	10.7	9.9	9.7	61.3
26V	I think, lecture and discussion are more important than ICT devices in classroom teaching.	Pe	11.0	23.0	21.8	16.8	27.4
28V	I choose teaching because I had no other option.	Mo	10.3	12.0	6.7	14.1	57.0
30V	I believe it is not possible for a teacher to equally treat all students in classroom.	Pe	19.3	32.4	13.5	9.4	25.4
32V	With existing pressure in profession, it is difficult for me to learn new teaching method.	Re	8.9	23.8	14.7	15.0	37.5

Note: Pe = Pedagogical skills, Pr = Professional development, Mo = Motivational aspects, Et = Ethical aspects, Re = Resilience aspects

C. Teachers' satisfaction and PTCS score

Teachers' level of competence has a close connection with their satisfaction with profession, institution and remuneration. It is expected that teachers who are satisfied with various aspects of their work will have higher score than the teachers who are not satisfied. Table 11.7 provides percentage of teachers scored more than mean in PTCS (i.e., highly competent, competent and moderately competent together) against various levels of their satisfaction with profession, institution and remuneration. A positive correlation was observed in each of the three areas. However, the level of significance varied in terms of area of satisfaction. For instance, the relationship of PTCS score was a bit low with satisfaction with remuneration than that with profession and institution. This, however, indicates that teachers' competence matters with their extent of satisfaction.

No statistically significant variation was observed in the level of competency in terms of length of service of the teachers (Annex 11.4). However, proportionately more teachers with a Master's degree assessed them competent or highly competent than those who had a

Table 11.7
Percentage of teachers scored more than mean in PTCS by satisfaction level with profession, institution and remuneration

Level of satisfaction	Area of satisfaction		
	Institution	Profession	Remuneration
Highly satisfied	60.5	61.7	61.5
Satisfied	45.3	51.5	57.2
Somewhat satisfied	49.8	49.4	55.0
Dissatisfied	22.9	44.1	52.4
Level of significance	p<0.001	p<0.001	p<0.05

Bachelor's degree or less education. For instance, 15.3% of the teachers with a Bachelor's degree or less education assessed them competent or highly competent, which was 18.3% among those who had a Master's degree (Table 11.8). The gap slightly increased when the moderately competent teachers were added with them; the proportion of teachers became 55.2% and 59.7%, respectively. The proportion of limited competent or incompetent teachers was higher among those who had a Bachelor's degree or lower education than those who had a Master's degree – 17.1% and 13.6%, respectively.

Grant status of the teachers of the private institutions had a relationship with competency level. Proportionately more grant teachers assessed them as competent or highly competent than the non-grant teachers – 16.2% and 8.5%, respectively (Table 11.9). The proportions increased to 56.4% and 45.1%, respectively when the moderately competent teachers were added with the above. Whereas, 16% of the grant teachers assessed them as limited competent or incompetent, 26.5% of the non-grant teachers did so.

Multivariate regression analysis

A multivariate regression analysis was carried out to predict teachers' level of competency in terms of PTCS score. Total score in PTCS was dichotomously categorized – more than mean and others. This, in other words, at least moderately competent teachers were considered in one category and the remaining (averagely competent and below) in another category. The explanatory variable were institution type, gender of teacher, area of institution, religion, educational qualifications, length of service, elder sibling as teacher, parent as teacher, teaching as aim in life, professional training, subject based training, educational short raining, second occupation, satisfaction with profession, satisfaction with institution, and satisfaction with remuneration. A step wise approach was applied and therefore only the statistically significant variables appeared in the final model.

Of the 16 explanatory variables, only four came out as significant predictors in the final model. These are institution type, area of institution, religion, and satisfaction with institution. The regression model is provided in Table 11.10. Following are the summary of findings.

Table 11.8
Percentage distribution of teachers by competency level and educational qualifications

Competency level	Educational qualifications	
	Bachelor's or below	Master's
Highly competent	0.4	0.4
Competent	14.9	18.1
Moderately competent	39.9	41.2
Averagely competent	27.7	26.7
Limited competent	14.3	9.9
Incompetent	2.8	3.7
Total	100.0	100.0

Table 11.9
Percentage distribution of teachers by competency level and grant status

Competency level	Grant status	
	Grant	Non-grant
Highly competent	0.4	0.0
Competent	15.8	8.5
Moderately competent	40.2	36.6
Averagely competent	27.6	28.4
Limited competent	13.0	19.0
Incompetent	3.0	7.5
Total	100.0	100.0

- The teachers of Government schools, School & Colleges, and senior madrasas were equally likely to express them as competent. Again, the teachers of Non-government schools and Dakhil madrasas were less likely to express them competent than the teachers of the remaining three types.
- Teachers of the rural educational institutions were more likely to express them competent than their counterparts in urban areas.
- The Muslim teachers were less likely to express them competent than those belonging to non-Muslim communities.
- The teachers who were satisfied with their institution were more likely to express them competent in teaching than those who were not satisfied with institution.

Table 11.10
Regression analysis predicting teachers recognizing them at least as moderately competent

Explanatory variables	Regression coefficient	Odds ratio	95% CI of odds ratio
Institution type			
Government	0	1.00	
Non-government	-0.71	0.49**	0.29 – 0.83
School & College	-0.44	0.65	0.36 – 1.16
Dakhil madrasa	-0.85	0.43***	0.25 – 0.73
Senior madrasa	-0.21	0.81	0.47 – 1.40
Area			
Urban	0	1.00	
Rural	0.49	1.63***	1.35 – 1.98
Religion			
Muslim	0	1.00	
Non-Muslim	0.27	1.31**	1.07 – 1.60
Satisfaction: institution			
No	0	1.00	
Yes	0.29	1.34***	1.13 – 1.59
Constant	0.18		
-2 log likelihood	4053.88		
Cox & Snell R ²	0.02		
Nagelkerke R ²	0.03		

*All teachers considered; ***p<0.001, **p<0.01, *p<0.05*

Another model was developed with the same variables, but taking only the teachers of private educational institutions. Aim of this was to see whether grant-status of the teachers play any role in predicting their self-rated competency. Therefore, a variable called grant-status was added in the basket of independent variables. The regression model is provided in Table 11.11. Here too, the same four variables came out as predictors of teachers expressing them competent. The new variable 'grant-status' did not appear in the model. Interpretations regarding area of institution, religion and satisfaction with institution remain the same as above. No statistically significant difference was observed among the teachers of Non-government schools, School & Colleges and Dakhil madrasas in expressing them competent; however, the teachers of senior madrasa were more likely to express them competent than those of remaining three types of private institutions.

Note that the predictive variables explained only a small portion of the variation in the dependent variable – as was observed in both the models.

Epilogue

Teaching is a socially significant profession in this sub-continent and it is highly regarded as a noble profession in the society. However, this respect is not practically appreciated by all due to the financial and power status of the profession. For that reason, very few of the college and university graduates consider

the profession as their top ranking choice. The job seekers' last choice is teaching but females are the exception in this case because large majority of the female teachers are found to accept the profession as their chosen field of work because of its limited work load and non-transferable nature. Female teachers also get priority for teaching in the primary level school as well. Therefore, female teachers are more sanguine to remain in this profession and value all the skills in teaching though they have limitation in achieving these skills with competence. Female teacher have to look after their kids and family and remain busy with household work besides teaching. Still female teachers take their profession to some serious extent and demonstrate a better position in the scale of teaching competence.

Table 11.11
Regression analysis predicting teachers recognizing them at least as moderately competent

Explanatory variables	Regression coefficient	Odds ratio	95% CI of odds ratio
Institution type			
Non-government	0	1.00	
School & College	0.27	1.31	0.93 – 1.84
Dakhil madrasa	-0.15	0.86	0.70 – 1.07
Senior madrasa	0.50	1.65***	1.28 – 2.12
Area			
Urban	0	1.00	
Rural	0.49	1.63***	1.31 – 2.02
Religion			
Muslim	0	1.00	
Non-Muslim	0.27	1.31*	1.05 – 1.64
Satisfaction: institution			
No	0	1.00	
Yes	0.29	1.34**	1.11 – 1.62
Constant	-0.53		
-2 log likelihood	3245.39		
Cox & Snell R ²	0.02		
Nagelkerke R ²	0.03		

*Only the teachers of private institutions considered; ***p<0.001, **p<0.01, *p<0.05*

Chapter 12

Involvement in Private Supplementary Tutoring and Use of Guidebooks

Key Findings

Overall, 22.4% of the teachers reported to engage themselves in private supplementary tutoring. They, on average, tutored 23.3 students. The major portion of the tutees (53.8%) was the teachers own school students.

Teachers' homes were most frequently used for providing private tutoring where 15.4% of the teachers offered this service. Among other places 7.2% of the teachers provided tutoring at students' homes, 2.8% at schools using classrooms, and 0.8% at coaching centres. Some teachers provided tutoring services at multiple places.

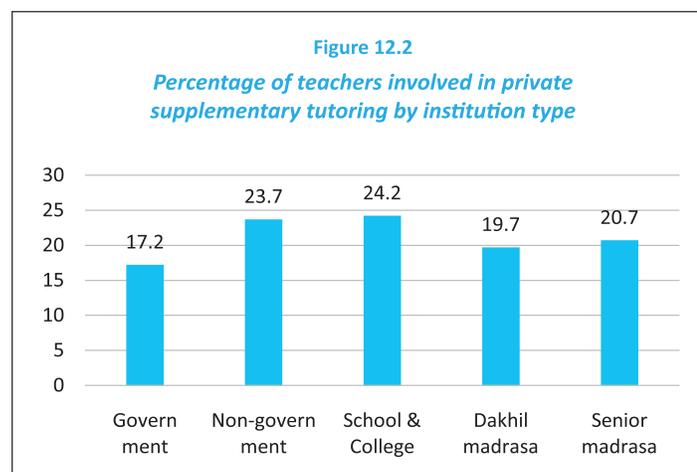
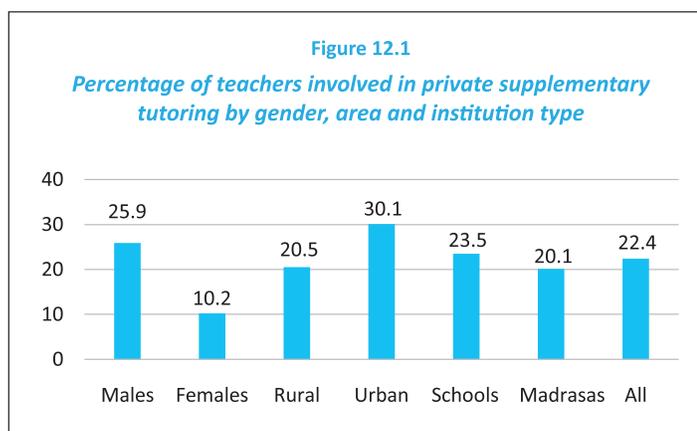
Overall, 37.1% of the teachers were using guidebooks. They used guidebooks for English and Mathematics in all secondary grades, Physics, Chemistry and Higher Mathematics in grades IX and X, and Arabic throughout the school years in madrasas.

Rampant use of guidebooks instead of textbooks, and practice of private supplementary tutoring are major challenges for educational development in Bangladesh. Use of guidebooks underestimates the significance of textbooks use, and the private supplementary tutoring does so for the classroom teaching. Both have financial implications as well. Students' use of these are already portrayed in previous *Education Watch* reports, but teachers' involvement in these practices are explored in this study for the first time. This chapter provides information on these with regard to institution type, gender and area; and identifies factors predicting teachers' engagement in these.

A. Private supplementary tutoring

In addition to classroom teaching as per routine and additional teaching in educational institutions, the secondary teachers engage themselves in private supplementary tutoring. It is by definition follows the same curriculum of educational institutions, may take place anywhere suitable to tutors and tutees, and more importantly is provided in exchange of financial benefits for the tutors (Bray 2003). Previous *Education Watch* studies and others reported existence of it among the students of pre-primary to secondary education (Nath 2008; Nath et al. 2008; 2014).

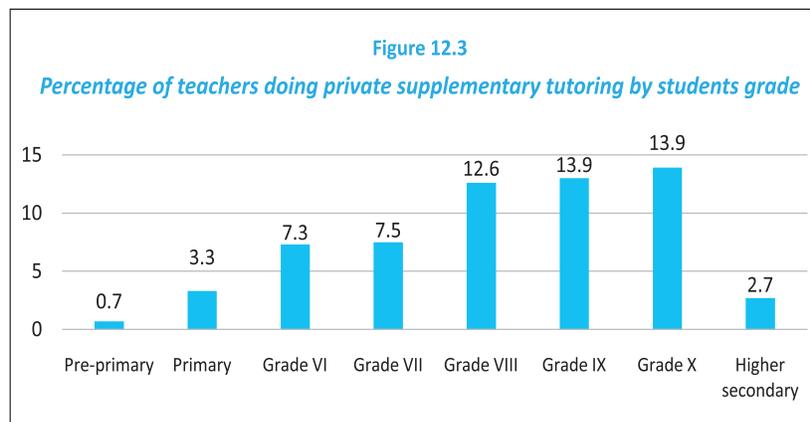
Although there may be a tendency to hide information, overall, 22.4% of the sampled teachers acknowledged that they were engaged in providing supplementary tutoring privately (Figure 12.1). The tendency to provide private supplementary tutoring was more among the male teachers than among females (25.9% versus 10.2%; $p < 0.001$). Proportionately more teachers of the urban educational institutions were in this business compared to those in rural areas (30.1% versus 20.5%; $p < 0.001$). Whereas, 23.5% of the teachers of the schools provided private supplementary tutoring, it was 20.1% among the teachers of madrasas ($p < 0.05$). The teachers of the School & Colleges were at the top with 24.2% of them providing private supplementary tutoring (Figure 12.2). The Non-government school teachers secured the second position with 23.7% of them doing so. This was 17.2% among the teachers of Government schools, 19.7% among those of Dakhil madrasas, and 20.7% among those of senior madrasas.



The teachers who were providing private supplementary tutoring belonged to two-thirds of the educational institutions under study. Such school teachers belonged to 68.9% of the institutions and madrasa teachers belonged to 62.5% of the institutions. Teachers of 64% of rural and 79.2% of urban institutions provided private supplementary tutoring. This figure was 48.3% among Government schools, about 70% among Non-government schools and School & Colleges, 63.3% among Dakhil and 60.8% among senior madrasas.

The teachers did not confine themselves in providing private tutoring to the students of secondary education only. Along with secondary level students, 0.7% of them provided it to pre-primary students, 3.3% provided it to primary level students, and 2.7% to higher secondary level students (Figure 12.3). Whereas, the teachers of urban institutions and those of madrasas were more likely to privately tutor to the students of pre-primary and primary levels than their respective counterparts (Annex 12.1). Proportionately more urban teachers also did so with the higher secondary level students. The teachers of Dakhil madrasas were more likely to provide private tutoring to the pre-primary and primary students, it was the teachers of School & Colleges who were more likely to do so with the students of higher secondary level (Annex 12.2). Proportion of teachers privately tutored increased with the increase of grades of the students. For instance, 7.3% of the teachers provided private tutoring to the students of grade VI, 7.5% to the students of grade VII, 12.6% to the students of grade VIII, 13% to those of grade IX, and 13.9% to those of grade X (Figure 12.3).

The number of students receiving private supplementary tutoring during the teacher survey varied substantially from one teacher to another. The mean was 23.3 per teacher with a standard deviation of 31.2 and range 1-230 (Table 12.1). A higher standard deviation than the mean signifies the extent of variation among the teachers in taking private



tutees. The coefficient of variation shows it to be about 34% higher than mean. The male teachers, on average, were providing tutoring support to 24.5 students and female teachers tutored 12.4 students. This was 25.6 students for the teachers of rural institutions and 16.6 students for those of urban institutions. Whereas, each madrasa teacher was providing private tutoring to 16.5 students, the school teachers were providing it to 26.2 students. The mean number of students receiving private tutoring from the teachers of three types of secular educational institutions were close to each other – from 25% to 26.5%; however, the institutions varied in terms of standard deviation and therefore coefficient of variation. The variation in number of students was the highest among the teachers of Non-government schools followed by those of School & Colleges and Government schools, respectively. The mean number of tutees was 18.1 for the teachers of senior madrasas and 15.4 for those of Dakhil madrasas with coefficient of variation 147.5 and 112.3, respectively. The standard deviation of number of tutees per teacher was higher than mean was observed in most of the above cases (Table 12.1).

The distribution of tutees by grade is provided in Annex 12.3. It shows that 9.1% of them were of grade VI, 9.6% were of grade VII, 23.1% were of grade VIII, 22.1% were of grade IX, and 28.7% were of grade X. Among others, 4.1% of the tutees were of pre-primary or primary grades and 3.3% were of higher secondary grades.

The teachers provided private supplementary tutoring at four different places. These include teachers' house, tutees' house, coaching centre, and classroom in school. The teachers' house was the most popular place with 15.4% of the teachers doing it there (Table 12.2). Among others, 7.2% of the teachers tutored at tutees' house, 0.8% in coaching centres, and 2.8% in schools. It seems that total of the above figures exceeds the proportion of teachers involved in private supplementary tutoring. This happened because a section of the teachers provided private supplementary tutoring in multiple places. No variation was observed in this distribution with regard to gender, area or type of educational institution (Annex 12.4).

Table 12.1
Number of tutees receiving private supplementary tutoring by teacher groups

Teacher groups	Mean	Standard deviation	Range	Coefficient of variation
Government	25.5	28.3	1 – 200	111.0
Non-government	26.3	35.2	1 – 220	133.8
School & College	25.0	24.0	1 – 135	96.0
Dakhil madrasa	15.4	17.3	1 – 90	112.3
Senior madrasa	18.1	26.7	1 – 230	147.5
Males	24.5	32.5	1 – 230	132.6
Females	12.4	10.1	1 – 41	81.5
Rural institutions	25.6	34.6	1 – 230	135.2
Urban institutions	16.6	16.6	1 – 200	100.0
Schools	26.2	34.0	1 – 220	129.8
Madrasas	16.5	21.8	1 – 230	132.1
All	23.3	31.2	1 – 230	133.9

Table 12.2
Distribution of teachers and tutees by place of private supplementary tutoring

Place of private tutoring	Percentage of teachers provide tutoring	Percentage distribution of students	Percentage share of own school students
Teacher's home	15.4	62.0	51.7
Student's home	7.2	7.5	35.7
Coaching centre	0.8	13.0	27.1
School	2.8	17.5	88.9
Total	22.4	100.0	53.8

The most popular place of private supplementary tutoring, in terms of number of tutees, was the teachers' house as 62% of them received it there (Table 12.2). This was followed by the classrooms of educational institutions where 17.5% of the tutees were served. Among others, 13% of the tutees were served in coaching centres and 7.5% in tutees' house. Providing private tutoring at teachers' house was prominent among the teachers of each type of educational institutions (Annex 12.5). The teachers of Non-government schools and the School & Colleges were ahead of the others in providing tutoring in the classrooms of their institutions with over 19% of the tutees serving there. Whereas, the male teachers provided private tutoring to 60.8% of their tutees at their own homes, it was 82.9% in the case of female teachers. Again, the tendency to do so in the coaching centres was observed only among the male teachers. The teachers of urban educational institutions were also more likely to provide private supplementary tutoring in the coaching centres than the teachers of rural institutions.

The teachers acknowledged that a section of their tutees were their own students whom they were supposed to teach in the classrooms. Proportion of such students was 53.8% at the aggregated level (Table

12.2). A large portion of the private tutees, who were taught in the classrooms of teachers educational institutions, were their own students (88.9%). This was 51.7% among those who were taught at teachers' homes, 35.7% among those who were taught at students' homes, and 27.1% among those who were taught in coaching centres.

Teaching own students in the capacity of private supplementary tutoring was observed more among the female teachers than the males (59.8% versus 53.4%; $p < 0.001$), among the teachers of urban educational institutions than those of rural areas (59.7% versus 52.4%; $p < 0.001$), and the teachers of schools than those of madrasas (55% versus 50.5%; $p < 0.001$) (Figure 12.4). The Government school teachers were ahead of all others in providing private tutoring to their own students followed by those of Non-government schools, Dakhil madrasas, School & Colleges, and senior madrasas, respectively (Figure 12.5).

Teachers' involvement in additional teaching in school and private tutoring was analysed together. It was observed that 21.4% of the teachers were involved in additional teaching but not in private tutoring, 10.8% in private tutoring but not in additional teaching, 11.5% in both, and 56.3% none (Figure 12.6). Involvement in none of the two activities was more among the females, rural teachers and madrasa teachers than their respective counterparts (Annex 12.7). It was highest among the teachers of Government schools (66.5%)

Figure 12.4

Percentage share of own school students in private tutoring offered by the teachers by gender, area and institution type

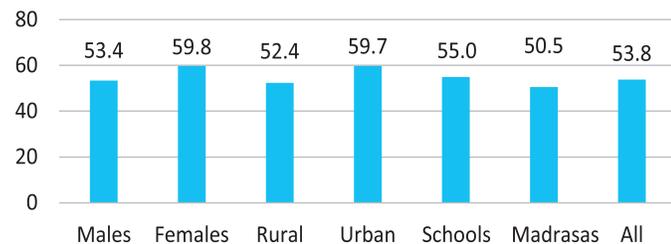


Figure 12.5

Percentage share of own school students in private supplementary tutoring offered by the teachers by institution type

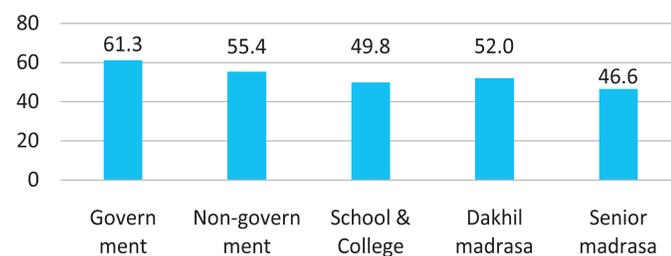
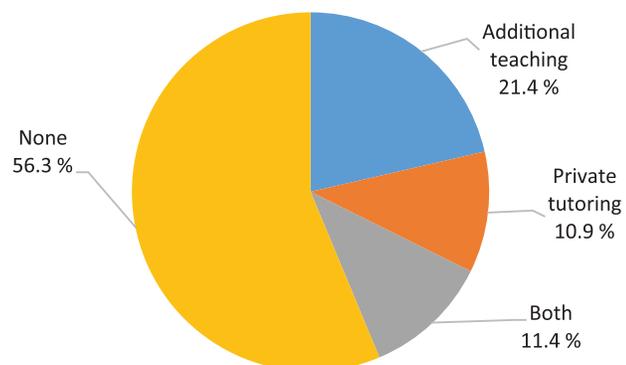


Figure 12.6

Percentage distribution of teachers by their involvement in additional teaching and private supplementary tutoring



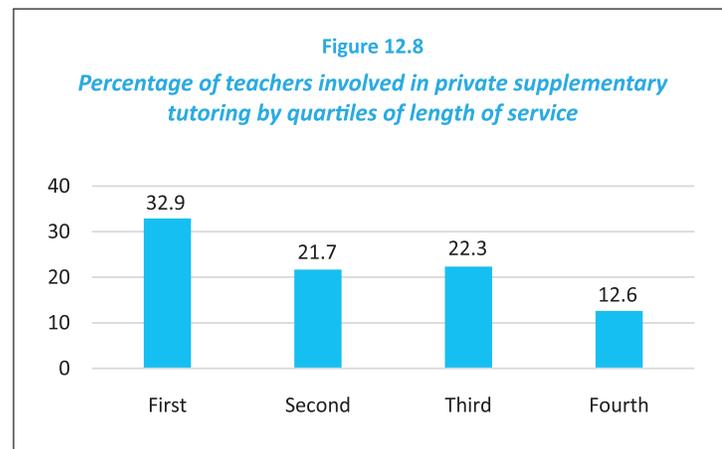
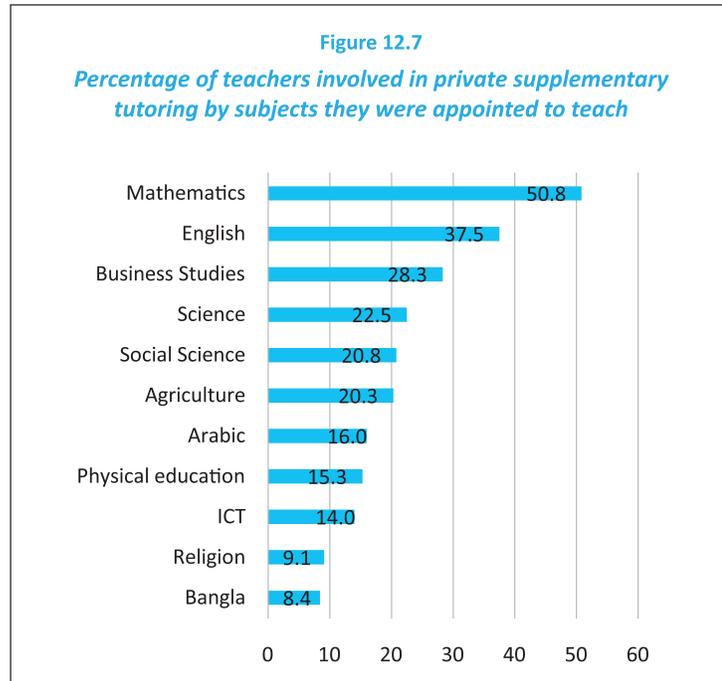
followed by those of senior (61.5%) and Dakhil (60.0%) madrasas, respectively. It was least among the teachers of School & Colleges (49%).

The Mathematics teachers were at the top in providing private supplementary tutoring. A half of these teachers were engaged in private supplementary tutoring. They were followed by English teachers (37.5%). Among others, 28.3% of the teachers of Business Studies, 22.5% of those of Science, 20.8% of those of Social Sciences, 20.3% of those of Agriculture, and 16% of those of Arabic were also providing private supplementary tutoring. A small proportion of the physical education or ICTs teachers were also engaged in this. They were 15.3% and 14% of the respective teacher groups.

Teachers' involvement in private supplementary tutoring was cross tabulated with their length of service. A statistically significant variation was observed in this ($p < 0.001$). The younger teachers, belonging to the first quartile in terms of service length, were most likely to involve with private tutoring with about a third of them doing so (Figure 12.8). This rate was 21-22% among the teachers belonging to middle two quartiles of teachers (50%), and 12.9% among the elder quartile. Separate analysis by gender, area and institution type also produced a similar result (Annex 12.8).

Multivariate regression analysis

Similar to the previous chapters, a multivariate regression analysis was carried out. Here, the predicting variable was teachers' involvement in private supplementary tutoring. Aim was to identify the predicting factors of private supplementary tutoring. The dependent variable was therefore dichotomously categorized – involved in private tutoring and not involved. The independent variables were: institution type, area of



institution, gender of teachers, religion, parent as teacher, elder sibling as teacher, aim in life as teacher, service length, availing professional training, availing subject based training, availing educational short courses, and teachers educational qualifications. A stepwise approach was followed and the final model considered only the statistically significant factors.

The final model is provided in Table 12.3. Of the 12 independent variables, seven came out in the model. These are: institution type, area of institution, gender of teacher, service length, availing professional training, availing subject based training, and availing educational short courses. These variables collectively explained 15% of the variations in the dependent variable (Nagelkerke statistic). Following are the findings from this analysis.

- Of the five types, the Government school teachers were least likely to provide private supplementary tutoring and those of School & Colleges the most. The teachers of two types of madrasas were equally likely in this case. The position of Non-government schools was in between School & Colleges and the madrasas.
- The male teachers and those from the urban educational institutions were more likely to provide private supplementary tutoring than their respective counterparts.
- A negative relationship was observed between length of service and providing private supplementary tutoring. The youngest group of teachers belonging to the first quartile with regard to service length were most likely to involve in private tutoring than others.
- Teachers with professional and subject based training were more likely to involve in private supplementary tutoring than those who had no such training. On the other hand, an opposite scenario was observed in the case of having educational short courses.

Table 12.3
Multivariate regression analysis predicting teachers' offer of private supplementary tutoring

Predictors	Regression coefficients	Odds ratio	95% CI for odds ratio
Institution type			
Government	0	1.00	
Non-government	1.11	3.03**	1.52 – 6.01
School & College	1.01	2.75**	1.29 – 5.85
Dakhil madrasa	0.86	2.35*	1.15 – 4.82
Senior madrasa	0.85	2.34*	1.14 – 4.79
Area			
Rural	0	1.00	
Urban	0.82	2.28***	1.81 – 2.87
Gender			
Females	0	1.00	
Males	1.56	4.78***	3.61 – 6.34
Service length (quartiles)			
First	0	1.00	
Second	-0.63	0.53***	0.42 – 0.68
Third	-0.85	0.43***	0.33 – 0.55
Fourth	-1.62	0.20***	0.15 – 0.26
Professional training			
No	0	1.00	
Yes	0.46	1.59***	1.27 – 1.98
Subject based training			
No	0	1.00	
Yes	0.25	1.29*	1.02 – 1.63
Educational short training			
Yes	0	1.00	
No	0.54	1.72***	1.34 – 2.20
Constant	-3.60		
-2 Log likelihood	2883.16		
Cox & Snell R ²	0.10		
Nagelkerke R ²	0.15		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Reasons of private supplementary tutoring

Private supplementary tutoring has gradually become an inseparable part of education culture in Bangladesh. Over the years, a number of factors contributed behind the growth of private supplementary tutoring. The teachers have explained the reasons themselves.

In-depth interviews with the teachers revealed that intention to earn more for living, which they described as their 'financial scarcity', played the most vital role in their engagement in private supplementary tutoring. A group of teachers, mostly from the private educational institutions (School & Colleges and Dakhil madrasas) reported that the salary and benefits they were obtaining from the institutions were not sufficient for running their families. Therefore, they became the providers of private supplementary tutoring for some additional income. 'Majority of the Science teachers including me are involved in private tutoring. I cannot maintain my family with the salary I draw from my school. Thus, I have to engage in private tutoring' – said a Chemistry teacher of a School & College in Sylhet.

Teachers' intention to provide private supplementary tutoring has increased remarkably when a social demand for this was created beside their financial need. The participant teachers reported that the students as well as their parents sometimes put pressure on them for tutoring privately; especially when the students approached to public examinations at grades VIII and X – the request increased dramatically. Emphasising this point, an Arabic teacher of a senior madrasa in Rajshahi stated that 'the teachers of our madrasa usually do not provide private tutoring. However, the students of grades VIII, IX and X sometimes request us for private tutoring.' With this regard, a Mathematics teacher of a Dakhil madrasa in Barishal said, 'the students and their parents came and requested me so strongly that I could not say no. This also helps me in maintaining my family.'

Some of the teachers, however, shared their experiences by saying that 'not from any educational needs but from social pressure' a section of the students avail private tutoring. According to them, private tutoring was a common trend among students and some of them considered it as a fashion and somehow they became stuck with an understanding that without private tutoring they would not be able to do well in examinations. A Biology teacher of a School & College in Barishal with this regard mentioned that 'sometimes the students request their teachers for private tutoring so passionately that the teachers cannot deny them. Moreover, nowadays students have an attitude that they must avail private tutoring. Otherwise, they would not be able to pass the examination with good scores.' This also indicates that because of availing private tutoring they lost their confidence and strength.

A section of the interviewed teachers highlighted that the classroom teaching-learning culture has a role in promoting the culture of private tutoring. They justified this by saying that private tutoring is essential in present Bangladeshi culture because the students do not learn from the classrooms. They however, blamed large class sizes and insufficient duration of the lesson period. An assistant teacher of a Dakhil madrasa in Mymensingh said the following in favour of his argument:

I think private tutoring is essential because we have to deal with a large number of learners in the regular classrooms. As a result quality of classroom teaching is vulnerable. If special classes and private tutoring are not there then the weaker students would fail in examinations and the number of dropped out learners would increase.

A Chemistry teacher of a Government school also agreed with the above statement. However, majority of the teachers thought that students would not require any support of private supplementary tutoring if they remain attentive to their regular classes in their own educational institutions.

Teachers' perception on private tutoring

The participant teachers viewed private tutoring from various perspectives. Their beliefs and thoughts on private tutoring created scope to analyse it into many particles. These are discussed in the following paragraphs.

Most of the teachers participating in in-depth interviews had an understanding that classroom was the main place for teaching-learning and the teachers' primary role was to ensure learning of the students in classrooms. As they said, the culture of private tutoring was not ethically acceptable to them. They perceived the growth of private tutoring as a weakness of the education system. Some of the respondents practiced private tutoring before, but due to a fear of losing dignity and to avoid the legal punishment they stopped it. For instance, a Mathematics teacher of a Government school in Sylhet said, 'once I was involved in private tutoring but no more now. Government has forbidden this. This is a crime now. Thus, I do not practice this. It may spoil my dignity if I do it.' An Arabic teacher of a Dakhil madrasa in Barishal believed that teaching philanthropically would enhance teachers' dignity but charging money for this may spoil their honour.

In terms of teaching-learning process of private tutoring, a group of teachers, mostly belonging to the Government schools said that this is highly suggestion based teaching and therefore, shows students a short-cut way of passing examination where actual learning does not take place. To explain the impact of private tutoring in regular classrooms, an English teacher of a senior madrasa reported that students do not value the routine classes. In this aspect he stated, 'because of private tutoring, students nowadays do not pay attention to the routine classes as they know that they would be taught the same topic in the private tutoring too.' With grief he also said, 'if a student pays attention to the routine classes s/he would never require any private tutoring.'

Comparing the quality of teaching-learning process in the routine classes in schools and in private tutoring a number of teachers, mostly from the School & Colleges and Dakhil madrasas, gave their judgement by saying that it was better in private tutoring for a few reasons. In private tutoring, teachers deal with a small group of students and therefore can pay attention to the students individually. Highlighting some benefits of private tutoring a teacher of History from a School & College in Barishal said,

If a student cannot understand the lessons from the routine and special classes then private tutoring might help them. In private tutoring, teacher deals with a small number of students. Therefore, they can interact in one-to-one basis. Students also feel shy to ask questions to the teacher in a routine class consisting 70-80 students. In private tutoring, they can ask questions to the teacher freely and can discuss their problems for longer time, which is not the case in regular classrooms.

However, a large group of teachers thought that it would not be a problem if there was no private tutoring. A student can do well following the routine classes only but for this, efforts would have to be given from the students' side, and their parents and teachers equally. A teacher of Aakaid and Fikah in a senior madrasa in Dinajpur stated,

It will be difficult to prepare the students well for the examinations if there is no provision of private tutoring and special classes, but it is possible to do well based on the routine classes too. For this, the students, teachers and the guardians would have to think alike. Parental awareness is important.

Moreover, the financial reward obtained from the private tutoring boosted teachers' motivation to work hard. In this point a teacher of Islam and Moral Education in a School & College in Barishal said, 'quality of teaching-learning is better in private tutoring for two reasons – teachers earn more money within a short

period and to sustain the business they give the best effort.’ The head teacher and the Mathematics teachers of a government high school in Sylhet and a Mathematics teacher of a Dakhil madrasa in Barishal also said in a similar way. A group of teachers from a School & College believed that through private tutoring, teacher could earn more money in a shorter time. Therefore, they were reluctant to give much effort for the routine classes.

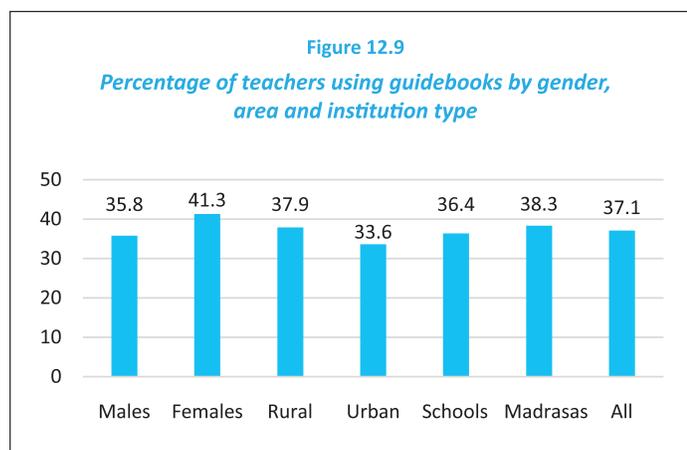
The above discussion clearly shows that a financial relationship between the parents and the teachers has been established because of private tutoring. According to a Bangla teacher of a Government school in Sylhet, this financial relationship increased pressure on both the groups and surprisingly they became serious about students’ learning, which added additional pressure upon the students.

