Raqib Chowdhury · Mahbub Sarkar
Foez Mojumder · M Moninoor Roshid
Editors

Engaging in Educational Research

Revisiting Policy and Practice in
Bangladesh

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Foez Mojumder • M Moninoor Roshid
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Editors
Raqib Chowdhury
Faculty of Education
Monash University
Melbourne, VIC, Australia

Foez Mojumder
Faculty of Education
Monash University
Melbourne, VIC, Australia

Mahbub Sarkar
Monash Centre for Scholarship in Health
Education (MCSHE), Faculty of Medicine,
Nursing & Health Sciences
Monash University
Melbourne, VIC, Australia

M Moninoor Roshid
Institute of Education and Research
University of Dhaka
Dhaka, Bangladesh

Foreword

Research is an essential part of education, and education itself demands continuous research for advancement and application. The 18 essays in this volume are all based on research by individuals connected with education and committed to the promotion of learning. They have examined all available data, made empirical investigations, and studied literature on the subjects of their research. Their findings are significant and should be of value to educationalists, policy-makers, teachers, and tertiary students, in a word to all interested in education in Bangladesh. In each of the essays there is a warm invitation to further research.

The two principal areas under focus are, as they ought to be, quality and equity. In education, quality comes first, but equity is almost of equal importance in the particular context of Bangladesh. For one thing, education is a universal birthright; for another, Bangladesh as a state is founded on the democratic promise of ensuring equal opportunity to all citizens, irrespective of class and creed. Moreover, the back-wardness of the country and the inadequacy of material resources in relation to its large population make it absolutely necessary that every citizen is developed in skill and ability through learning. Ideally, access should be free.

Quality of education depends on several factors, most of which have been dis-cussed in the essays. Curriculum, infrastructure, methods, and environment have their special value, but quality depends, as indicated in these essays, primarily on the teachers. Teachers must be qualified and trained; they should have proper apti-tude and commitment. We in Bangladesh need to bring the most talented of our men and women to the teaching profession. There is a claim that 25% of the annual budget and at least 4% of the GDP should be allocated to education. The claim is amply justified on the simple ground that in our circumstances education is the most productive sector for investment—certainly more than civil administration and mili-tary defense. Investment in education would, among other things, create directly and consequentially employment which is a *sine qua non* for economic develop-ment. Teachers are not mere conduits of learning, they are viable heroes whom the students would like to admire and emulate. It would, therefore, be necessary to make the profession honorable – governmentally as well as socially, and honor

would depend not on words but on the personal respect accorded to them in terms of both prestige and financial provision. A poor teacher is not an effective teacher.

Of the hindrances of quality in education, the most subversive has been the process of transferring the test of learning from the classroom to the examination hall. Ever since its beginning, modern education in the country has been examination-oriented. The orientation has not declined; on the contrary, it has grown over the years owing, peculiarly, to the inclination of the authorities to have result without working for it. Apart from reliance on examination certificates as the most reliable measure of knowledge-acquisition, the number of public examination itself has increased to the continual detriment of classroom teaching and to the corresponding delight of the coaching centers and guidebook makers.

Examinations are, of course, a necessary part of education, but public examinations should not be the sole indicator of academic achievement. It is because of the overriding importance given to it that examination-hall activity dominates over classroom teaching. Experiments, many of them unnecessary, have been made with the examination system. One of these is the introduction of the so-called creative question setting. The introduction ignores the fact that it is teaching that needs creativity and not question setting and that innovations demand the ground to be prepared. The result has been harmful. Teachers found that creative questions are not easy to invent and went to guidebooks for help. Students and their guardians got the message. The market for guidebooks widened and the use of textbooks shrunk. The multiple choice question system has emerged as yet another bugbear. Whereas academically the system is no substitute for answers in writing, what the authorities have discovered, much to their disappointment, is that it lends itself conveniently to the leaking of question papers along with the answers in numbers.

One of the challenging areas is English language learning. The time-honored method of grammar translation has recently been replaced by communicative method. Although the merits of direct communication are well established, it has not been working well in our context. As is pointed out in one of the essays, the primary drawback is the lack of trained teachers. To add to the ailment, there is the fact that the system functions better in the schools with students drawn from the privileged sections of the society, contributing to the widening of the existing social cleavage. Clearly, there is a good case for returning to the old grammar-translation method.

The decline in science education is worthy of attention. The most obvious reason for the decline is its comparative lack of commercial value. But science is important; for it not only gives knowledge but also helps to develop curiosity and the ability to think critically. Commerce works in determining students' choice of study. Indeed commerce is ubiquitous in its presence. Thanks to the operation of capitalism, education is increasingly becoming a commodity; it is being bought and sold, and quality education remains unaffordable for the less privileged. That privatization of learning is on the rise is, of course, all of a piece with the principles on which the state is functioning nowadays. It is disheartening, to say the least, that the study of humanities is also suffering on account of its unprofitablility.

The problem of ensuring equity persists, turning from bad to worse. The state is expected to intervene, but it does not, because the state itself is capitalist both in ideology and practice. Society is unequal, so is access to education. In Bangladesh we have fought for a social revolution but have failed to achieve the goal. That accounts for many of our educational weaknesses including the overwhelming one of inequity. How can you have equity in an unequal society?

It bears no refutation that considered from the point of social benefit what ails education in Bangladesh today is its division into three disparate streams based, overly, on the separation of the classes. We have the English medium teaching designated for the rich, the Bengali medium for the poor, and Islamist Madrasahs for the poor. Naturally the English medium dominates. This is a phenomenon that needs very thorough going into not only the interest of education but also that of the well-being of the people. Inequity is destructive, and to employ education in widening the social gulf instead of bridging, it is tantamount to a preparation for future anarchy.

To turn to the question of quality, education does not endure nor does it become creative unless given through the medium of the mother language. One of the research papers in this book reveals that even in the teaching of English the use of Bengali in the classroom can be a help rather than a hindrance. Unfortunately, Bengali is not being used as the medium in the way and to the degree it ought to be. This may look strange to outsiders, but the peculiar fact of the matter is that in neglecting to use the mother language we are failing to provide the best possible education to our learners.