Finally, it is understood that a complex interaction among students, teachers and parents were taking place putting private supplementary tutoring at the centre. Most of the teachers reported that if private supplementary tutoring was stopped it would not have any effect on school life, but the parents would not accept it. According to the teachers private teaching got sustainability in the society because of the parental support. Though the interviewed teachers’ were found confident about the quality of teaching-learning provisions in the educational institutions, the parents were not. Thus, they promoted private teaching and a group of teachers especially those who taught subjects like English and Mathematics were taking advantage of this as an opportunity. Therefore, the teachers concluded that to eradicate private supplementary tutoring from the education system a collective effort would have to be there from the parents, students and teachers.

B. Use of Guidebooks

The government provides free textbooks to all secondary level students irrespective of their identity. The educational institutions get a few sets of free textbooks for teachers use. The National Curriculum and Textbook Board (NCTB) also prepares teacher guides for each of the subjects to distribute among the teachers. In addition to hard copies, soft copies of both are available in the website of NCTB. In the name of supplementary material, a number of independent private publishers have been publishing guidebooks against each of the textbooks for long. The guidebooks provide probable questions likely to appear in examination situation on each of the chapters and their ready answers. Therefore, the students do not need to think much to have answers; the only requirement is the capacity of memorization. A section of both the teachers and the students find these helpful for their respective tasks. Intensity of guidebooks use among the students and teachers was explored in a few studies on primary education (Nath et al. 2015; Nath 2018). No such information is available in secondary education. An attempt was therefore made here to explore secondary teachers’ use of guidebooks.

Overall, 37.1% of the teachers reported that they have used guidebooks to prepare for classroom activities (Figure 12.9). The female teachers were more likely to use guidebooks than the male teachers (41.3% versus 35.8%; $p < 0.01$).

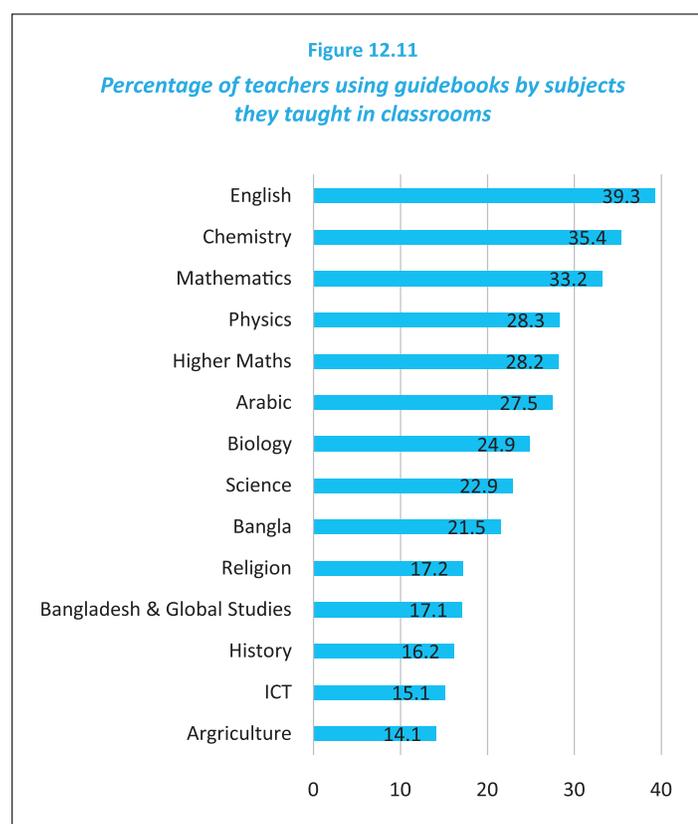
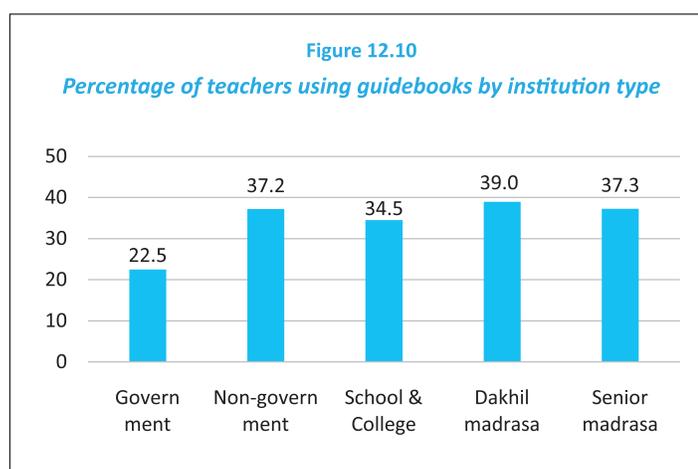


No such difference was observed with regard to area and broad type of institution. It was observed that 37.9% of the teachers of rural and 33.6% of those of urban educational institutions used guidebooks. Again, 36.4% of the school teachers and 38.3% of the madrasa teachers also fall in this category. The teachers of the Government schools were significantly less likely to use guidebooks than others ($p < 0.01$) (Figure 12.10). Whereas, 35-39% of the teachers of the other type of institutions used guidebooks, it was only 22.5% among the teachers of Government schools.

Institution wise analysis shows that the teachers of 79% of the institutions under study used guidebooks with no difference by area or broad type of institution. Teachers of about 80% of the Non-government schools and Dakhil madrasas, 77.5% of senior madrasas, 75% of School & Colleges, and 53.3% of the Government schools used guidebooks.

The proportion of teachers using guidebooks increased with the increase of grade at which they offer teaching. For instance, it was 21-22% among those who taught in grade VI and VII, 24.1% among those who taught in grade VIII, and over 28% among those who taught in grade IX and X (Annex 12.9).

An analysis was carried out to know the subjects for which the teachers used guidebooks. Use of guidebook was popular to those teachers who were teaching English and Mathematics throughout the secondary grades. Overall, 39.3% of the English teachers and 33.2% of the Mathematics teachers used guidebooks (Figure 12.11). Nearly 23% of the Science teachers, 21.5% of the Bangla teachers and 17.1% of those teaching Bangladesh & Global Studies used guidebooks throughout the secondary grades. A section of the teachers teaching Religion, ICT or Agriculture also used guidebooks irrespective of grades. Guidebooks on Chemistry, Physics and Higher Mathematics were added to the above



for those who teach in grades IX and X (Annex 12.9). Proportion of teachers used guidebooks for these subjects were 35.4, 28.3 and 28.2%, respectively. These were accompanied by Biology (24.9%) and History (16.2%). It was the Arabic for which the madrasa teachers used guidebooks throughout secondary grades. Overall, 27.5% of the teachers who taught Arabic were using guidebooks.

Nearly 42% of the teachers belonging to the first quartile in terms of length of service have reported to use guidebooks (Figure 12.12). This was 37.5% among those belonging to the second quartile, 34.2% among those

to third quartile, and 35.9% among those to the fourth quartile ($p < 0.001$). Separate analysis by gender, area and institution type produced different results for different groups of teachers (Annex 12.10). For instance, the proportion of teachers using guidebooks varied with the variation in service length for male teachers, teachers of rural educational institutions and those in schools. However, no significant variation was observed for females, teachers of urban educational institutions and the madrasa teachers.

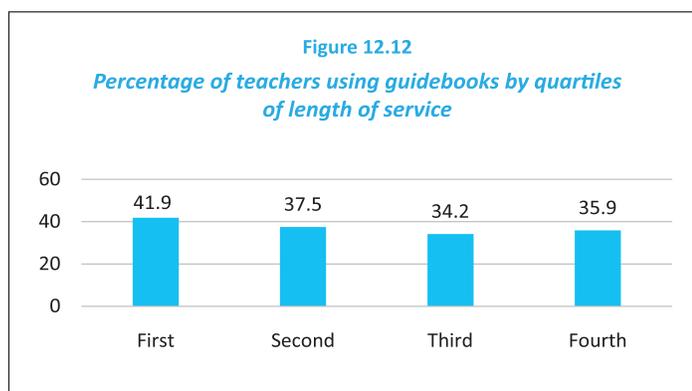


Table 12.4
Multivariate regression analysis predicting teachers' use of guidebooks

Multivariate regression analysis

A multivariate regression analysis was carried out to find out the variables predicting teachers' use of guidebooks. The dependent variable was dichotomously categorized – used guide books and did not use. The independent variables were: institution type, area of institution, gender of teachers, religion, parent as teacher, elder sibling as teacher, aim in life as teacher, service length, availing professional training, availing subject based training, availing educational short courses, and teachers educational qualifications. A stepwise approach was followed and the final model considered only the statistically significant factors.

The final model is provided in Table 12.4. Of the 12 independent variables, five came out in the model. These are: gender of teacher, religion, parent as

Predictors	Regression coefficient	Odds ratio	95% CI for odds ratio
Gender			
Males	0	1.00	
Females	0.22	1.24*	1.04 – 1.49
Religion			
Non-Muslim	0	1.00	
Muslim	0.26	1.29**	1.06 – 1.58
Parent as teacher			
Yes	0	1.00	
No	0.28	1.33*	1.04 – 1.68
Service length (quartiles)			
First	0	1.00	
Second	-0.22	0.80*	0.65 – 0.99
Third	-0.37	0.69***	0.56 – 0.86
Fourth	-0.26	0.77**	0.62 – 0.95
Subject based training			
No	0	1.00	
Yes	0.29	1.34**	1.11 – 1.61
Constant	-1.05		
-2 Log likelihood	3931.08		
Cox & Snell R ²	0.01		
Nagelkerke R ²	0.02		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

teacher, service length, and availing subject based training. These variables collectively explained only 2% of the variations in the dependent variable (Nagelkerke statistic). Following are the findings from this analysis.

- Female teachers and those belonging to Muslim community were more likely to use guidebooks than their respective counterparts (male teachers and non-Muslims respectively).
- Teachers with parents as teachers were more likely to use guidebooks than those who had no parent as teacher.
- The teachers belonging to the first quartile in terms of length of service were more likely to use guidebooks than those who had longer service length.
- Teachers having subject based training were more likely to use guidebooks than those who did not receive such training.

Chapter 13

Knowledge on National Education Policy, Secondary Curriculum and SDG 4

Key Findings

The teachers, in general, had no clear idea about the important national and international documents which have direct implications on educational development in the country. They seem to have not been able to differentiate among the documents.

Of the teachers, 85.5% knew that Bangladesh had a National Education Policy (NEP), 63.1% claimed to have read the policy; however, only 40.6% could state the correct year of introducing NEP.

Eighty-six percent of the teachers knew about the existence of a national curriculum for secondary education, and 62.4% claimed to have read it. While asked, 43.1% of the teachers could say correctly the objectives of national secondary curriculum and 18.5% could say the year of latest modification of curriculum.

Two-fifths of the teachers claimed that they have heard about Sustainable Development Goals (SDGs), but only 5.5% knew under whose leadership the SDGs were formed. Less than 5% of the teachers were aware about various details of the SDGs.

This chapter provides information on the teachers' knowledge on three specific issues relevant to the delivery of quality education. The issues include national education policy, national secondary education curriculum, and Sustainable Development Goals (SDGs). The data were firstly analysed by gender, area of institution and institution type, and then with regard to a number of characteristics of the teachers. Multivariate regression analysis was also performed for better understanding of variation among the teachers with these regards.

A. National Education Policy

Although the country has seen ten education commissions to prepare National Education Policy, many of these initiatives could not be materialised. The latest education policy came into being in 2010 after endorsement by the *Jatiya Sangsad* (the National Parliament). The Ministry of Education published the policy in Bangla and English languages, and the policy is also made available in its website. As it is the national guideline for development of all levels of education, it was expected that the teachers of secondary education would be fully aware of it. However, this was not the case. On average, 85.5% of the teachers in the sample knew about the existence of a National Education Policy, 63.1% claimed to have read it, and 40.6% could say the year of its introduction (Figure 13.1).

On average, 85.5% of the teachers knew that Bangladesh has a written education policy, 4.2% knew that there is no written policy for education, and 10.1% was confused about its existence. The proportion of teachers knowing about existence of a written education policy was significantly more among the males than the females (87.6% versus 78.4%; $p < 0.001$) (Table 13.1). Although, no such difference was observed between the teachers of rural and urban educational institutions; the school teachers were significantly ahead of their counterparts in the madrasas in knowing the existence of a National Education Policy (87.1% versus 82.4%; $p < 0.001$).

A statistically significant variation existed in this with regard to type of educational institution (Table 13.2). The teachers of the Government schools were ahead of all others with 94% of them knowing about existence of the National Education Policy followed jointly by those of

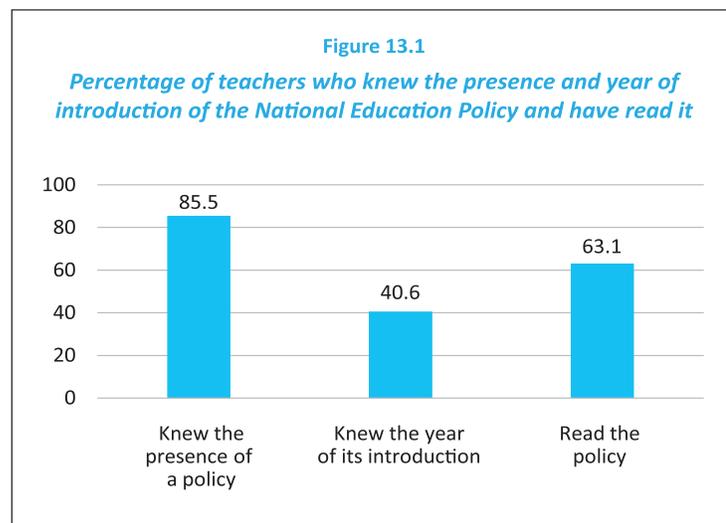


Table 13.1
Percentage of teachers who knew the presence and year of introduction of National Education Policy and have read it by gender, area and institution type

Aspects	Gender		Area		Institution type	
	Males	Females	Rural	Urban	Schools	Madrasas
Knew the presence	87.6	78.4	85.5	85.3	87.1	82.4
Significance	p<0.001		ns		p<0.001	
Knew the year	42.9	32.8	41.2	38.0	43.1	35.7
Significance	p<0.001		ns		p<0.001	
Have read the policy	65.7	54.1	63.1	63.1	66.0	57.5
Significance	p<0.001		ns		p<0.001	

Note: ns = not significant at $p = 0.05$

Non-government schools and School & Colleges (86.8% each). They were followed by the teachers of senior and Dakhil madrasas respectively (83.7% and 81.5%, respectively).

The teachers were found very confused about the year in which the National Education Policy was endorsed. Two-fifths of those who knew about existence of the policy

reported that they did not know the year. The others reported any of the years from 1971 to 2018. Although the correct answer was 2010, 2.2% of the teachers reported a year before this and 10.1% reported a year after this. Therefore, 47.5% of the teachers who knew about existence of the policy, could mention the year correctly. They were 40.6% of the teachers under study.

Proportionately more male teachers knew the year of endorsement of the education policy than the female teachers with a difference of 10 percentage points (42.9% versus 32.8%; $p < 0.001$) (Table 13.1). No statistically significant difference was observed with this regard, between the teachers of rural and urban educational institutions. However, the school teachers were ahead of their counterparts in the madrasas, in knowing this, with a difference of 7.4 percentage points (43.1% versus 35.7%; $p < 0.001$).

The teachers of the Government schools were much ahead of the others with over three-fifths of them knowing the year of endorsement of education policy (Table 13.2). This figure was almost equal among the teachers of the other two types of schools with a gap of 22 percentage points (Non-government 42.5%, School & College 42.3%). Thirty-seven percent of the teachers of senior madrasas and 34.7% of those of Dakhil madrasas knew the year correctly.

Sixty-three percent of the teachers claimed that they have read a section or the full policy on paper or from the Ministry's website (Table 13.1). They were 65.7% among the males and 54.1% among the females ($p < 0.001$). No statistically significant difference was observed by area of institution, but the school teachers were ahead of the madrasa teachers with a statistically significant margin (66% versus 57.5%; $p < 0.001$).

The Government school teachers were much ahead of the others with 78.8% of them reading the National Education Policy (Table 13.2). Although, no difference was observed between the teachers of Non-government schools and School & Colleges, they were about 13 percentage points behind the Government school teachers. This was 59.8% among the teachers of senior madrasas and 55.8% among those of Dakhil madrasas.

Not much variation was observed between the assistant heads of institutions and the assistant teachers in knowing the presence of the National Education Policy and reading it, but the head of the institutions were ahead of them on both the issues (Table 13.3). On the other hand, no difference was

Table 13.2

Percentage of teachers who knew the presence and year of introduction of National Education Policy and have read it by institution type

Aspects	Institution type					Level of significance
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Knew the presence	94.0	86.8	86.8	81.5	83.7	$p < 0.001$
Knew the year	60.5	42.5	42.3	34.7	37.0	$p < 0.001$
Have read the policy	78.8	65.5	65.8	55.8	59.8	$p < 0.001$

Table 13.3

Percentage of teachers who knew the presence and year of introduction of National Education Policy and have read it by designation of teachers

Aspects	Designation			Level of significance
	Head of institution	Assistant head of institution	Assistant teacher	
Knew the presence	93.2	86.2	85.0	$p < 0.02$
Knew the year	50.0	50.0	39.3	$p < 0.001$
Have read the policy	86.3	61.9	61.8	$p < 0.001$

observed between the heads of institutions and their assistants in knowing the year of introduction of education policy, but the assistant teachers were much behind of them in knowing this. The grant teachers were significantly ahead of the non-grant teachers in knowing the presence of policy and its year of introduction and reading the policy ($p < 0.001$) (Figure 13.2).

Multivariate regression analysis

A multivariate regression analysis was carried out to predict teachers' reading of the National Education

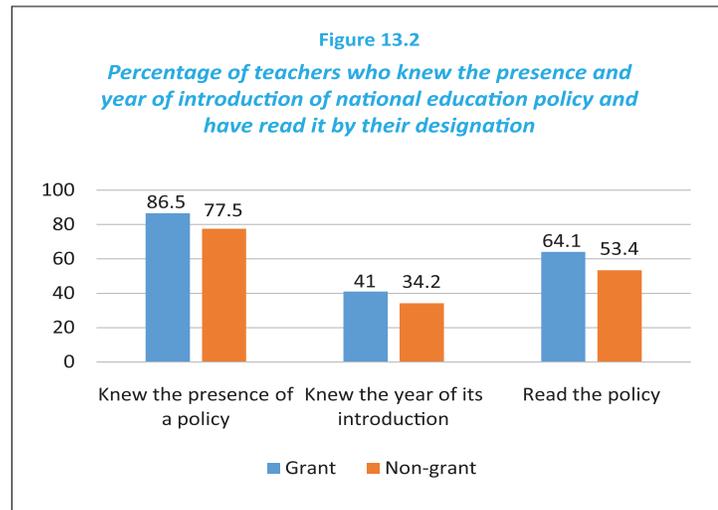
Policy. This phenomenon was categorized into two parts – read the education policy and did not read it. The independent variables considered in this analysis were 13 in number. These are: institution type, area of institution, gender of teacher, religion, elder sibling as teacher, parent as teacher, teaching as aim in life, service length, having professional training, having subject based training, having educational short training, having a second occupation, and educational qualification of teachers. All these are also categorical variables. A stepwise approach was adopted so that only the statistically significant predictors came out in the final regression model.

Of the 13 variables considered, seven appeared in the final model. These are gender, service length, having professional training, having subject based training, having educational short training, having a second occupation, and educational qualifications. These variables collectively explained 9% of the variation in the dependent variable. Remaining six variables had no significant contribution in predicting teachers' reading of National Education Policy. The final model is provided in Table 13.4. Following are the major findings.

- The male teachers were more likely to read the National Education Policy than the female teachers.
- The teachers who had a Master's degree were more likely to read the National Education Policy than those who had a Bachelor's degree or lower educational qualifications.
- Those who had another profession alongside teaching were less likely to read the National Education Policy than those who were engaged only in teaching.
- No difference was observed in reading the National Education Policy among the teachers belonging to the first two quartiles of length of service. However, they were highly likely to read the policy than those belonging to the upper half of the median.
- Teachers who had professional training, subject based training, and attended educational short courses were more likely to read the education policy than those who did not have these training.

B. Secondary curriculum

Curriculum can be described as a master plan of any education provision at the implementation level. It is the guideline for textbook and teacher preparation, teaching-learning provision, co-curricular activities that helps all concerned to deliver an effective and quality education. A curriculum sets standards, goals and



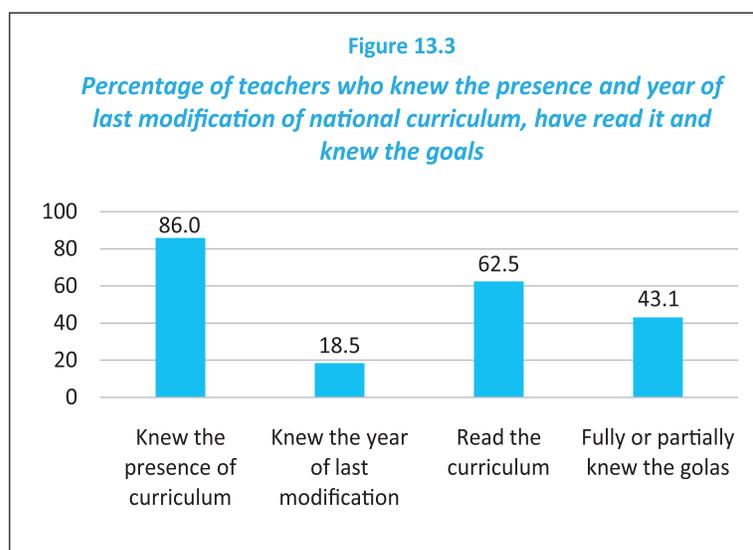
learning outcomes that enable teachers to judge whether or not students are able to move onto the next level. The national curriculum for school education was first introduced in Bangladesh in 1978. It was modified several times followed by modifications in the textbooks. The latest modification of the curriculum was done in 2012. It is written in national language Bangla, and available in print and in the website of NCTB as well. The teachers are supposed to take lessons on curriculum during professional training. Short training courses are also offered to inform the teachers on the curriculum matters. Of the interviewed teachers, 86% knew the existence of a national curriculum for secondary education, 18.5% knew the year of its latest modification, 62.5% claimed to read it, and 43.1% knew the curriculum goals 'partially' or 'fully' (Figure 13.3).

Nine in every ten teachers had a confirmed reply on the existence of a written national curriculum for secondary education. Of them, 86% knew about its existence and 4.1% did not know. The remaining teachers (9.9%) had no idea about existence of a national curriculum. No statistically significant difference was observed by gender or area of institution in teachers knowing about existence of a national curriculum (Table 13.5). However, proportionately more teachers of schools knew this than those of madrasas (87.6% versus 82.9%; $p < 0.001$). This was known by 93.5% of the teachers of Government schools, 88% of those of School & Colleges, 87.3% of those of Non-government schools, 83.8% of those of senior madrasas, and 82.2% of those of Dakhil madrasas (Table 13.6).

Many of the teachers were confused about the year of latest modification of secondary curriculum. In reply to a question on this, nearly 59% of the teachers who knew about the existence of a written curriculum provided no answer. The others mentioned a variety of years ranging from 1972 to 2018. The correct answer was 2012, but 6.6% of the teachers mentioned any of the earlier years and 13% mentioned any of the later years. Therefore, 21.5% of the teachers could mention the year correctly. They were 18.5% of all the teachers in the sample.

No difference was observed among the teachers in knowing the year of latest modification of national curriculum in terms of gender or area (Table 13.5). However, proportionately more school teachers knew the correct year of the latest modification of curriculum than their counterparts in madrasas (19.6% versus 16.2%; $p < 0.02$). Whereas, 32.8% of the teachers of the Government schools knew the correct year of curriculum modification, 19.2% among those of Non-government schools and School & Colleges, and about 16% among those of two types of madrasas knew this ($p < 0.001$) (Table 13.6).

Over 62% of the teachers claimed that they have read the national curriculum for secondary education. Proportion of teachers reading the curriculum was mostly equal among the males and the females (Table 13.5). It was also equal between the teachers of rural and urban educational institutions. However, the



school teachers were ahead of the madrasa teachers in reading the curriculum with a statistically significant margin (64.7% versus 57.9%; $p < 0.001$). Three-quarters of the Government school teachers, 64-65% of those of other two types of schools, 60% of those of senior madrasas, and 56.5% of those of Dakhil madrasas have claimed to read the secondary curriculum ($p < 0.001$) (Table 13.6).

The national secondary curriculum in Bangladesh aims to 'create knowledgeable, skilful, logical, creative, and patriotic human resource through overall development of learners with humanistic, social and ethical strengths'. A question was asked to the teachers to know how much of this was known to them. Those who did not know about existence of a written curriculum along with another 42.9% – totalling 56.9% of the teachers could not say anything about the aims of curriculum. Of the remaining, 35.8% could say this 'partially' and 7.3% 'fully'. Therefore, the proportion of teachers 'fully' or 'partially' knowing about the aims of national secondary curriculum was 43.1%. This was highest among the teachers of Government schools – 18% knew it 'fully' and 43.3% knew it 'partially'.

Proportion of teachers knowing the secondary curriculum 'fully' or 'partially' was more among the males than the females (44.6% versus 37.9%; $p < 0.01$), and among the school teachers than the madrasa teachers (45% versus 39.2%; $p < 0.01$) (Table 13.5). No such difference was observed between the teachers of rural and urban educational institutions. This was 44-45% among the teachers of Non-government schools and School & Colleges, 41.3% among those of senior madrasas, and 37.8% among those of Dakhil madrasas (Table 13.6).

The head of the institutions were much ahead of the other teachers in knowing the presence of curriculum, reading it and knowing the goals at least partially (Table 13.7). The assistant heads and the assistant teachers were close to each other in the above three aspects; however, they were significantly behind the head of institutions in each. On the other hand, an equal proportion of the heads of institutions and their assistants

Table 13.4
Logistic regression analysis predicting teachers' reading of the National Education Policy

Explanatory variables	Regression coefficient	Odds ratio	95% CI of odds ratio
Gender of teacher			
Females	0	1.00	
Males	0.86	2.36***	1.91 – 2.93
Professional training			
No	0	1.00	
Yes	0.47	1.60***	1.34 – 1.91
Subject based training			
No	0	1.00	
Yes	0.46	1.59***	1.31 – 1.92
Educational short course			
No	0	1.00	
Yes	0.65	1.91***	1.55 – 2.36
Second occupation			
Yes	0	1.00	
No	0.34	1.41***	1.18 – 1.68
Service length (quartiles)			
First	0	1.00	
Second	0.01	1.01	0.80 – 1.26
Third	-0.35	0.71**	0.56 – 0.89
Fourth	-0.33	0.72**	0.57 – 0.90
Educational qualifications			
Bachelor's or below	0	1.00	
Master's	0.45	1.57***	1.33 – 1.85
Constant	-1.54		
-2 log likelihood	3740.35		
Cox & Snell R ²	0.07		
Nagelkerke R ²	0.09		

*** $p < 0.001$, ** $p < 0.01$

knew the year of last modification of national curriculum; the assistant teachers lagged much behind them in this.

The grant teachers of the private educational institutions were significantly ahead of their non-grant counterparts in knowing the presence of curriculum, reading it, and knowing the goals at least 'partially', but no such difference was observed between them in knowing the year of its last modification (Figure 13.4).

Multivariate regression analysis

Two regression models were built predicting two issues related to teachers knowledge on national secondary curriculum. The issues were teachers reading of the national curriculum and their knowledge on curriculum goals. Both of them were dichotomously categorised in the following way.

- a. Reading of national curriculum: read the curriculum and did not read it
- b. Knowledge on curriculum objectives: knew at least one objective and did not know any objective

Thirteen independent variables were considered in both the analysis. These are: institution type, area of institution, gender of teacher, religion, elder sibling as teacher, parent as teacher, aim in life as teaching, service length, having professional training, having subject based training, having educational short training, having

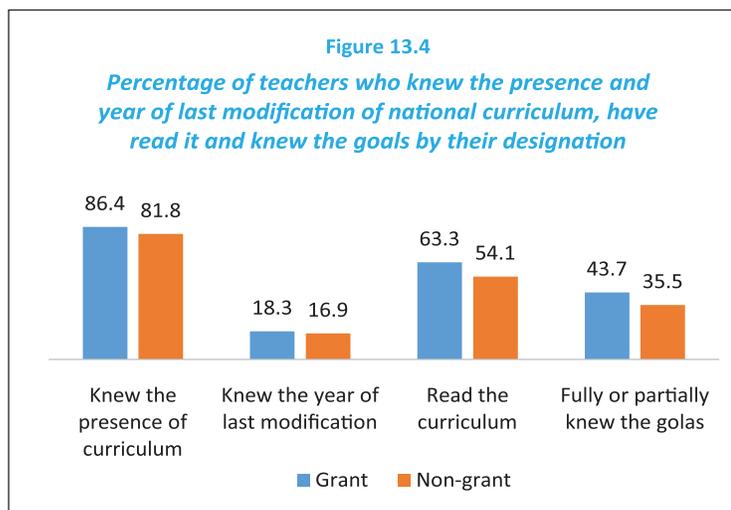


Table 13.5
Percentage of teachers knowing various aspects of national curriculum by gender, area and institution type

Aspects	Gender		Area		Institution type	
	Male	Female	Rural	Urban	School	Madrasa
Knew its presence	86.1	85.8	85.6	87.7	87.6	82.9
Level of Significance	ns		ns		p<0.001	
Knew the year of last modification	18.5	18.3	18.7	17.6	19.6	16.2
Level of Significance	ns		ns		p<0.001	
Have read curriculum	63.0	60.4	61.7	65.4	64.7	57.9
Level of Significance	ns		ns		p<0.001	
At least partially knew the goals	44.6	37.9	42.7	44.5	45.0	39.2
Level of Significance	p<0.01		ns		p<0.01	

Note: ns = not significant at p = 0.05

Table 13.6
Percentage of teachers knowing various aspects of national curriculum by institution type

Aspects	Institution type					Level of significance
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Knew its presence	93.5	87.3	88.0	82.2	83.8	p<0.001
Knew the year	32.8	19.2	19.2	16.3	16.0	p<0.001
Have read the policy	75.2	64.2	65.5	56.5	60.0	p<0.001
At least partially knew the curriculum goals	61.3	44.3	45.0	37.8	41.3	p<0.001

a second occupation, and educational qualifications. All of them are categorical variables. A stepwise approach was adopted so that only the statistically significant predictors came out in the final regression models.

The final model predicting teachers' reading of curriculum considered five variables and the model predicting knowledge on curriculum objectives considered seven. Four of them are common. These are having three types of training and educational qualification of teachers. In addition, the first model considered religion as predictive variable and the second model considered gender of teacher, having second occupation and length of service. The predictive variables collectively explained 6% of the variation in the dependent variable of the first model and it was 5% in the second model. The models are provided in Tables 13.8 and 13.9, respectively. Following are the summary of findings.

For reading of national secondary curriculum:

- The non-Muslim teachers were more likely to read the national curriculum than the Muslim teachers. And the teachers who had a Master's degree were more likely to read the curriculum than those who had a Bachelor's degree or below educational qualification.
- Teachers who had received professional training, subject based training, and educational short training were more likely to read the curriculum than those who did not have these training.

Table 13.7
Percentage of teachers knowing various aspects of national curriculum by their designation

Aspects	Designation			Level of significance
	Head of institution	Assistant head of institution	Assistant teacher	
Knew its presence	93.2	81.5	85.9	p<0.01
Knew the year	25.5	27.5	17.4	ns
Have read the policy	77.0	59.0	61.8	p<0.001
At least partially knew the curriculum goals	63.0	43.6	41.8	p<0.001

Note: ns = not significant at $p = 0.05$

Table 13.8
Logistic regression analysis predicting teachers' reading of the national secondary curriculum

Explanatory variables	Regression coefficient	Odds ratio	95% CI of odds ratio
Religion of teacher			
Muslim	0	1.00	
Non-Muslim	0.37	1.44***	1.17 – 1.78
Professional training			
No	0	1.00	
Yes	0.32	1.38***	1.16 – 1.63
Subject based training			
No	0	1.00	
Yes	0.45	1.57***	1.30 – 1.89
Educational short course			
No	0	1.00	
Yes	0.51	1.66***	1.35 – 2.04
Educational qualifications			
Bachelor's or below	0	1.00	
Master's	0.47	1.59***	1.36 – 1.86
Constant	-0.76		
-2 log likelihood	3844.43		
Cox & Snell R ²	0.04		
Nagelkerke R ²	0.06		

*** $p < 0.001$

For knowing curriculum objectives

- The male teachers were more likely to know the objectives of national secondary curriculum than the female teachers.
- The teachers who had a Master's degree were more likely to know the objectives of national curriculum than those who had a Bachelor's degree or lower educational qualification.
- Those who had another profession alongside teaching were less likely to know the objectives of national curriculum than those who were engaged only in teaching.
- No difference was observed in knowing the objectives of national curriculum among the teachers belonging to the first and the fourth quartile with regard to their length of service. However, they were highly likely to know the objectives of national curriculum than those belonging to the middle half of the teachers.
- Teachers who had professional training, subject based training, and educational short training were more likely to know the objectives of national curriculum than those who did not have these training.

Table 13.9

Logistic regression analysis predicting teachers' knowing at least one objective of national curriculum

Explanatory variables	Regression coefficient	Odds ratio	95% CI of odds ratio
Gender of teacher			
Females	0	1.00	
Males	0.48	1.61***	1.31 – 1.98
Professional training			
No	0	1.00	
Yes	0.47	1.61***	1.35 – 1.91
Subject based training			
No	0	1.00	
Yes	0.34	1.41***	1.17 – 1.70
Educational short course			
No	0	1.00	
Yes	0.45	1.56***	1.26 – 1.94
Second occupation			
Yes	0	1.00	
No	0.18	1.19*	1.01 – 1.41
Service length (quartiles)			
First	0	1.00	
Second	-0.22	0.81*	0.65 – 0.99
Third	-0.42	0.66***	0.52 – 0.82
Fourth	-0.16	0.85	0.69 – 1.06
Educational qualifications			
Bachelor's or below	0	1.00	
Master's	0.35	1.42***	1.22 – 1.66
Constant	-1.69		
-2 log likelihood	3977.87		
Cox & Snell R ²	0.04		
Nagelkerke R ²	0.05		

*** $p < 0.001$, * $p < 0.05$

Qualitative insights

In-depth interviews with the teachers also confirmed that the head of institutions were more aware about the National Education Policy and the curriculum than the other teachers. Therefore, the heads were found more comfortable to talk with the interviewers on these issues. The assistant teachers struggled to analyse the strength, weakness and implication of the policy and curriculum in teaching-learning process.

Most of the heads of the institutions reported to have copies of education policy and national curriculum in their educational institutions. They collected those from the secondary education offices at the upazila level or downloaded those from the respective websites. Having copies of education policy or the curriculum was rare mostly in the Non-government schools and the madrasas. The heads of these institutions confirmed that they did not read these documents.

Some of the heads however reported that on collection of the documents from various sources they shared those with the assistant teachers and organized discussion meetings at school. They assumed that the assistant teachers would carry such discussions on, but this was not the case in practice. Thus, the heads were therefore unsure about the teachers' knowledge regarding education policy and curriculum. Such a scenario was described in the following way by a head teacher of a Government high school in Sylhet district.

Copies of the Education Policy and national curriculum are available in my school. I have collected those from the upazila secondary education office. I informed my teachers about their availability, but did not see any reaction among them. I did not notice any discussion among the teachers on these. I do not know whether they know anything about the curriculum or the education policy.

The other heads of the Government schools reported that copies of education policy and national curriculum are preserved in all Government schools in the country as part of official norms. With this regard, the head of a Government school in Dinajpurzaid, 'the copies of education policy and curriculum are officially collected and preserved in my school because this is a government school.'

Some of the heads of institutions opined that for two reasons their assistant teachers knew more about curriculum and education policy. Firstly, the assistant teachers have participated in various training courses where these were discussed. Secondly, the heads organized discussion meetings on these issues on a yearly or bi-yearly basis from which the assistant teachers learned. In order to explain the link between education policy and curriculum a head teacher of a Government school mentioned that the education policy is supposed to be implemented through the curriculum and syllabus which means that the expectation of the policy is cascaded through the curriculum and then by the syllabus. This teacher also perceived that the policy and curriculum were being implemented successfully because the teachers were provided with sufficient training.

On the other hand, the heads of madrasas and some Non-government schools opined that the implementation of these was not that easy. In this point a principal of a senior madrasa in Dinajpur argued that the expectation from the policy and curriculum was much higher compared to the facilities they had been provided for implementing these. He highlighted the necessity of improved infrastructure, qualified teachers and quality training for implementing the education policy and curriculum properly. He said,

In the current setting it is not possible to teach according to the instruction of education policy and curriculum unless the education ministry plays a strong role with this regard. The classroom should be sound proof. Meritorious and skilled teachers should be recruited and they should be sent abroad for higher training.

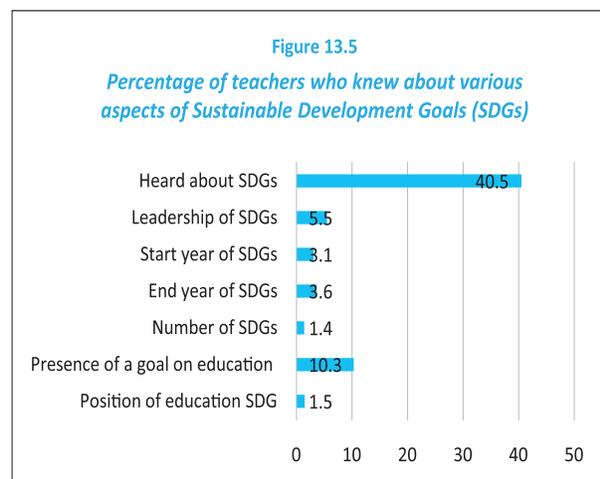
In order to describe the implications of education policy and curriculum in school setting, most of the teachers tried to describe their linkages with the current assessment process which as they said 'creative question based'. A group of teachers thought that without having a very good command on the education policy and curriculum, the teachers would not be able to teach the students in these days. According to them, the ways of teaching students for preparing them for answering the creative questions was mentioned in the policy and the curriculum. They also felt that students learning would remain incomplete if teachers teach without having sound knowledge on education policy and curriculum.

In conclusion it may be said that teachers' understanding on education policy and curriculum was not sufficient enough. Instead of perceiving these a guideline of operating the educational institutions, these were considered a tool for improving students' performance in the examinations.

C. Sustainable Development Goals

This section deals with teachers' knowledge about Sustainable Development Goals (SDGs), specifically the fourth goal (SDG 4 or Education SDG). This is important as the goals are endorsed by the government of Bangladesh as broad directions for national development. These are important for the teachers to know because there are some indicators considering the teachers and the teachers have specific role to play in achieving the goal on education (4th goal). Although over two-fifths of the teachers claimed that they have heard about the SDGs and 10.3% knew that there is a goal on education, a very few of them (less than 5%) could say the other aspects of it (Figure 13.5).

Gender difference persisted on knowledge about the SDGs; 43.2% among the males and 31.2% among the females have heard about the SDGs ($p < 0.001$) (Table 13.10). Though, no statistically significant difference was observed between the teachers of rural and urban educational institutions (41.2% and 37.7%; ns), proportionately more teachers of the schools claimed to hear about it than those of madrasas (43.1% versus 35.4%; $p < 0.001$). A very wide gap was observed among the teachers of various types of educational institutions with Government schools far ahead of the two other types of school, and the two types of madrasa further behind the above.



The teachers' knowhow on further detail of SDGs was very poor. For instance, only 5.5% of the teachers knew that the SDGs were prepared under the leadership of United Nations. Their knowledge on the start and the end years of SDGs implementation was also very poor. Only 3.1% of the teachers could tell the start year of it and 3.6% could tell the end year. Although the teachers of each type of educational institutions showed poor knowledge; the teachers of Government schools demonstrated a higher level. For instance, 26.8% of the Government school teachers knew the leadership of SDGs, 17.2% knew the start year of it, and 17.7% knew the end year. These figures with regard to gender, area and institution type were much below than the above – each lower than 7%. Besides the above difference, the male teachers were ahead of the female teachers, and the school teachers were ahead of the madrasa teachers in each of the three. However, no difference was noticed by area of institutions (Table 13.10).

In response to the question on the leadership of preparing the SDGs, the teachers provided varieties of answers. About 11% of those who have provided an answer said, it was the creation of the Prime Minister of Bangladesh Sheikh Hasina; a small section, however, mentioned the name of her son Sajib Wazed Joy (PM's Advisor on ICT affairs), the Government or the Ministry of Education. The other responses of the teachers were the following: Kudrat-e-Khuda (Chair of the first Education Commission in Bangladesh), the World Bank, UNESCO, Professor Mohammad Yunus (Nobel laureate and Grameen Bank Founder), Mohammad Zafar Iqbal (Professor and literary personality), Begum Khaleda Zia (former PM), and Rasheda K Choudhury (Executive Director of CAMPE). There is a possibility that the teachers confused the issue of the SDGs with other issues. This happened because of their lack of knowledge.

A question was asked to the teachers to know whether they are informed about the duration of SDG implementation. As the teachers mentioned, the start year of SDG implementation ranged from 1991-2025 and the end year from 2021-2050. It seemed that the teachers were confused about various years related to various events, indicating that they were not serious about these. For instance, in response to the start year of SDGs, though majority of them mentioned a year from 2014-2016, a section mentioned 2010 which is the year of endorsing the National Education Policy, and another section mentioned 2021 which is linked to Vision 2021 of the government of Bangladesh.

The year 2021 was also mentioned by a section of the teachers as the end year of SDGs and another section mentioned the year 2041 which is the targeted year of the government to proceed Bangladesh to a developed country status. Note that the years 2021, 2041 etc. are often mentioned by the PM and the other political leaders in power in public lectures.

Overall, only 1.4% of the teachers knew the number of SDGs (17 nos.), 10.3% knew that there was a specific goal on education and 1.5% knew the position of it in the list of goals (fourth). Likely to the previous, the teachers of the Government schools were much ahead of the others in knowing these three issues. Among the teachers of Government schools, 14% knew the number of SDGs, 26% knew that there was a specific goal on education and 9.7% knew the position of it (Table 13.11). No difference was observed in knowing any of the three issues in terms of area of institution, but the proportion of school teachers knowing each of these was significantly higher than that of the madrasa teachers. No gender difference was observed in knowing the number of SDGs and the position of education SDG; however, proportionately more male teachers knew the presence of an education MDG than their female counterparts. It is to be noted that none of the sampled teachers knew the number of targets under the education SDG.

Table 13.10
Percentage of teachers who knew about various aspects of SDGs by gender, area and institution type

Aspects	Gender		Area		Institution type	
	Male	Female	Rural	Urban	School	Madrasa
Heard about SDGs	43.2	31.2	41.2	37.7	43.1	35.4
Significance	p<0.001		ns		p<0.001	
Knew about leadership	6.2	3.0	5.5	5.7	6.3	3.8
Significance	p<0.001		ns		p<0.01	
Start year of SDGs	3.5	1.8	3.2	2.9	3.8	1.9
Significance	p<0.05		ns		p<0.01	
End year of SDGs	4.0	2.2	3.6	3.6	4.4	2.0
Significance	p<0.05		na		p<0.001	
Number of SDGs	1.5	0.9	1.4	1.6	1.8	0.7
Significance	ns		ns		p<0.01	
Presence of education goal	11.1	7.5	10.3	10.6	11.9	7.2
Significance	p<0.01		ns		p<0.001	
Position of education goal	1.6	1.2	1.5	1.7	2.1	0.5
Significance	ns		ns		p<0.001	

Note: ns = not significant at $p = 0.05$

Table 13.11
Percentage of teachers who knew about various aspects of SDGs by institution type

Aspects	Institution type					Level of significance
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Heard about SDGs	69.5	41.8	44.8	34.3	37.0	p<0.001
Knew about leadership	26.8	5.5	6.8	3.8	3.8	p<0.001
Start year of SDGs	17.2	3.3	2.8	1.3	2.7	p<0.001
End year of SDGs	17.7	4.0	3.5	1.8	2.3	p<0.001
Number of SDGs	14.0	1.3	1.3	0.8	0.3	p<0.001
Presence of education goal	26.0	11.5	10.5	6.8	7.8	p<0.001
Position of education goal	9.7	1.8	1.7	0.0	1.2	p<0.001

Overall, 85.7% of the teachers did not know any of the above seven facts on SDGs (mentioned in Table 13.11), 9.2% knew one fact, 2.1% knew two, 1.3% knew three, and 1.7% knew 4-7 facts. Only 0.1% of the teachers knew all seven facts. The male teachers were ahead of the female teachers in knowing at least one of the facts (15.5% versus 10.4%; $p < 0.001$). The teachers of rural and urban educational institutions knew equally. The school teachers were ahead of the madrasa teachers in knowing these (16.2% versus 10.6%; $p < 0.001$). A huge difference was observed with regard to institution type. Whereas, 39.7% of the Government school teachers knew at least one of the facts, it was 15-16% among the teachers of Non-government schools and School & Colleges, and 10-11% among those of two types of madrasas.

The teachers were asked about the main features of the education SDG. None of them knew all the five features. Separately, 2% of the teachers knew that all levels of education are included in the fourth SDG, 4.1% knew that there is a promise to ensure quality of education, 1.1% knew that inclusive education was one of the features, 1% knew that equality in education was mentioned, and 0.8% knew that opportunity for lifelong education was promised (Table 13.12). Overall, 5.4% of the teachers knew at least one of the above five features. No statistically significant variation was observed in the proportions of male and female teachers knowing at least one of the features of education SDG. The same was observed when data were analysed by area of institution. This was 6.3% among the school teachers and 3.6% among the madrasa teachers ($p < 0.001$). Whereas, 15.7% of the teachers of Government schools knew any of the five features, it was 6% among the teachers of Non-government schools and School & Colleges each, 4.2% among the teachers of senior madrasas, and 3.2% among those of Dakhil madrasas ($p < 0.001$) (Table 13.12).

The heads of the institutions were significantly ahead of the other teachers (assistant heads and assistant teachers) in their knowledge about the SDGs and knowing some selected facts on SDGs and the main features of education SDG (Table 13.13). No difference was observed in these between the assistant heads of institutions and the assistant teachers. The grant teachers of private schools were significantly ahead of the non-grant teachers of the same type of institutions in hearing about the SDGs (40.9% versus 32.9%; $p < 0.01$), but no such difference was observed between them in knowing the facts on SDGs (17.7% versus 14.3%; ns) and knowing the main features of education SDG (4.9% versus 6.8%; ns).

Table 13.12
Percentage of teachers who were able to say the main features of education SDG

Main features of education SDG	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
All levels of education included	8.2	2.2	2.0	1.0	1.7	2.0
Ensure quality of education	11.8	4.7	4.5	2.3	3.0	4.1
Inclusive education system	5.0	1.3	1.0	0.5	0.7	1.1
Equity in education	2.3	1.2	0.8	0.5	0.8	1.0
Opportunity for lifelong education	1.7	1.0	0.7	0.5	0.3	0.8
Any of the above*	15.7	6.0	6.0	3.2	4.2	5.4

Note: Multiple responses counted; * $p < 0.001$

Table 13.13
Percentage of teachers knowing various aspects of SDGs by their designation

Aspects	Designation			Level of significance
	Head of institution	Assistant head of institution	Assistant teacher	
Hearing about SDGs	53.4	39.2	39.8	$p < 0.01$
Knowing some facts on SDG	28.6	14.9	13.4	$p < 0.001$
Knowing main features of SDG4	13.0	7.4	4.8	ns

Note: ns = not significant at $p = 0.05$

Multivariate regression analysis

Three regression models were built predicting three specific issues related to teachers' knowledge on Sustainable Development Goals. The issues were teachers hearing about SDGs, knowing at least one of the seven given facts on SDGs, and knowing at least one of the five main features of education SDG (SDG 4). Each of them were dichotomously categorised in the following way.

- a. Hearing about SDGs: Heard and did not hear
- b. Knowing about SDGs: Knew at least one of the seven given facts and did not know any
- c. Knowing the main features of SDG 4: Knew at least one of the five features and did not know any

Thirteen independent variables were considered in each of the analysis. These are: institution type, area of institution, gender of teacher, religion, elder sibling as teacher, parent as teacher, aim in life as teaching, service length, having professional training, having subject based training, having educational short training, having a second occupation, and educational qualifications. All of them are categorical variables. A stepwise approach was adopted so that only the statistically significant predictors came out in the final regression models.

The model predicting hearing about SDGs considered nine variables, the model predicting knowing about the facts of SDGs considered seven, and the model knowing the features of education SDG (SDG 4) considered two. Two variables were common in each model. These are institution type and length of service of teachers. In addition, four variables were common in the first two models. These are gender, teaching as aim in life, having educational short training, and educational qualifications. Furthermore, area of institutions appeared only in the first model and elder sibling as teacher in the second model. The predictive variables collectively explained 8% of the variation in the dependent variables of each of the first two models, and it was 3% in the third model. The models are provided in Tables 13.14 to 13.16, respectively. Following are the summary of findings.

For hearing about SDGs:

- The teachers of Government schools were more likely to hear about the SDGs than the teachers of other four types of institutions. No difference was observed among the teachers of these four types of institutions.
- The male teachers and the teachers of the institutions located in rural areas were more likely to hear about the SDGs than their respective counterparts (females and teachers of urban institutions).
- The teachers who had a Master's degree were more likely to hear about the SDGs than those who had a Bachelor's degree or lower educational qualification.
- Those who did not aim to be a teacher were more likely to hear about SDGs than those who had an aim to be a teacher.
- No difference was observed in hearing about the SDGs among the teachers belonging to the first and the third quartile with regard to their length of service. However, they were highly likely to hear about the SDGs than those belonging to the second and the fourth quartiles regarding length of service.
- Teachers who had professional training, subject based training, and educational short training were more likely to hear about the SDGs than those who had not have these training.

For knowing about the facts of SDGs

- The teachers of Government schools were more likely to know at least one of the seven given facts of SDGs than the teachers of the other four types of institutions. No difference was observed among the teachers of these four types of institutions.
- The male teachers were more likely to know at least one of the seven given features of SDGs than the female teachers.
- The teachers who did not aim to be a teacher were more likely to know at least one of the seven given features of SDGs than the teachers who had an aim to be a teacher. Again, those who had an elder sibling in teaching profession were more likely to know the same than those who had no such elder sibling.
- The teachers who had a Master's degree were more likely to know at least one of the seven given features of SDGs than those who had a Bachelor's degree or lower educational qualification.
- No difference was observed in knowing the facts of SDGs among the teachers belonging from the second to the fourth quartile with regard to their length of service. However, they were much less likely to do so than those belonging to the first quartile regarding length of service.

Table 13.14

Logistic regression analysis predicting teachers' hearing about Sustainable Development Goals

Explanatory variables	Regression coefficient	Odds ratio	95% CI of odds ratio
Institution type			
Government	0	1.00	
Non-government	-1.29	0.27***	0.16 – 0.48
School & College	-1.14	0.32***	0.17 – 0.59
Dakhil madrasa	-1.33	0.27***	0.15 – 0.47
Senior madrasa	-1.30	0.27***	0.15 – 0.49
Area of institution			
Urban	0	1.00	
Rural	0.26	1.30**	1.05 – 1.60
Gender of teacher			
Females	0	1.00	
Males	0.61	1.83***	1.51 – 2.23
Teaching as aim in life			
Yes	0	1.00	
No	0.27	1.31***	1.13 – 1.54
Professional training			
No	0	1.00	
Yes	0.43	1.54***	1.27 – 1.85
Subject based training			
No	0	1.00	
Yes	0.32	1.37***	1.13 – 1.67
Educational short course			
No	0	1.00	
Yes	0.49	1.63***	1.30 – 2.04
Service length (quartiles)			
First	0	1.00	
Second	-0.26	0.77*	0.62 – 0.96
Third	-0.22	0.81	0.64 – 1.01
Fourth	-0.46	0.63***	0.51 – 0.79
Educational qualifications			
Bachelor's or below	0	1.00	
Master's	0.22	1.25***	1.07 – 1.47
Constant	-0.75		
-2 log likelihood	3869.84		
Cox & Snell R ²	0.06		
Nagelkerke R ²	0.08		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

- Teachers who had received short training on educational issues were more likely to know about the facts of SDGs than those who did not receive such training.

For knowing the features of SDG 4

- The teachers of Government schools were most likely to know at least one of the five features of SDGs followed by those of School & Colleges with a significant margin. The teachers of remaining three types of institutions however had an equal level of knowledge, but they were less likely to know these than those of the above mentioned three types of institutions.
- No difference was observed in knowing the features of SDG 4 among the teachers belonging from the first, second and fourth quartiles with regard to their length of service. However, they were more likely to know the features than those belonging to the third quartile.

Qualitative insights

Attempts were also made to know teachers knowledge on SDGs through in-depth interviews. A frustrating result came out. Many of them did not hear about the SDGs. For instance, an assistant head teacher of a Non-government school in Mymensingh said, 'I have never heard about the Sustainable Development Goals. So I cannot say anything about these.' A

principal of a senior madrasa and a head teacher of a Government high school also opined in the same way. Few teachers perceived that as part of job preparation the young teachers might study about SDGs. In this regard, a head teacher of a Non-government school stated, 'I did not hear about SDGs, but my assistant teachers might hear as they appear in BCS examinations.'

Those who heard about SDGs mentioned that, mass media like newspaper and television were the main sources for them. A few of the teachers however said that teachers might know about SDGs from internet. In the words of a head teacher of a School & College in Barishal, 'The issues of SDGs are frequently discussed here and there. We can learn about these from newspapers and television channels. I think our teachers also know about these because they often refer to SDGs'. Another group of teachers especially from

Table 13.15

Logistic regression analysis predicting teachers' knowing at least one of the seven given facts of SDGs

Explanatory variables	Regression coefficient	Odds ratio	95% CI of odds ratio
Institution type			
Government	0	1.00	
Non-government	-1.11	0.33***	0.20 – 0.56
School & College	-1.12	0.33***	0.17 – 0.62
Dakhil madrasa	-1.47	0.23***	0.13 – 0.41
Senior madrasa	-1.48	0.23***	0.13 – 0.41
Elder sibling as teacher			
No	0	1.00	
Yes	0.32	1.38**	1.07 – 1.76
Gender of teacher			
Females	0	1.00	
Males	0.53	1.70***	1.28 – 2.26
Teaching as aim in life			
Yes	0	1.00	
No	0.40	1.49***	1.21 – 1.85
Educational short course			
No	0	1.00	
Yes	0.89	2.43***	1.67 – 3.53
Service length (quartiles)			
First	0	1.00	
Second	-0.41	0.67**	0.50 – 0.89
Third	-0.48	0.62***	0.46 – 0.83
Fourth	-0.45	0.64***	0.47 – 0.85
Educational qualifications			
Bachelor's or below	0	1.00	
Master's	0.47	1.60***	1.28 – 1.99
Constant	-1.99		
-2 log likelihood	2325.59		
Cox & Snell R ²	0.05		
Nagelkerke R ²	0.08		

*** $p < 0.001$, ** $p < 0.01$

Government schools mentioned about various training courses and discussion from where they heard about SDGs. However, a few of them was seen confused. They often mixed the SDGs with the Vision 2021 of Bangladesh. For instance, a head teacher of a Government school in Sylhet said,

A group from a2i programme came to our school and talked about SDGs with special focus on quality of education. My colleagues might have some ideas on this. They know that there are some aims to achieve Prime Minister's vision. They work for this. For example, using ICT in teaching-learning process.

Though their knowledge on SDGs was not clear and could hardly think critically about the implications of SDGs in the operation of their educational institutions they perceived that our education system was not ready to achieve the SDGs. Highlighting quality of education a major concern of SDGs most of them argued that because of poor teaching and weak assessment system quality of education cannot be achieved. So they emphasized on ensuring fulfilment of the pre-conditions of quality education, e.g. qualified teacher and effective training for building teachers' capacity on pedagogy.

Table 13.16
Logistic regression analysis predicting teachers' knowing at least one of the main features of SDG4

Explanatory variables	Regression coefficient	Odds ratio	95% CI of odds ratio
Institution type			
Government	0	1.00	
Non-government	-1.02	0.36***	0.18 – 0.71
School & College	-1.04	0.35*	0.15 – 0.86
Dakhil madrasa	-1.73	0.18***	0.08 – 0.40
Senior madrasa	-1.45	0.24***	0.10 – 0.53
Service length (quartiles)			
First	0	1.00	
Second	-0.22	0.80	0.53 – 1.21
Third	-0.87	0.42***	0.25 – 0.69
Fourth	-0.33	0.72	0.47 – 1.09
Constant	-1.41		
-2 log likelihood	1230.43		
Cox & Snell R ²	0.01		
Nagelkerke R ²	0.03		

*** $p < 0.001$, * $p < 0.05$

Chapter 14

Role of Teachers' Associations

Key Findings

Six different teacher associations were identified for the secondary level school teachers and two for the madrasas. They were sub-divided into several quarters depending upon political and personal interest of their leaders.

Teacher development initiatives undertaken by the government received no direct assistance from the teacher associations.

Three out of every ten teachers were members of any of the teacher associations. Majority of them (60.4%) got membership influenced by their seniors, followed by those who became members on their own choice (34.5%). About three-quarters of the members reported to participate in some activities of the associations. Major activity seemed to be the regular meeting of the associations.

About 13% of the teachers confessed that their participation in association activities hindered teaching-learning activities in schools.

Teachers play a pivotal role in the provision of quality education. Unfortunately, in many countries around the world, they have not been officially represented in the design of key education reforms. In many of these countries teachers are unionised. One of the main reasons for the detachment of teachers from mainstream decision making is that the teachers unions often are in antagonistic relationship with governments. A growing body of global experiences shows that constructive collaboration between governments and teachers unions can lead to positive outcomes for students. The teachers' unions in this subcontinent including Bangladesh have never been viewed as constructive government-friendly institutions. This is because teachers are seen to be more interested in looking after their own petty interests and personal wellbeing than in broader improvement of their professional quality and competence. This chapter looks at the case of teachers' unions in Bangladesh and how they contribute to the goal of ensuring quality education for all.

A. History of teachers' movement

The teachers' movement in Bangladesh aiming to their own wellbeing started during the British period, separately for primary and secondary education. The secondary teachers' organization to carry out the movement in the then Bengal was called All Bengal Teachers' Association (ABTA). Established in 1921, the Association included the teaching and non-teaching staff of aided and non-aided educational institutions. The teachers of government educational institutions were kept out of this. Acharya Profulla Chandra Roy was the first president of ABTA. Note that the first school teachers' association in British India was the Madras Association of Women Teachers which was established in 1890, well before the Bengal Association. The Madras Association later spread throughout southern and eastern parts of India. At the early stage of the movement, some teachers and their leaders talked about their professional obligations in terms of how to maximise efficiency, but a formal organizational commitment was missing. Under the leadership of Dr Kazi Motahar Hossain, Dr Alim Al Razi and Principal Ibrahim Khan, College teachers were initially associated with ABTA but after the liberation of Bangladesh, college teachers got separated from ABTA to establish their own association.

The first president of College Teachers' Association was Professor Shariful Islam. He was the first to write and assert about teachers' needs and rights in line with UNESCO and ILO. His point of view included both the teachers' professional efficiency and teachers' needs. There was a difference of opinion within the association regarding their role. One of the groups' understanding was that teachers' association's role is only to meet up their demands, but the other group considered that the quality of education was also their concern.

In order to meet the objectives of the *Education Watch* study, the study team met with representatives of different teachers' associations in Bangladesh in groups as well as individually to understand their functions and activities and their role in the development of teachers' competency. There are two major types of teachers' associations in Bangladesh for secular education - one that looks after the interest of teachers in government schools and the other that takes care of the private schools. There is another teachers' association for madrasas. In the discussion, high officials of those associations talked about the success of their movement, claiming that most of the positive changes happening in the teachers' job status were resulted from their bargains with the government. This was particularly in the cases of fixing salary, scale of pay, and benefits. It also appeared from the discussion that prior to taking any major decision regarding teachers' fate, the government hardly felt the necessity of taking teachers' opinion into consideration.

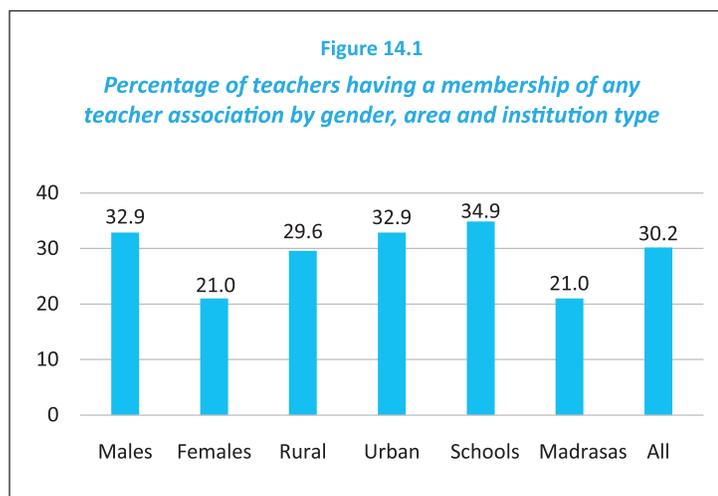
The teachers said that their satisfaction in terms of status and salary largely affected quality of teaching. Low status and poor salary seldom attract high calibre individuals into the profession. They also opined that for some reasons or other all the pay commissions of the government largely undermined teachers' status and their salary. Teachers' representatives said strongly that 'unless we come down to the streets, the government do not pay attention to our interest'. Therefore, many changes brought into the teachers' quality, education system and administrative rules were due to teachers' movement. The representatives of private schools felt that they neither had any job security nor any satisfaction in their job. In order to achieve significant success in realising teachers' demands, they said, it is very important to keep close connections with major political parties. Unless a group is backed by a large number of supporters of a particular political party, particularly the ruling party, they said, it is very difficult to realize the demands.

The teachers' representatives thought that the quality of education and teachers' competence is an area where teachers' association can contribute more in an indirect way than directly. They maintained that in improving the status of the teacher is directly connected to the quality of education so they fight for their interests first. As a result a large number of teachers try to remain attached to their relevant teachers' associations.

The actual number of teachers' associations for secondary schools and madrasas is not available but it is assumed that their number would be around six for secondary schools and two or more in the case of madrasas. The major associations of secondary school teachers are: (a) Bangladesh Government Secondary Teachers' Association, (b) Bangladesh Non-Government Secondary Teachers' Association, (c) Bangladesh Teachers' Federation, (d) Shikkhok Kormochari Oikko Jote, (e) National Front of Teachers & Employees, and (f) Bangladesh Technical Teachers' Association. On the other hand, the prominent madrasa education teachers' associations are: (a) Bangladesh Madrasa Teachers' Association, and (b) Bangladesh Madrasa General Teachers' Association.

B. Association membership and participation in activities

It was observed in the teacher survey that on average, 30.2% of the secondary school teachers had membership of any of the teacher associations (Figure 14.1). The male teachers were significantly ahead of the female teachers in having membership of any teacher association (32.9% versus 21.0%; $p < 0.001$). The same was observed for the school teachers compared to their counterparts in the madrasas (34.9% versus 21.0%; $p < 0.001$). However, no statistically significant difference was observed between the teachers of rural and urban institutions. Membership of any teachers' association also varied significantly with regard to type of institution ($p < 0.001$). Figure 14.2 shows that the teachers of Government schools were at the top with 46.5% of them being member of some associations, followed by those in the Non-government schools (35.2%). Whereas about a quarter of the teachers of senior madrasas were



members of teachers' associations, it was 18.7% among the teachers of Dakhil madrasas.

Although over a third of the members of teachers' associations got membership on their own choice (34.5%), the majority were influenced by others (60.4%). Nature of membership was more 'general' for three-fifths of the members, who did not bear any portfolio in the organization. Twenty-eight percent of the members were holding 'member' position in the executive committees at various levels from union to national, and 12% were holding other positions in the committees. The teachers who got membership of associations influenced by their colleagues were least likely to be a committee member and those who took membership influenced by association leaders were most likely to be so and the self-interested teachers were in between (Table 14.1).

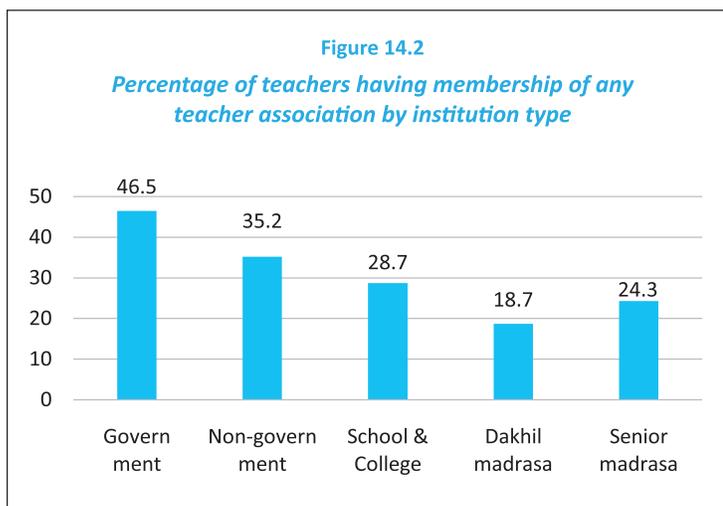


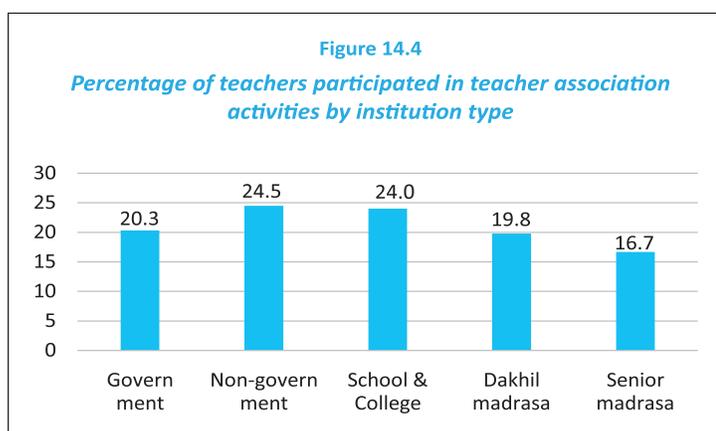
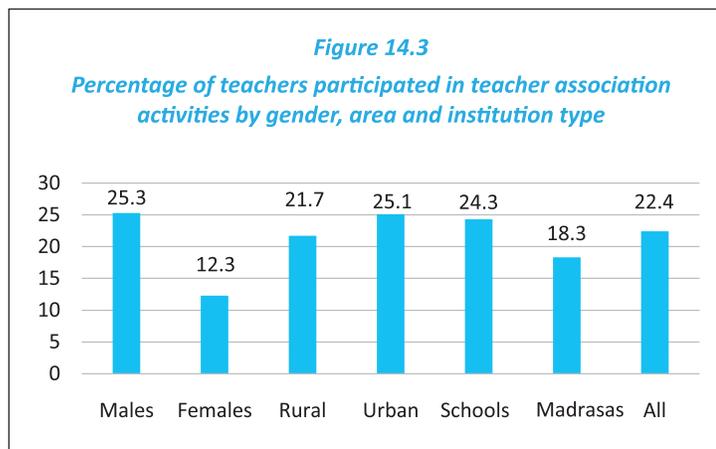
Table 14.1
Percentage of teachers by their position in association and way of being member

Position in association	Way of being member of association			All
	Self interest	Influenced by colleagues	Influenced by leaders	
General member in committee	30.8	25.6	39.1	28.0
Other positions in committee	14.6	8.7	32.6	12.0
General member of association	54.6	65.7	28.3	60.0
Total	100.0	100.0	100.0	100.0

Membership of an association demands certain roles and participation from the general members. Not all the members of the teacher associations participated in any organizational activities in the past one year. Again, a group of teachers participated in association activities even being without a member. Overall, 16.3% of the teachers were members as well participated in association activities, 14% were members but did not participate in activities, 6.1% were not a member of association but participated in association activities, and 63.6% were not a member neither participated in any activities. Non-members participation in association activities was observed irrespective of institution type, gender, and area of institution.

Although 30.2% of the teachers were the members of any association, about three-quarters of them claimed to be engaged with association activities over the past year. However, in total 22.4% of the teachers mentioned that they took part in some activities of the association (Figure 14.3). Whereas, a quarter of the male teachers claimed to be engaged with teachers' association activities, it was almost half among the female teachers (12.3%) ($p < 0.001$). Proportionately more school teachers were engaged with association activities than their counterparts in the madrasas (24.3% versus 18.5%; $p < 0.001$). No statistically significant difference was observed between the teachers of rural and urban educational institutions with regard to their engagement with teachers' association activities.

Two extreme cases were the Government schools and Dakhil madrasas. Proportion of teachers as members of association was highest in Government schools; non-participation of the members in association activities was also highest in these institutions (28%). Again, participation of non-members in association activities was also lowest there (1.8%). All these made participation level much lower among the teachers of Government schools. Only a fifth of the teachers of Government schools participated in association activities over the past year (Figure 14.4). A reverse scenario was observed in Dakhil madrasas. Here, the proportion of non-members participating in association activities was the highest (7%) and non-participation of members was lowest (5.4%). Here too, about a fifth of the teachers participated in association activities. Nearly a quarter of the teachers of Non-government schools and School & Colleges, and 16.7% of those in senior madrasas participated in association activities during last one year prior to interview.



Teachers who participated in association activities were asked to mention the name of the activities in which they took part. In response to this question teachers provided multiple responses. Majority of the teachers in all types of institutions reported that 'attendance' as one of the main tasks they have done as members during the past year. They were 59.4% of the member-teachers in the sample – 73.8% among the teachers of Government schools and 47.9% among those of Dakhil madrasas (Table 14.2). Over 45% of the members attended in the movement for obtaining educational rights in general, less than a third attended for teachers' rights movement. Other activities like helping others, tree plantation, membership raising etc. were some activities where fewer numbers of teachers took part during the one year reference period. Teachers' involvement in association activities does not signify much that they were largely interested in association activities. That is, teacher leaders were not very much successful in motivating their followers to be involved in association activities.

It also came out during the in-depth interviews with the teachers that members' participation in various activities was passive. Some teachers' engagement with the association was superficial and they did not possess any ownership of the association. In most cases, teachers tended to ignore the instructions that come from the association. However, avoidance of association activities was not always possible due to

demand and expectation from seniors who might be a leader of the association. For instance, an assistant teacher of Accounting in a Non-government school at Mymensingh stated, 'I am not actively involved with the teachers' association, but if my head teacher asks me to attend any meeting, seminar or movement of the association I just go there.' The other teachers also expressed their views in a similar way.

Table 14.2
Percentage of teachers participating in teacher association activities during the past one year by type of activities and institution type

Activities	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Meeting	73.8	60.5	57.6	47.9	70.0	59.4
Movement for educational rights	25.4	50.3	39.6	37.8	37.0	45.5
Movement for teachers rights	15.6	31.3	29.9	40.3	26.0	31.9
Activities to help others in need	4.1	2.7	1.4	2.5	0.0	2.3
Tree plantation activity	6.6	4.1	3.5	1.7	4.0	3.7
Activities to increase members	1.6	0.7	1.4	0.8	1.0	0.8
Others	1.6	0.0	0.7	0.0	0.0	0.1

Note: Multiple responses counted

C. Effect of membership in school business

Whether there is any relationship between teachers' day to day activities and being a member of the association was sought through the teacher survey. That is, the teachers were asked to report whether their participation in association activities caused any problem in serving the educational institutions. Teachers' response with this regard was quite negative and only a few of them mentioned that participation in association activities was a hindrance to their teaching. Details are shown in Table 14.3. Overall, 12.8% of the teachers who participated in association activities reported that teaching-learning activities were affected by their participation in association related activities. This proportion significantly varied by area of institution and broad institution type, but not by gender of teachers. Proportionately more rural teachers reported to be affected than their urban counterparts and the school teachers reported this more than the madrasa teachers. No statistically significant variation was observed by institution type. The connection between participation in association activities and teaching-learning activities was not found significant in many aspects. The association leaders may take this information into their cognizance so that they can utilize their fellow members' service with caution.

The teachers who were not members of any association and did not take part in any association related activities were likely to conduct fewer classes as per class routine than those who were

Table 14.3
Percentage of teachers' reported to have disturbance in teaching-learning activities due to participation in teacher association activities

Gender		Area		Institution type		All teachers
Males	Females	Rural	Urban	Schools	Madrasas	
13.4	8.4	14.8	5.5	14.4	9.0	12.8
ns		p<0.01		p<0.05		
Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	Significance	
5.7	15.0	11.1	8.4	10.0	ns	

Note: ns = not significant at $p = 0.05$

members or participated in association activities (Table 14.4). No statistically significant difference was found between the members and non-members of teacher associations with regard to their involvement in private tutoring, but those who have participated in teacher association activities over the past year were less likely to engage in private tutoring (18.7% versus 23.4%;

$p < 0.01$). No statistically significant difference was observed in teachers' involvement in additional teaching activities in educational institutions with regard to their membership of teacher association or participating in association activities.