One hears of the rise of fundamentalist religious militancy in the country. Not surprisingly, the militants are drawn from those reared in the English and the Madrasahs streams. This happens because the two have a subterranean linkage in their dissociation from the culture, history, and environment of the country. This dissociation is due, primarily, to our failure to make use of the mother language in the educational upbringing of the students.

These are some of the issues connected with quality and equity. We would expect researchers to explore these areas in depth. That is a future prospect. Meanwhile, what we have before us is an excellent work. Let us congratulate the four editors and their fellow educationalists on the remarkable volume they have offered us. We have reasons to be grateful to them.

University of Dhaka   Serajul Islam Choudhury
Dhaka, Bangladesh

Series Editors' Introduction

This volume by Chowdhury, Sarkar, Mojumder, and Roshid on *Engaging in Educational Research: Revisiting Policy and Practice in Bangladesh* is the latest book to be published in the long-standing Springer Book Series 'Education in the Asia Pacific Region: Issues, Concerns and Prospects'. The first volume in this Springer series was published in 2002, with this book by Chowdhury et al. being the 44th volume to be published to date.

This book is an important contribution to the available research literature on education in Bangladesh because it provides up-to-date information on key aspects of education and schooling in that country. After providing an overview of Bangladesh as a country, and the evolution of its schooling system, the authors document major changes that have occurred in Bangladesh over the past decade or so, with particular reference to globalisation and internationalisation, which impact on the content, organisation and management of education.

The 18 chapters that comprise this book are organised under three main themes: access, equity and quality; reformation of curriculum, assessment and teacher development; and higher education, employability and economic growth. The contents of the book refers to primary, secondary and tertiary education, Islamic schools (Madrasah Education), teacher education, English language education and non-formal education.

In terms of the Springer Book Series, in which this volume is published, the various topics dealt with in the series are wide ranging and varied in coverage, with an emphasis on cutting edge developments, best practices and education innovations for development. Topics examined include environmental education and education for sustainable development; the interaction between technology and education; the reform of primary, secondary and teacher education; innovative approaches to education assessment; alternative education; most effective ways to achieve quality and highly relevant education for all; active ageing through active learning; case studies of education and schooling systems in various countries in the region; cross-country and cross-cultural studies of education and schooling; and the sociology of teachers as an occupational group, to mention just a few. More information about this series is available at http://www.springer.com/series/6969

All volumes in this series aim to meet the interests and priorities of a diverse education audience including researchers, policy makers and practitioners; tertiary students; teachers at all levels within education systems; and members of the public who are interested in better understanding cutting-edge developments in education and schooling in Asia-Pacific.

The reason why this book series has been devoted exclusively to examining various aspects of education and schooling in the Asia-Pacific region is that this is a particularly challenging region which is renowned for its size, diversity and complexity, whether it be geographical, socio-economic, cultural, political or developmental. Education and schooling in countries throughout the region impact on every aspect of people's lives, including employment, labour force considerations, education and training, cultural orientation, and attitudes and values. Asia and the Pacific are home to some 63% of the world's population of 7 billion. Countries with the largest populations (China, 1.4 billion; India, 1.3 billion) and the most rapidly growing mega-cities are to be found in the region, as are countries with relatively small populations (Bhutan, 755,000; the island of Niue, 1600).

Levels of economic and socio-political development vary widely, with some of the richest countries (such as Japan) and some of the poorest countries on earth (such as Bangladesh). Asia contains the largest number of poor of any region in the world, the incidence of those living below the poverty line remaining as high as 40% in some countries in Asia. At the same time many countries in Asia are experiencing a period of great economic growth and social development. However, inclusive growth remains elusive, as does growth that is sustainable and does not destroy the quality of the environment. The growing prominence of Asian economies and corporations, together with globalisation and technological innovation, is leading to long-term changes in trade, business and labour markets, to the sociology of populations within (and between) countries. There is a rebalancing of power, centred on Asia and the Pacific region, with the Asian Development Bank in Manila declaring that the twenty-first century will be 'the Century of Asia Pacific'.

We believe this book series makes a useful contribution to knowledge sharing about education and schooling in Asia-Pacific. Any readers of this or other volumes in the series who have an idea for writing their own book (or editing a book) on any aspect of education and/or schooling, that is relevant to the region, are enthusiastically encouraged to approach the series editors either direct or through Springer to publish their own volume in the series, since we are always willing to assist perspective authors shape their manuscripts in ways that make them suitable for publication in this series.

Office of Applied Research and Innovation   Rupert Maclean
College of the North Atlantic-Qatar
Doha, Qatar

Zhejiang University   Lorraine Symaco
Hangzhou, China
February 2018

Contents

Contributors

Manzoor Ahmed BRAC Institute of Educational Development, BRAC University, Dhaka, Bangladesh

Neelima Akhter Department of English, University of Dhaka, Dhaka, Bangladesh

Fakrul Alam Department of English, University of Dhaka, Dhaka, Bangladesh

S. M. Ariful Islam Department of Culture and Global Studies, Aalborg University, Aalborg, Denmark

Farhan Azim Melbourne Graduate School of Education, University of Melbourne, Melbourne, VIC, Australia

Laila Farhana Apnan Banu International Labour Organization Bangladesh, Dhaka, Bangladesh

Raqib Chowdhury Faculty of Education, Monash University, Melbourne, VIC, Australia

Lindsey Conner College of Education, Psychology and Social Work, Flinders University, Adelaide, Australia

Janinka Greenwood College of Education, Health and Human Development, University of Canterbury, Canterbury, New Zealand

Ahsan Habib Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh

Saira Hossain Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh

Ariful Haq Kabir Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh

Stephen Keast Faculty of Education, Monash University, Melbourne, VIC, Australia

Md. Saiful Malak Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh

Bruce Missingham School of Geography and Environmental Science, Monash University, Melbourne, VIC, Australia

Foez Mojumder Faculty of Education, Monash University, Melbourne, VIC, Australia

Muhammad Ishaq-ur Rahman Radiance Community Services Network, Toronto, Canada

Shahidur Rahman Department of Economics and Social Sciences, BRAC University, Dhaka, Bangladesh