Table 14.4

Teachers' involvement in various activities in association with their membership

Indicators	Membership		Level of significance	Participation		Level of significance
	Yes	No		Yes	No	
Involved in private tutoring (%)	20.4	23.2	ns	18.7	23.4	$p < 0.01$
Periods conducted per week (mean)	22.4	24.2	$p < 0.001$	21.9	24.2	$p < 0.001$
Involved in additional teaching (%)	51.4	49.8	ns	50.6	50.2	ns
Additional classes taken per week (mean)	6.5	5.9	ns	6.3	6.1	ns

Note: ns = not significant at $p = 0.05$

Multivariate regression analysis

A multivariate regression analysis was carried out to predict teachers' membership with their associations and their participation in association activities. Therefore, two regression models were built. Both of the dependent variables were categorical with two values i.e., dichotomous in nature. These are,

- Association membership: member and non-member
- Participation in association activities: participated over the past year and did not participate

The number of explanatory variables were 12. These are institution type, gender of teacher, area of institution, religion, educational qualifications, length of service, elder sibling as teacher, parent as teacher, teaching as aim in life, satisfaction with profession, satisfaction with institution, and satisfaction with remuneration. A step wise approach was applied in both and therefore only the statistically significant variables appeared in the final models.

Of the 12 explanatory variables, six came out as significant predictors in each final model. Five of them were common in both. The common variables were institution type, gender of teacher, length of service, educational qualifications, and satisfaction with remuneration. In addition, satisfaction with profession came out as a predictor of membership and area of institution came out as a predictor of participation in activities. The regression models are provided in Tables 14.5 and 14.6. Following are the summary of findings.

- The Government and Non-government school teachers were equally likely to be a member of teacher associations. The teachers of the other institutions were less likely to do so compared to the Government school teachers. Regarding participation in association activities, the teachers of Non-government schools were significantly ahead of those in Government schools. No difference was observed between the teachers of Government schools and any of the remaining three types of institutions.
- The males, Master's degree holders, and those who were satisfied with their remuneration were more likely to be a member of teacher association and participate in its activities over the past

year's than their respective counterparts such as females, having Bachelor's degree or below educational qualification and those who were not satisfied with their remuneration, respectively.

- The teachers who belonged to the fourth quarter in terms of length of service were significantly ahead in having membership of teacher association and participate in its activities than those belonging to the first quarter. No difference was observed in cases between the teachers belonging to the first and any of the middle two quarters.
- The teachers who were satisfied with their profession were more likely to be a member of a teachers' association than those who were not satisfied with their profession. No such relationship was observed in the case of participation in association activities.
- The teachers of the urban educational institutions were more likely to participate in association activities than their counterparts in rural institutions. Area of institution was not a significant issue in relation to membership of teacher association.

The above predictive variables explained a small portion on the variations in the dependent variables. It was 6% (Cox & Snell R²) and 8% (Nagelkerke R²) for the model on membership and 4% (Cox & Snell R²) and 7% (Nagelkerke R²) for the model on participation in teachers' association activities.

As obtained from in-depth interviews with the teachers, their professional and social background also had an influence on their involvement with the association. The young teachers were largely found not to be interested in the association. Some of them said that they were yet to settle with their profession and some showed their busyness in searching a better job as a reason of not being a member of any teacher association. Some of them did not hear about existence of such organization. On the other hand, a mixed behaviour was observed among those who were relatively older. Location of the

Table 14.5
Multivariate regression analysis predicting teachers being member of teacher association

Explanatory variables	Regression coefficients	Odds ratio	95% CI of odds ratio
Institution type			
Government	0	1.00	
Non-government	-0.31	0.74	0.45 – 1.21
School & College	-0.66	0.52*	0.29 – 0.93
Dakhil madrasa	-1.23	0.29***	0.17 – 0.50
Senior madrasa	-0.94	0.39***	0.23 – 0.67
Gender of teacher			
Females	0	1.00	
Males	0.59	1.80***	1.46 – 2.24
Length of service (quartile)			
First	0	1.00	
Second	-0.21	0.81	0.64 – 1.04
Third	0.09	1.10	0.87 – 1.39
Fourth	0.50	1.64***	1.31 – 2.06
Educational qualification			
Bachelor's or below	0	1.00	
Master's	0.34	1.40***	1.18 – 1.66
Satisfaction: occupation			
No	0	1.00	
Yes	0.33	1.39*	1.03 – 1.87
Satisfaction: remuneration			
No	0	1.00	
Yes	0.18	1.19*	1.01 – 1.42
Constant	-1.38		
-2 log likelihood	3493.80		
Cox & Snell R ²	0.06		
Nagelkerke R ²	0.08		

***p<0.001, **p<0.01, *p<0.05

institutions also played a role in determining teachers' involvement with the association. The teachers of the institutions situated in the relatively remote areas were less involved with the association, though they also got notifications of various activities of the associations. Such a phenomenon was reported by a Biology teacher of a School & College. Besides, a good portion of the teachers avoided the activities of the association as they were not convinced at roles of teacher associations. With this regard, a teacher of Bangladesh & Global Studies of a Government school uttered with grief – 'I do not have any connection with the teachers' association because I find no significance of it. In my observation they play no role to enhance teachers' capacity'.

D. Government-Association relationship

A mixed opinion of the teachers was observed about the role of their associations regarding decision-making process of the government for education. A section of the teachers was found to be satisfied with the relationship between the government and teachers' associations. These teachers mostly highlighted various activities of the government in recent past. However, another section of the teachers said that the government, in general, was not interested in discussion with the teachers' associations. One of the teacher leaders belonging to this latter group mentioned that 'the government made many commitments to the teachers, but did not keep those'. Some of these teachers said, 'the government sits with the teacher associations for political interest. Teachers play a big role in the elections; therefore, to keep them happy, the government has to sit with teacher leaders before decision making.' A teacher said in detail about this. According to him, there are three layers of teachers association in Bangladesh – central, district and upazila. Of these, central and upazila levels are very important and therefore strong. The leaders who are at the central level are quite empowered. Upazila level teachers are associated with local politics. However, the influence of district level bodies is negligible. As a result, the issues do not rise up systematically from grassroots to the centre and information is not systematically delivered.

Table 14.6
Multivariate regression analysis predicting teachers being participated in teacher association activities

Explanatory variables	Regression coefficients	Odds ratio	95% CI of odds ratio
Institution type			
Government	0	1.00	
Non-government	0.66	1.94*	1.03 – 3.66
School & College	0.57	1.77	0.88 – 3.58
Dakhil madrasa	0.36	1.43	0.74 – 2.76
Senior madrasa	0.05	1.06	0.54 – 2.06
Gender of teacher			
Females	0	1.00	
Males	0.85	2.34***	1.81 – 3.02
Area of institution			
Rural	0	1.00	
Urban	0.29	1.34**	1.06 – 1.68
Length of service (quartile)			
First	0	1.00	
Second	-0.14	0.87	0.66 – 1.14
Third	0.16	1.17	0.90 – 1.52
Fourth	0.48	1.61***	1.26 – 2.07
Educational qualification			
Bachelor's or below	0	1.00	
Master's	0.25	1.29**	1.07 – 1.54
Satisfaction: remuneration			
No	0	1.00	
Yes	0.34	1.41***	1.16 – 1.70
Constant	-2.88		
-2 log likelihood	3056.75		
Cox & Snell R ²	0.04		
Nagelkerke R ²	0.07		

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Noting the political affiliation of the teacher associations, the teachers informed that there are many teacher organizations, majority of them are unregistered. They claimed that almost all of them are patronised by political parties. A few of them are more influential in terms of membership, but majority are not. One-third of secondary school teachers are affiliated with any teachers' organization. Pointing to numerous teachers' organizations some teachers tried to say that it may be a strategy of the government to keep teachers divided into many groups so that they cannot grow with strong opposition force against the government decision.

The secondary school teachers in interviews also opined that regardless of the nature of the teachers' associations these were used as a political platform by a group of influential teacher-leaders who were involved or had an intention to be involved in local and national level politics in future. Therefore, instead of securing the interest of general teachers few teachers used the association as a political weapon through which they intended to have popularity for political purposes in the community. A group of teachers viewed that the leaders of the teacher associations should not be selected based on any political affiliation rather their intellectual capability should be considered.

Another group of teachers argued that the more decentralization of the teachers' association is made, the more will be the possibility of political malpractice. Therefore, teachers demanded for only one central teachers' association instead of many at different levels. An assistant head teachers of a Non-government high school said:

There are seven/eight teachers' associations in this upazila which I do not like at all because they are many in number and also they have political dimensions. There should be only one teachers' association where all the schools would be the members. This association will discuss and negotiate with the government regarding the issues related to the teachers' professional development, unfortunately the associations focus only on self-interest.

Therefore, it is the expectation of teachers that, the teachers' association should be free from any political influence so that all the teachers can enjoy the benefits equally. To secure this, creation of a central teachers' association was a demand from a group of teachers.

It was found from the discussion with the teacher associations' leaders that all of their constitutions underscore the importance of quality of education and the associations provide their verdicts regarding any major changes in the curriculum or education system in the country. There was a long demand from the teachers' associations to employ and engage subject wise teachers in the educational institutions to teach particular subjects. This demand has not been fulfilled; in practice, teachers have to teach various subjects though all of them may not be related to their field of study.

They mentioned that in principle, the government recognizes the importance of teachers association and some time share their views regarding formulation of new policy, but prior to implementation of any policy government do not discuss the matter with the association. In the opinion of the teachers association, 'the government comes to us only when a conflict arises between the teachers and government policy'. One of the burning examples, as they mentioned, was related to recruitment of qualified individuals as teachers. The teacher leaders said that the associations demanded to the government to set up a body like Bangladesh Public Service Commission (BPSC) to recruit teachers for the private secondary educational institutions. On their demand, the government set up the Non-government Teachers Registration and Certification Authority (NTRCA). The authority just conducts examination for the teachers, recruitment is still in the hands of the respective School Managing Committees or the Governing Bodies. In the opinion

of the leaders, 'it is a bureaucratic set up and is not working in the way we had expected'. Again, NTRCA is working only for the private secondary school teachers, but the other important stream of education like madrasa is not included in its scheme.

E. Protection of teachers' interest

In response to a question, 'how the association protects teachers' interest,' majority of the teachers said that the associations could do little in this matter except setting up the pay scale for the teachers of private educational institutions. A teacher, as well as a leader of an association, told that this pay scale is one of their successes they have got as a result of long persisting demand. However, the majority of the teachers did not receive the salary as per the revised pay scale. A large number of non-government eligible teachers did not get the salary subvention from the government (grant or Monthly Pay Order or MPO). Regarding the grant issue, the non-government teachers observed human chain and staged a demonstration in front of the National Press Club in June 2012 when the then Chairperson of the Parliamentary Standing Committee for Education met the demonstrating teachers and expressed his solidarity with their demands. Later, in December 2017, teachers associations staged a big demonstration in the same place. In this demonstration, teachers raised their demands about their socio-economic and professional development including nationalization of all private educational institutions. They resorted to hunger strike from 26 December 2017 to 5 January 2018 and raised their three demands, such as (i) government must enlist the non-grant educational institutions for grant within May 2018 as they wanted to see implementation within the tenure of this government (ii) recognition to non-grant institutions following the existing criteria; otherwise developing new criteria may invite corruption, and (iii) to include teacher representative in the process of declaration of grant institutions so that they can positively contribute to the matter. Following their demand, the personal secretary-1 of the then Prime Minister went to the teachers to let them know the PM's consent to their demand and requested them to go back to the classrooms. As a result, the government enlisted 1,000 educational institutions under grant scheme to be executed from the following fiscal year, though there were about 5,000 institutions eligible to be enlisted. One of the teacher leaders mentioned:

Actually, it is not the association but political leadership, which is responsible for protecting teachers' interest. For instance, teachers' salary was increased three times in the national pay scale during the time of Awami League government. This government took two major decisions about teachers. One of them is establishing a separate pay scale for teachers and the other is to set up a separate public service commission for teachers' recruitment.

However, those decisions did not see the light of the day yet. One of the teachers mentioned, 'though they received the basic payment according to the national pay scale, they are deprived of other facilities such as promotion and transfer'. The respondents who were teachers from non-government institutions said that they do not have transfer options like the government school teachers.

Teachers also mentioned that a systematic change occurred in the recruitment of teachers at government secondary schools. At present corruption reduced to some extent as the recruitment process is supervised by the BPSC. Moreover, those who have M. Phil. or Ph.D. degree are directly qualified for assistant professor in college. However, 'Mapping' the change which was needed desperately is not accompanied. Unemployment problem and political goodwill is the main reason behind this issue. As a result, 150 thousand teachers of 9 thousand educational institutions are continuing their job without payment. However, the education office has expressed their commitment to include them in the pay order list but the result is still disappointing and they are waiting for the government's political decision.

F. Enhancing professional capacity of teachers

Most of the teachers who were considered for in-depth interviews, irrespective of institution type, had a common thought that the teachers' associations did not have much contribution for enhancing the professional capacity of the teachers'. Associations' over emphasis on activities for securing teachers' salary and benefits, time scale, selection grade etc., but sidestepping the issues of teachers' professional development was not taken well by the teachers. They showed their dissatisfaction with this regard at a complaining tone. For instance, a Bangla teacher of a Government school said, 'the teachers' associations are not playing minimum role to enhance teachers' professional skill or qualification. Instead they are busy for grabbing various benefits'. A number of teachers from each type of the institutions expressed their frustration in a similar way.

A group of teachers reported that besides working for securing the institutional benefits the associations also helped the teachers in their crisis moments. A head teacher of a Non-government school provided an example with this regard. When a teacher died and his family experienced acute financial scarcity the teachers' association of that area came forward to donate some money to his family. Another head teacher of a School & College perceived the teachers' association as a platform for sharing their personal sorrows and happiness. So, it is evident that, teachers' associations' main focus was not the professional enhancement of the teachers but enhancing them financially. However, the interviewed teachers expected a strong role of the teachers' associations regarding their professional capacity enhancement. Many of them believed that if the associations were cordial regarding professional capacity building of the teachers then they would be able to accomplish these. As per their voice the associations' leaders had access to the ministry and they had the power to influence the government for providing their financial and professional benefits. With this regard, a Bangla teacher of a Government school mentioned, 'If the associations wish they can do many things to enhance teachers' professional skills i.e. organizing capacity building workshop'. A head teacher of a Government school said, 'The regional teachers' association can raise the issues of teachers' professional capacity building to the ministry.' His colleague, a Mathematics teacher of the same institution also opined in the same way. Therefore, it can be said that regarding the issues of professional capacity development, the teachers expected an active role of the teachers' associations. However, their efforts were mostly occupied only to ensuring the financial benefits.

Preparing questions for terminal examinations and supplying those to the schools on payment were common practice of the teachers' associations. A large group of teachers from various types of institutions perceived this as a barrier of their professional capacity building because if they could prepare the questions by themselves, this might add value to their professional profile. Therefore, through supplying the examination question papers the teachers' associations were hindering teachers' professional skills development instead of enhancing those.

Whereas most of the interviewed teachers criticized the role of teachers' association negatively, two head teachers did it another way. A head teacher of a School & College appreciated the associations' role in supplying syllabus and question papers to the educational institutions, and instructing the teachers in quality issues. On the other hand, a head teacher of a Government school admired the teachers' association for playing a strong role regarding the enhancement of teachers' job status. In his word,

Teachers' association places teachers' demand to the government and through this the association tries to enhance the quality of teachers' lives. At present, teachers are honoured as a first class officer of the state. Moreover, the assistant head teachers now can be promoted to assistant district education officer. The teachers' association played a strong role to bring this rule in place.

Though they appreciated the role of teachers' associations it was not for their contribution in teachers' professional enhancement but for the financial benefits of the teachers. Therefore, it can be said that the teachers in general were not happy with the activities of the teachers' associations. They argued that the actual role of the teachers' associations should be improving the overall education system and placing teachers' logical demands, needs and objection to the right place, not bargaining for financial benefits only.

Epilogue

Teachers' qualitative development in terms of professional and personal wellbeing should be the responsibility of government as well as teachers' association. Government is continuously trying to do that but in most of the cases without the direct assistance of the teachers' associations. There are teachers' associations based on their types of institutions like government, non-government and madrasas. However, these organizations are again sub-divided into several quarters depending upon political and some leaders' personal interest. Such fragmentations actually resulted into many malpractices and deprivation from the rights of the teachers that they duly deserve. Large numbers of secondary school teachers belong to the group of MPO supported non-government schools and they suffer from various professional and financial weaknesses. The quality of education and teachers' competence is an area where teachers' association can contribute more but in reality, they work as a pressure group in the matters of financial and personal beneficial aspects only.

Besides some, only limited number of teachers (less than one third) holds membership of any association and many of them do not participate in the associations' activities with respect. Teachers' less involvement in association activities make their demand weak in one hand and on the other hand government delays in fulfilling their demand. Moreover, majority of the teachers' associations are politically affiliated and therefore, demands are not duly appreciated. It is clearly found that the government recognizes the importance of teachers' association and some time share their views regarding formulation of new policy, but prior to implementation of any policy government do not discuss the matter with the association. Still, large numbers of teachers outside government system are not receiving any financial assistance from the government. Finally, it can be mentioned that in terms of quality of education and development of teachers' quality the associations are largely silent.

Chapter 15

Discussion of Key Findings and Policy Recommendations

Key Findings

A favourable student-teacher ratio in every educational institution should be ensured through appointing more teachers. Recruitment of temporary teachers should be avoided.

Teacher training capacity aiming to teach only by a formally trained teacher in pedagogy should be increased. Scope and capacity of subject-based and other short training courses need to be expanded from a lifelong learning perspective.

Annual teacher assessment based on their classroom performance should be introduced to keep them obliged to improve classroom teaching. Monitoring school visits needs to be emphasised. Feedback and follow-up mechanisms should also be in place.

Expansion of use of technologies in education should be prioritised. Quick expansion of ICT labs, high-speed internet facilities, quality equipment at institution level, and having teachers' own ICT devices can be helpful with this regard.

In order to address widening inequality within and among various types of educational institutions, a serious attempt should be made to reduce the gaps with regard to teachers' educational qualifications, and availability of infrastructure and other facilities in the institutions. Non-government schools and Dakhil madrasas need special attention.

Review of promotion policy with the principle 'change of designation with the change of grade' may be seriously thought of to create an incentive mechanism and to increase job satisfaction of the teachers.

The secondary teaching community should seriously think about a major review of the role of their associations with regard to 21st century needs.

A similar study as this can be carried out on teachers of primary education.

This final chapter summarises the key findings of this study on the teachers of secondary educational institutions in Bangladesh. It also discusses the findings in light of the SDG 4 and identifies the gaps in achieving various targets of this particular goal. Some policy recommendations are also made for consideration by the respective stakeholders so that Bangladesh can achieve SDG 4 on time.

A. Discussion

The *Education Watch* platform is in its 20th year now. This is a major feat which very few similar initiatives have been able to achieve in the world. For this year, the *Education Watch* group decided to devote focus specifically on the teachers of secondary education. Although a number of issues related to the teachers of primary and secondary education were explored in the previous *Education Watch* studies, this is for the first time that the teachers' lives, living, and their development have been explored nationally. The issues addressed in this study were diverse – starting from the household demography of the teachers to issues on professional and personal lives and their involvement in the activities of teachers' associations. Three types of secondary educational institutions under general education stream, viz., Government school, Non-government school and School & College, and two types of madrasas, viz., Dakhil madrasa and senior madrasa (combining Alim, Fazil and Kamil) were looked at. Permanent teachers teaching from grade VI to X were the subjects of this study. Benefits of a mixed-method approach using both quantitative and qualitative research techniques were harnessed.

It is universally known that teachers are extremely important and inseparable component of any education system. The first Education Commission of Bangladesh recognized their roles in education by saying that 'teachers' are the heart of any education system, and quality of education solely depended on the quality of teachers and the efforts they take' (Government of Bangladesh 1974). The global community also highly emphasized the teachers' roles and responsibilities in the journey towards creating a learning society. Drawing teachers into the decision making position, the Delors Commission, in its report to UNESCO on education for 21st century, proposed four pillars of education – learning to know, to do, to be and to live together, which provided an integrated vision of education (Delors et al. 1996). The latest one is the role of teachers in achieving the SDGs. The expectations of SDGs are much higher and integrated in nature compared to any other previous global development initiatives (United Nations 2015). The Education SDG (SDG 4) intends to achieve quality education for all with equity from pre-primary to higher secondary level and, therefore, quality teachers with relevant pedagogical training were thought to be essential. Besides, the SDG target 4.7 stipulates that by 2030, the learners' would acquire such knowledge and skills that would help promote global sustainable development, which certainly include all the 17 SDGs. The role of the teachers is undoubtedly very vital with this regard as well.

Teaching as a sector of employment is one of the largest in Bangladesh with over 1.1 million teachers from pre-primary to tertiary education (BANBEIS 2017). Those who teach at secondary level comprise nearly a third (32.8%) of total teaching force and about two-thirds (65.8%) of post-primary teaching force. The teachers comprise 22% of the total service sector employment with similar education, i.e., higher secondary and above in Bangladesh. The secondary school teachers comprise over 14% of the tertiary educated service sector employees (EW calculation based on data from BANBEIS 2017, BBS 2018 and Ullah 2018). Again, whereas only 15% of the population aged similar to the teachers in Bangladesh completed only secondary education¹, 48.8% of the teachers' of secondary education had a Master's degree. Therefore, the teachers,

¹ Source: Re-analysis of *Education Watch* Household Survey 2016 data; age considered 21-60 years

as an organized and educated professional group, have the potential to help achieve the SDGs. Again, these teachers take care of about 37 million students, which create another layer of opportunity to motivate, teach and improve skills so that they can get prepared for achieving global sustainable development. All the above put the teachers in a unique position to actively participate in achieving the SDGs and to inspire, motivate, and prepare the younger generation for a sustainable earth.

The secondary education sector in Bangladesh has grown significantly in recent past in terms of expansion. Since 2008, the student population has risen by 43.4%. But the teaching force, on the other hand, has risen by 13.2%. The educational institutions have grown by 3.7%. Such an uneven growth has implications for number of students per institution and as well as on student-teacher ratio. This study did not collect any information on the infrastructure other facilities over time, but it can be said that the pressure of students on the institutions as well as on the teachers has increased tremendously. This phenomenon is likely to have negative implications on the provision of quality teaching. The first issue with this regard is inadequate number of approved teaching positions for the educational institutions. If all the approved positions were filled up through permanent recruitment, the student-teacher ratio would have been more than 40:1 in 27.4% of the institutions; of which more than 60:1 in 12% of them. To meet the shortage, as was found in this study, a half of the institutions with good financial ability recruited temporary teachers. This could, somehow, decrease the pressure for a section of the institutions, but not for the remaining half of the institutions, particularly those which were financially not able to do so.

The opposite side of the coin is that a good portion of the educational institutions, mostly from among the madrasas, had very few students compared to the approved teaching positions and number of permanent teachers there. The student-teacher ratio was much lower in those institutions. In the latter case, over a fifth of the institutions had less than 20 students against one permanent teacher, which were found in 30% of the madrasas. Therefore, majority of the secondary educational institutions suffer from scarcity of teachers and a smaller portion of the institutions enjoy overflow. Some administrative intervention may be required to make it in order.

The other related issue is recruitment of temporary teachers. It is practiced because of shortage of teachers in the institutions in terms of number of students. In most cases, positions are already created, though inadequate in number, but the problem lies with inactive/reluctant role of authorities in recruiting permanent teachers. Again, the temporary teaching staff are obliged to work like as permanent teachers without guaranteeing job security. Moreover, instead of being specialist resource provision teachers, they are just job seeker educated youth, who in general expect permanent jobs. Therefore the temporary teachers cannot work with adequate concentration rather always busy in searching for permanent jobs. As there is no possibility to reduce the number of students in the secondary educational institutions, need of teacher is a permanent issue. Therefore, a permanent solution is better through creating more teaching positions in the institutions and fulfilling those immediately.

Increasingly teachers with higher educational qualifications were recruited for teaching positions in secondary educational institutions over time. This is no doubt a good sign for secondary education in Bangladesh. At the same time, a large portion of the teachers joined the profession not by choice. Such people preferred other professions and occupations, but joined in present profession without any prior thinking about the profession; for some it was absolutely unplanned. Such a situation may have negative influence on the profession as well as on quality of teaching and resulting learning.

Some of the teachers, during in-depth interviews, explained how they were inspired by their own teachers or any relative teachers to choose teaching as profession. However, this did not happen for majority of them. In the *Education Watch 2017* study, in response to a question 'whether they looked upon teachers as role models for ethical and moral standard', 65% of the secondary level students responded positively; however, a quarter replied in the negative (Ahmed et al. 2018). Surprisingly, a half of the teachers also responded negatively to the same question. This means that the teachers are aware of how they are looked upon by their own students. These should be taken seriously as it is expected that the teachers would be the first to rely on, after the parents, in every aspect of life. Now the question is, what are the factors that made the teachers' image so low as an idol? How all the teachers can be developed idol to the students is a more important question, which needs to be explored. Educational institutions and the teacher associations may look at the issue to find out a probable solution.

The public sector is in general attractive to a job seeker. The same was observed with respect to having a teaching job in Government secondary schools. A main reason is perhaps the attractive remuneration package. Although the basic monthly salary for teaching in any secondary educational institution is the same, the Government school teachers get other benefits and perks more than those of private institutions (grant or non-grant) including retirement benefits. Second is the job security as these are covered by the revenue budget (as against development budget which has some uncertainty depending on availability of non-revenue funds). It was observed that about two-thirds of the teachers of Government schools had moved in from teaching in private educational institutions. It is a common practice that the graduates first take a job in the private institutions for teaching or anything else and then keep trying for a job in Government schools as long as they are eligible in terms of age limit. Such a natural selection process of secondary education teaching market resulted concentration of more qualified teachers in terms of education (with postgraduate degrees, better performance in public examinations and studying Science) in the Government secondary schools. The School & Colleges can be placed in second position, the Non-government schools and senior madrasas jointly third and the Dakhil madrasas at the bottom in terms of choice as a destination of secondary educational institution for teaching. Such a differentiated choice of institutions may get stronger over time with differentiation in physical facilities, proximity to an urban centre and other determinants.

One of the important target in SDG 4 is to provide education to all children through a qualified teacher who has formal training on pedagogy (Target 4c). Although the situation has improved over time, a large proportion of the secondary students in Bangladesh were still deprived of this as over a third of their teachers did not have such training. The students of the madrasas were more deprived in this because two-thirds of Dakhil and a half of the senior madrasa teachers had no formal training on pedagogy. It was good to see that the teachers understood the importance of pedagogical training and all the teachers who did not have formal pedagogical training wanted to have such training. This study observed that the young teachers (belonging to the first quartile of the teachers in terms of service length), males and Master's degree holders were less likely to have this training. A section of these untrained teachers might be waiting for changing their job especially those who were in Non-government schools and Dakhil madrasas. Another section may not have been able to manage leave from their respective institutions to pursue training. Whatever the case, it is important to take steps so that all the teachers are trained. This can be done through making it an obligatory provision for the educational institutions by imposing a time barrier. An interlinked issue is the provision of receiving such training in service. Over three-quarters of the currently trained teachers received pedagogical training while in service. The teacher recruitment policy still allows appointing of untrained graduates as teachers. If the policy continues, it would never be possible to achieve

this target of SDG to provide pedagogical training to about 120,000 untrained teachers as well as to those who will be recruited up to 2030. Therefore, a massive initiative with high priority should be considered through capacity building of the teacher training institutions, both in public and non-governmental sectors.

The other means of increasing quality of the teachers as well as of education is the provision of in-service training for them on various subjects they teach and different short courses on issues related to educational matters. It was observed that a larger proportion of the teachers (than those who received formal pedagogical training) were provided subject-based training and/or short training courses on various educational matters. Majority of the teachers who received these training got it very recently and these were mostly held at the auspices of the Ministry of Education. This indicates the government's good intention and effort to improve quality of teachers. Each teacher teaches around 5-6 subjects in different grades of secondary education; therefore, 1-2 subject-based training is not adequate for them. They need training on each of the subjects they teach which should be repeated several times. Again, short courses on ICT, computer application, curriculum, teaching quality improvement, creative question preparation, student assessment etc. are very generic type, and therefore, each of the teachers should receive such training. Analysis of data for this study shows that proportion of subject teachers receiving subject-based training on any particular subject did not reach 45%, and at the upper end less than a third of all teachers received short training course on ICT and creative question preparation. All these indicate huge training gap among the teachers of secondary educational institutions.

A more important issue, perhaps, is how much of such training is reflected in classroom teaching. Observation of teaching-learning practice in real classroom setting, done for this study, gave a gloomy picture. Teachers were found monotonously following lecture method irrespective of subjects without use of any teaching aids and promoting rote learning. There was an element of reluctance on the part of teachers to use any ICT devices or multimedia or to engage students in learning process. The delivery of the teachers was largely one way. A good amount of teaching time was spent in searching the 'answer' of probable questions that might appear in examination from the textbooks or identifying it in the guidebooks. Homework was just an extension of it leading to memorization. It seems that the classroom situation has not been changed over the decades. There was also a lack of supervision of classroom teaching. Although over three-quarters of the teachers reported to have been supervised at least once over the past three months of interviewing - with 85% of those by the heads of the institutions – a half of them did not get any feedback on how they were performing. Those who received feedback were very routine and mundane in nature, mostly related to discipline, but not directly related to quality of teaching-learning or pedagogy. Therefore, the main thrust of classroom teaching as well as supervision of those was substantially missing throughout the process.

How much time the teachers should be in educational institutions and what would be the distribution of time by various activities they perform– these are two important questions with regard to quality of education. The first Education Commission in Bangladesh proposed it to be 45 hours per week for the teachers of secondary education. Thirty-six years later the Education Policy of 2010 shortened it to 40 hours (Government of Bangladesh 1974; 2010). Change in the distribution of time by activities also took place. Whereas the Commission proposed 21 hours for teaching, 10 hours for preparation of exercise, eight hours for counselling and welfare duties, and six hours for other activities, the Policy has increased classroom teaching time to 24 hours but decreased time for remaining activities – to six hours for each of preparation of exercise and counselling and welfare activities, and four hours for other activities. Based on their interviews, the teachers on average spent 32 hours 12 minutes in school during the week prior to interview

– much less than what was officially expected. Nearly a half of it was for classroom teaching, 16% for preparation for teaching and 35% for other activities. This shows that the practice in the educational institutions was far different than what was written in the Policy. The teachers of secondary educational institutions in Bangladesh spend much less time at work compared to other service holders. As a result, the actual contact hour between the students and teachers becomes much less than expected. Surprisingly, the teachers wanted to spend even lesser time for classroom teaching – from currently conducting 23.7 periods per week to 18.6 periods. Such a mentality of the teachers is totally unexpected and not acceptable. It seems that the teachers are used to look at it from their own interest not from the students' interest. They had no headache of doing any preparatory activities before conducting classes or any welfare or counselling activities for the students. The situation related to contact-hour becomes more vulnerable when a section of the teachers choose teaching profession considering shorter duration of office hour.

The government of Bangladesh has made various initiatives to spread the benefits of ICTs among the masses. Use of ICTs to improve quality of education has been given importance in the National Education Policy 2010 and ICT Policy 2015 (Government of Bangladesh 2010, 2015). The Ministry of Education also prepared ICT in Education Master Plan 2012-21 aligned with the country's Vision 2021 (Government of Bangladesh 2013). Efforts are being made to equip the educational institutions with ICT labs and multimedia classrooms. All these initiatives are aligned with the SDG targets 4.4 and 4a, which calls for improving ICT skills among the students and spread of internet facilities in educational institutions for pedagogical purposes. Use of multimedia in classroom teaching seems not yet much popular in secondary educational institutions. Problem lies with shortage of basic minimum facilities at the institution level as well as lack of a culture of using ICT in education among the teachers. Only over a fifth of the institutions had both multimedia classroom and ICT lab, but over two-fifths had none. Again, there were disparities among various types of institutions and among the institutions within each type. Nearly two-fifths of the teachers reported to have used multimedia in classroom teaching. A section of the teachers who used those however, faced various types of obstacles, and another section was totally unwilling to use those. A good proportion of the teachers had their own ICT devices like smart phone, tablet, laptop or desktop computer. The teachers who had their own ICT devices, who received ICT training and belonged to the middle half of the teachers in terms of service length, were more likely to use multimedia in classrooms. The situation can be improved further through creating more facilities at the institution level, setting up a backup mechanism for maintenance, and encouraging to have personal devices (perhaps at a subsidised price or through providing small grants).

The Ministry of Education has imposed restrictions on teachers' involvement in private supplementary tutoring, and has instructed the educational institutions to arrange additional teaching for weaker students. This study observed that two-thirds of the educational institutions had a provision of additional teaching mostly for the students of grades VIII and X where a half of the teachers of these institutions taught – who constituted a third of all teachers under secondary education. In addition, 22.4% of the teachers reported to be engaged in private supplementary tutoring. Expansion of additional teaching in the educational institutions before or after the school hours and on holidays and teachers' offering private supplementary tutoring indicates inadequacy of official teaching provided by the teachers to their students. Short duration of contact hours may explain a part of this inadequacy and the other part by ineffective classroom teaching as mentioned above. Although the teachers tried to blame the students and their parents for their overenthusiasm in availing private supplementary tutoring, the parents said it differently which was compatible with the findings from classroom observation. As both additional teaching and private tutoring have financial implications, there was no reason for the parents to be enthusiastic about it. Again, a good

proportion of the teachers reported to use guidebooks. This is also a reflection of their neglect. All these issues need serious attention. Emphasis should be on improvement of regular classroom teaching so that there is no need of additional teaching, private tutoring or guidebooks.

One of the major spirits of SDGs is equitable growth. It is more relevant when the Education SDG is concerned – the title of which says, ‘Ensure inclusive and equitable quality of education’. Therefore, the first step of achieving this goal is to create an equitable system of education. Unfortunately, the secondary education system in Bangladesh is far away from this. As shown already in an earlier paragraph, the existing selection process works to differentiate among various types of secondary educational institutions in Bangladesh. Varieties of issues were described in different chapters of this report with many different indicators related to the teachers. In most of the cases the advantage of the Government schools was at the top followed by the School & Colleges. The Non-government schools and the senior madrasas shared the third and the fourth places interchangeably. The last position was for the Dakhil madrasas. There was also huge variation among the institutions within each of the types. Reflection of the above was observed in the level of satisfaction of the teachers with regard to their profession, institution and remuneration. Whereas 54.8% of the Government school teachers were satisfied with each of the above, it was only 21% among those in Dakhil madrasas. Only a small portion of the secondary students can get the opportunity to admit in the Government schools and the large majority of them admit in other types. Such an inequitable system cannot guarantee inclusive or equitable quality of education and therefore goes extremely against the spirit of SDGs.

Gender equality is an important goal in SDGs. Goal 5 is dedicated on this. The issue is also emphasised in the other goals as well including the Goal 4. The Ministry of Education has directed the secondary educational institutions to recruit 40% of their teachers from among the females. The institutions are far off from this. Although the proportion of females among the temporarily recruited teachers was higher than that of the permanently recruited (31.1% versus 23.8%); it was, all together, less than a quarter. Therefore, the gap needs to be fulfilled through appointing more females than males while recruiting new teachers. The findings of this study reveals that although the female teachers were more likely to take teaching as profession than the males, no gender difference was observed between them in terms of educational qualifications, salary and benefits, ICT use in classrooms, and satisfaction with profession, institution and remuneration. A number of areas were found where the males were ahead of the females and vice versa. For instance, more females had professional training, but more males received educational short courses. Males were more engaged in private supplementary tutoring, but the females in using guidebooks. Again, males were more likely to be aware of education policy, curriculum objectives, and SDGs than the females. No gender difference was observed in getting supervision, but females were less likely to get feedback. Males wanted to change institution and were engaged in additional teaching than the females. These differences have implication not only on creating a vibrant teaching force at secondary education level in Bangladesh, but also on quality of teaching at the institution level.

Various types of teachers unions or associations exist in different parts of the world. In the developed world, these are more organized and proactive with regard to professional as well as overall development of education. The teachers in this part of the world started to organize themselves through establishing their own associations during British Raj about a century ago. The associations, in most cases, are aligned with various political parties and their activities are mostly centred to the demands for increasing facilities for their members (i.e., teachers). No doubt, most of the demands were logical and were necessary to place before the concerned authorities, but as a result the associations could not concentrate much on issues

related to quality improvement of the teachers or the system. Such a situation often lead to antagonistic relationship between the associations and the government.