M Moninoor Roshid Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh

Goutam Roy Institute of Education and Research, University of Rajshahi, Rajshahi, Bangladesh

Abu Salahuddin Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh

Mahbub Sarkar Monash Centre for Scholarship in Health Education (MCSHE), Faculty of Medicine, Nursing & Health Sciences, Monash University, Melbourne, VIC, Australia

Shahriar Shafiq Government of Bangladesh, Dhaka, Bangladesh

Tanjilut Tasnuba Social Enterprise, BRAC Education Programme, Dhaka, Bangladesh

Susan Webb Faculty of Education, Monash University, Melbourne, VIC, Australia

Chapter 1
Education in Bangladesh: Changing Contexts and Emerging Realities

Raqib Chowdhury and Mahbub Sarkar

Abstract The recent decades have seen major—and in some cases unprecedented—changes in Bangladesh's education sector, sometimes in ways distinct from other countries in the region and globally. Given its history of nearly two centuries of British colonial rule, as well as a religion- and language-based national identity that eventually saw the country transition from being a province in the British-ruled Subcontinent to an independent country, influences of such political histories can often be felt unmistakably in the way education is understood and enacted in current day Bangladesh. In addressing some of the persistent trends of education, this book presents, as much as it critiques, educational practices across a range of sectors—from primary to higher education, from formal to the informal and the on-demand, and looks into practices in teaching and pedagogy, curriculum planning and assessment, policymaking, administration and leadership. This chapter sets the scene for the studies showcased in this volume, first by giving an overview of education in Bangladesh, and introducing the structure of its education. It then discusses the roles of the various stakeholders in education, highlighting issues and topics that have been picked up by chapter authors as the themes in the book. This chapter is primarily intended for international readers to familiarise them with some of the basics of Bangladesh's education today and the emerging realities in this context in recent times. In doing so, the chapter presents the most persistent interests of education researchers all of whom have had many years of teaching and research training and experience both nationally and internationally.

R. Chowdhury (✉)
Faculty of Education, Monash University, Melbourne, VIC, Australia
e-mail: raqib.chowdhury@monash.edu

M. Sarkar
Monash Centre for Scholarship in Health Education (MCSHE), Faculty of Medicine, Nursing & Health Sciences, Monash University, Melbourne, VIC, Australia
e-mail: mahbub.sarkar@monash.edu

Introduction

Inevitably, and in response to worldwide reverberations of globalisation, internationalisation and free trade movements, and increased transnational migration of academics around the world, Bangladesh has witnessed major changes in its educational scenario over the past decade. While these changes have largely followed global patterns, especially those manifested in developing countries, and, in particular, developing countries in South Asia, there are unique and idiosyncratic features that have characterised education in Bangladesh. This book attempts to unfold, explore, understand and critique some of these educational issues and changes, and it does so through studies that highlight some of the persistent concerns of education researchers both in Bangladesh or those who are interested in the country and the region worldwide. To that extent this book is not so much based on any one 'unifying' theme—three distinct themes are identified—but in fact it showcases studies conducted on different aspects of education in Bangladesh, for example, equity, access and inclusion, educational policy and practices, curriculum and assessment, teacher development and higher education reform. Together these studies provide a holistic picture of the present and future of education in Bangladesh and how this aligns with developing countries elsewhere. Further, this book aims to create a single platform for these studies to be disseminated to scholars both from developing and developed countries as a useful reference for the educational research community in Bangladesh and offer directions towards achieving Sustainable Development Goals (SDGs)—a high-priority UN-sanctioned development issue in many developing nations.

   Primarily intended for an international readership, this context chapter attempts to provide a short and succinct account of the contextual specifics within which the studies in all of the chapters of this book were conducted. While not comprehensive, it highlights the complexities of some of the current issues that have characterised the education scenario in Bangladesh, as well as the emerging realities that these studies have to be preoccupied with, which have implications for the ways in which we will understand, internalise and enact our educational practices in the near future.

Bangladesh: An Overview

Bangladesh, a part of the Indian sub-continent, was under the British colonial rule for nearly 200 years (1757–1947), a fact which has left indelible scars in the fabric of its educational history. With the end of the British rule in 1947 following the Second World War, the sub-continent was divided into two independent countries based on religious majority: India primarily accommodated Hindus, while the two geographically separated exclaves of East and West Pakistan mainly accommodated

Muslims. Despite the similarity in religious demographic, these two exclaves had different languages, cultures and traditions and were geographically separated by a long stretch of about 2500 km in between. Over the next few decades, as a result of economic deprivation and socio-political suppression from the militarily dominant West Pakistan, the East built up momentum in support of democracy and economic and political autonomy, culminating in the War of Liberation in 1971. After a prolonged 9-month war, in December 1971 East Pakistan achieved independence with the name of the modern nation of Bangladesh.

Bangladesh is a developing country with a dense population. The current area of land is 148,460 km² accommodating about 160 million people with a growth rate of 1.04% (Central Intelligence Agency [CIA], 2017). CIA reports that currently, an estimated 31.5% of the population live below the poverty line. The current literacy rate stands at 72.8% and education expenditure is 2.2% of total GDP, ranked at 161th in the word (CIA, 2017).

A total of seven National Education Commissions have so far been formed in post-independence Bangladesh and while critics have pointed out that they were used by ruling political parties to advance their agenda and ideology, they have also shaped the general direction of the country's education and the educational needs of its learners over the last four and a half decades. The first Education Commission report in Bangladesh, led by Dr. Qudrat-e-Khuda, proposed primary education from Grades 1 to 8 and secondary education from Grades 9 to 12 (Qudrat-e-Khuda et al., 1974). This report emphasised secular education at all levels, future work-relevant technical and vocational education, and an improved assessment system with letter grading in assessment. This Commission report, however, remained largely unimplemented due to an abrupt change of political power in 1975 which saw the Father of the Nation, Sheikh Mujibur Rahman, assassinated (Ministry of Education, 2010). A number of Education Commissions were formed in the next three decades during the period of 1975–2003; however, these commission reports were successively shelved and nullified with the changes in the political scenario (Chowdhury & Kabir, 2014). The current education policy document—the National Education Policy 2010—was eventually formulated and is currently in the process of implementation (Ministry of Education, 2010).