Although there are many associations for the teachers of secondary education, less than a third of the teachers were found to be the members of these associations. A lesser proportion of the teachers were found to be active participants of association activities. The teachers in general expressed dissatisfaction with the associations' activities as these had no link with their professional development. The young teachers showed their interest to join and participate in association activities if they see them useful for their profession. There is a demand from not only the society but also from the teacher community to see the teachers' association active for professional development of the teachers. The secondary teachers' association in Bangladesh are unfortunately not yet ready to address such demands and be proactive in contributing to improving quality of education. It is not the Ministry of Education or the Government of Bangladesh who can do it, it is the teachers who should come together and make their own associations operating for the development of quality education in this country.

Very frustrating results were found regarding teachers' awareness and knowledge regarding national education policy, national curriculum, and the sustainable development goals (SDGs). It is surprising that the teachers deliver the contents of the textbooks without knowing much about the curriculum goals and the broader perspective of education placed in the national policy. It is likely that the teachers do not need to care about what is written in these documents and therefore no requirement for linking the contents of the textbooks with anything else. This is supported by the findings from the classroom observations, where it was seen that the teachers were delivering contents mechanically and in isolation without linking those with any other concept, content or broader vision of education. Such a situation indicates that the teachers were not qualified enough to create a broad-based learning environment for the students of secondary educational institutions. The same can be said about SDGs or specifically for SDG 4. The teachers were not aware about the general facts of the SDGs; therefore, specific issues regarding Education SDG are far from their knowledge. It is less likely that these teachers of secondary educational institutions in Bangladesh, with their very limited knowledge about education policy, curriculum, and SDG 4, would be able to effectively contribute in promoting the concept of sustainable development through their students. This is not an issue related to target 4.7 only, but an issue that affects all other goals and targets. Moreover, if the situation of the teachers, who are much educated than others, is so poor regarding knowledge and awareness on SDGs, what about the mass people of Bangladesh? This should be a serious concern for the sake of overall development of the nation.

B. Policy recommendations

Based on the findings of this study, and the analyses and discussions made of those in line with the SDGs, the following recommendations are formulated to help promote achieving the targets of SDG 4. It should be noted that many of these are already in the policy, but are not progressing in due speed. This study, therefore, reemphasises those.

1. *A favourable student-teacher ratio in every institution should be ensured.* This should be done through examining the present student-teacher ratio, number of students over a period of past five years, and the approved number of positions of teacher – separately for each of the institutions. The aim should be to place more teachers where the ratio is higher (say over 40:1) and withdraw from those with excess. However, the extreme or unusual situation of remote rural areas needs to be considered with care. Recruitment of temporary teachers should be avoided.

2. *Teacher training capacity aiming to teach every student by a teacher having formal training in pedagogy should be increased. Scope and capacity of subject-based and other short training courses need to be expanded from a lifelong learning perspective.* Existing capacity of public and private teacher training institutions may hardly be able to provide training to the currently untrained teachers, but not to the new recruits. Capacity building of the current institutions as well as establishment of new training institutions should be considered seriously. BRAC's Post Primary and Continuing Education (PACE) can be utilised to solve a portion of this task. International cooperation may also be sought. Subject based training should be provided to the teachers in all subjects they offer and in a continuous basis. Some generic courses should be provided to every teacher, which should include curriculum, education policy, SDGs and ICT. Along with capacity building of training institutions, capable non-government organizations should also be considered as training provider. Benefits of ICTs and internet can be used to reach the teachers.
3. *Annual teacher assessment based on their classroom performance should be introduced to keep them obliged to improve classroom teaching.* Quality classroom teaching is the key to quality education. A part of huge lacking in effective classroom teaching is due to inadequate knowledge of the teachers, but a major part is related to lack of obligation. Provision of regular supervision of classroom teaching and written feedback to respective teacher may help in this. An important task of the head of the institutions should be to provide annual assessment of the teachers based on a set of prescribed indicators. This should also include teachers' preparation of exercises for classroom teaching and counselling and welfare duties to the students. Monitoring school visits needs to be emphasised in this regard.
4. *Expansion of use of technologies in education should be one of the priority tasks of the government.* This can be done through quick expansion of ICT labs, multimedia classrooms and providing high-speed Internet accessibility covering all the educational institutions with trained teachers. Quality of equipment with provision of maintenance is also important. ICT devices and high-speed internet facilities should be made available to teachers at a subsidized price so that they can have them of their own. Networking of teachers with pedagogical issues can help them improve their own quality.
5. *In order to address widening inequality within and among various types of educational institutions, a serious attempt should be made to reduce the gaps with regard to teachers' educational qualifications, and availability of infrastructure and other facilities in the institutions.* This should include a similar recruitment procedure including equity in financial and other benefits during job and after retirement. As the existing natural selection process has just widened inequity over time, an intervention from the government is a call of the time. The Non-government schools and the Dakhil madrasas need special attention.
6. *Rearrangement of promotion policy with the principle 'change of designation with the change of grade' may be seriously thought of to create an incentive mechanism and to increase job satisfaction of the teachers.* As it is now, the teachers can be recruited at grade 10 as Assistant Teachers; if the annual assessment reports show good progress, they can be promoted to grade 9 after five years, to grade 8 after 10 years, and to grade 7 after 15 years. The designations at the promoted grades may be Associate Teacher, Teacher and Senior Teacher, respectively. The Head and Assistant Head of the institutions should be considered as administrative positions, for which only the Senior Teachers will be eligible. Two more positions such as Senior Assistant Teacher and

Senior Associate Teacher may also be introduced if a separate pay-scale is considered. Like as public college teachers, qualified teachers can be posted to secondary education administration.

7. *The secondary teaching community should seriously think about a major review of the role of their associations with regard to 21st century needs.* Having many associations of teachers should not be a problem, but the challenge is how these associations can be made more proactive towards creating a new generation of teachers and achieving quality of education, coming out of traditional role like 'trade unions' in line with parent political parties. The government need to engage the associations in policy formulation and implementation.
8. Finally, a similar study can be carried out for primary education. This will help understand the full picture of our school education system and therefore take necessary actions for improvement in line with SDG 4.

References

Annexes

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Annexes

Annex 1.1

The fourth Sustainable Development Goal (SDG 4) and related targets

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

- 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
- 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
- 4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
- 4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
- 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

Annex 1.2

Titles of previous Education Watch reports and major aspects

Year	Report title	Issues explored
1999	Hope not complacency: State of primary education in Bangladesh	<ul style="list-style-type: none"> • Internal Efficiency • Level of Basic competencies achievement
2000	A question of quality: State of primary education in Bangladesh	<ul style="list-style-type: none"> • Competency based learning achievement • Teacher Education
2001	Renewed hope daunting challenges: State of primary education in Bangladesh	<ul style="list-style-type: none"> • Internal efficiency • Private expenditure of education • School budgets • Literacy status
2002	Literacy in Bangladesh: Need for a new vision	<ul style="list-style-type: none"> • Exploration of literacy levels of the population
2003-04	Quality with equity: The primary education agenda	<ul style="list-style-type: none"> • In-depth probe of participation, equity and quality
2005	The state of secondary education: Progress and challenges	<ul style="list-style-type: none"> • Internal efficiency • Financing • Management
2006	Financing primary and secondary education in Bangladesh	<ul style="list-style-type: none"> • State level financing in education • Private expenditure for education
2007	The state of secondary education: Quality and equity challenges	<ul style="list-style-type: none"> • Secondary Curriculum implementation • Learning Achievement of Grade X students • Further education and employment opportunities of secondary graduates
2008	State of primary education in Bangladesh: Progress made, challenges remained	<ul style="list-style-type: none"> • Quality in primary education • Internal efficiency • Student's achievement of competencies
2009-10	Exploring low performance in education: The case of Sylhet division	<ul style="list-style-type: none"> • Access and retention in Sylhet • Constraints for educational development in this region • Way forward to overcome challenges
2011-12	Skills development in Bangladesh: Enhancing the youth skills profile	<ul style="list-style-type: none"> • Skill profile of Bangladeshi Youth • Youth's expectation of skills • Policy recommendation for skill development in Bangladesh
2013	New vision old challenges: The state of pre-primary education in Bangladesh	<ul style="list-style-type: none"> • Development of pre-primary education in Bangladesh • Current status and feature of pre-primary education • Perception of parents and teachers

2014	Whither grade V examination? An assessment of primary education completion examination in Bangladesh	<ul style="list-style-type: none"> • Discourses on PECE examination among stakeholders and media reporting • Family and school's responses to PECE • Process of PECE administration • Link between student's performance in PECE and their achievement of competencies
2015	Moving from MDG to SDG: Accelerate progress for quality primary education	<ul style="list-style-type: none"> • Preparedness of teacher • Trend and correlation between children's access and achievement • Assessment of institutional efficiency as output of investment in education • Equity in primary education through quality framework
2016	Literacy, skills, lifelong learning – SDG4 in Bangladesh: Where are we	<ul style="list-style-type: none"> • Literacy attainment by different group of population • Educational qualification and skill acquisition • Existing lifelong learning opportunities
2017	Ethics and values in school: Capturing the spirit of education	<ul style="list-style-type: none"> • Conceptualization of Ethics and Value Education (EVE) in curriculum and textbooks • EVE in pedagogy • Students perception about EVE • Policy recommendation for EVE enhancement

ক্রমিক	প্রশ্ন	উত্তর/কোড						
		মানবিক	বিজ্ঞান	বাণিজ্য	মুজাব্বিদ	হিফজুল কুরআন	কারিগরি	
21	নবম-দশম শ্রেণিতে কোন কোন বিভাগ চালু আছে?	হ্যাঁ	1	1	1	1	1	1
		না	2	2	2	2	2	2
22	এ বছর (২০১৮) মাধ্যমিক স্তরের ক্লাস রুটিন তৈরিতে কতজন শিক্ষক জড়িত ছিলেন?				নারী		পুরুষ	
23	এ শিক্ষাপ্রতিষ্ঠানের কতজন শিক্ষক কোনো শিক্ষক সমিতির সদস্য?				নারী		পুরুষ	

ক্রমিক	প্রশ্ন	উত্তর/কোড					
		ষষ্ঠ	সপ্তম	অষ্টম	নবম	দশম	
24	ডিজিটাল উপকরণ (মাল্টিমিডিয়া, ল্যাপটপ, প্রোজেক্টর) ব্যবহার করে এ বছর (২০১৮ সালে) কোন কোন শ্রেণিতে শিক্ষণ-শিখন কার্যক্রম পরিচালনা করা হয়েছে?	হ্যাঁ	1	1	1	1	1
		না	2	2	2	2	2
25	মাধ্যমিক শিক্ষা অফিস বা এনসিটিবি প্রদত্ত কোন কোন শ্রেণির কতগুলো বিষয়ের শিক্ষাক্রম এ শিক্ষাপ্রতিষ্ঠানে আছে?	সব বিষয়ের আছে	1	1	1	1	1
		বেশিরভাগ বিষয়ের আছে	2	2	2	2	2
		অর্ধেক বা তার কম আছে	3	3	3	3	3
		কোনো বিষয়েরই নেই	4	4	4	4	4
26	ক্লাস রুটিনের বাইরে এ বছর এই শিক্ষাপ্রতিষ্ঠানে কোনো বিশেষ ক্লাসের আয়োজন করা হয়েছে কি?	হ্যাঁ	1	1	1	1	1
		না	2	2	2	2	2
27	বিশেষ ক্লাসে কতজন শিক্ষক দায়িত্বপালন করছেন/করেছিলেন?	নারী					
		পুরুষ					

মাধ্যমিক স্তরে শ্রেণিভেদে বর্তমানে তালিকাভুক্ত ও উপস্থিত শিক্ষার্থীর সংখ্যা (হাজিরাখাতা অনুযায়ী)

ক্রমিক	প্রশ্ন	ষষ্ঠ		সপ্তম		অষ্টম		নবম		দশম	
		ছাত্র	ছাত্রী								
28	তালিকাভুক্ত কতজন?										
29	আজ উপস্থিত কতজন?										

গত দুই বছরে জেএসসি/জেডিসি ও এসএসসি/দাখিল পরীক্ষার ফলাফল

সাল	পরীক্ষার নাম	মোট পরীক্ষার্থী	পরীক্ষার ফলাফল							
			A+	A	A-	B	C	D	F	
২০১৭	জেএসসি/জেডিসি									
	এসএসসি/দাখিল									
২০১৬	জেএসসি/জেডিসি									
	এসএসসি/দাখিল									

(জানা নাই = ৪৪৪৪, প্রযোজ্য নয় = ৯৯৯৯)

তথ্যসংগ্রহকারীর নাম: তারিখ:

তত্ত্বাবধায়কের নাম: তারিখ:

Annex 2.2
Teacher survey questionnaire

এডুকেশন ওয়াচ ২০১৮

বাংলাদেশে মাধ্যমিকস্তরের শিক্ষকদের জন্য প্রশ্নপত্র

এই তথ্য শুধু গবেষণার কাজে
ব্যবহার করা হবে

সনাক্তকরণ

শিক্ষাপ্রতিষ্ঠানের নাম: কোড: এলাকা: গ্রাম = 1, শহর = 2

গ্রাম/মহল্লা: ইউনিয়ন/ওয়ার্ড: উপজেলা:

শিক্ষাপ্রতিষ্ঠানের ধরন: সরকারি মাধ্যমিক = 1, বেসরকারি মাধ্যমিক = 2, বেসরকারি স্কুল ও কলেজ = 3,
দাখিল মাদ্রাসা = 4, আলিম/ফাজিল/কামিল মাদ্রাসা = 5

শিক্ষকের নাম: লিঙ্গ: পুরুষ = 1, নারী = 2

পদবী: অধ্যক্ষ/প্রধান শিক্ষক/সুপারিনটেনডেন্ট = 1, সহকারী প্রধান শিক্ষক = 2, সহকারী শিক্ষক = 3, প্রভাষক = 4, সহকারী অধ্যাপক = 5,
সহযোগী অধ্যাপক = 6, প্রদর্শক = 7

এমপিওভুক্তি: এমপিওভুক্ত = 1, এমপিওভুক্ত নয় = 2 মোবাইল নং:

গবেষণায় অংশগ্রহণের জন্য তথ্যদাতার অনুমতি গ্রহণ

সম্মানিত শিক্ষক মহোদয়,

গণসাক্ষরতা অভিযানের পক্ষ থেকে সালাম নিবেন। বাংলাদেশের প্রাথমিক, মাধ্যমিক ও মৌলিক শিক্ষার ওপর গবেষণা পরিচালনা এবং এর ফলাফল শিক্ষাসংশ্লিষ্ট ব্যক্তিবর্গ ও সাধারণ মানুষকে অবহিত করার উদ্দেশ্য নিয়ে গণসাক্ষরতা অভিযানের উদ্যোগে ১৯৯৮ সালে এডুকেশন ওয়াচ নামে একটি প্রকল্প শুরু হয়। এ প্রকল্পের আওতায় এ পর্যন্ত ১৬টি প্রতিবেদন প্রকাশিত হয়েছে। এসব গবেষণা থেকে প্রাক-প্রাথমিক, প্রাথমিক ও মাধ্যমিক শিক্ষার বিভিন্ন বিষয় সম্পর্কে নানান তথ্য জানা গেছে, প্রণয়ন করা গেছে নীতিনির্ধারণী সুপারিশমালা। গবেষণা প্রতিবেদনগুলো বিভিন্ন মহল বিশেষ করে শিক্ষক, শিক্ষা কর্মকর্তা, উন্নয়ন সহযোগী সংস্থা, সরকারের শিক্ষা এবং প্রাথমিক ও গণশিক্ষা মন্ত্রণালয়দ্বয়েও বেশ প্রশংসিত হয়েছে। এর ফলাফল সরকারি-বেসরকারি পর্যায়ে পরিকল্পনা প্রণয়ন ও বাস্তবায়নে সহায়ক হিসেবে কাজ করছে।

এ বছরের গবেষণার একজন তথ্যদাতা হিসেবে আপনাকে দৈবচয়নের ভিত্তিতে নির্বাচন করা হয়েছে। গবেষণার অংশ হিসেবে আমরা আপনার কাছ থেকে আপনার পরিবার, শিক্ষা, প্রশিক্ষণ, বিদ্যালয় কর্মকাণ্ড, শিক্ষাসংক্রান্ত বিবিধ বিষয়ে আপনার ধারণা, আর্থসামাজিক অবস্থা ও আয়মূলক কার্যক্রম বিষয়ক বিস্তারিত তথ্য সংগ্রহ করবো। আপনাকে নিশ্চিত করছি যে আপনার দেয়া তথ্য শুধু গবেষণার কাজে ব্যবহার করা হবে এবং সমস্ত তথ্য গোপন রাখা হবে—কোনো তথ্যই কোনো ব্যক্তিবিশেষ বা প্রতিষ্ঠানের নামসহ প্রকাশ করা হবে না। গবেষণায় অংশগ্রহণের জন্য আপনাকে কোনো সম্মানী প্রদান করা হবে না। আপনার দেয়া তথ্য অনুরূপ মোট ৩,০০০ জন শিক্ষকের দেয়া তথ্যের সাথে একত্রে বিশ্লেষণ করা হবে। উল্লেখ্য, এই প্রশ্নপত্রের সব প্রশ্নের উত্তর দিতে আপনি বাধ্য নন এবং চাইলে যেকোনো সময় যেকোনো প্রশ্নের উত্তর দিতে অপরাগতা প্রকাশ করতে পারেন। আপনি চাইলে এ গবেষণায় অংশগ্রহণ নাও করতে পারেন।

যদি আপনি সহযোগিতা করেন অর্থাৎ গবেষণার জন্য প্রয়োজনীয় সব তথ্য প্রদান করেন, তাহলে আপনার কোনো ক্ষতি হবার সম্ভাবনা নেই কিন্তু আপনিসহ অন্য সকলের তথ্য সম্মিলিতভাবে বাংলাদেশের শিক্ষার উন্নয়নে ব্যাপক অবদান রাখবে।

উপরে উল্লেখিত বর্ণনার পরিক্রমিত, আপনি কি তথ্য দিয়ে আমাদের এই গবেষণা কাজে সহযোগিতা করতে সম্মত আছেন?

হ্যাঁ = 1, না = 2 (হ্যাঁ হলে, ধন্যবাদ জানিয়ে জরিপ কাজ শুরু করুন)

A. শিক্ষকের পরিবারের সদস্যদের জনমিতি ও শিক্ষা (এই অংশে শিক্ষক, তাঁর স্ত্রী/স্বামী এবং সন্তানদের তথ্য নিতে হবে)

ক্রমিক	নাম	লিঙ্গ	শিক্ষকের সাথে সম্পর্ক	বয়স		বর্তমান পেশা	শিক্ষকতা পেশায় কখনো ছিলেন/আছেন কি?	শ্রেণি পাশ কি?	চিঠি লিখতে পারেন কি?	কুলে গমন অবস্থা		বর্তমানে কুলে যাচ্ছে এমন সদস্যদের তথ্য		এই অংশ 3-29 বছর বয়সীদের জন্য পূরণ করতে হবে		কখনো কুলে ভর্তি না হওয়ার কারণ কী?	
				বছর	মাস					প্রধান	দ্বিতীয়	কোন শ্রেণিতে পড়ছে?	কুলের ধরন	সর্বশেষ কোন শ্রেণিতে পড়ত?	কুলের ধরন		বারে পড়া সদস্যদের তথ্য
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

<p>3. লিঙ্গ: পুরুষ = 1 নারী = 2</p> <p>4. সম্পর্ক: শিক্ষক নিজে = 1 শিক্ষকের স্ত্রী/স্বামী = 2 সন্তান = 3</p>	<p>7.8. পেশা: শিক্ষকতা = 1 কৃষি/বর্গা চাষ = 2 দিনমজুর (কৃষি/অকৃষি) = 3 চাকরি = 4 বাবসা = 5 ড্রাইভার = 6 স্ব-নিয়োজিত পেশা (কাঠমিস্ত্রী/রাজমিস্ত্রী/ইলেকট্রিশিয়ান ইত্যাদি) = 7</p> <p>9. শিক্ষকতা পেশায় থাকার: হ্যাঁ = 1 না = 2 জানা নাই = 8</p> <p>11. চিঠি: হ্যাঁ = 1 না = 2 জানা নাই = 8</p>	<p>10.13.15. শ্রেণি: কুলে গিয়েছে কিন্তু কোনো শ্রেণি পাশ করেনি = 0 শ্রেণিপাশ/শিশু শ্রেণি = 1 প্রথম শ্রেণি = 2 দ্বিতীয় শ্রেণি = 2 এসএসসি/পাশ = 10 এইচএসসি/আলিম = 12 বিএ/ফাজিল = 14 স্নাতক (সম্মান) = 15</p>	<p>14.16. কুলের ধরন: গ্রাম-প্রাথমিক (এনজিও পরিচালিত) = 1 মসজিদ/মাদ্রাসার তাতিক প্রাক-প্রাথমিক = 2 সরকারি প্রাথমিক = 3 সাম্প্রতিক সরকারিকৃত প্রাথমিক = 4 বেসরকারি প্রাথমিক = 5 এনজিও পরিচালিত প্রাথমিক = 6 এবেতদায়ি মাদ্রাসা = 7 দাখিল/আলিম/ফাজিল/কামিল মাদ্রাসা = 8 কওমি/হাফেজি/নূরানী মাদ্রাসা = 9</p>	<p>কিন্ডারগার্টেন = 10 নিম্ন মাধ্যমিক = 11 বেসরকারি মাধ্যমিক = 12 সরকারি মাধ্যমিক = 13 স্কুল ও কলেজ = 14 কলেজ/বিশ্ববিদ্যালয় = 15 কারিগরি শিক্ষাপ্রতিষ্ঠান = 16 অন্যান্য (লিখুন) = 17 জানা নাই = 88, প্রযোজ্য নয় = 99</p>
<p>12. কুলে গমন অবস্থা: বর্তমানে যাচ্ছে = 1, বারে পড়েছে (পূর্বে গিয়েছিল কিন্তু গত ছয় মাসে একদিনও যায়নি) = 2, কখনও যায়নি = 3, প্রযোজ্য নয় = 9</p>	<p>17.18. বারে পড়া/কুলে ভর্তি না হওয়ার কারণ: টাকার অভাব = 1, কুল দূরে = 2, যাতায়াতের সমস্যা = 3, অসুস্থতা/প্রতিবন্ধী = 4, ইচ্ছা করে যায় না = 5, বিয়ে = 6, কুল ভর্তি করেনি = 7, বয়স কম/সময় হয়নি = 8, বারবার ফেল করা = 9, বাড়িতে কাজ করতে হয় = 10, আরকলজি করার জন্য = 11, বিদেশ যাওয়ার জন্য = 12, সামাজিক নিরাপত্তার অভাব = 13, অভিভাবকদের অনীহা = 14, পড়ালেখা শেষ হওয়ার = 15, অন্যান্য (লিখুন) = 16, , জানা নাই = 88</p>			

ক্রমিক	প্রশ্ন	উত্তর/কোড
19	আপনার পিতা কোন শ্রেণি পাশ করেছিলেন? (A ছকের শ্রেণি কোড দেখুন)	
20	আপনার মাতা কোন শ্রেণি পাশ করেছিলেন? (A ছকের শ্রেণি কোড দেখুন)	
21	আপনার পিতা-মাতা এবং ভাই-বোনদের মধ্যে কেউ শিক্ষকতা পেশায় জড়িত থাকলে তাঁরা কে কে জড়িত ছিলেন বা আছেন? (একাধিক কোড হতে পারে) কোড:পিতা = 1, মাতা = 2, বড় ভাই = 3, বড় বোন = 4, ছোট ভাই = 5, ছোট বোন = 6, কেউ জড়িত নয় = 9	
22	আপনার বৈবাহিক অবস্থা কী? কোড: বিবাহিত = 1, অবিবাহিত = 2, বিধবা/বিপত্নীক/বিবাহ-বিচ্ছেদ = 3	
23	আপনার জাতি পরিচয় কী? কোড: বাঙালি = 1, আদিবাসী = 2	
24	আপনি কোন ধর্মাবলম্বী? কোড: মুসলিম = 1, হিন্দু = 2, বৌদ্ধ = 3, খ্রিস্টান = 4, অন্যান্য = 5	

B. শিক্ষা

ক্রমিক	প্রশ্ন	উত্তর/কোড
1	আপনার সর্বোচ্চ শিক্ষাগত যোগ্যতা কী (কোন শ্রেণি পাশ করেছেন)? কোড: বিএ = 14 এমএ = 18 দাখিল = 22 এমফিল = 26 এসএসসি = 10 বিকম = 15 এমকম = 19 আলিম = 23 পিএইচডি = 27 এইচএসসি = 12 বিএসসি = 16 এমএসসি = 20 ফাজিল = 24 কৃষি ডিপ্লোমা = 28 বিএসএস = 17 এমএসএস = 21 কামিল = 25	

2. আপনার শিক্ষাজীবনের বিভিন্ন স্তরে যে ধরনের শিক্ষালাভ করেছেন তা জানিয়ে নিচের তথ্যগুলো দিন

ক্রমিক	শিক্ষাস্তর	শিক্ষার ধরন কী?	শিক্ষাপ্রতিষ্ঠানের ধরন কী?	প্রতিষ্ঠানের পরিচালনার ধরন কী?	কোন শাখায় পড়েছেন?	পরীক্ষার ফলাফল কী?
1	2	3	4	5	6	7
1	প্রাথমিক সমাপনী/পঞ্চম শ্রেণি					
2	নিম্ন মাধ্যমিক সমাপনী/অষ্টম শ্রেণি					
3	মাধ্যমিক					
4	উচ্চ মাধ্যমিক					
5	স্নাতক/ডিগ্রি					
6	স্নাতকোত্তর (১ম)					
7	স্নাতকোত্তর (২য়)					
3. শিক্ষার ধরন: সাধারণ = 1 মাদ্রাসা = 2	4. প্রতিষ্ঠানের ধরন: প্রাথমিক বিদ্যালয়/এবতেদায়ী মাদ্রাসা = 1 মাধ্যমিক বিদ্যালয়/দাখিল মাদ্রাসা = 2 উচ্চ মাধ্যমিক বিদ্যালয়/স্কুল ও কলেজ/ আলিম মাদ্রাসা = 3 কলেজ/বিশ্ববিদ্যালয় কলেজ = 4	বিশ্ববিদ্যালয় = 5 এনজিও পরিচালিত স্কুল = 6 কিভারগার্টেন = 7 অন্যান্য (লিখুন) = 8	5. পরিচালনার ধরন সরকারি = 1 বেসরকারি = 2	6. শাখা: মানবিক/সাধারণ = 1 বিজ্ঞান = 2 বাণিজ্য = 3 মুজাব্বিদ = 4 হিফজুল কুরআন = 5 কারিগরি = 6 প্রযোজ্য নয় = 9	7. পরীক্ষার ফলাফল: জিপিএ হলে সরাসরি লিখুন প্রথম বিভাগ = 6 দ্বিতীয় বিভাগ = 7 তৃতীয় বিভাগ = 8 জানা নাই = 88 প্রযোজ্য নয় = 99	

ক্রমিক	প্রশ্ন	উত্তর/কোড
3	আপনার শিক্ষা জীবনে সবসময়ই কি একই ধরনের শিক্ষালাভ করেছিলেন, না-কি কখনো সাধারণ শিক্ষা থেকে মাদ্রাসায় অথবা মাদ্রাসা থেকে সাধারণ শিক্ষায় স্থানান্তরিত হয়েছিলেন? (একাধিক কোড হতে পারে) কোড:সবসময় সাধারণ শিক্ষা = 1, সবসময় মাদ্রাসা শিক্ষা = 2, সাধারণ থেকে মাদ্রাসায় = 3, মাদ্রাসা থেকে সাধারণ শিক্ষায় = 4	
4	শিক্ষার ধরনে পরিবর্তন হলে, কোন শ্রেণিতে পরিবর্তন হয়েছিল? (পরিবর্তিত ধরন যে শ্রেণি থেকে তা লিখুন) প্রযোজ্য নয় = 99	১ম বার ২য় বার
5	আপনি কখনো কওমি মাদ্রাসায় পড়ালেখা করলে কত বছর সেখানে পড়েছিলেন? কখনো পড়েনি = 99	

C. প্রশিক্ষণ

1. আপনি পেশাগত কোনো প্রশিক্ষণ পেয়েছেন কি?

হ্যাঁ = 1, না = 2

⇒ উত্তর কোড 2 হলে, 3নং প্রশ্নে চলে যান

2. হ্যাঁ হলে, নিচের তথ্যগুলো দিন? (সর্বশেষ প্রশিক্ষণ থেকে লিখুন)

ক্রমিক	প্রশিক্ষণের ধরন	কখন পেয়েছেন	কোন সালে এ প্রশিক্ষণ পেয়েছেন	কোন ধরনের প্রতিষ্ঠান থেকে পেয়েছেন	প্রশিক্ষণের জন্য কে আপনাকে নির্বাচিত করেছিল?
1	2	3	4	5	6
1					
2					
3					
4					

2. প্রশিক্ষণের ধরন: সার্টিফিকেট ইন এডুকেশন (সিইনএড) = 1 ব্যাচেলর অব এডুকেশন (বি.এড) = 2 মাস্টার অব এডুকেশন (এম.এড) = 3 ডিপ্লোমা-ইন-এডুকেশন (ডিপ-ইন-এড) = 4 ব্যাচেলর অব ফিজিক্যাল এডুকেশন (বিপিএড) = 5 ব্যাচেলর অব মাদ্রাসা এডুকেশন (বিএমএড) = 6	3. কখন পেয়েছেন? চাকরিতে যোগদানের পূর্বে = 1 চাকরিরত অবস্থায় = 2 5. প্রতিষ্ঠানের ধরন: সরকারি = 1 বেসরকারি = 2 এনজিও = 3	6. কে আপনাকে নির্বাচিত করেছিল? নিজে = 1 প্রধান শিক্ষক = 2 উপজেলা মাধ্যমিক শিক্ষা কর্মকর্তা = 3 উপজেলা একাডেমিক সুপারভাইজার = 4 জেলা শিক্ষা কর্মকর্তা = 5 সরকার কর্তৃক নির্বাচিত = 6 এসএমসি = 7 প্রশিক্ষণ নিতে কেউ রাজি না হওয়ায় = 8 অন্যান্য (লিখুন) = 9 ...
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3. শিক্ষকতা পেশায় এসে আপনি কি বিষয়ভিত্তিক কোনো প্রশিক্ষণ পেয়েছেন?

হ্যাঁ = 1, না = 2

⇒ উত্তর কোড 2 হলে, 5নং প্রশ্নে চলে যান

4. হ্যাঁ হলে, নিচের তথ্যগুলো দিন? (সর্বশেষ প্রশিক্ষণ থেকে লিখুন)

ক্রমিক	প্রশিক্ষণপ্রাপ্ত বিষয়	প্রশিক্ষণের মেয়াদ কতদিন ছিল?	কোন সালে এ প্রশিক্ষণ পেয়েছেন?	কোন ধরনের প্রতিষ্ঠান থেকে পেয়েছেন?	প্রশিক্ষণের জন্য কে আপনাকে নির্বাচিত করেছিল?
1	2	3	4	5	6
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

2. বিষয় কোড:

বাংলা = 1	পদার্থবিজ্ঞান = 6	অর্থনীতি = 12	কৃষিশিক্ষা = 17	ধর্ম ও নৈতিক শিক্ষা = 22	কর্ম ও জীবনমুখী শিক্ষা/
ইংরেজি = 2	রসায়ন = 7	পৌরনীতি = 13	গার্হস্থ্য বিজ্ঞান = 18	কুরআন মাজিদ ও তাজভিদ = 23	ক্যারিয়ার শিক্ষা = 28
গণিত = 3	জীববিজ্ঞান = 8	ফিন্যান্স ও	চারু ও কারুকলা = 19	হাদিস শরিফ = 24	শারীরিক শিক্ষা, স্বাস্থ্যবিজ্ঞান
বিজ্ঞান = 4	উচ্চতর গণিত = 9	ব্যাকিং = 14	আইসিটি = 20	আকায়েদ ও ফিকহ = 25	ও খেলাধুলা = 29
বাংলাদেশ ও	ইতিহাস = 10	হিসাববিজ্ঞান = 15	কম্পিউটার = 21	আরবি = 26	অন্যান্য (লিখুন) = 30 ...
বিশ্বপরিচয় = 5	ভূগোল = 11	ব্যবসায় উদ্যোগ = 16		ইসলামের ইতিহাস = 27	

5. প্রতিষ্ঠানের ধরন এবং 6. কে আপনাকে নির্বাচিত করেছিল? (উভয় কলামের ক্ষেত্রে পেশাগত প্রশিক্ষণ ছকের কোড লিস্ট দেখুন)

5. শিক্ষকতার পেশায় এসে আপনি কি শিক্ষাসংক্রান্ত কোনো স্বল্পকালীন প্রশিক্ষণ পেয়েছেন?

হ্যাঁ = 1, না = 2

⇒ উত্তর কোড 2 হলে, 7নং প্রশ্নে চলে যান

6. হ্যাঁ হলে, নিচের তথ্যগুলো দিন? (সর্বশেষ প্রশিক্ষণ থেকে লিখুন)

ক্রমিক	প্রশিক্ষণের ধরন	প্রশিক্ষণের মেয়াদ কতদিন ছিল?	কোন সালে এ প্রশিক্ষণ পেয়েছেন?	কোন ধরনের প্রতিষ্ঠান থেকে পেয়েছেন?	প্রশিক্ষণের জন্য কে আপনাকে নির্বাচিত করেছিল?
1	2	3	4	5	6
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

2. প্রশিক্ষণের ধরন:

তথ্য ও যোগাযোগ প্রযুক্তি (আইসিটি) = 1

ডিজিটাল কনটেন্ট ডেভেলপমেন্ট = 2

টিচিং লার্নিং ম্যাটেরিয়াল ডেভেলপমেন্ট/শিক্ষা উপকরণ উন্নয়ন = 3

শিক্ষা প্রশাসন ও ব্যবস্থাপনা/বিদ্যালয় ব্যবস্থাপনা/অফিস ব্যবস্থাপনা = 4

জীবন দক্ষতাভিত্তিক শিক্ষা/লাইফ স্কিল বেইসড

এডুকেশনাল ট্রেনিং (এলএসবিই) = 5

জাতীয় শিক্ষাক্রম বিস্তরণ (ন্যাশনাল কারিকুলাম ডিসেমিনেশন)/

কারিকুলাম = 6

শিক্ষক-শিক্ষাক্রম নির্দেশিকা/

টিচার্স কারিকুলাম গাইড (টিসিজি) = 7

পারফরম্যান্স বেইসড ম্যানেজমেন্ট

(পিবিএম) = 8

সৃজনশীল প্রশ্ন পদ্ধতি (সিকিউ) = 9

স্কুল বেইজড এ্যাসেসমেন্ট (এসবিএ) = 10

ইংলিশ ল্যাংগুয়েজ টিচিং কোর্স = 11

কমিউনিকোটিভ ইংলিশ ট্রেনিং কোর্স = 12

স্যাটেলাইট ট্রেনিং কোর্স = 13

হাতে-কলমে বিজ্ঞান শিক্ষা = 14

কম্পিউটার = 15

স্কাউটস = 16

স্বাস্থ্য বিষয়ক (বিষয় বহির্ভূত) = 17

টিচিং কোয়ালিটি ইমপ্রুভমেন্ট

(টিকিউআই) = 18

অন্যান্য (লিখুন) = 19 ...

2. বিশেষ ক্লাস শুরু মাস: জানুয়ারি = 1 ফেব্রুয়ারি = 2 ... আগস্ট = 8	3. বিশেষ ক্লাস নেওয়ার সময়: শ্রেণি কার্যক্রম শুরু হওয়ার আগে = 1 রমজানের ছুটিতে/অন্যান্য বিশেষ ছুটিতে = 4 শ্রেণি কার্যকালীন/ক্লাসের ফাঁকে = 2 অন্যান্য লিখুন = 5 ... শ্রেণি কার্যক্রম শেষে = 3	1. শ্রেণি/স্তর: এবং 4. আপনি কোন কোন বিষয় পড়ান? (উভয় কলামের ক্ষেত্রে E ছকের কোড লিস্ট দেখুন)
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ক্রমিক	প্রশ্ন	উত্তর/কোড	
4	প্রতিষ্ঠানের ভেতর কোচিং-এ সপ্তাহে আপনাকে মোট কতটি ক্লাস নিতে হয়/হতো?		
5	কোচিং-এ সপ্তাহে আপনার নির্ধারিত ক্লাস নিতে মোট কত সময় লাগে/লাগতো?	ঘণ্টা	
		মিনিট	

G. তথ্যপ্রযুক্তির ব্যবহার

ক্রমিক	প্রশ্ন	উত্তর/কোড	
1	আপনি নিম্নের কোন কোন তথ্যপ্রযুক্তি সামগ্রী ব্যবহার করতে জানেন? ⇨ উত্তর কোড 6 হলে, 5 নং প্রশ্নে চলে যান কোড: সাধারণমোবাইল ফোন = 1, স্মার্ট ফোন = 2, ট্যাবলেট/ট্যাব = 3, কম্পিউটার = 4, ল্যাপটপ = 5, কোনোটি নয় = 6		
2	কোন কোন তথ্যপ্রযুক্তি সামগ্রী আপনার নিজের আছে? কোড: মোবাইল ফোন = 1, স্মার্ট ফোন/ট্যাব = 2, কম্পিউটার/ল্যাপটপ = 3, কোনোটি নয় = 4		
3	তথ্যপ্রযুক্তি সামগ্রী ব্যবহার করে গত এক মাসে কোন কোন কাজ আপনি করেছেন? (একাধিক কোড হতে পারে)		
	কথা বলা	1	গান/সিনেমা/নাটক/কার্টুন শোনা/দেখা
	SMS/লিখিত খুদে বার্তা প্রেরণ/চ্যাটিং	2	ওয়াজ শোনা
	ইন্টারনেট ব্যবহার/ব্রাউজিং	3	রেডিও শোনা
	নিজের পড়ালেখার কাজ	4	ছবি তোলা/ভিডিও করা
	শিক্ষার্থীদের জন্য কনটেন্ট তৈরি	5	মানি ট্রান্সফার/মোবাইল ব্যাংকিং
	বিদ্যালয়ে মাল্টিমিডিয়া মাধ্যমে পাঠদান	6	গেম
	পেশাসংক্রান্ত টাইপিং/রাইটিং ইত্যাদি	7	ব্যবহার করিনি
4	গত এক মাসে আপনি ইন্টারনেটে কোন ধরনের তথ্য ব্রাউজ করেছেন? (3 নং প্রশ্নের উত্তর কোড 3 হলে জিজ্ঞেস করুন) (একাধিক কোড হতে পারে)		
	সামাজিক যোগাযোগে (ফেইসবুক, ভাইবার ইত্যাদি)	1	দেশ-বিদেশের সংবাদ
	শিক্ষা/পাঠ সম্পর্কিত তথ্য (শিক্ষক বাতায়ন ... ইত্যাদি)	2	বিনোদনমূলক
	পেশাসংক্রান্ত তথ্য (দৈনিক শিক্ষা/শিক্ষা বার্তা... ইত্যাদি)	3	ব্যক্তিগত ই-মেইল
	বিদ্যালয়ের অন্যান্য কাজসংক্রান্ত	4	অন্যান্য (লিখুন)
	খেলাধুলার খবর	5	প্রযোজ্য নয়
5	আপনি কি গত এক সপ্তাহের মধ্যে কখনও ...	রেডিওতে কোনো অনুষ্ঠান শুনেছেন?	হ্যাঁ = 1, না = 2
		টেলিভিশনে কোনো অনুষ্ঠান দেখেছেন?	হ্যাঁ = 1, না = 2
		খবরের কাগজ পড়েছেন?	হ্যাঁ = 1, না = 2
		ইন্টারনেট ব্রাউজ করেছেন?	হ্যাঁ = 1, না = 2
6	আপনি পাঠদানে এ বছর মাল্টিমিডিয়া ব্যবহার করেছেন কি? ⇨ উত্তর কোড 2 হলে, 10নং প্রশ্নে চলে যান	হ্যাঁ	1
		না	2
7	মাল্টিমিডিয়া ব্যবহার করে গত এক মাসে কতটি ক্লাস নিয়েছিলেন?		
8	গত এক মাসে কোন কোন বিষয়ের ক্ষেত্রে মাল্টিমিডিয়া ব্যবহার করেছেন? (বিষয় কোড দেখুন) প্রযোজ্য নয় = 99		

9	মাল্টিমিডিয়া ব্যবহারের মাধ্যমে পাঠদান করার ক্ষেত্রে আপনি কী ধরনের সমস্যার/অসুবিধার সম্মুখীন হচ্ছেন বা প্রধান অন্তরায়গুলো কী কী? (একাধিক কোড হতে পারে) কোড: নিজ দক্ষতার অভাব = 1, পর্যাপ্ত প্রশিক্ষণের অভাব = 2, পর্যাপ্ত ইকুইপমেন্টের অভাব = 3, পর্যাপ্ত প্রস্তুতি নেওয়ার ক্ষেত্রে সময়ের অভাব = 4, পর্যাপ্ত শ্রেণি কক্ষের অভাব = 5, ব্যবহার অনুপযোগী/অকার্যকরী ইকুইপমেন্ট = 6, অনুপযোগী/অকার্যকরী উপকরণ = 7, বিদ্যুৎ বিভ্রাট = 8, অন্যান্য (লিখুন) = 9..., নেটওয়ার্ক সমস্যা = 10, কোনো সমস্যা নাই = 99	
10	না হলে, কেন ব্যবহার করেননি? (একাধিক কোড হতে পারে) কোড: প্রতিষ্ঠানে মাল্টিমিডিয়া নেই = 1, অনুপযোগী ইকুইপমেন্ট = 2, প্রশিক্ষণ না থাকায় = 3, প্রয়োজন বোধ করিনি = 4, কর্তৃপক্ষের সিদ্ধান্তে = 5, অন্যান্য (লিখুন) = 6 ...	

8. বিষয় কোড:

বাংলা = 1	পদার্থবিজ্ঞান = 6	অর্থনীতি = 12	কৃষিশিক্ষা = 17	ধর্ম ও নৈতিক শিক্ষা = 22	কর্ম ও জীবনমুখী শিক্ষা/
ইংরেজি = 2	রসায়ন = 7	পৌরনীতি = 13	গার্হস্থ্য বিজ্ঞান = 18	কুরআন মাজিদ ও তাজভিদ = 23	ক্যারিয়ার শিক্ষা = 28
গণিত = 3	জীববিজ্ঞান = 8	ফিন্যান্স ও	চারু ও কারুকলা = 19	হাদিস শরিফ = 24	শারীরিক শিক্ষা, স্বাস্থ্যবিজ্ঞান
বিজ্ঞান = 4	উচ্চতর গণিত = 9	ব্যাংকিং = 14	আইসিটি = 20	আকায়েদ ও ফিকহ = 25	ও খেলাধুলা = 29
বাংলাদেশ ও	ইতিহাস = 10	হিসাববিজ্ঞান = 15	কম্পিউটার = 21	আরবি = 26	অন্যান্য (লিখুন) = 30 ...
বিশ্বপরিচয় = 5	ভূগোল = 11	ব্যবসায় উদ্যোগ = 16		ইসলামের ইতিহাস = 27	

H. গৃহশিক্ষকতা/প্রাইভেট টিউটরিং

(বিদ্যালয়ে শিক্ষকতার পাশাপাশি শিক্ষকেরা অভিভাবকদের অনুরোধে পরীক্ষায় ভালো ফলাফলের জন্য কখনো কখনো পিছিয়ে পড়া শিক্ষার্থীদের নিজ বা শিক্ষার্থীর বাড়িতে বা কোচিং সেন্টারে পাঠদান করে থাকেন/পড়িয়ে থাকেন। আপনি এরূপ পাঠদান করে থাকলে বা প্রাইভেট টিউটরিং এর সাথে জড়িত থাকলে নিচের তথ্যগুলো দিন।)

ক্রমিক	প্রশ্ন	উত্তর/কোড						
1	শিক্ষাপ্রতিষ্ঠানে রুটিনমাসিক ও অতিরিক্ত পাঠদানের বাইরে নিজ বা শিক্ষার্থীর বাসায় বা কোনো কোচিং সেন্টারে আপনি বর্তমানে প্রাইভেট পড়ান কি? ⇒ উত্তর কোড 1 হলে, 3নং প্রশ্নে চলে যান	হ্যাঁ 1 না 2						
2	না হলে, এ বছর অন্য কোনো সময়ে পড়িয়েছিলেন কি? ⇒ উত্তর কোড 2 হলে, I সেকশনে চলে যান	হ্যাঁ = 1, না = 2						
3	হ্যাঁ হলে, বর্তমানে কোন শ্রেণির কতজন শিক্ষার্থীকে প্রাইভেট পড়ান? জানা নাই = 888							
	প্রাক-প্রাথমিক	প্রাথমিক	ষষ্ঠ শ্রেণি	সপ্তম শ্রেণি	অষ্টম শ্রেণি	নবম শ্রেণি	দশম শ্রেণি	উচ্চ মাধ্যমিক
4	পড়ানোর স্থানভেদে মোট শিক্ষার্থী এবং অন্য শিক্ষাপ্রতিষ্ঠানের শিক্ষার্থী সংখ্যা কত? জানা নাই = 888	স্থান	মোট কতজন শিক্ষার্থী	এদের মধ্যে কতজন অন্য শিক্ষাপ্রতিষ্ঠানের				
		নিজ বাসায়						
		শিক্ষার্থীর বাসায়						
		কোচিং সেন্টারে						
		বিদ্যালয়ে						

I. শিক্ষানীতি, শিক্ষাক্রম ও টেকসই উন্নয়ন অর্জন শিক্ষানীতি

ক্রমিক	প্রশ্ন	উত্তর/কোড
1	বাংলাদেশের কোনো লিখিত শিক্ষানীতি আছে বলে আপনি জানেন কি? ⇒ উত্তর কোড 2/8 হলে, 4নং প্রশ্নে চলে যান	হ্যাঁ/আছে 1 না/নেই 2 জানা নাই 8
2	যদি থাকে বা আপনি জানেন যে আছে - তবে এটি কোন সালে তৈরি (প্রকাশিত) হয়েছে? জানা নাই = 8888	
3	শিক্ষানীতিটি আপনি পড়েছেন কি?	হ্যাঁ = 1, না = 2

মাধ্যমিক শিক্ষাক্রম

ক্রমিক	প্রশ্ন	উত্তর/কোড
4	বাংলাদেশে মাধ্যমিক স্তরে কোনো লিখিত শিক্ষাক্রম আছে বলে আপনি জানেন কি? ⇒ উত্তর কোড 2/8 হলে, 8নং প্রশ্নে চলে যান	হ্যাঁ/আছে 1 না/নেই 2 জানা নাই 8
5	যদি থাকে বা আপনি জানেন যে আছে— তবে এটি সর্বশেষ কোন সালে পরিমার্জন করা হয়েছে? জানা নাই = 8888	
6	শিক্ষাক্রমটি আপনি পড়েছেন কি?	হ্যাঁ = 1, না = 2
7	শিক্ষাক্রমে মাধ্যমিক শিক্ষার লক্ষ্য সম্পর্কে কী বলা আছে? (লক্ষ্য: শিক্ষার্থীর সার্বিক বিকাশের মাধ্যমে মানবিক, সামাজিক ও নৈতিক গুণসম্পন্ন জ্ঞানী, দক্ষ, যুক্তিবাদী ও সৃজনশীল দেশপ্রেমিক জনসম্পদ সৃষ্টি)	বলতে পেরেছে 1 আংশিক পেরেছে 2 বলতে পারেনি 3

টেকসই উন্নয়ন অভীষ্ট

ক্রমিক	প্রশ্ন	উত্তর/কোড
8	আপনি কি 'সাসটেইনেবল ডেভেলপমেন্ট গোল' (এসডিজি) বা 'টেকসই উন্নয়ন অভীষ্ট/লক্ষ্যমাত্রা'র কথা জানেন বা শুনেছেন? ⇒ উত্তর কোড 2 হলে, J সেকশনে চলে যান	হ্যাঁ 1 না 2
9	এটি কার নেতৃত্বে তৈরি হয়েছে? কোড: জাতিসংঘ = 1, অন্যান্য (লিখুন) = 2 , জানা নাই = 88	
10	কোন সময়কে নির্দিষ্ট করে এটি তৈরি করা হয়েছে বা এটি বাস্তবায়নের সময় কত সাল থেকে কত সাল পর্যন্ত? জানা নাই = 8888	শুরু শেষ
11	এতে মোট কতটি অভীষ্টের/লক্ষ্য/গোলের কথা বলা হয়েছে? জানা নাই = 8888	
12	এতে শিক্ষা সম্পর্কিত কোনো অভীষ্ট/লক্ষ্য/গোল আছে কি? কোড: হ্যাঁ = 1, না = 2, জানা নাই = 8 ⇒ উত্তর কোড 2/8 হলে, J সেকশনে চলে যান	
13	হ্যাঁ হলে, কত নম্বর অভীষ্টটি/লক্ষ্যটি শিক্ষা-সম্পর্কিত? জানা নাই = 88	
14	শিক্ষা সম্পর্কিত অভীষ্টটি/লক্ষ্যটিতে মোট কতটি টার্গেট/লক্ষ্যমাত্রা রয়েছে? জানা নাই = 888	
15	শিক্ষা সম্পর্কিত অভীষ্টটির/লক্ষ্যটির মূল কথাগুলো কী কী? (একাধিক কোড/উত্তর হতে পারে) কোড: এতে সকল স্তরের শিক্ষা অন্তর্ভুক্ত = 1, মানসম্মত শিক্ষা নিশ্চিতকরণ = 2, অন্তর্ভুক্তিমূলক শিক্ষা ব্যবস্থা = 3, সমতাভিত্তিক শিক্ষা ব্যবস্থা = 4, জীবনব্যাপী শিক্ষা লাভের সুযোগ = 5, জানা নাই = 8	

J. পেশা নির্বাচন, চাকরি প্রাপ্তি ও আর্থিক স্বাচ্ছন্দ্য

ক্রমিক	প্রশ্ন	উত্তর/কোড
1	কর্মজীবনে প্রবেশের পূর্বে মানুষ সাধারণত পছন্দের পেশা নিয়ে চিন্তা-ভাবনা করে থাকেন। আপনি এরূপ চিন্তা করে থাকলে, প্রধানত কোন পেশায় নিজেকে দেখতে চেয়েছিলেন? কোড: ডাক্তার = 1, ইঞ্জিনিয়ার = 2, শিক্ষক = 3, পুলিশ/আইন-শৃঙ্খলা বাহিনীর কর্মকর্তা = 4, সেনা/সশস্ত্র বাহিনীর কর্মকর্তা = 5, ব্যাংক কর্মকর্তা = 6, উকিল = 7, সাংবাদিক = 8, মার্চেন্টডাইজার = 9, চার্টার্ড একাউন্টেন্ট = 10, বৈমানিক/পাইলট = 11, নাবিক = 12, সরকারি কর্মকর্তা = 13, বেসরকারি কর্মকর্তা = 14, এনজিও কর্মকর্তা/উন্নয়ন কর্মী = 15, ব্যবসা = 16, কৃষি = 17, রাজনীতিবিদ = 18, অন্যান্য (লিখুন) = 19 , পেশা নিয়ে কখনো ভাবিনি = 77	
2	শিক্ষকতা পেশায় আসার পূর্বে আপনি অন্য কোনো পেশায় নিয়োজিত/কর্মরত ছিলেন কি?	হ্যাঁ = 1, না = 2
3	হ্যাঁ হলে, সর্বশেষ কোন পেশায় ছিলেন? কোড: চাকরি = 1, ব্যবসা = 2, স্ব-নিয়োজিত পেশা (কাঠমিস্ত্রী/রাজমিস্ত্রী/ইলেকট্রিশিয়ান ইত্যাদি) = 3, গবাদি পশু/পাখি পালন/মৎস চাষ = 4, হস্তশিল্প = 5, কৃষি = 6, গৃহ শিক্ষকতা/প্রাইভেট টিউটরিং = 7, অন্যান্য (লিখুন) = 8 , প্রযোজ্য নয় = 9	

4	আপনি কোন বিষয়ের শিক্ষক হিসেবে নিয়োগপ্রাপ্ত? (৮ নং পৃষ্ঠার বিষয় কোড দেখুন) কোড: প্রধান শিক্ষক = 77, জানা নাই = 88, কোনো বিষয়ে নিয়োগপ্রাপ্ত নয় = 99		
5	বর্তমান কর্তৃপক্ষের অধীনে আপনার চাকরি কত বছর হলো?	বছর	
		মাস	
6	বর্তমান কর্তৃপক্ষের পূর্বে আপনি কি কখনো অন্য কোনো কর্তৃপক্ষের অধীনে শিক্ষকতা করেছিলেন? ⇒ উত্তর কোড 2 হলে, 9 নং প্রশ্নে চলে যান	হ্যাঁ	1
		না	2
7	হ্যাঁ হলে, মোট কতটি কর্তৃপক্ষের অধীনে ছিলেন?		
8	সেগুলোতে মোট কত বছর চাকরি করেছিলেন?	বছর	
		মাস	
9	বর্তমান চাকরিটি পেতে আপনাকে কোনো নিয়োগ পরীক্ষা দিতে হলে, তা কী ধরনের? কোড: শুধু মৌখিক = 1, শুধু লিখিত = 2, লিখিত ও মৌখিক = 3, পরীক্ষা দিতে হয়নি = 4		
10	এ চাকরি পেতে আপনাকে কোনো অর্থ খরচ করতে হয়েছিল কি? কোড: হ্যাঁ = 1, না = 2, উত্তর দিতে অনিচ্ছুক = 3		

ক্রমিক	প্রশ্ন	উত্তর/কোড				
11	বর্তমান প্রতিষ্ঠানে চাকরিতে আপনি কতটা সন্তুষ্ট? কোড: খুবই সন্তুষ্ট = 1, সন্তুষ্ট = 2, মোটামুটি/নিরপেক্ষ = 3, অসন্তুষ্ট = 4, একেবারেই অসন্তুষ্ট = 5					
12	শিক্ষকতা পেশায় আপনি কতটা সন্তুষ্ট? কোড: খুবই সন্তুষ্ট = 1, সন্তুষ্ট = 2, মোটামুটি/নিরপেক্ষ = 3, অসন্তুষ্ট = 4, একেবারেই অসন্তুষ্ট = 5					
13	আপনি কি একই পেশায় থেকে প্রতিষ্ঠান পরিবর্তনের কথা ভাবছেন?	হ্যাঁ = 1, না = 2				
14	আপনি কি পেশা পরিবর্তনের কথা ভাবছেন?	হ্যাঁ = 1, না = 2				
15	এই শিক্ষাপ্রতিষ্ঠান থেকে প্রাপ্ত বেতন/ভাতা/অনুদানকে আপনি কতটা সন্তোষজনক বলে মনে করেন? কোড: বেশ সন্তোষজনক = 1, সন্তোষজনক = 2, মোটামুটি/নিরপেক্ষ = 3, সন্তোষজনক নয় = 4, মোটেই সন্তোষজনক নয় = 5					
16	গত এক বছরে আপনি কোন কোন উৎস থেকে কত টাকা আয় করেছেন তা বলুন।					
	নং	আয়ের উৎস	টাকা	নং	আয়ের উৎস	টাকা
	1	এই প্রতিষ্ঠানে শিক্ষকতা		5	কৃষিকাজ	
	2	অন্য প্রতিষ্ঠানে শিক্ষকতা		6	মৎস ও গবাদি পশু পালন	
	3	শিক্ষাপ্রতিষ্ঠানে অতিরিক্ত পাঠদান		7	ক্ষুদ্র ও মাঝারি ব্যবসা	
	4	প্রাইভেট টিউটরিং/গৃহশিক্ষকতা		8	অন্যান্য (লিখুন)	
17	গত এক বছরে, আপনার খানার আর্থিক অবস্থা কী রকম ছিল? (বিভিন্ন খাত থেকে এই খানায় যত টাকা আয় হয়েছে এবং বিভিন্ন খাতে যত টাকা ব্যয় হয়েছে তার তারতম্যের ভিত্তিতে জিজ্ঞেস করুন, গত এক বছর খানার আর্থিক অবস্থা কী রকম ছিল?)	সবসময় ঘাটতি	1			
		মারো মারো ঘাটতি	2			
		সমান	3			
		উদ্বৃত্ত	4			

K. শিক্ষক সমিতি

1. আপনি কি বর্তমানে কোনো শিক্ষক সমিতি/সংগঠনের সদস্য? (শুধু আর্থিক কর্মকাণ্ডে নিযুক্ত এরূপ সমিতি বাদে) হ্যাঁ = 1, না = 2

⇒ উত্তর কোড 2 হলে, 3নং প্রশ্নে চলে যান

2. হ্যাঁ হলে, নিচের তথ্যগুলো দিন?

ক্রমিক	সমিতির নাম	কার মাধ্যমে বা ইচ্ছায় সদস্য হয়েছেন?	ব্যাপ্তির নিরিখে শিক্ষক সমিতিটির কার্যক্রম কোন পর্যায়ে?	কোনো পর্যায়ের কমিটিতে যুক্ত থাকলে কোন পর্যায়ের কমিটিতে যুক্ত?	কমিটির কোন পদে আছেন?
1	2	3	4	5	6
1					
2					
3					
3. কার মাধ্যমে বা ইচ্ছায় সদস্য হয়েছেন?		4. সমিতিটির কার্যক্রম কোন পর্যায়ে?		5. কোন পর্যায়ের কমিটিতে যুক্ত?	
নিজের ইচ্ছায় = 1 বিদ্যালয় শিক্ষক = 2 সমিতির নেতা/সদস্য = 3 অন্যান্য (লিখুন) = 4...		জাতীয় = 1 উপজেলা = 4 আঞ্চলিক = 2 ইউনিয়ন = 5 জেলা = 3 অন্যান্য (লিখুন) = 6		কেন্দ্রীয় কমিটি = 1 ইউনিয়ন কমিটি = 5 আঞ্চলিক কমিটি = 2 স্কুল কমিটি = 6 জেলা কমিটি = 3 অন্যান্য (লিখুন) = 7 ... উপজেলা কমিটি = 4 যুক্ত নই/প্রযোজ্য নয় = 9	
6. কোন পদে আছেন? সভাপতি = 1, সহসভাপতি = 2, সাধারণ সম্পাদক = 3, যুগ্ম সাধারণ সম্পাদক = 4, সাংগঠনিক সম্পাদক = 5, প্রচার সম্পাদক = 6, দপ্তর সম্পাদক = 7, গবেষণা সম্পাদক = 8, অর্থ সম্পাদক = 9, ধর্মীয় সম্পাদক = 10, সাধারণ সদস্য = 11, অন্যান্য (লিখুন) = 12 প্রযোজ্য নয় = 99					

ক্রমিক	প্রশ্ন	উত্তর/কোড
3	আপনি কি গত এক বছরে শিক্ষক সমিতির কোনো কর্মকাণ্ডের/কাজের সাথে যুক্ত ছিলেন? ⇒ উত্তর কোড 2 হলে L সেকশনে চলে যান	হ্যাঁ 1 না 2
4	হ্যাঁ হলে, কী কী কর্মকাণ্ডের/কাজের সাথে যুক্ত ছিলেন? কোড: সভা-সমিতিতে অংশগ্রহণ = 1, শিক্ষাসংক্রান্ত অধিকার আদায়ে আন্দোলন/প্রতিবাদ = 2, পেশাসংক্রান্ত অধিকার আদায়ে আন্দোলন/প্রতিবাদ = 3, জাতীয় দুর্যোগ/প্রাকৃতিক বিপর্যয়ে সহযোগিতা করা = 4, বৃক্ষরোপণ কর্মসূচিতে অংশগ্রহণ = 5, সদস্য সংগ্রহ = 6, অন্যান্য (লিখুন) = 7	
5	সমিতির কাজ করতে গিয়ে শ্রেণিকক্ষের শিখন-শেখানো কার্যক্রমে আপনার কোনো ব্যাঘাত ঘটেছিল কি?	হ্যাঁ 1 না 2

L. গত এক সপ্তাহে কোন কাজে কত সময় ব্যয় করেছেন তার একটা হিসাব দিন

ক্রমিক	কাজের ধরন	ব্যয়িত সময় (ঘণ্টা)
	বিদ্যালয় কার্যকালীন	
1	শিক্ষাপ্রতিষ্ঠানে রুটিনভুক্ত পাঠদান	
2	রুটিনভুক্ত পাঠদানের জন্য প্রস্তুতি	
3	অন্যান্য কাজে বিদ্যালয়ে অবস্থান	
	বিদ্যালয় কার্যকালীন বহির্ভূত (পেশাসংক্রান্ত)	
4	শিক্ষাপ্রতিষ্ঠানে অতিরিক্ত পাঠদান/কোচিং (বিদ্যালয় কর্তৃক আয়োজিত)	
5	গৃহশিক্ষকতা (নিজ গৃহ/শিক্ষার্থীর বাড়িতে/কোচিং সেন্টারে)	
6	বাড়িতে রুটিনভুক্ত পাঠদানের জন্য প্রস্তুতি	
7	বাড়িতে রুটিন-বহির্ভূত (গৃহশিক্ষকতা) পাঠদানের প্রস্তুতি	

	বিদ্যালয় কার্যকালীন বহির্ভূত (অন্যান্য পেশা এবং কাজে)	
8	অন্যান্য পেশায় ব্যয়িত সময়	
9	ঘরের/সংসারের কাজে (বাজার/গৃহস্থালির কাজ/সন্তানের পড়াশুনা/সন্তানের লালন-পালন...)	
10	পত্রিকা/ম্যাগাজিন/বই পড়া (অন/অফ লাইন উভয়)	
11	ঘুম	
12	অন্যান্য কাজে ব্যয়িত সময়	

কষ্ট করে এতটা সময় ধরে আমাদের প্রশ্নের উত্তর দেয়ার জন্য আপনাকে অসংখ্য ধন্যবাদ

তথ্যসংগ্রহকারীর নাম: তারিখ:

তত্ত্বাবধায়কের নাম: তারিখ:

Annex 2.3

Development procedure of Perceptual Teaching Competence Scale

As per SDG 4.1 all children and adolescents are expected to get sustainable quality primary and secondary education so that they can become contributing citizen to the nation. In order to obtain such attributes, students, particularly students of secondary schools, it is necessary to ascertain the quality of teachers engaged in teaching in schools. Therefore, to determine teachers' teaching competence a standardized five-point Perceptual Teaching Competence Scale (PTCS) was developed under the scheme of this study. Since teacher's professional competence is a qualitative measure and it is difficult to measure without long term observation of teaching and follow-up activities, it was decided to measure their self-reported perceptual competence by developing and using a standardized assessment scale. Therefore, by using Likert model of assessment a true picture of teacher's competence was measured. Perceptual competence is a combination of knowledge, attitude and practice of a teacher's demonstrable skills in classroom performance.

Competency requires mastery of certain skills consists of all three domains (cognitive, affective and psychomotor or practice) of performance. Moreover, the competency has to be observable and measurable either to the teacher himself/herself or to an external observer. This scale (PTCS) considers the self-assessment aspects of competencies on the basis of a five point continuum. A teacher has to measure and report all the relevant competencies necessary to become a competent teacher in class through evaluating some pre-determined competency statements incorporated into the scale. The scale was developed on the basis of Fennema and Franke (1992) model and Shulman's (1986, 1988) framework of measuring teachers attitude format. Measurement of cognitive and affective components of teachers' competencies cannot be done through direct observation because these are very much inner constructs of an individual. Therefore, these inner constructs along with the behavioural aspects were considered to measure through a self-evaluative perceptual scale. The evaluation scale consisted of several statements related to different components of teacher's competence. The statements were distributed into five components or sub-scales consisting of teachers' pedagogical, professional, motivational, ethical, and resilience levels. Each sub-scale contained statements from the domain of cognitive, affective and behavioural characters with positive and negative valence.

A first version with 168 items was drafted in Bangla by the researchers on the basis of Teacher Competencies Framework and Continuous Professional Development of Teachers of the 'Advisory Committee on Teacher Education and Qualification' (ATEQ, currently known as COTAP - 'Committee on Professional Development of Teachers and Principals', 2013) under the Ministry of Education, Hong Kong. The initially drafted 168 items were sent out to a panel of subject experts belongs to Psychology and Education. The panel of judges evaluated the content of each item, rated the items whether they are essential for the scale and grouped them into five factors: (a) Pedagogy in classroom, (b) Professional development in practice, (c) Motivation, (d) Professional ethics, (e) Resilience. After being reviewed by the panellists, the Content Validity Ratio (CVR) of each item was calculated on the basis of the CVR value and the 180 items were reduced to 88 items. Items having a CVR value of less than 0.99 were eliminated from the scale as prescribed by Cohen and Swerdlik (2010). Since PTCS is a new measuring instrument, it was necessary to identify its underlying constructs. To do so Exploratory Factor Analysis (EFA) technique was used. Particularly, the principal axis factoring (PAF) method was used for factor extraction (Hair et al. 2010). After several factor extractions, certain items were eliminated due to not reaching a minimum rotation of 0.40. Finally a 35- item, five-factor solution was found to fit the model best. This was determined from reviewing the Eigen values (Kaiser's Criterion) >1 , factor loadings, and the qualitative consistency between items in each factor (Field, 2009). The inter item consistency reliability (Cronbach alpha) of the scale was 0.743 and the scale score would range between 35 and 175.

Each of the 35 items of PTSC is composed of 5 response options like: (i) It applies to me completely, (ii) It applies to me partially, (iii) Some time it applies sometimes not, (iv) It does not apply to me, and (v) It does not apply to me at all.

The sub-scales are defined in the following paragraphs:

1. **Pedagogy in classroom:** This subscale measures practice of pedagogy in classroom by the teachers. Particularly, it focuses on the ability to create a psychologically safe learning environment for students, contributing to their wellbeing interacting with students effectively, delivering contents meaningfully (Roelofs & Sanders 2007; Jones 2007). An item for Pedagogy in classroom subscale reads as: 'A teacher should give more emphasis on teaching rather than class management'/'Teaching aid is essential for making a class effective'.
2. **Professional development in practice:** This subscale measures competence in reflection and development, the ability to reflect on one's own competence and to keep up with changing demands and developments within the profession (Roelofs & Sanders 2007). An item for this subscale reads as: 'I would prefer to learn anything that would be beneficial to my teaching'/'Knowledge of teacher education curriculum is essential for a teacher'.
3. **Motivation:** Motivation is the driving force of people that determine why they do something, how long they will continue that work and what effort they will put to that work. Dornyei and Ushioda (2011) identified two dimensions of motivation of teachers i.e., motivation to teach and motivation to remain in the profession. This sub-scale identifies the statements relevant to these determinants of motivation. An item for Motivation subscale reads as: 'I think through teaching by creating better citizens I playing role in developing the nation'/'I feel proud to be a teacher'.
4. **Professional Ethics:** 'Without ethical competence there can be no professional competence' (Agejas, Parada & Oliver 2007). Professional ethics are guiding principles that governs professional practice (Agejas et al. 2007). In this subscale teachers' professional ethics comprises of ability to operate with punctuality, responsibility, effectively and impartiality (Perez 2005). An item for professional ethics subscale read as: 'I always come to school on time'/'I feel ashamed when I cannot go for class on time'/'I do not consider my relationship with pupil while scoring the script'.
5. **Resilience:** Resilience is defined as an individual's successfully coping with the adversity (Pecillo 2016). This subscale measures teachers' resilience in dealing with the challenge regarding self, profession, pupil, environment and colleagues. An item for Resilience subscale read as: 'The changing role of teachers stresses me about the profession'/'I maintain good relationship with my colleagues.'Teaching is such a profession where one has to encounter various social, psychological and economic adversity or harsh conditions. Unless a teacher can manage such adversity by adopting some kind of psycho-social effort it would be difficult for him/her to sustain in the profession or maintain any quality of teaching.