Education Structure: Formal Education

The current formal education system in Bangladesh is broadly divided into two main types: general education and religious (*madrasah*) education. The studies showcased in this book focus on issues regarding general education, which has three major levels: primary, secondary and tertiary education (see Fig. 1.1). In order to provide a broad overview of the backdrop against which the chapters of this book are written, the following sections briefly describe each of these levels in terms of their scope, priorities and challenges.

Age	Grade							
25+	20	PhD						
24+	19	MPhil						
23+	18	MPhil						
22+	17	MA/MBA/MBS/MSc/MCom MEd/MSS/LLM		MSc (Engr/Agr Text/Leath)	MEd	MSc (Engr/Tech Ed)		Kamil
21+	16	Bachelor (Honours)			BEd/BPEd	BSc (Engr)	BSc (Tech Ed)	Fazil
20+	15	Bachelor (Honours) BA/BBA/BBS BSc/BCom BEd/BSS/LLB	Bachelor (Pass) BA/BBA/BBS BSc/BCom BEd/BSS/LLB	MBBS/BDS	BSc (Engr/Agr Text/Leath)	Diploma (Engr)		Fazil (Honours) / Fazil (Pass)
19+	14							
18+	13				DPEd			
17+	12	Higher Secondary Education		Public Examination: HSC		HSC Vocational		Alim
16+	11				C-in-Ed			
15+	10	Secondary Education		Public Examination: SSC		Trade Certificate SSC Vocational Artisan Courses		Dakhil
14+	9							
13+	8	Junior Secondary Education			Public Examination: JSC			
12+	7							
11+	6							
10+	5	Primary Education			Public Examination: PECE			Ebtedayee
9+	4							
8+	3							
7+	2							
6+	1							
5+		Pre-primary Education						

Proposed Primary Education spans Grades 1–8.

Fig. 1.1 Education structure of Bangladesh

Primary Education

Primary education, often referred to as 'basic education', is currently compulsory for children aged 6–10 years (Grades 1–5). Although 'basic', the current National Education Policy 2010 recommends primary education be extended to Grade 8, and this is currently in the process of implementation by 2018. According to the Directorate of Primary Education [DPE] (2016), 126,615 primary schools provided primary education to nearly 19 million children throughout the country. In 2016, the Gross Enrolment Rate (GER) in primary education was 112.12%, while the Net Enrolment Rate (NER) was 97.94% (DPE, 2016). This large gap between the GER and NER indicates that a large number of primary level children do not represent the official primary school age group. Not being enrolled in primary school at the designated age may have several implications. As the MoPME (2014) reports, it may contribute to increasing dropout rates in later years, as well as the likelihood of affecting boys and girls differently, given the socio-economic realities of the country. For example, for boys from financially disadvantaged or socio-economically deprived households, parents view the opportunity costs for attending school to be high as they are seen as ready to be engaged in paid or unpaid work. Some of these concerns have been analysed in detail in the chapter by *Banu, Shafiq, and Roy*. For girls, on the other hand, there is pressure from family and community for early marriage when they approach adolescence. In addition, late enrolment accelerates concern for safety and security for older and unmarried schoolgoing girls.

Despite such differences in the GER and NER, the DPE (2016) reported a number of significant improvements in the primary education sector between 2010 and 2016—for example, a decrease in dropout rate (from 39.8% to 19.2%), repetition rate (from 12.6% to 6.1%), average student absenteeism (from 16.5% to 12.5%) and student-teacher ratio (from 44:1 to 34:1) and an increase in the cycle completion rate (from 60.2% to 80.8%) and the coefficient of efficiency (from 62.3 to 80.9).

At present, the government provides textbooks to all primary school children for free. This process includes the massive and expensive production of over 100 million textbooks for different subjects and their distribution throughout the country to over 80,000 schools all at the same time at the beginning of each school year (DPE, 2014).

At the end of primary level, children sit for a public examination, the Primary Education Completion Examination (PECE), which they have to pass to get promoted to the next level—the secondary school. In 2014, the PECE pass rate was 97.9% (DPE, 2014).

Secondary Education

The secondary education system has three successive stages: junior secondary (Grades 6–8), secondary (Grades 9 and 10), and higher secondary (Grades 11 and 12). At the junior secondary level, a single general curriculum caters for all students who sit for a public examination at the end of Grade 8 called the Junior Secondary Certificate (JSC). Curriculum streaming starts at Grade 9, at which point students choose their future study direction from the streams of general education and technical-vocational education and training (TVET). Within general education, students choose any one of the groups of science, humanities and business studies. If students choose a non-science stream (i.e. humanities or business studies) at the secondary level, they are unable to pursue further science education later in their course of studies, a matter that often has implications in terms of employment opportunities later in life. Students sit two public examinations—the Secondary School Certificate (SSC) at the end of Grade 10 and the Higher Secondary School Certificate (HSC) at the end of Grade 12. The JSC, SSC and HSC examinations are all administered nationwide by seven Boards of Intermediate and Secondary Education (BISE), located across seven regions of the country.

As for TVET, students enter into vocational training institutes (VTI) for 2-year SSC (vocational) courses, and they may then enter into VTIs or polytechnic institutes for 2-year HSC (vocational) or 3-year diploma in engineering courses. The Technical Education Board conducts all TVET examinations and offers diploma and certificates for all TVET institutions. With the government's recent emphasis on skills development, it has established the National Skills Development Council (NSDC) to enhance individual employability and entrepreneurship and reduce poverty. In addition to general education and TVET, Islamic schools (*Madrasahs*) also provide secondary education, and this will be briefly discussed in a separate section later on.