Annex 2.4

The Perceptual Teaching Competence Scale

এই তথ্য শুধু গবেষণার
কাজে ব্যবহার করা হবে

—এক্সপেরিমেন্টাল স্কেল ২০১৮

Perceptual Teaching Competence Scale (PTCS)

শিক্ষণ দক্ষতার প্রত্যক্ষণ পরিমাপক

সম্মানিত শিক্ষক মহোদয়ের জন্য নির্দেশনা

মাধ্যমিক পর্যায়ের শিক্ষকবৃন্দ তাঁদের নিজস্ব শিক্ষাদান দক্ষতা সম্পর্কে কতটা পারদর্শিতা অর্জন করেছেন, সেই সচেতনতা পরিমাপ করার জন্য একটি আদর্শায়িত পরিমাপক বা standardized test প্রস্তুত করা হয়েছে। এই পরিমাপকের পদ বা উক্তিগুলো বিদ্যালয়ের শিক্ষণ-শিখন পরিস্থিতির কথা বিবেচনা করেই প্রস্তুত করা হয়েছে। অনুগ্রহ করে আপনি প্রতিটি উক্তি পড়ে দেখুন এবং সেখানে উল্লেখিত ধারণা বা পরিস্থিতি আপনার বেলায় কতটা প্রযোজ্য অথবা খাটে তা বিবেচনা করে প্রতিটি উক্তির মান নিরূপণ করুন। উক্তিটি যদি আপনার ক্ষেত্রে ‘সম্পূর্ণ খাটে’ তবে ডান দিকের ছকের ‘৫’ সংখ্যাকে বৃত্তবদ্ধ করুন। যদি উক্তিটি আপনার ক্ষেত্রে ‘আংশিক খাটে’ তবে ‘৪’ সংখ্যাকে বৃত্তবদ্ধ করুন, যদি উক্তিটি আপনার ক্ষেত্রে ‘কখনো খাটে কখনো খাটে না’ হয় তবে ‘৩’ সংখ্যাকে বৃত্তবদ্ধ করুন, যদি মনে করেন যে উক্তিটি আপনার ক্ষেত্রে ‘খুব একটা খাটে না’ তাহলে ‘২’ সংখ্যাকে বৃত্তবদ্ধ করুন। আর যদি দেখেন যে, ঐ উক্তিটি আপনার ক্ষেত্রে ‘কিছুতেই খাটে না’ তাহলে ‘১’ সংখ্যাকে বৃত্তবদ্ধ করুন। নিচে বৃত্তবদ্ধ করার একটি নমুনা প্রদর্শন করা হলো। এবার নিচের পছন্দগুলো থেকে আপনার সঠিক উত্তর বাছাই করে প্রশ্নপত্রের ছকে তা নির্দেশ করুন।

উক্তিটি আমার ক্ষেত্রে সম্পূর্ণ খাটে	৫
উক্তিটি আমার ক্ষেত্রে আংশিক খাটে	৪
উক্তিটি আমার ক্ষেত্রে কখনো খাটে কখনো খাটে না	৩
উক্তিটি আমার ক্ষেত্রে খুব একটা খাটে না	২
উক্তিটি আমার ক্ষেত্রে কিছুতেই খাটে না	১

উদাহরণ: আমি একজন শিক্ষক হতে পেরে সবসময় গর্ব অনুভব করি: ৫ ৪ ৩ ২ ১

অনুগ্রহ করে সবগুলো উক্তি সম্পর্কেই আপনার মতামত দিন, কোনো উক্তি বা বক্তব্য বাদ দিয়ে যাবেন না। এই বক্তব্য সবগুলোই কোনো না কোনো ধারণা বা অবস্থার কথা তুলে ধরেছে, অতএব এখানে ভুল-শুদ্ধ বলে কিছু নেই। আপনার এই মতামত কেবল গবেষণার কাজেই ব্যবহার করা হবে এবং তা কোনোভাবেই আপনার পরিচয়সহ প্রকাশ করা হবে না।

আপনি এই গবেষণা কাজে সহায়তা করতে ইচ্ছুক হলে, নিম্নোক্ত তথ্য দিয়ে আমাদের সহযোগিতা করুন। আর যদি আপনি এই প্রশ্নপত্র পূরণ করতে সংকোচ বোধ করেন বা কোনো কারণে এটি পূরণ করতে না চান তবে অনুগ্রহ করে এটি ফেরত দিন।

সনাক্তকরণ

শিক্ষাপ্রতিষ্ঠানের নাম: কোড: এলাকা: গ্রাম = 1, শহর = 2
গ্রাম/মহল্লা: ইউনিয়ন/ওয়ার্ড: উপজেলা:
শিক্ষাপ্রতিষ্ঠানের ধরন: সরকারি মাধ্যমিক = 1, বেসরকারি মাধ্যমিক = 2, বেসরকারি স্কুল ও কলেজ = 3,
দাখিল মাদ্রাসা = 4, আলিম/ফাজিল/কামিল মাদ্রাসা = 5
শিক্ষকের নাম: লিঙ্গ: পুরুষ = 1, নারী = 2
পদবী: অধ্যক্ষ/প্রধান শিক্ষক/সুপারিনটেনডেন্ট = 1, সহকারী প্রধান শিক্ষক = 2, সহকারী শিক্ষক = 3, প্রভাষক = 4, সহকারী অধ্যাপক = 5,
সহযোগী অধ্যাপক = 6, প্রদর্শক = 7
এমপিওভুক্তি: এমপিওভুক্ত = 1, এমপিওভুক্ত নয় = 2 মোবাইল নং:

ক্রম	বক্তব্যসমূহ	সম্পূর্ণ খাতে	আংশিক খাতে	কখনো খাতে কখনো খাতে না	খুব একটা খাতে না	কিছুতেই খাতে না
১	আমি নিজে মানসিক চাপের মধ্যে থাকলেও শিক্ষার্থীদের প্রয়োজনের উপর নজর রাখি।	৫	৪	৩	২	১
২	আমি মনে করি, শ্রেণির সকল শিক্ষার্থীকে একই পদ্ধতিতে মূল্যায়ন করা কঠিন।	৫	৪	৩	২	১
৩	আমি বিশ্বাস করি শ্রেণি শিখন-শেখানোকে কার্যকর করার জন্য একজন প্রশিক্ষণ প্রাপ্ত শিক্ষকের কোনো পরিকল্পনার প্রয়োজন হয় না।	৫	৪	৩	২	১
৪	আমি শিক্ষক হিসেবে নিজের ভবিষ্যৎ সম্পর্কে হতাশ।	৫	৪	৩	২	১
৫	আমি মনে করি, শ্রেণিব্যবস্থাপনার চাইতে শিখন-শেখানোর ওপরই অধিক গুরুত্ব দেওয়া উচিত।	৫	৪	৩	২	১
৬	আমার মতে, শিক্ষক প্রশিক্ষণ বিষয়ক শিক্ষাক্রমের জ্ঞান যেকোনো শিক্ষকের জন্যই আবশ্যিক।	৫	৪	৩	২	১
৭	আমি মনে করি, শিক্ষক হিসেবে ভাল নাগরিক তৈরির মাধ্যমে আমি জাতি গঠনের কাজেই সাহায্য করছি।	৫	৪	৩	২	১
৮	ক্লাসে শিক্ষার্থীদের অনাকাঙ্ক্ষিত ব্যবহার আমি একদমই সহ্য করতে পারি না।	৫	৪	৩	২	১
৯	আমি শিক্ষক প্রশিক্ষণের শিক্ষাক্রম সম্পর্কে জানতে আগ্রহী।	৫	৪	৩	২	১
১০	শিক্ষক হিসেবে আমি আমার বেতনের ব্যাপারে সন্তুষ্ট।	৫	৪	৩	২	১
১১	আমি মনে করি, সুচিন্তিত শিখন-শেখানো পরিকল্পনা ছাড়া কার্যকরভাবে শ্রেণিকার্যক্রম পরিচালনা অসম্ভব।	৫	৪	৩	২	১
১২	আমি বিশ্বাস করি, উপযুক্ত পরিচর্যা পেলে, সকল শিক্ষার্থীই কাঙ্ক্ষিত শিখনফল অর্জন করতে পারে।	৫	৪	৩	২	১
১৩	আমি মনে করি, পেশাগত প্রশিক্ষণ ছাড়া কোনো শিক্ষকেরই শ্রেণিকক্ষে প্রবেশ করা উচিত নয়।	৫	৪	৩	২	১
১৪	শিক্ষকতা পেশায় প্রতিনিয়ত পরিবর্তনশীল চাহিদা আমাকে ভীত করে তোলে।	৫	৪	৩	২	১
১৫	আমি যে বিষয় পড়াই সে সম্পর্কে জানতে সর্বদা উদগ্রীব থাকি।	৫	৪	৩	২	১
১৬	শিক্ষকতা পেশার সাথে আমার নিজের অন্তিত্বকে আমি অবিচ্ছিন্ন মনে করি।	৫	৪	৩	২	১
১৭	কোনো বিষয়ের শিক্ষক হওয়ার জন্য আমি ঐ বিষয়ের উপর পরিপূর্ণ জ্ঞান অর্জন করতে চাই।	৫	৪	৩	২	১
১৮	শিক্ষক হিসেবে আমার দুর্বলতা ও অক্ষমতা সম্পর্কে আমি সচেতন।	৫	৪	৩	২	১
১৯	আমার বিশ্বাস, কোনো অবস্থায়ই একজন শিক্ষক শ্রেণিতে জেগুরপ্রীতি (জেগুর বায়াস) দেখাতে পারেন না।	৫	৪	৩	২	১
২০	আমি আমার পাঠদানকে কার্যকর করার জন্য বেশিরভাগ সময়ই বক্তৃতা পদ্ধতি ব্যবহার করি।	৫	৪	৩	২	১
২১	মানসিক চাপের মধ্যে থাকলেও আমি ক্লাসে ধৈর্য ধরে রাখতে পারি।	৫	৪	৩	২	১
২২	সময়মত ক্লাসে যেতে না পারলে আমার লজ্জাবোধ হয়।	৫	৪	৩	২	১
২৩	আমার মতে, একজন প্রশিক্ষণ প্রাপ্ত শিক্ষকের কোনো শিক্ষা-উপকরণের প্রয়োজন হয় না।	৫	৪	৩	২	১
২৪	আমি শ্রেণিতে সকল শিক্ষার্থীর সমান অংশগ্রহণের সুযোগ তৈরি করি।	৫	৪	৩	২	১
২৫	শ্রেণিতে শিখন-শেখানোর কাজে আই.সি.টি ব্যবহারে আমি স্বাচ্ছন্দ্যবোধ করি।	৫	৪	৩	২	১

ক্রম	বক্তব্যসমূহ	সম্পূর্ণ খাতে	আংশিক খাতে	কখনো খাতে কখনো খাতে না	খুব একটা খাতে না	কিছুতেই খাতে না
২৬	শ্রেণিতে শিখন-শেখানোর জন্য আই.সি.টি. ব্যবহারের চাইতে আমি বজুতা ও আলোচনা করাকে বেশি ফলপ্রসূ মনে করি।	৫	৪	৩	২	১
২৭	খাতা মূল্যায়ন করার সময় আমি শিক্ষার্থীর সাথে আমার ব্যক্তিগত সম্পর্ককে বিবেচনায় নেই না।	৫	৪	৩	২	১
২৮	অন্য কোনো পেশায় যাওয়ার সুযোগ ছিল না বলেই আমি শিক্ষকতায় আসি।	৫	৪	৩	২	১
২৯	আমার মতে, শিখন-শেখানো প্রক্রিয়া কার্যকর করার জন্য শিক্ষা-উপকরণ ব্যবহারের বিকল্প নাই।	৫	৪	৩	২	১
৩০	আমার বিশ্বাস, একজন শিক্ষকের পক্ষে শ্রেণির সকল শিক্ষার্থীর প্রতি সমানভাবে মনোযোগ দেওয়া অসম্ভব।	৫	৪	৩	২	১
৩১	আমি শিক্ষকতা পেশা নিয়ে গর্ববোধ করি।	৫	৪	৩	২	১
৩২	স্কুলে এতো কাজের চাপের মাঝে নতুন শিক্ষণ কৌশল শেখা আমার জন্য কঠিন।	৫	৪	৩	২	১
৩৩	মনে হয় যেন শিক্ষকতা পেশা আমার জন্য নয়।	৫	৪	৩	২	১
৩৪	আমি সর্বদা সময়মত স্কুলে উপস্থিত হই।	৫	৪	৩	২	১
৩৫	স্কুলে আমার সহকর্মীদের সাথে আমি সুসম্পর্ক বজায় রাখি।	৫	৪	৩	২	১

পরিমাপকটির পরিপূর্ণ উত্তরদানের জন্য আপনাকে অসংখ্য ধন্যবাদ।

Annex 2.5 Weighing procedure

Latest available information on the number of institutions and teachers by type of institutions provided by the Bangladesh Bureau of Educational Information and Statistics (BANBEIS) was used to calculate weights against each type of institutions. It was done for national as well as separately for schools and madrasas. Here, the weights are nothing but the proportions of institutions/teachers under various types of institutions adjusted with number of institution type. The following tables provide this information in summary; the first one for institution level estimates and second one for teacher level estimates.

Institution type	Number of institution	Proportion of institutions			Weights		
		National	School	Madrasa	National	School	Madrasa
Government	327	0.012	0.019		0.060	0.057	
Non-government	16,149	0.602	0.922		3.010	2.766	
School & College	1,035	0.038	0.059		0.190	0.177	
Dakhil madrasa	6,558	0.245		0.704	1.225		1.408
Senior madrasa	2,753	0.103		0.296	0.515		0.592
Total	26,822	1.000	1.000	1.000	5.000	3.000	2.000

Institution type	Number of teacher	Proportion of teachers			Weights		
		National	School	Madrasa	National	School	Madrasa
Government	7,600	0.023	0.034		0.113	0.102	
Non-government	194,605	0.577	0.869		2.885	2.606	
School & College	21,782	0.065	0.097		0.323	0.292	
Dakhil madrasa	66,376	0.197		0.586	0.984		1.172
Senior madrasa	46,919	0.139		0.414	0.695		0.828
Total	337,282	1.000	1.000	1.000	5.000	3.000	2.000

Annex 3.1 UNESCO proposed selection criteria for teachers

A recruitment strategy should:

- be evidence-informed and based on current and projected qualitative and quantitative needs;
- attract and retain the right number of teachers with the desired profile and commitment;
- promote teacher professionalism through their employment status and conditions (some employers recruit contractual teachers in response to specific needs or situations, such as providing teachers for difficult-to-staff schools);
- include procedures for the licensing or certification of teachers, to ensure that individuals who wish to teach possess the necessary knowledge, competences and attributes;
- ensure equity in teacher recruitment, through fair, transparent procedures that does not affect disadvantage groups or individuals;
- ensure the equitable recruitment of effective school leaders with the requisite knowledge, competences and attributes; and
- in fragile states and emergency situations, allow the systematic and coordinated recruitment of teachers with appropriate profiles and competences.

Source: UNESCO (2015)

Annex 3.2

ILO/UNESCO proposal for selecting criteria of teachers

1. Policy governing entry into preparation for teaching should rest on the need to provide society with an adequate supply of teachers who possess the necessary moral, intellectual and physical qualities and who have the required professional knowledge and skills.
2. To meet this need, educational authorities should provide adequate inducements to prepare for teaching and sufficient places in appropriate institutions.
3. Completion of an approved course in an appropriate teacher-preparation institution should be required of all persons entering the profession.
4. Admission to teacher preparation should be based on the completion of appropriate secondary education, and the evidence of the possession of personal qualities likely to help the persons concerned to become worthy members of the profession.
5. While the general standards for admission to teacher preparation should be maintained, persons who may lack some of the formal academic requirements for admission, but who possess valuable experience, particularly in technical and vocational fields, may be admitted.
6. Adequate grants or financial assistance should be available to students preparing for teaching to enable them to follow the courses provided and to live decently; as far as possible the competent authorities should seek to establish a system of free teacher preparation institutions.
7. Information concerning the opportunities and the grants or financial assistance for teacher preparation should be readily available to students and other persons who may wish to prepare for teaching.
8. Fair consideration should be given to the value of teacher-preparation programmes completed in other countries as establishing in whole or in part the right to practice teaching. (2) Steps should be taken with a view to achieving international recognition of teaching credentials conferring professional status in terms of standards agreed to internationally.

Source: ILO/UNESCO (1966)

Annex 3.3

Criteria for promotion of teachers as prescribed by ILO/UNESCO

1. Teachers should be able, subject to their having the necessary qualifications, to move from one type or level of school to another within the education service.
2. The organization and structure of an education service, including that of individual schools, should provide adequate opportunities for and recognition of additional responsibilities to be exercised by individual teachers, on condition that those responsibilities are not detrimental to the quality or regularity of their teaching work.
3. Consideration should be given to the advantages of schools sufficiently large for pupils to have the benefits and staff the opportunities to be derived from a range of responsibilities being carried by different teachers.
4. Posts of responsibility in education, such as that of inspector, educational administrator, director of education or other posts of special responsibility, should be given as far as possible to experienced teachers.
5. Promotion should be based on an objective assessment of the teacher's qualifications for the new post, by reference to strictly professional criteria laid down in consultation with teachers' organizations.

Source: ILO/UNESCO (1966)

Annex 3.4

Recommendation of ILO/UNESCO for determining teachers' wage

115:

- (a) reflect the importance to society of the teaching function and hence the importance of teachers as well as the responsibilities of all kinds which fall upon them from the time of their entry into the service;
- (b) compare favourably with salaries paid in other occupations requiring similar or equivalent qualifications;
- (c) provide teachers with the means to ensure a reasonable standard of living for themselves and their families as well as to invest in further education or in the pursuit of cultural activities, thus enhancing their professional qualification;
- (d) take account of the fact that certain posts require higher qualifications and experience and carry greater responsibilities.

116. Teachers should be paid on the basis of salary scales established in agreement with the teachers' organizations. In no circumstances should qualified teachers during a probationary period or if employed on a temporary basis be paid on a lower salary scale than that laid down for established teachers.

117. The salary structure should be planned so as not to give rise to injustices or anomalies tending to lead to friction between different groups of teachers.

118. Where a maximum number of class contact hours is laid down, a teacher whose regular schedule exceeds the normal maximum should receive additional remuneration on an approved scale.

119. Salary differentials should be based on objective criteria such as levels of qualification, years of experience or degrees of responsibility but the relationship between the lowest and the highest salary should be of a reasonable order.

120. In establishing the placement on a basic salary scale of a teacher of vocational or technical subjects who may have no academic degree, allowance should be made for the value of his practical training and experience.

121. Teachers' salaries should be calculated on an annual basis.

122.

- (1) Advancement within the grade through salary increments granted at regular, preferably annual, intervals should be provided.
- (2) The progression from the minimum to the maximum of the basic salary scale should not extend over a period longer, than, 10 to 15 years.
- (3) Teachers should be granted salary increments for service performed during periods of probationary or temporary appointment.

123

- (1) Salary scales for teachers should be reviewed periodically to take into account such factors as a rise in the cost of living, increased productivity leading to higher standards of living in the country or- a general upward movement in wage or salary levels.
- (2) Where a system of salary adjustments automatically following a cost of living index has been adopted, the choice of index should be determined with the participation of the teachers' organizations and any cost-of-living allowance granted should be regarded as an integral part of earnings taken into account for pension purposes.

124. No merit rating system for purposes of salary determination should be introduced or applied without prior consultation with and acceptance by the teachers' organizations concerned.

Annex 3.5

Opportunity for professional development and further education

31. Authorities and teachers should recognize the importance of in service education designed to secure a systematic improvement of the quality and content of education and of teaching techniques.
32. Authorities, in consultation with teachers' organizations, should promote the establishment of a wide system of in-service education, available free to all teachers. Such a system should provide a variety of arrangements and should involve the participation of teacher-preparation institutions, scientific and cultural institutions, and teachers' organizations. Refresher courses should be provided, especially for teachers returning to teaching after a break in service.
33.
 - (1) Courses and other appropriate facilities should be so designed as to enable teachers to improve their qualifications, to alter or enlarge the scope of their work or seek promotion and to keep up to date with their subject and field of education as regards both content and method.
 - (2) Measures should be taken to make books and other material available to teachers to improve their general education and professional qualifications.
34. Teachers should be given both the opportunities and the incentives to participate in courses and facilities and should take full advantage of them.
35. School authorities should make every endeavour to ensure that schools can apply relevant research findings both in the subjects of study and in teaching methods.
36. Authorities should encourage and, as far as possible, assist teachers to travel in their own country and abroad, either in groups or individually, with a view to their further education.
37. It would be desirable that measures taken for the preparation and further education of teachers should be developed and supplemented by financial and technical co-operation on an international or regional basis.

Source: ILO/UNESCO (1966)

Annex 3.6

Teachers' duties and responsibilities as mentioned in ILO/UNESCO (1966) charter

79. The participation of teachers in social and public life should be encouraged in the interests of the teacher's personal development, of the education service and of society as a whole.
80. Teachers should be free to exercise all civic rights generally enjoyed by citizens and should be eligible for public office.
81. Where the requirements of public office are such that the teacher has to relinquish his teaching duties, he should be retained in the profession for seniority and pension purposes and should be able to return to his previous post or to an equivalent post after his term of public office has expired.
82. Both salaries and working conditions for teachers should be determined through the process of negotiation between teachers' organizations and the employers of teachers.
83. Statutory or voluntary machinery should be established whereby the right of teachers to negotiate through their organizations with their employers, either public or private, is assured.
84. Appropriate joint machinery should be set up to deal with the settlement of disputes between the teachers and their employers arising out of terms and conditions of employment. If the means and procedures established for these purposes should be exhausted or if there should be a breakdown in negotiations between the parties, teachers' organizations should have the right to take such other steps as are normally open to other organizations in the defence of their legitimate interests.

Annex 4.1

**Percentage distribution of institutions by year of establishment
area and institution type**

Year of establishment	Area		Institution type	
	Rural	Urban	Schools	Madrasas
1832–1900	0.8	1.9	1.4	0.4
1901–1947	11.5	6.6	13.9	4.6
1948–1971	25.7	17.0	25.9	20.7
1972–1990	27.9	34.9	21.2	44.0
1991–2016	34.1	39.6	37.6	30.3
Total	100.0	100.0	100.0	100.0

Annex 4.2

Percentage of educational institutions by stream of education, area and institution type

Stream of education offered	Area			Institution type		
	Rural	Urban	Level of significance	Schools	Madrasas	Level of significance
Humanities	99.4	88.7	p<0.001	96.1	100.0	p<0.01
Science	67.0	80.2	p<0.01	92.2	25.8	p<0.001
Business Studies	37.0	62.3	p<0.001	63.6	0.0	na
Mujabbid	1.2	0.9	ns	0.0	2.9	na
Hifjul Quran	0.6	1.9	ns	0.0	2.5	na
Vocational	2.2	0.9	ns	2.8	0.4	p<0.05

Notes: ns = not significant at $p = 0.05$, na = not applicable

Annex 4.3

**Percentage distribution of educational institutions by
number of students and institution type**

Number of students	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
≤200	0.8	10.8	3.3	55.8	30.0	23.4
201-400	20.0	30.8	23.3	41.7	56.7	35.7
401-600	18.4	22.5	25.9	2.5	11.7	16.6
601-800	10.8	21.7	14.2	0.0	0.8	13.8
801+	50.0	14.2	33.3	0.0	0.8	10.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean	900	564	795	210	273	530
SD	487	409	659	90	119	430
CV	54.0	72.5	82.9	42.8	43.6	81.0

Notes: SD = standard deviation, CV = coefficient of variation

Annex 4.4
Percentage distribution of institutions by student-teacher ratio and institution type

Number of students per teacher	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Permanent teachers only						
≤25	15.0	18.3	11.7	69.2	50.0	33.9
26-40	47.5	29.2	21.7	24.2	34.2	28.3
41-60	22.5	29.2	28.3	5.8	10.8	21.5
61+	15.0	23.3	38.3	0.8	5.0	16.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
All teachers						
≤25	18.3	21.7	17.5	76.7	55.0	38.3
26-40	55.0	36.6	30.8	19.2	32.5	31.9
41-60	22.5	30.0	34.2	3.3	8.3	21.3
61+	4.2	11.7	17.5	0.8	4.2	8.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Annex 5.1
Percentage distribution of teachers by marital status, gender area and institution type

Marital status	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Married	94.9	92.8	94.9	92.4	94.5	94.2	94.3
Unmarried	4.8	4.1	4.1	6.9	4.3	5.3	4.7
Others ¹	0.3	3.1	1.0	0.7	1.2	0.5	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹Widow/widower/divorced/separated

Annex 5.2
Percentage distribution of teachers by marital status, gender area and institution type

Marital status	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Married	92.5	94.5	94.3	92.8	96.1
Unmarried	6.7	4.2	5.2	6.5	3.7
Others ¹	0.8	1.3	0.5	0.7	0.2
Total	100.0	100.0	100.0	100.0	100.0

¹Widow/widower/divorced/separated

Annex 5.10
Percentage of teachers by the person in the family who is a teacher
gender and institution type

Family members	Gender		Institution type		Area		All
	Males	Females	Schools	Madrasas	Rural	Urban	
Spouse	19.6	37.9	26.3	18.8	24.1	22.1	23.7
Offspring	2.2	1.6	2.1	2.1	2.0	2.6	2.1
Parents	10.9	14.9	12.0	11.4	11.9	11.6	11.8
Elder siblings	18.1	22.8	19.1	19.1	18.5	21.8	19.1
Younger siblings	18.1	21.4	20.3	15.9	19.4	16.4	18.9
Any	49.4	66.1	55.7	47.9	52.8	54.2	53.1

Note: Multiple responses counted

Annex 5.11
Percentage of teachers by the person in the family who is a teacher
gender, area and institution type

Family members	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Father	10.8	13.3	11.4	11.2	11.4	11.2	11.3
Mother	0.5	3.5	1.1	1.6	1.5	0.6	1.2
Elder brother	14.6	12.4	13.9	14.6	13.5	15.1	14.1
Elder sister	4.4	12.4	5.3	10.2	7.0	4.7	6.2
Younger brother	14.1	9.5	13.7	10.5	13.7	11.9	13.1
Younger sister	5.3	13.5	7.1	7.5	8.3	4.9	7.2

Note: Multiple responses counted

Annex 5.12
Percentage of teachers by the person in the family who is a
teacher and institution type

Family members	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Father	12.5	11.2	12.8	9.8	13.2
Mother	2.3	1.5	1.3	0.7	0.5
Elder brother	17.0	13.5	12.5	15.3	14.8
Elder sister	13.2	6.7	8.2	3.8	5.8
Younger brother	15.8	13.8	11.3	9.7	15.0
Younger sister	12.0	8.2	8.2	3.8	6.5

Note: Multiple responses counted

Annex 6.4

Percentage distribution of teachers by change of broader school type in education life and institution type

Change of stream	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
All through general	91.2	88.2	88.4	46.8	61.0
All through madrasa	2.3	2.5	2.8	22.0	15.8
From general to madrasa	5.0	8.0	7.3	27.7	19.2
From madrasa to general	1.5	1.3	1.5	3.5	4.0
Total	100.0	100.0	100.0	100.0	100.0

Annex 6.5

Percentage of teachers studied in madrasas by gender, area institution type and level of education

Gender/area/ institution type	Level of education					
	Primary	Junior secondary	Secondary	Higher secondary	Bachelor's	Master's
Gender						
Males	13.3	27.5	27.9	26.8	24.4	42.2
Females	3.8	6.2	6.4	6.1	4.4	8.4
Area						
Rural	10.7	23.0	23.4	22.6	20.3	36.6
Urban	13.0	21.6	21.8	20.2	18.3	27.1
Institution type						
Schools	4.5	11.3	11.3	10.4	8.9	17.1
Madrasas	24.2	45.2	46.4	45.2	42.3	62.7
All	11.1	22.8	23.1	22.1	19.9	34.2

Annex 6.6

Percentage of teachers studied in madrasas by institution type and level of education

Institution type	Level of education					
	Primary	Junior secondary	Secondary	Higher secondary	Bachelor's	Master's
Government	3.8	8.3	8.5	7.8	4.7	5.4
Non-government	4.5	11.5	11.3	10.5	9.1	18.4
School & College	4.7	11.2	11.5	10.7	8.3	13.6
Dakhil madrasa	26.8	51.0	52.2	50.8	48.0	69.0
Senior madrasa	20.5	37.2	38.3	37.3	34.5	53.6
All	11.1	22.8	23.1	22.1	19.9	34.2

Annex 6.7

Percentage distribution teachers changing stream of education by grade at which the change occurred, gender, area and institution type

Grade at which the change occurred	Gender		Institution type		Area		All
	Males	Females	Schools	Madrasas	Rural	Urban	
Grades 1-5	7.4	0.0	7.3	6.9	4.5	17.9	6.9
Grade 6	76.2	67.7	76.3	75.2	78.9	60.7	75.6
Grades 7-16	16.4	32.3	16.4	17.9	16.6	21.4	17.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Annex 6.8

Percentage distribution teachers changing stream of education by grade at which the change occurred and institution type

Grade at which the change occurred	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Grades 1-5	2.6	7.1	7.5	7.0	6.5
Grade 6	71.8	76.8	73.6	77.0	71.9
Grades 7-16	25.6	16.1	18.9	16.0	21.6
Total	100.0	100.0	100.0	100.0	100.0

Annex 6.9

Percentage of teachers studied in Kaomi madrasas by gender area and institution type

Gender		Area		Institution type		All
Males	Females	Rural	Urban	Schools	Madrasas	
2.8	0.6	2.2	2.6	1.0	4.8	2.3

Institution type				
Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
0.5	1.0	1.5	5.3	4.2

Annex 6.10

Percentage of teachers studied in public educational institutions by gender, area, institution type and level of education

Gender/area/ institution type	Level of education					
	Primary	Junior secondary	Secondary	Higher secondary	Bachelor's	Master's
Gender						
Males	80.7	3.7	3.6	22.0	41.6	50.2
Females	89.1	10.9	10.5	33.0	56.3	87.2
Area						
Rural	83.5	4.2	4.0	21.5	41.1	56.8
Urban	78.7	9.7	10.0	36.9	60.5	65.1
Institution type						
Schools	88.5	6.4	6.1	28.9	51.6	72.8
Madrastas	70.9	3.0	3.2	15.5	31.1	35.8
All	82.6	5.3	5.2	24.4	44.9	58.9

Annex 6.11

Percentage of teachers studied in public educational institutions by institution type and level of education

Institution type	Level of education					
	Primary	Junior secondary	Secondary	Higher secondary	Bachelor's	Master's
Government	88.3	13.2	15.2	47.3	81.1	88.2
Non-government	88.5	6.0	5.5	28.0	50.1	71.3
School & College	88.7	8.0	8.3	31.0	55.1	75.2
Dakhil madrasa	69.3	1.8	1.8	13.9	27.4	29.8
Senior madrasa	73.2	4.7	5.3	17.8	36.2	44.6
All	82.6	5.3	5.2	24.4	44.9	58.9

Annex 6.12

*Percentage distribution of teachers by gender, area, institution type
stream of education and level of education*

Gender/area/ institution type	Level of education			
	Secondary	Higher secondary	Bachelor's	Master's
Males				
Humanities	47.3	51.2	64.0	74.5
Science	46.8	35.6	26.6	17.0
Business	5.2	12.0	8.2	7.8
Others	0.7	1.2	1.2	0.7
Females				
Humanities	55.8	67.9	72.5	75.8
Science	40.7	24.4	20.7	17.5
Business	3.4	6.4	5.0	6.7
Others	0.1	1.3	1.8	0.0
Rural institutions				
Humanities	50.0	55.9	67.4	77.1
Science	44.9	32.1	24.4	15.7
Business	4.5	10.7	6.8	6.7
Others	0.6	1.3	1.4	0.5
Urban institutions				
Humanities	46.0	51.1	59.9	67.6
Science	47.5	37.2	28.5	21.4
Business	5.7	10.9	10.4	10.2
Others	0.8	0.8	1.2	0.8
School teachers				
Humanities	42.3	48.9	61.0	67.8
Science	51.8	37.1	28.5	21.0
Business	5.6	13.0	9.3	11.2
Others	0.3	1.0	1.2	0.0
Madrasa teachers				
Humanities	63.0	66.9	76.0	86.0
Science	32.8	25.1	18.7	10.8
Business	3.2	6.2	3.7	1.7
Others	1.0	1.8	1.6	1.5

Annex 6.13
**Percentage distribution of teachers by institution type,
stream of and level of education**

Institution type/ stream of education	Level of education			
	Secondary	Higher secondary	Bachelor's	Master's
Government				
Humanities	30.7	35.3	57.0	60.9
Science	64.5	55.1	34.3	30.7
Business	4.8	9.3	8.2	8.4
Others	0.0	0.3	0.5	0.0
Non-government				
Humanities	43.2	49.8	61.6	69.0
Science	51.0	36.0	28.0	19.9
Business	5.5	13.2	9.1	11.1
Others	0.3	1.0	1.3	0.0
School & College				
Humanities	38.6	45.2	56.8	63.8
Science	55.0	41.0	30.7	22.9
Business	6.2	12.8	11.8	13.3
Others	0.2	1.0	0.7	0.0
Dakhil madrasa				
Humanities	68.8	71.2	80.2	88.0
Science	26.5	20.6	15.1	9.0
Business	3.3	6.2	3.3	1.5
Others	1.4	2.0	1.4	1.5
Senior madrasa				
Humanities	54.6	61.0	70.6	83.6
Science	41.8	31.5	23.6	13.3
Business	3.0	6.2	4.1	1.9
Others	0.6	1.3	1.7	1.2

Annex 6.14

*Percentage distribution of teachers by gender, area, institution type,
grade of achievement and level of education*

Gender/area/ institution type	Level of education			
	Secondary	Higher secondary	Bachelor's	Master's
Males				
First division	39.0	15.7	9.1	19.8
Second division	49.9	62.7	55.7	69.2
Third division	11.1	21.6	35.2	11.0
Females				
First division	52.7	23.5	8.2	19.4
Second division	43.3	67.6	71.3	73.6
Third division	4.0	8.9	20.5	7.0
Rural institutions				
First division	39.5	15.4	8.5	18.7
Second division	50.0	64.0	57.9	70.0
Third division	10.5	20.6	33.6	11.3
Urban institutions				
First division	53.1	26.2	10.3	22.8
Second division	41.9	62.9	64.9	71.0
Third division	5.0	10.9	24.8	6.2
School teachers				
First division	43.6	17.3	7.6	17.4
Second division	47.2	63.8	58.4	72.1
Third division	9.2	18.9	34.0	10.5
Madrassa teachers				
First division	39.0	17.8	11.5	23.6
Second division	51.0	63.7	60.8	67.1
Third division	10.0	18.5	27.7	9.3

Annex 6.15

Percentage distribution of teachers by institution type, grade of achievement and level of education

Institution type	Level of education			
	Secondary	Higher secondary	Bachelor's	Master's
Government				
First division	72.0	47.5	16.4	28.6
Second division	26.0	48.0	70.9	68.2
Third division	2.0	4.5	12.7	3.2
Non-government				
First division	41.8	15.7	7.3	16.1
Second division	48.5	64.6	57.3	72.4
Third division	9.7	19.7	35.4	11.5
School & College				
First division	49.9	21.0	7.4	20.7
Second division	42.8	62.2	63.9	72.2
Third division	7.3	16.8	28.7	7.1
Dakhil madrasa				
First division	36.3	16.4	11.8	21.7
Second division	53.0	63.3	59.5	68.4
Third division	10.7	20.3	28.7	9.9
Senior madrasa				
First division	42.8	19.8	11.1	26.3
Second division	48.2	64.2	62.7	65.3
Third division	9.0	16.0	26.3	8.4

Annex 6.16

Percentage of teachers having a second Master degree by gender area and institution type

Gender		Area		Institution type		All
Males	Females	Rural	Urban	Schools	Madrasas	
3.1	0.2	2.0	4.8	1.7	4.5	2.6

Institution type				
Government	Non-government	School & College	Dakhil madrasa	Higher madrasa
3.3	1.5	2.0	4.8	3.8

Annex 6.23

Percentage distribution of teachers by number of short courses received and institution type

Number of training	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Nil	14.2	10.7	11.3	29.3	24.3	16.4
One	25.4	28.5	27.6	39.7	36.8	31.7
Two	22.3	25.3	23.8	17.3	21.2	23.0
Three	15.7	16.5	18.3	7.8	10.5	14.1
Four	8.8	7.7	9.2	4.0	4.7	6.6
Five	5.8	5.0	4.3	1.2	1.2	3.7
Six+	7.8	6.3	5.5	0.7	1.3	4.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Annex 6.24

Percentage distribution of various sub-groups of teachers by number of short courses received

Number of training	Gender		Area		Institution type		Grant status	
	Males	Females	Rural	Urban	Schools	Madrasas	Grant	Non-grant
Nil	15.8	18.5	15.6	19.6	10.8	27.3	14.1	32.6
One	31.7	31.3	33.4	24.3	28.4	38.5	31.8	32.9
Two	22.8	23.9	23.0	23.3	25.1	18.9	24.4	14.0
Three	14.0	14.2	14.5	12.3	16.7	8.9	14.6	9.8
Four	7.1	5.2	6.4	7.8	7.8	4.3	6.9	4.2
Five	3.7	3.6	3.0	6.6	4.9	1.2	3.9	1.6
Six+	4.9	3.3	4.1	6.1	6.3	0.9	4.3	4.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Annex 6.25

Percentage distribution of educational short courses by year of training held and institution type

Year of training	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
1988 – 2005	6.7	3.5	3.5	3.1	3.6
2006 – 2010	18.1	15.5	15.7	7.8	6.4
2011 – 2015	36.2	33.8	38.7	28.3	29.0
2016 – 2018	39.0	47.2	42.1	60.8	61.0
Total	100.0	100.0	100.0	100.0	100.0

Annex 6.26

Percentage distribution of educational short courses by year of training held and sub-groups of teachers

Year of training	Gender		Area		Institution type		Grant status	
	Males	Females	Rural	Urban	Schools	Madrasas	Grant	Non-grant
1988 – 2005	3.8	2.4	3.5	3.6	3.6	3.3	3.7	1.1
2006 – 2010	13.7	14.0	12.7	17.5	15.6	7.2	13.1	18.7
2011 – 2015	33.0	33.4	31.8	37.8	34.4	28.6	32.9	34.1
2016 – 2018	49.5	50.2	52.0	41.1	46.4	60.9	50.3	46.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Annex 7.1

Percentage distribution of teachers by aim in life, gender area and institution type

Aim in life	Gender		Area		Institution type	
	Males	Females	Rural	Urban	Schools	Madrasas
Doctor/Engineer	11.0	11.5	10.7	13.2	13.1	7.3
Teacher	56.3	67.1	60.7	50.5	54.6	66.7
Police/Defence official	6.7	0.6	5.4	5.0	5.8	4.3
Banker	4.3	4.0	4.0	4.9	5.0	2.8
Government official	13.9	9.6	11.6	18.4	13.7	11.4
Businessperson	1.9	0.1	1.2	2.9	1.1	2.4
Did not have any	3.0	4.6	3.5	2.8	3.6	2.8
Others	2.9	2.5	2.9	2.3	3.1	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Annex 7.2

Percentage distribution of teachers by aim in life and institution type

Aim in life	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Doctor/Engineer	16.8	13.0	12.2	5.2	10.4
Teacher	41.5	55.5	52.3	70.2	62.0
Police/Defence official	8.5	5.7	6.1	3.9	4.8
Banker	3.3	5.0	5.3	2.3	3.3
Government official	21.3	13.2	15.8	10.8	12.3
Business person	0.7	1.0	2.0	3.0	1.5
Did not have any	3.8	3.0	3.0	2.2	2.5
Others	4.1	3.6	3.3	2.4	3.2
Total	100.0	100.0	100.0	100.0	100.0

Annex 7.3

*Percentage distribution of teachers by a combination of previous profession
gender, area and institution type*

Previous job	Gender		Area		Institution type	
	Males	Females	Rural	Urban	Schools	Madrasas
Teaching + others	11.4	5.0	9.6	11.6	10.8	8.3
Teaching only	19.8	21.9	18.0	29.8	21.3	18.4
Others only	18.2	10.7	17.9	10.9	17.7	14.2
None	50.6	62.4	54.5	47.7	50.2	59.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Annex 7.4

*Percentage distribution of teachers by length of teaching service, gender
area and type of institution*

Length of service (in years)	Gender		Area		School type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
0 – 8	23.5	32.0	26.4	21.6	24.3	27.7	25.4
9 – 16	21.6	37.7	24.6	27.6	24.4	26.8	25.2
17 – 22	25.1	19.1	23.8	23.7	25.3	20.8	23.8
23 – 40	29.8	11.2	25.2	27.1	26.0	24.7	25.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	17.3	13.2	16.3	16.6	16.5	15.9	16.3
Standard deviation	9.3	7.4	9.1	8.8	8.8	9.4	9.0
Coefficient of variation	53.8	56.1	55.8	53.0	53.3	59.1	55.2

Annex 7.5

*Percentage distribution of teachers by length of teaching service
and type of institution*