Tertiary Education

The 2010 National Education Policy specifies as the main aim of higher education the creation and sustainable continuity of new knowledge, as well as the development of skilled manpower in the nation. To achieve this aim, tertiary education of Bangladesh is broadly divided into two categories—general and specialised. The general tertiary education, designed for post-higher secondary students, comprises a 3-year 'pass' course and a 4-year honours course for bachelor's degree, followed by a 2-year and 1-year master's course for *pass* graduates and *honours* graduates, respectively. The 'specialised' tertiary education—such as a bachelor's degree in medicine—requires the completion of a 5-year course of studies, while degrees in the fields of engineering, agriculture, textiles and leather technology require completion of a 4-year course of undergraduate studies. Currently, a total of 130 universities (38 public and 92 private) provide tertiary education to nearly a million students across the country (Bangladesh Bureau of Educational Information and Statistics [BANBEIS], 2018).

Madrasah *Education*

There are three types of madrasahs (Islamic schools) in Bangladesh: *Quomi*, *Hafizia* and *Alia*. Quomi madrasahs provide only religious (faith-based) education (Ahmed, 2004) with an emphasis on Islamic studies and Arabic literacy (Amin, 2013) and are private—although in recent years, there have been attempts to structure it in accordance with general education. These do not receive any financial support from the government and are financed with donations from national and international bodies (Ahmed, 2004). Embedded within mosques, Hafizia madrasahs are an Islamic school to teach the holy Quran. Although in recent years, some Hafizia madrasahs have taken initiatives to teach Bangla; the main objective of this type of madrasah, and its sole graduating requirement, is the memorisation of the entire Quran. Upon graduation, students usually enrolled in Alia madrasahs.

In contrast to Quomi madrasahs, Alia madrasahs are mainly government-funded without the support of any external organisations. Alia madrasahs, divided into five levels, provide what is equivalent to the general education, corresponding to the five levels of general education described above; the *Ebtedayee* offers education equivalent to primary level, while *Dakhil*, *Alim*, *Fazil* and *Kamil* are equivalent to secondary, higher secondary, bachelor and master's levels, respectively. The government legally recognises such equivalence, and graduates from Alia madrasahs are given the same opportunities to continue schooling at higher levels either within the Madrasah system or the general education system. In Alia madrasahs, students are taught 'secular' subjects such as English and Bangla languages, science, mathematics, social studies, geography, history, etc., along with religious subjects. In 2016, a total of 9314 Alia madrasahs throughout the country provided post-primary education to nearly four million students (BANBEIS, 2018).

Non-formal Education

In addition to formal education, more than 1.5 million learners participate in non-formal education (NFE) (Bureau of Non-Formal Education [BNFE]: http://www.bnfe.gov.bd/) in Bangladesh. NFE is a 'people-activated mode of education delivery' (Zia-Us-Sabur, 2007, p. 1) and is offered by organisations outside the formal schooling system. It is a 'purposeful and systematically organised' (Zia-Us-Sabur, 2007, p. 1) form of education usually offered to address literacy needs of those who are educationally disadvantaged. This form of education is flexible and inclusive, and in developing countries such as Bangladesh, it imparts basic literacy as well as life skills aiming to alleviate poverty. The Bureau of Non-Formal Education (BNFE), operating under the Ministry of Primary and Mass Education, is the central coordinator of NFE programmes for youth and adult in Bangladesh. NFE programmes are implemented by hundreds of non-government organisations (NGOs) throughout the country. The NFE activities in Bangladesh are a combination of literacy and numeracy programmes, life skills training programmes as well as income generation programmes and generally cater for the age group between 11 and 45 years. The contents of NFE literacy is markedly different from the contents of primary schools in that the NFE agenda targets youth and adult illiterates to acquire and retain literacy skills and attempts to educate learners about real-life situations from which they can readily benefit (Zia-Us-Sabur, 2007). The project implementation is reasonably flexible in the sense that community/learners have a say in identifying learners, deciding the location of centres and in deciding on the timing of the teaching-learning process.

NGO Contribution

In Bangladesh, non-government organisations (NGOs) are visible actors in socio-economic transformation (Zohir, 2004), of which education is an important element. NGOs, funded by donors (both as loan and aid), charities and through individual or corporate sponsorship, mainly focus on providing education to marginalised groups. For example, NGOs have provided non-formal primary education (NFPE) to children aged 8–14 years, who have dropped out from or have never enrolled in primary school (Sabur & Ahmed, 2010). More than 30,000 NGO-run institutions throughout the country provide NFPE to about 10% of total children receiving the primary education (Ahmed & Hossain, 2010). Along with providing NFPE, the role of NGOs include promoting dialogue with community and parents on how they could contribute to improving school performance, organising tutoring for students outside school hours and assisting in recruiting volunteer teacher assistants.

The largest NFPE provider in Bangladesh, the Building Resources Across Communities (BRAC), is a national NGO that provides NFPE to over one million

children nationwide (Sabur & Ahmed, 2010). International NGOs, such as Save the Children and Plan International, focus on designing and implementing pre-primary education programmes (Creative Associates International, 2002). In addition, NGOs run a number of formal primary schools that follow the government curriculum but do not generally receive any financial assistance and supervisory support from the government (Sabur & Ahmed, 2010). Both national and international NGOs also have made significant contributions towards the development and dissemination of supplementary teaching-learning materials for both primary and secondary education (Creative Associates International, 2002).

Teacher Education

Several institutions provide education for teachers at different levels. BANBEIS (2018) reports that there are currently 59 Primary Training Institutes (PTI) that provide a 1-year certificate in education course for primary school teachers. Recently they introduced a 18-month diploma in primary education (DPEd) course for primary school teachers. A total of 118 Teachers' Training Colleges (TTC) offer a 1-year bachelor of education (BEd) and 1-year master of education (MEd) courses for teachers of secondary schools. In addition, five Higher Secondary Teacher Training Institutes (HSTTI) provide in-service training for teachers at the higher secondary level. There are also institutes which provide training exclusively for teachers working in technical and vocational institutions and madrasahs. There are 30 physical education colleges offering training to physical education teachers.

However, the take-up of formal teacher training remains low. The World Bank (2016) estimates that currently only 58% of secondary teachers were fully trained and accredited with a bachelor of education qualification. Such training still promotes the age-old transmissive mode of learning (see Chowdhury, Chap. 9, this volume), and in-service training is limited to a small number of teachers and is 'sporadic' (Thornton, 2006, p. 182) in nature.

At the higher education level, teacher training is largely absent, although this has been acknowledged as a barrier to ensuring quality education. Considering the importance of teacher training in higher education, the University Grants Commission (UGC), in cooperation with the British Council, has established the Centre of Excellence in Teaching and Learning (CoETL) at six public universities (CampusLive, 2018) and at a number of private universities.

English Language Education

Within general education, *English* education fairs prominent in policy discourses, as well as in research and teacher training initiatives, and this is reflected in a number of chapters that have focussed on English education in the book (see, e.g., *Akhter, Roshid, Alam,* and *Islam*). Bangladesh does not enjoy the ethnolinguistic diversity

that other countries in the region have (Chowdhury & Farooqui, 2011), with 98.8% of its population speaking 'Bangla' or 'Bengali' (CIA, 2017). A foreign (rather than second) language in Bangladesh, English is taught as a compulsory core subject from Grades 1 to 12. Proficiency in English is widely seen as a precondition leading to economic, social and educational opportunities and providing access to material resources. Because of the importance accorded to English and the consistently escalating demands for English proficiency, in 2000 the government introduced major changes to the school curriculum, textbooks and teacher training (Chowdhury & Farooqui, 2011), which has generally seen a shift to the communicative modes of teaching and learning (Chowdhury & Kamal, 2014; Hamid & Honan, 2012; Hamid, Jahan, & Islam, 2013).

The 2003 National Education Commission placed specific emphasis on the importance of learning English from the primary level (Chowdhury & Kabir, 2014) with the objective of achieving primary skills and use English as a useful foreign language. While the role of English education in the country's industrial workforce, especially in relation to international communication, is no longer a matter of debate, communication skills in English continue to be a challenge in competing with the global market (Chowdhury & Kabir, 2014). Indeed a study by Roshid and Webb (2013) noted that the gap between bookish knowledge of English and real communicative competence has kept away business workers from fully benefiting from the advantages of the lingua franca. They argued that university graduates were often not trained to be competent enough in English communication to confidently invest in graduate opportunities in international businesses.

Administrative Structure and Funding

Two government ministries administer and manage the education system in Bangladesh: the Ministry of Primary and Mass Education (MoPME) and the Ministry of Education (MOE). The Directorate of Primary Education (DPE), attached to the MoPME, looks after the administration of primary education, while the Directorate of Secondary and Higher Education (DSHE), attached to the MOE, is responsible for policy formulation, administration and management of post-primary, secondary and higher education, including madrasah and other special types of education such as government teacher training colleges. Both the DPE and DSHE have offices at the district and sub-district levels throughout the country to conduct administrative and managerial activities. The Directorate of Technical Education (DTE) looks after the administration of technical and vocational education, while the Madrasah Education Board looks after the *Alia* madrasah education including conducting public examinations from *Dakhil* to *Kamil* levels. All tertiary education is coordinated and monitored by the University Grants Commission (UGC) of Bangladesh, which is responsible for monitoring standards and compliance of all public and private universities. The role of the UGC in the administration of all universities across the country has been detailed in the chapter by *Kabir and Webb*.

Bangladesh has a highly centralised funding mechanism. The main education expenditure is met through a central government funding source. In 2015–2016, education spending accounts for 10.71% of the national budget, equivalent to 2.83% of GDP (BANBEIS, 2018). The government bears all costs associated with mainstream primary education, and this is provided free of charge to students. On the other hand, almost the entire secondary education sector has been developed by the private sector, and this was mostly done on a not-for-profit basis, although teachers' salaries and wages and the cost of the schools' physical infrastructure development are funded out of the national education budget. For post-primary education, a small amount of tuition fee (an equivalent of USD 0.14–0.22 per month for junior secondary and USD 0.22–0.58 per month for secondary and higher secondary) is collected from students (United Nations Educational Scientific and Cultural Organization [UNESCO], 2007). UNESCO reports that the government sets this fee for all public schools and the majority of government-aided private institutions collect the fee similar to public institutions. In contrast, fully private institutions set their fees independently, and the amount tends to be significantly higher compared to the fee set by the government (UNESCO, 2007). At the tertiary education level, however, the UGC assesses funding needs of the public universities and advises the government accordingly. Private universities collect most of their funding from students' tuition, which is significantly higher than that of public universities.

In addition to government funding, Bangladesh receives a considerable amount of grants and loans from development partners such as the World Bank, AusAID, USAID, Asian Development Bank and DFID to support the implementation of the government's educational development strategies. For example, ten development partners contributed a total of over USD 1.7 billion to implement the Third Primary Education Development Programme (PEDP-3), which aimed at establishing an efficient, inclusive and equitable primary education system by delivering child-friendly learning to all children in pre-primary and primary education levels (DPE, 2015). Another example of development partners' support to enhance access to and equity in secondary education is the Secondary Education Quality and Access Enhancement Project (SEQAEP), which is co-funded by the World Bank and the government of Bangladesh (World Bank, 2017).

Teaching and Assessment Practices at School Level Education

The National Curriculum and Textbook Board (NCTB) and the Madrasah Education Board are responsible for the prescription of curriculum for junior secondary and secondary education, whereas Boards of Intermediate and Secondary Education (BISE) bears the direct responsibility for the curriculum/syllabus for higher secondary education. The planning and development of textbooks too are under the responsibility of these governmental bodies.

The NCTB prepares one textbook for each subject for each of the grades, and each textbook is published in two languages: one in Bengali, the state language, and

the other in English for the schools that follow the NCTB curriculum but use English as the medium of instruction, with the former used by most students and teachers in Bangladesh (Rahman, 2011). The existing embedded practice of using textbooks in Bangladesh is heavily reliant on this single textbook (Sarkar, 2012b) with very few exceptions where an additional supplementary material is used. Students are assessed by the pool of items taken directly from the textbook, and tests often demand answers be copied straight from the textbook although there are no instances of the practice of open-book tests. Such an approach reinforces the need for teachers and students to rely almost exclusively on this recommended textbook but also heavily encourages the prevalence of rote learning and memorisation across all levels of primary and secondary education (Maleque, Begum, Islam, & Riad, 2007).