Length of service (in years)	Type of institution				
	Government	Non- government	School & College	Dakhil madrasa	Senior madrasa
0 – 8	26.2	24.3	23.5	26.7	29.0
9 – 16	28.5	24.0	26.7	30.3	21.8
17 – 22	16.3	26.0	21.7	21.5	19.8
23 – 40	29.0	25.7	28.1	21.5	29.4
Total	100.0	100.0	100.0	100.0	100.0
Mean	15.5	16.5	16.9	15.5	16.6
Standard deviation	9.4	8.8	9.0	8.7	10.3
Coefficient of variation	60.6	53.3	53.3	56.1	62.0

Annex 7.6

Logistic regression analysis predicting having a second occupation of the teachers of private institutions (model 3)

Explanatory variables	Regression coefficient	Odds ratio	95% CI of Odds ratio
Institution type			
Non-government	0		
School & College	-0.22	0.80	0.56 – 1.15
Dakhil madrasa	0.31	1.37*	1.06 – 1.77
Senior madrasa	0.20	1.23	0.93 – 1.61
Gender			
Males	0	1.00	
Females	1.94	6.64***	5.10 – 9.44
Area			
Urban	0	1.00	
Rural	0.68	1.97***	1.53 – 2.52
Religion			
Non-Muslim	0	1.00	
Muslim	0.24	1.27*	1.01 – 1.61
Service length (quartiles)			
Lowest	0	1.00	
2nd lowest	0.17	1.18	0.91 – 1.54
2nd highest	0.39	1.47**	1.13 – 1.91
Highest	0.31	1.36*	1.05 – 1.75
Grant status			
Grant	0	1.00	
Non-grant	0.82	2.28***	
Constant	-0.71		
-2 log likelihood	2740.99		
Cox & Snell R2	0.11		
Nagelkerke R2	0.15		

Note: Household activities were considered as occupation

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Annex 7.12

Percentage distribution of teachers by level of satisfaction with present occupation and institution type

Level of satisfaction	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Highly satisfied	65.2	63.5	65.8	64.0	66.9
Satisfied	23.0	27.5	26.8	26.0	24.0
Roughly okay	8.3	8.0	6.7	8.2	8.3
Dissatisfied	2.3	0.8	0.5	1.3	0.8
Highly dissatisfied	1.2	0.2	0.2	0.5	0.0
Total	100.0	100.0	100.0	100.0	100.0

Annex 7.13

Percentage distribution of teachers by level of satisfaction working with present institution, gender, area and institution type

Level of satisfaction	Gender		Area		Institution type	
	Males	Females	Rural	Urban	Schools	Madrasas
Highly satisfied	43.6	39.9	45.3	32.2	43.6	41.3
Satisfied	31.5	33.7	30.5	38.4	32.3	31.4
Roughly okay	21.0	22.2	20.1	26.3	20.9	21.9
Dissatisfied	2.5	3.0	2.6	2.6	2.2	3.4
Highly dissatisfied	1.4	1.2	1.5	0.5	1.0	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Annex 7.14

Percentage distribution of teachers by level of satisfaction working with present institution and institution type

Level of satisfaction	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Highly satisfied	48.1	43.0	46.9	36.7	47.9
Satisfied	31.5	32.3	32.8	30.3	32.8
Roughly okay	16.2	21.7	16.3	25.0	17.5
Dissatisfied	2.5	2.0	3.5	4.8	1.5
Highly dissatisfied	1.7	1.0	0.5	3.2	0.3
Total	100.0	100.0	100.0	100.0	100.0

Annex 7.18

Percentage distribution of the teachers of private educational institutions by various satisfaction level with three issues combined and their grant status

Various satisfaction level	Grant status		Both
	Grant	Non-grant	
Satisfied with each three issues	28.4	6.2	25.6
Satisfied with profession and institution but not with remuneration	48.0	40.3	47.0
Satisfied with profession but not with others	13.3	35.9	16.2
All other cases	10.3	17.6	11.2
Total	100.0	100.0	100.0

Annex 7.19

Percentage distribution of teachers wanted to change profession or institution by gender, area and institution type

	Gender		Area		Institution type	
	Males	Females	Rural	Urban	Schools	Madrasas
Profession	5.8	3.0	4.7	7.4	4.3	6.8
Institution	32.8	30.5	33.4	27.3	30.8	35.2
None	61.4	66.5	61.9	65.3	64.9	58.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Annex 7.20

Percentage of teachers wished to change profession and institution by their satisfaction with profession, institution and remuneration

Level of satisfaction	Satisfaction on profession		Satisfaction on institution	
	Wanted to change profession	Wanted to change institution	Wanted to change profession	Wanted to change institution
Highly satisfied	3.3	20.7	3.1	30.3
Satisfied	5.3	30.4	7.0	31.6
Roughly okay	8.5	52.5	13.3	45.4
Dissatisfied or highly dissatisfied	7.6	63.6	22.2	63.9
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001

Level of satisfaction with remuneration package	Wanted to change profession	Wanted to change institution
Highly satisfied	3.1	18.5
Satisfied	5.0	26.4
Roughly okay	4.6	34.1
Dissatisfied	7.9	38.3
Highly dissatisfied	4.0	35.5
Level of significance	p<0.01	p<0.001

Annex 8.1

Percentage of teachers teach by grade and institution type

Grades	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
Primary	22.0	3.2	7.7	42.7	40.3	16.8
Grade VI	72.8	61.7	54.2	66.5	68.8	63.4
Grade VII	78.5	68.8	61.5	75.8	76.7	71.1
Grade VIII	83.8	84.0	79.5	83.8	82.2	83.4
Grade IX	90.8	92.5	91.7	88.7	82.2	90.2
Grade X	89.8	94.5	93.3	90.0	80.5	91.5
Higher secondary	0.0	0.0	9.5	0.0	16.3	2.9

Annex 8.2

Percentage of teachers teach by grade, gender, area and institution type

Grades	Gender		Institution type		Area		All
	Males	Females	Schools	Madrasas	Rural	Urban	
Primary	15.7	20.9	4.2	41.7	13.4	31.1	16.8
Grade VI	62.2	67.6	61.3	67.5	63.3	63.7	63.4
Grade VII	68.4	80.2	68.4	76.2	70.1	75.2	71.1
Grade VIII	82.9	85.2	83.6	83.2	83.8	82.0	83.4
Grade IX	90.2	90.1	92.4	86.0	90.3	89.8	90.2
Grade X	92.1	89.2	94.2	86.1	92.0	89.1	91.5
Higher secondary	3.2	1.6	0.9	6.8	15.0	4.2	2.9

Annex 8.3

Mean number of subjects taught at secondary level by gender area and institution type

Gender		Area		Institution type		All
Males	Females	Rural	Urban	Schools	Madrasas	
3.3	3.5	3.3	3.6	3.4	3.3	3.3
p<0.001		p<0.001		ns		

Institution type					Level of significance
Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
3.6	3.4	3.1	3.3	3.3	p<0.05

Note: ns = not significant at $p = 0.05$

Annex 8.4

Percentage distribution of teachers by number of subjects taught at secondary level, gender, area and institution type

Number of subjects taught	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
1	11.5	8.3	10.2	13.3	10.4	11.5	10.8
2	20.9	18.2	21.6	14.9	20.7	19.4	20.3
3	25.7	26.8	26.9	21.6	25.6	26.6	25.8
4	22.4	22.9	22.7	21.6	22.8	21.8	22.5
5	12.6	11.7	12.5	11.8	11.5	14.1	12.4
6-9	6.9	12.1	6.1	16.8	9.0	6.6	8.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Annex 8.5

Percentage distribution of teachers by number of subjects taught at secondary and institution type

Number of subjects taught	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
1	10.4	9.8	15.7	13.0	9.3
2	20.2	20.7	21.0	20.0	18.7
3	21.6	25.6	26.0	24.6	29.3
4	19.0	23.2	20.8	22.3	21.2
5	15.0	11.4	11.7	12.7	16.0
6-9	13.8	9.3	4.8	7.4	5.5
Total	100.0	100.0	100.0	100.0	100.0

Annex 8.6

Percentage distribution of teachers observed in their classrooms by position of observer, gender, area and institution type

Observer	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Head	56.0	62.0	55.5	65.2	57.6	57.0	57.4
Assistant Head	7.7	11.1	7.3	13.3	8.9	7.6	8.5
Upazila Education Officer	14.4	12.1	15.3	7.7	14.7	12.1	13.9
Upazila Academic Supervisor	12.3	7.1	13.3	2.0	13.0	7.3	11.1
Zila Education Officer	6.9	6.4	7.1	5.6	8.2	4.1	6.8
SMC Chairperson	4.5	2.9	4.3	3.1	3.0	6.3	4.1
SMC members	2.2	1.4	1.9	2.4	1.8	2.5	2.0
Others	0.7	0.4	0.8	0.1	0.7	0.6	0.6
None	21.5	22.7	22.0	21.1	19.9	25.6	21.8

Note: Multiple responses counted

Annex 8.7

Percentage of teachers observed in their classrooms by position of observer and institution type

Observer	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Head	66.2	56.5	64.2	51.8	64.3
Assistant Head	13.3	8.5	11.2	7.2	8.2
Upazila Education Officer	8.2	14.8	16.0	13.7	10.0
Upazila Academic Supervisor	4.0	14.0	7.5	7.8	6.5
Zila Education Officer	6.0	8.3	8.0	3.5	4.8
SMC Chairperson	0.0	3.0	4.0	6.3	6.3
SMC members	0.5	1.8	1.8	2.5	2.5
Others	1.2	0.7	0.5	0.8	0.2
None	23.0	20.2	16.3	27.5	22.8

Note: Multiple responses counted

Annex 8.8

Percentage distribution of teachers by ways of providing feedback gender, area and institution type

Ways of providing feedback	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Written	3.1	0.9	2.6	2.4	2.7	2.2	2.6
Oral	55.6	49.5	54.5	53.4	55.0	52.9	54.2
Both	1.7	1.3	1.5	1.9	1.9	0.9	1.6
No feedback	18.1	25.6	19.4	21.2	20.5	18.4	19.8
Not observed	21.5	22.7	22.0	21.1	19.9	25.6	21.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Annex 8.9

Percentage distribution of teachers by ways of providing feedback and institution type

Ways of providing feedback	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Written	2.7	2.8	2.0	2.5	1.8
Oral	49.4	54.7	59.2	51.9	54.5
Both	1.7	1.8	3.0	0.3	1.7
No feedback	23.2	20.5	19.5	17.8	19.2
Not observed	23.0	20.2	16.3	27.5	22.8

Annex 8.13

Percentage distribution of teachers by level of liking the class routine and institution type

Level of liking	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Fully liked	41.7	52.4	54.7	64.1	53.9
Major portion liked	28.7	29.0	25.8	22.7	25.5
Halfway liked	23.3	14.0	16.8	11.5	16.8
Less than half liked	4.3	2.8	1.7	1.2	2.3
Did not like at all	2.0	1.8	1.0	0.5	1.5
Total	100.0	100.0	100.0	100.0	100.0

Annex 8.14

Percentage of teachers by whom the question papers for the last half yearly examination was prepared, gender, area and institution type

Who prepared question papers	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Self	44.7	40.3	40.9	55.3	46.3	38.5	43.7
Self + other teacher	9.7	12.5	9.3	14.5	10.1	10.8	10.3
Other teacher	1.4	1.8	1.5	1.6	1.8	0.9	1.5
Open market	14.6	13.7	16.0	7.6	13.2	16.7	14.4
Teachers union	36.5	38.1	39.7	24.6	35.3	39.8	36.8
Other school	1.0	1.0	1.2	0.6	0.8	1.6	1.0
Others	1.1	0.3	0.5	2.7	1.4	0.1	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Multiple responses counted

Annex 8.15

Percentage of institutions having special classes by grade area and institution type

Grade	Area		Institution type		All
	Rural	Urban	Schools	Madrasas	
VI	4.3	4.7	5.3	2.5	4.3
VII	5.1	4.8	6.1	2.9	5.0
VIII	61.7	78.3	69.2	56.2	64.7
IX	5.9	12.3	7.8	5.4	7.0
X	56.7	64.2	60.8	52.9	58.0
None	36.5	19.8	30.0	40.2	33.6
All	4.1	4.7	5.3	2.1	4.2

Note: Multiple responses counted

Annex 10.1

*Percentage of institutions having classroom teaching using multimedia
by grade and institution type*

Grade	Institution type					All
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
VI	98.3	71.7	87.5	40.0	73.3	65.0
VII	98.3	71.7	88.3	41.7	73.3	65.5
VIII	99.2	73.3	92.5	45.8	75.8	68.0
IX	99.2	74.2	95.8	46.7	78.3	69.0
X	99.2	72.5	95.0	46.7	78.3	68.0
None	0.8	25.8	4.2	50.8	21.7	30.3
All	98.3	70.0	87.5	40.0	72.5	64.0

Annex 10.2

*Percentage of institutions having classroom teaching using multimedia by
grade, area and institution type*

Grade	Area		Institution type		All
	Rural	Urban	Schools	Madrasas	
VI	60.9	84.0	73.1	50.0	65.0
VII	61.5	84.0	73.1	50.8	65.5
VIII	64.2	85.8	75.0	54.6	68.0
IX	65.4	85.8	75.8	55.8	69.0
X	64.2	85.8	74.4	55.8	68.0
None	33.7	14.3	24.2	42.1	30.3
All	59.6	84.8	71.7	49.6	64.0

Annex 10.3

*Percentage of teachers knowing how to use some specific ICT
devices by gender, area and institution type*

ICT devices	Gender		Area		School type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Ordinary mobile phone	90.9	88.6	90.4	90.2	89.5	92.1	90.4
Smart phone	71.1	78.6	70.4	82.9	75.5	67.5	72.8
Tablet computer	26.3	32.1	24.5	40.9	29.3	24.4	27.6
Desktop computer	49.0	50.7	47.2	58.5	52.1	43.8	49.3
Laptop computer	35.6	40.6	36.9	36.0	38.8	32.6	36.7
None	0.1	0.0	0.1	0.1	0.0	0.1	0.1

Note: Multiple responses counted

Annex 10.4

Percentage of teachers knowing how to use some specific ICT devices by institution type

ICT devices	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Ordinary mobile phone	83.8	89.8	89.0	93.5	90.0
Smart phone	90.5	74.5	79.0	64.8	71.2
Tablet computer	46.5	28.0	34.7	23.3	25.8
Desktop computer	65.7	51.3	54.5	41.8	46.7
Laptop computer	56.7	37.7	43.0	30.0	36.2
None	0.0	0.0	0.5	0.2	0.0

Note: Multiple responses counted

Annex 10.5

Percentage of teachers by purposes of using ICT devices and institution type

Purpose of using ICT devices	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Talking	100.0	99.8	99.5	99.3	100.0
SMS	77.2	60.8	63.7	55.8	58.0
Internet browsing	84.3	58.2	67.3	50.1	55.5
Self-study	40.5	23.8	31.2	12.5	24.2
Preparing contents for students	53.2	30.5	38.7	21.5	27.8
Teaching using multimedia	63.3	40.2	49.1	21.9	36.3
Occupational writing	31.5	18.5	24.0	13.4	17.3
Amusement	61.5	54.3	54.3	35.1	40.7
Listening Islamic preach	25.5	29.2	25.3	52.1	46.0
Listening radio programme	12.8	12.5	13.2	15.4	13.3
Photo/videography	70.7	52.3	58.1	43.6	47.0
Money transfer/mobile banking	44.7	36.0	37.0	31.7	31.5
Gaming	18.0	16.2	17.6	12.2	12.7

Note: Multiple responses counted

Annex 10.6

Percentage of teachers using ICT devices for occupational purposes by gender, area and institution type

Gender		Area		Institution type		All
Males	Females	Rural	Urban	Schools	Madrasas	
51.7	52.7	49.2	63.3	55.8	44.2	51.9
ns		p<0.001		p<0.001		

Institution type					
Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	
81.0	54.0	63.2	40.7	49.3	p<0.001

Note: ns = not significant at $p = 0.05$

Annex 10.7

Percentage of teachers by reasons of internet browsing and institution type

Reasons of internet browsing	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Social media	94.1	94.6	92.3	88.3	93.1
Teaching related information	81.0	67.9	76.6	70.3	73.9
Occupational information	63.2	51.6	56.2	52.0	49.5
School related activities	45.3	35.8	41.0	35.7	36.0
Sports news	54.5	45.0	50.2	45.7	45.0
General news	81.8	79.1	77.1	78.3	79.9
Amusement	67.8	62.5	65.2	56.0	61.9
Personal email	57.3	35.2	47.8	36.0	39.6

Note: Multiple responses counted

Annex 10.8

Percentage of teachers offering classroom teaching using multimedia by owning various ICTs

ICTs	Whether teacher own the technology		Level of significance
	Yes	No	
Ordinary mobile phone	38.0	46.7	p<0.001
Smart phone/tablet	47.7	25.4	p<0.001
Desktop/laptop	63.3	30.1	p<0.001

Annex 10.9

Percentage of teachers offering classroom teaching using multimedia by having ICT training, gender, area and institution type

Having ICT training	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
No	34.5	36.2	31.8	45.8	41.2	23.3	34.8
Yes	48.8	54.5	47.4	66.4	51.0	48.2	50.2
Significance	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Annex 10.10

Percentage of multimedia using teachers who faced difficulties in using it (among those who conducted classes)

	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Faced difficulty	65.2	73.2	73.0	49.5	65.3	72.5	67.2
Did not face difficulty	34.8	26.8	27.0	50.5	34.7	27.5	32.8
Level of significance	p<0.01		p<0.001		p<0.05		

	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa	Level of significance
Faced difficulty	53.3	66.8	60.3	77.7	68.2	p<0.001
Did not face difficulty	46.7	33.2	39.7	22.3	31.8	

Annex 10.11

Percentage of teachers facing difficulties in using multimedia by types of difficulties gender, area and institution type (among those who conducted classes)

Difficulties in use of multimedia	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Lack of skills	11.8	13.8	12.9	9.8	11.9	13.7	12.3
Lack of training	43.5	53.5	44.7	52.6	47.2	43.1	46.1
Lack of adequate equipment	24.7	25.0	24.9	24.6	22.1	31.9	24.8
Lack of time to take preparation	7.7	9.2	8.0	8.7	9.0	5.8	8.1
Don't have enough classroom	27.7	18.2	24.7	27.2	27.7	18.6	25.2
Defective equipment	11.0	8.0	11.1	6.4	9.4	12.3	10.2
Defective materials	4.2	12.5	7.1	3.0	7.1	4.6	6.4
Electricity failure	55.7	45.8	57.8	32.1	53.1	53.1	53.1
Others	0.1	0.1	0.0	0.5	0.2	0.0	0.1
Network problem	2.9	1.2	2.8	1.0	1.8	4.1	2.5

Note: Multiple responses counted

Annex 10.12

Percentage of teachers by reasons of not using multimedia by gender, area and institution type (among those who did not conduct classes)

Reasons of not using multimedia	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
No provision in school	47.6	37.3	47.9	32.2	40.5	53.1	45.4
Defective equipment	19.2	26.4	20.6	21.7	24.1	15.4	20.8
Had no training	29.2	35.1	28.8	39.4	31.6	28.7	30.5
Did not feel necessary	6.8	5.1	6.3	7.0	6.3	6.8	6.5
School authority did not want	5.9	5.2	5.2	8.6	6.1	5.1	5.7
Others	1.3	0.3	1.1	0.9	0.9	1.3	1.1

Note: Multiple responses counted

Annex 11.1

Distribution of teachers by class interval of PTCS scores

Scores	Number of teachers	Percentage of teachers
76 – 85	1	0.0
86 – 95	-	-
96 – 105	14	0.5
106 – 115	48	1.6
116 – 125	180	6.0
126 – 135	554	18.5
136 – 145	846	28.2
146 – 155	968	32.2
156 – 165	363	12.1
166 – 175	26	0.9
Total	3,000	100.0

Annex 11.2

Mean and percentage of scores by sub-components gender, area and institution type

Sub-scales	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Pedagogical skills (Maximum score is 45)	31.4 (69.8)	31.2 (69.3)	31.5 (70.0)	30.7 (68.2)	31.4 (69.8)	31.3 (69.5)	31.4 (69.7)
Professional development (Maximum score is 25)	23.4 (93.6)	23.3 (93.2)	23.5 (94.0)	22.9 (91.6)	23.4 (93.6)	23.4 (93.6)	23.4 (93.6)
Motivational aspects (Maximum score is 35)	28.7 (82.0)	28.7 (82.0)	28.8 (82.3)	28.4 (81.1)	28.7 (82.0)	28.7 (82.0)	28.7 (82.0)
Ethical aspects (Maximum score is 35)	31.0 (88.6)	30.4 (86.8)	30.9 (88.3)	30.6 (87.4)	31.0 (88.6)	30.5 (87.1)	30.8 (88.0)
Resilience aspects (Maximum score is 35)	28.5 (81.4)	28.2 (80.6)	28.6 (81.7)	27.6 (78.8)	28.3 (80.8)	28.8 (82.3)	28.5 (81.4)
All	143.1 (81.8)	141.9 (81.1)	143.4 (81.9)	140.4 (80.2)	142.9 (81.7)	142.6 (81.5)	142.8 (81.6)

Annex 11.3

Percentage distribution of teachers by their response regarding level of fitting the statements of PTCS with them

Serial	Statements	Sub-scale	Level of fitting of the statements with the teachers				
			Fully	Partially	Sometimes	Not exactly	Not at all
1	আমি নিজে মানসিক চাপের মধ্যে থাকলেও শিক্ষার্থীদের প্রয়োজনের উপর নজর রাখি।	Re	84.1	11.6	2.9	0.6	0.8
2V	আমি মনে করি, শ্রেণির সকল শিক্ষার্থীকে একই পদ্ধতিতে মূল্যায়ন করা কঠিন।	Pe	46.8	29.3	13.8	4.6	5.4
3V	আমি বিশ্বাস করি শ্রেণি শিখন-শেখানোকে কার্যকর করার জন্য একজন প্রশিক্ষণপ্রাপ্ত শিক্ষকের কোনো পরিকল্পনার প্রয়োজন হয়না।	Et	16.2	13.6	9.5	10.1	50.7
4V	আমি শিক্ষক হিসেবে নিজের ভবিষ্যৎ সম্পর্কে হতাশ।	Mo	14.4	15.6	10.4	12.2	47.3
5V	আমি মনে করি, শ্রেণিব্যবস্থাপনার চাইতে শিখন-শেখানোর ওপরই অধিক গুরুত্ব দেওয়া উচিত।	Pe	42.5	29.0	13.4	7.8	7.2
6	আমার মতে, শিক্ষক প্রশিক্ষণবিষয়ক শিক্ষাক্রমের জ্ঞান যে কোনো শিক্ষকের জন্যই আবশ্যিক।	Pr	94.4	4.3	1.0	0.3	0.1
7	আমি মনে করি, শিক্ষক হিসেবে ভাল নাগরিক তৈরির মাধ্যমে আমি জাতিগঠনের কাজেই সাহায্য করছি।	Mo	92.4	6.4	0.9	0.1	0.3
8V	ক্লাসে শিক্ষার্থীদেও অনাকাঙ্ক্ষিত ব্যবহার আমি একদমই সহ্য করতে পারি না।	Re	23.1	24.3	22.3	12.7	17.6
9	আমি শিক্ষক প্রশিক্ষণের শিক্ষাক্রমসম্পর্কে জানতে আগ্রহী।	Pr	89.0	5.2	3.2	1.5	1.1
10	শিক্ষক হিসেবে আমি আমার বেতনের ব্যাপারে সন্তুষ্ট।	Mo	17.0	29.8	7.5	19.0	26.5
11	আমি মনে করি, সুচিন্তিত শিখন-শেখানো পরিকল্পনা ছাড়া কার্যকরভাবে শ্রেণিকার্যক্রম পরিচালনা অসম্ভব।	Pe	74.5	15.7	4.1	2.2	3.8
12	আমি বিশ্বাস করি, উপযুক্ত পরিচর্যা পেলে, সকল শিক্ষার্থীই কাঙ্ক্ষিত শিখনফল অর্জন করতে পারে।	Et	78.9	16.1	4.0	0.7	0.3
13	আমি মনে করি, পেশাগত প্রশিক্ষণছাড়া কোনো শিক্ষকেরই শ্রেণিকক্ষে প্রবেশ করা উচিত নয়।	Pr	50.7	25.6	9.1	6.8	7.8
14V	শিক্ষকতা পেশায় প্রতিনিয়ত পরিবর্তনশীল চাহিদা আমাকে ভীত করে তোলে।	Re	13.7	24.4	14.4	16.2	31.3
15	আমি যে বিষয় পড়াই সেসম্পর্কে জানতে সর্বদা উদগ্রীব থাকি।	Pr	87.3	6.9	3.0	1.3	1.5
16	শিক্ষকতা পেশার সাথে আমার নিজের অস্তিত্বকে আমি অবিচ্ছিন্ন মনে করি।	Mo	65.0	12.0	4.1	3.6	15.3
17	কোনো বিষয়ের শিক্ষক হওয়ার জন্য আমি ঐ বিষয়ের উপর পরিপূর্ণ জ্ঞান অর্জন করতে চাই।	Pr	90.7	6.3	1.5	0.7	0.8
18	শিক্ষক হিসেবে আমার দুর্বলতা ও অক্ষমতা সম্পর্কে আমি সচেতন।	Re	77.7	14.6	3.4	1.4	2.9
19	আমার বিশ্বাস, কোনো অবস্থায়ই একজন শিক্ষক শ্রেণিতে জেগারপ্রীতি (জেগারবায়াস) দেখাতে পারেন না।	Et	73.4	7.5	5.3	3.0	10.9
20V	আমি আমার পাঠদানকে কার্যকর করার জন্য বেশিরভাগসময়ই বক্তৃতা পদ্ধতি ব্যবহার করি।	Pe	13.8	26.8	32.7	13.6	13.2
21	মানসিক চাপের মধ্যে থাকলেও আমি ক্লাসে ধৈর্য্য ধরে রাখতে পারি।	Re	71.3	21.0	5.0	1.6	1.1
22	সময়মত ক্লাসে যেতে না পারলে আমার লজ্জাবোধ হয়।	Et	88.5	6.7	2.5	0.7	1.5
23V	আমার মতে, একজন প্রশিক্ষণপ্রাপ্ত শিক্ষকের কোনো শিক্ষা-উপকরণের প্রয়োজন হয় না।	Et	8.5	10.7	9.9	9.7	61.3

24	আমি শ্রেণিতে সকল শিক্ষার্থীও সমান অংশগ্রহণের সুযোগ তৈরি করি।	Pe	81.6	12.5	4.4	0.8	0.7
25	শ্রেণিতে শিখন-শেখানোর কাজে আই.সি.টি ব্যবহারে আমি স্বাচ্ছন্দ্যবোধ করি।	Pe	64.1	18.1	9.6	3.2	5.0
26V	শ্রেণিতে শিখন-শেখানোর জন্য আই.সি.টি ব্যবহারের চাইতে আমি বক্তৃতা ও আলোচনা করাকে বেশি ফলপ্রসূ মনে করি।	Pe	11.0	23.0	21.8	16.8	27.4
27	খাতা মূল্যায়ন করার সময় আমি শিক্ষার্থীর সাথে আমার ব্যক্তিগত সম্পর্ককে বিবেচনায় নেই না।	Et	81.1	3.5	2.5	1.7	11.2
28V	অন্য কোনো পেশায় যাওয়ার সুযোগ ছিল না বলেই আমি শিক্ষকতায় আসি।	Mo	10.3	12.0	6.7	14.1	57.0
29	আমার মতে, শিখন-শেখানো প্রক্রিয়া কার্যকর করার জন্য শিক্ষা-উপকরণ ব্যবহারের বিকল্প নাই।	Pe	82.6	11.0	3.3	1.9	1.2
30V	আমার বিশ্বাস, একজন শিক্ষকের পক্ষে শ্রেণির সকল শিক্ষার্থীও প্রতি সমানভাবে মনোযোগ দেওয়া অসম্ভব।	Pe	19.3	32.4	13.5	9.4	25.4
31	আমি শিক্ষকতা পেশা নিয়ে গর্ববোধ করি।	Mo	90.5	5.5	1.7	1.1	1.2
32V	স্কুলে এতো কাজের চাপের মাঝে নতুন শিক্ষণ কৌশল শেখা আমার জন্য কঠিন।	Re	8.9	23.8	14.7	15.0	37.5
33V	মনে হয় যেন শিক্ষকতা পেশা আমার জন্য নয়।	Mo	6.3	5.1	5.2	7.4	75.9
34	আমি সর্বদা সময়মত স্কুলে উপস্থিত হই।	Et	94.0	4.1	1.2	0.3	0.4
35	স্কুলে আমার সহকর্মীদের সাথে আমি সুসম্পর্ক বজায় রাখি।	Re	96.2	2.7	0.7	0.3	0.2

Pe = Pedagogical skills, Pr = Professional development, Mo = Motivational aspects, Et = Ethical aspects, Re = Resilience aspects

Annex 11.4

Percentage distribution of teachers by competency level and length of experience

Competency level	Experience (in years)			
	0 - 8	9 - 16	17 - 22	23 - 40
Highly competent	0.3	0.9	0.1	0.1
Competent	16.1	11.7	17.0	15.1
Moderately competent	39.8	42.7	40.5	36.3
Averagely competent	31.0	26.3	24.3	28.7
Limited competent	10.2	15.2	13.6	15.9
Incompetent	2.6	3.2	4.5	3.9
Total	100.0	100.0	100.0	100.0

Annex 12.1

Percentage of teachers offered private supplementary tutoring by students' grade and teachers' gender, area and institution type

Students grade	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Pre-primary	0.8	0.1	0.5	1.2	0.7	0.5	0.7
Primary	3.4	2.8	2.6	6.1	2.0	5.8	3.3
Class VI	8.0	4.7	6.5	10.7	7.3	7.2	7.3
Class VII	8.3	4.6	6.9	10.4	7.4	7.7	7.5
Class VIII	15.0	4.4	11.7	16.5	13.6	10.7	12.6
Class IX	15.4	4.4	11.5	19.0	14.7	9.5	13.0
Class X	16.7	4.6	12.8	18.9	15.9	10.1	13.9
Classes XI-XII	3.3	0.6	2.0	5.7	2.8	2.5	2.7
Total	25.9	10.2	20.5	30.1	23.5	20.1	22.4

Annex 12.2

Percentage of teachers offered private supplementary tutoring by students' grade and teachers' institution type

Students grade	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Pre-primary	0.2	0.8	0.2	0.5	0.5
Primary	1.3	2.0	2.2	7.2	3.8
Class VI	5.2	7.5	6.0	7.8	6.5
Class VII	5.7	7.7	6.2	7.5	7.8
Class VIII	8.7	14.0	11.8	10.5	10.8
Class IX	10.3	15.0	13.8	9.3	9.7
Class X	10.8	16.0	16.5	9.8	10.5
Classes XI-XII	2.0	2.5	5.7	2.2	3.0
Total	17.2	23.7	24.2	19.7	20.7

Annex 12.3

Percentage distribution of students receiving private supplementary tutoring by grade

Students grade	Number of students	Percentage distribution
Pre-primary	82	0.5
Primary	557	3.6
Class VI	1,414	9.1
Class VII	1,496	9.6
Class VIII	3,608	23.1
Class IX	3,446	22.1
Class X	4,474	28.7
Classes XI-XII	513	3.3
Total	15,590	100.0

Annex 12.4

Percentage of teachers by place of private supplementary tutoring gender, area and institution type

Place of tutoring	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madradas	
Teachers house	17.6	8.0	14.1	20.9	15.8	14.6	15.4
Students house	9.1	1.0	5.8	13.1	7.7	6.4	7.2
Coaching centre	1.1	0.0	0.9	0.3	0.8	0.9	0.8
School	3.2	1.5	2.9	2.6	3.4	1.8	2.8

Place of tutoring	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Teachers house	11.8	16.0	15.5	14.5	14.7
Students house	4.7	7.7	8.7	6.0	7.0
Coaching centre	0.2	0.8	1.0	0.8	1.0
School	2.2	3.5	3.2	1.2	2.5

Note: Multiple responses counted

Annex 12.5

Percentage distribution of tutees by place of private supplementary tutoring and institution type

Place of tutoring	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Teacher's home	60.8	82.9	60.1	70.0	60.1	69.0	62.0
Student's home	7.7	2.4	6.5	11.9	6.9	9.4	7.5
Coaching centre	13.8	0.0	15.3	3.2	13.7	10.5	13.0
School	17.7	14.7	18.1	14.9	19.3	11.1	17.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Place of tutoring	Institution type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Teacher's home	72.5	59.4	62.9	69.1	68.9
Student's home	7.6	6.7	9.0	9.8	8.9
Coaching centre	7.6	14.4	9.1	11.3	9.6
School	12.3	19.5	19.0	9.8	12.6
Total	100.0	100.0	100.0	100.0	100.0

Annex 12.6

Percentage share of own school students by place of private supplementary tutoring and institution type

Place of tutoring	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
Teacher's home	50.7	63.6	50.1	57.7	52.5	48.9	51.7
Student's home	35.5	45.0	36.6	33.7	34.7	38.1	35.7
Coaching centre	27.1	-	27.0	28.0	29.6	15.3	27.1
School	91.2	40.0	87.3	97.0	87.9	95.0	88.9
Total	53.4	59.8	52.4	59.7	55.0	50.5	53.8

Place of tutoring	School type				
	Government	Non-government	School & College	Dakhil madrasa	Senior madrasa
Teacher's home	64.0	53.0	44.7	52.8	44.3
Student's home	34.0	35.6	29.1	37.1	39.7
Coaching centre	0.0	29.9	30.6	18.0	11.6
School	100.0	87.9	85.5	100.0	90.8
Total	60.3	55.4	49.8	52.0	46.6

Annex 12.9

Percentage of teachers used guidebooks by subject and grade

Subject	Grade					Total
	VI	VII	VIII	IX	X	
Bangla	16.3	16.6	18.8	20.7	23.0	21.5
English	27.8	29.8	32.3	38.5	37.2	39.3
Mathematics	32.8	23.3	29.8	31.9	33.0	33.2
Science	17.0	20.3	19.5	26.8	20.4	22.9
Bangladesh & Global Studies	14.0	13.7	21.7	15.5	20.8	17.1
Physic	-	-	-	26.4	27.0	28.3
Chemistry	-	-	-	36.8	35.5	35.4
Biology	-	-	-	24.7	24.7	24.9
Higher Mathematics	-	-	-	34.8	26.7	28.2
History	-	-	-	12.8	16.6	16.2
Agriculture	11.0	8.4	16.4	12.6	10.0	14.1
ICT	13.1	6.9	14.2	14.9	20.2	15.1
Religion	12.5	14.1	11.5	15.5	15.2	17.2
Arabic	21.2	26.1	22.7	26.1	26.0	27.5
Physical education	6.7	7.0	6.7	8.6	8.0	8.9
All	21.9	21.2	24.1	28.8	28.4	37.1

Annex 12.10

Percentage of teachers used guidebooks by service length, gender area and institution type

Service length (quartiles)	Gender		Area		Institution type		All
	Males	Females	Rural	Urban	Schools	Madrasas	
First	43.3	38.4	42.5	39.5	41.9	42.2	41.9
Second	33.1	46.3	37.9	36.5	37.1	38.2	37.5
Third	32.9	40.3	34.0	35.3	31.4	41.0	34.2
Fourth	35.5	39.5	38.4	26.8	35.4	36.4	35.9
Significance	p<0.001	ns	p<0.05	ns	p<0.05	ns	p<0.05

Note: ns = not significant at p<0.05

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Education Watch Report 2018-19

The fourth Sustainable Development Goal (SDG 4) presents a challenge and an opportunity for achieving quality education for all children with significant role for the teachers. The teachers are in a unique position to actively participate in achieving the SDGs and to inspire, motivate, and prepare the younger generation for a sustainable future. But how well are the secondary school teachers in Bangladesh prepared to take on the challenge?

The secondary education system in Bangladesh is engulfed with scarcity of qualified and motivated teachers and their uneven distribution. The young graduates lack preparation for being a school teacher and there is insufficient opportunity for pre and in-service training. The education system is characterised predominantly by one-way lecturing, rote learning, inadequate supervision of classrooms, and lack of monitoring. On-payment additional teaching, private supplementary tutoring to own school students, and guidebooks are parts of the system. With only 16 hours of weekly teaching, the teachers consider themselves overloaded!

A section of the teachers have a second occupation and a high variation existed in their remuneration. The teachers seldom have clear knowledge about the National Education Policy, secondary curriculum or Sustainable Development Goals. Many teachers' associations existed, but few directly contributed to the professional development of teachers. The Government schools, miniscule in numbers, enjoy better service conditions and facilities.

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