School education is exam-driven because the success of learners, teachers and schools is almost exclusively measured by students' results in the exams (Holbrook, 2005). As the school exams mostly demand memorisation and recall of content from the textbooks (Holbrook, 2005), teachers often encourage students to practise rote learning, and teaching often reflects the washback effect (Tapan, 2010) where teachers mostly prepare students for the exams. Exam results are very important as they are used to determine students' promotion from one grade to another, and this is also used to determine students' scope of future study options (Sarkar & Corrigan, 2014). For example, if a student does not attain a certain benchmark (often set at 80%) in mathematics and science in the JSC examination, they might not be allowed to take science subsets at the secondary level (see Mojumder & Keast, Chap. 11, this volume).

Generally, class sizes are very large, which challenges teachers in ensuring the employment of engaging pedagogies (Rahman, 2011). In government secondary schools, class size often exceeds 100 students per class (Holbrook, 2005). In such a situation, teachers often resort to unidirectional lecturing which hinders opportunities for student engagement (Sarkar & Corrigan, 2014). For example, researching with science teachers, Sarkar (2012a) has shown that even when teachers try to engage students in active learning by involving them in group activities—often for project activities or completing assignments—group formation is often based on academic achievement where higher-achieving students are grouped together to enjoy teachers' close attention, whereas low-performing students rarely get the same level of attention.

Access and Equity

While there is huge progress with respect to enrolment in school, a recent study by United Nations International Children's Emergency Fund [UNICEF] (2014) reported that a total of 5.6 million primary and junior secondary school-aged children still do not go to school. While out-of-school primary school-aged children as a percentage of the total primary school-aged population is only 16.2%, this rate is 30.7% for the junior secondary cohort. In contrast to many other developing

countries, compared to girls, boys are more excluded at both levels of education. Children access to education is found to be the lowest in areas with high concentrations of financially and socially disadvantaged people. For example, children in metropolitan slums are 2.5 times more likely to be excluded from school than the national average (UNICEF, 2014).

Also, school attendance rates for children engaged in work are found to be lower than for other children of the same age. This is important in a context where 1.7 million children are engaged in child labour (Bangladesh Bureau of Statistics [BBS], 2015). UNICEF (2014) also reported how vulnerable the children living in natural disaster-prone areas are with respect to attending school. More than 1.5 million children could not attend schools due to the cyclones in 2007 and 2009 (see Ahmed, Chap.2, this volume). Apart from access, dropout is also a significant challenge, given that 20% of children who enter primary school dropout before they complete the cycle (DPE, 2016). Another point of high dropout is the transition between the primary and lower secondary education level—about 20% of students in Grade 5 (the last grade of primary schooling) do not transition to junior secondary education (UNICEF, 2014).

The most recent, National Education Policy 2010, has recommended mainstream inclusive education intervention as a measure of providing access to all children in primary education as well as reducing dropout rates (Ministry of Education, 2010). The mainstreaming of inclusive education intervention aims at designing appropriate policies and strategies to address the needs of four specific disadvantaged children groups: girls, ethnic minorities, the poor, and children with disabilities. Government and non-government agencies play complementary roles in designing and implementing specific inclusive education programmes for children. In addition, since the early 1990s, the government has continued targeting stipend programmes (Mahmud, 2003), providing cash payments to girls and children from low-income communities to offset school-related direct and opportunity costs. *Banu* et al. (in Chap. 3) have discussed the issues related to access and equity in detail.

Overview of Chapters

Chapters in this book are broadly distributed under three themes: (a) access, equity and quality in education; (b) reformation of curriculum, assessment and teacher development; and (c) higher education, employability and economic growth. In the scrupulous selection of chapters from the large pool of papers submitted for this book, we had to ensure that while all main areas of education were considered, these three themes emerged as persistent and recurrent. Therefore, while not exhaustive, together the selection highlights the contemporary priorities for education researchers in the country.

To highlight the themes, issues as well as preoccupations that have emerged across the individual chapters of this book, a summary of each is presented below. As well as showcasing the nature of Bangladeshi education researchers' current

critical engagements both at home and overseas, this section also provides additional contextual specifics of the myriad aspects of the complex education system of Bangladesh. Further cross-referencing is provided in individual chapters.

Based on a critical documentary analysis of a large number of research reports, policy briefs and advocacy materials, as well as important policy documents such as the National Education Policy 2010 and Bangladesh Education for All 2015 paper, *Ahmed*'s study examines the process and findings of a multinational policy-relevant research project (the CREATE project) and the extent to which it influenced subsequent policy and strategy discourses in relation to the national goal of achieving quality and equity in Universal Primary Education in Bangladesh.

In a scenario where statistical and quantitative gains in enrolment rates have often masked a stark deterioration in the quality of primary education, rendering the system largely ineffective, *Banu, Shafiq and Roy* problematise the complexities of ensuring a more equitable approach to participation in primary education in Bangladesh to ensure learning for all. In particular, it analyses the disparities in school participation of children coming from a variety of socio-economic status and uncovers the multiple layers of inequality that a child is likely to experience during schooling based on privileges or lack thereof attendant to their demographics. Through an analysis of sociocultural, economic and pedagogical determinants, the study recommends policy and programmatic options which have the potential to lead to more a more equitable participation in primary education.

In a country that is often the stage for natural disasters, some catastrophic in nature, the role of the relatively recent intervention of Education in Emergencies (EiE) can be an important contingency plan of its education system. Through the personal first-hand experience of having been involved in an EiE project, *Rahman and Missingham* examine an EiE offering that set a remarkable example of providing education at a time of natural disaster. Against the backdrop of the massive devastation left behind by tropical cyclone Sidr that struck coastal Bangladesh in late 2007, this study evaluates lessons from applied EiE experience through the *Anondo Biddaloy* project which helped to regain students' interest and confidence in education by offering alternative emergency arrangements. Rather than teaching to the formal curriculum, the central goal for EiE initiatives in a post-disaster scenario is not only to offer continuity but crucially also to encourage transition back to formal schooling.

Through a large-scale study involving nearly 1500 students, *Habib and Hossain* explore the complexities of the correlation between students' sense of belonging to the school, their school satisfaction and academic performance in seven junior secondary schools. Their findings suggest that while there are strong and significant relationships between these three aspects of the educational experience, it is through students' psychosocial engagement in their learning that the best academic achievements can be realised.

Despite the democratic rationale that often precedes the adoption of student-centred communicative pedagogies, communicative language teaching (CLT) often creates social divides and offers inequitable opportunities to students from various socio-economic backgrounds, as well as to schools with differentiated resource pro-

files. *Islam*'s article explores how with the abolishment of the traditional grammar-translation-based pedagogies, CLT has created social class systems resulting in high-performing schools awarded with higher pass rates, while resource-constrained low-performing schools are often disadvantaged. The paper critically analyses how such school stratifications and inequitable institutional practices extend beyond the classroom to the society at large.

Malak and Tasnuba's chapter is a close look at factors embedded in secondary school teachers' views and teaching practices on the issue of including special educational needs (SEN) students in mainstream 'non-inclusive' classrooms. Despite the best intentions of teachers in accommodating students with intellectual or physical disabilities, lack of adequate knowledge in the provision of equitable care has prevented teachers from addressing crucial needs for this largely neglected student population. They argue that as well as major policy reforms and opportunities for professional development, a cultural change is needed in creating the conditions that will facilitate a truly inclusive environment in these regular classes.

In a society where authoritarian, top-down leadership is still the norm, *Salahuddin, Greenwood and Conner* offer the critical study of a case where one person makes a difference in changing attitudes about leading through learning. Through an engagingly articulated narrative of one innovative principal in a Bangladeshi secondary school, the authors analyse a case which exemplifies how to build teacher leadership in a secondary school in a way that allows teachers to play the triple roles of the leader, the teacher and the learner. In this particular school, conditions were created by the principal which offered a model of shared responsibility in engaging with students and the community at large. This case study offers an alternative to international models, which are often insensitive to local needs and logistics.

In addressing the unfortunate distance that has separated the work of school teachers and university academics, *Chowdhury*'s chapter looks at why it is important and mutually beneficial for these two groups of teachers to engage in collaborative partnerships by integrating research into their daily practices. While he encourages school teachers to take up classroom-based action research by showing how they might draw on their everyday practices as ready tools for investigation, the chapter also invites academics to make the best use of teachers' vast pool of first-hand knowledge to build truly meaningful and useful education research about teaching and learning which is sometimes only possible when school teachers are involved.

In science classes, as in language classes, the persistent pressure from the washback effect, where the teachers' primary aim is often to prepare students for exams through the encouragement of rote memorisation, renders the aim of promoting affective components such as values as secondary. By analysing a group of science teachers' perspectives and practices, *Sarkar* critically examines two documented curriculum-intended values—curiosity and rational thinking—in terms of how science education can be truly be made meaningful. The lack of uniformity found in the teachers' views on the importance of teaching values to facilitate curiosity and rational thinking represents their uncritical adoption of reliance on traditional science teaching. Sarkar recommends the need for professional and pedagogic devel-

opment opportunities for science teachers which will encourage the promotion of values education in the true spirit of the twenty-first century.

Mojumder and Keast's study investigates why, despite often being branded as boring, irrelevant and generally difficult, students in Bangladesh continue to study hard to meet the benchmarks to qualify to study in the science stream. Findings indicated that there is a strong preference for hands-on, practical, engaging and more meaningful tasks which offer opportunities for them to link their learning to real-life applications. This contrasts with the traditional, textbook-based pedagogy which characterises the teaching of science in schools. The authors suggest ways in which the pedagogy of science can be made more interesting and relevant.

Azim looks at the high-stakes national Secondary School Certificate test and how it aligns with the major public assessment systems. In particular, it analyses the newly introduced 'creative question' (CQ) and its reception among teachers, students as well as educational researchers. Against the metrics of a widely accepted assessment criteria, the CQ is critically analysed in terms of validity, reliability, comparability, standard setting, grading and bias, and suggestions for further fine-tuning it are suggested for how the SSC examination may be shaped in future years.

Alam draws on his vast experience as teacher and educator to critique what he calls a 'critical period' in the nation's educational history, characterised by a peak in the accumulated suspicion and anxiety about linguistic encroachment, combined with the fear of an imperial language marginalising Bengali, and the abject commodification of higher education in current day Bangladesh. Together with a vastly unplanned expansion of the education system and the widely accepted proliferation of often impractical Western teaching methods, universities now prioritise on churning out employable graduates ready to meet the job market's demands in the quickest manner without regard for in-depth knowledge. Alam highlights the urgency for us to adopt a pedagogy that is critical and humanistic in orientation and suggests ways in which a positive paradigm shift can be achieved to improve the condition of English studies in Bangladesh.

S. Rahman studies the patterns in the return of migrant Bangladeshi academics and examines a number of local sustainable initiatives through public sector higher education reform which have propagated the shift from brain drain to brain gain. This case study, which involves a group of returned academics currently working in private universities in the country, examines the push and pulls factors involved in reverting brain drain in developing countries and in particular the instrumental and altruistic incentives in their decisions to return. It also highlights how the private universities have created unique and timely opportunities for these academics to contribute to higher education in the country and the factors that can ensure that their return is truly sustainable.

Kabir and Webb's chapter debunks the illusion of freedom guised under privatisation and neoliberal agendas in the higher education sector, especially as enacted in the private sector. The chapter explores how, in the name of accountability, standardisation and compliance, state machineries have exerted power in ways that have implicated the autonomy of private universities across the country since the early 1990s. With the emergence of a new form of corporate-style governance and mana-

gerial system which has now taken over the higher education system, central bodies have assumed greater power in regulating private universities, which in turn has impacted policy development.

Through a large-scale case study conducted at Dhaka University involving two experimental groups, *Akhter* explores the extent to which the oft-maligned practice of code-switching in the English language classroom can indeed be a productive and truly meaningful teaching practice. The study finds that a strategic and informed practice of English-Bangla code-switching can yield significant benefits, especially in long-term retention of L2 vocabulary.

Roshid looks at how differentiated abilities in English communication can facilitate empowerment within corporate settings. This study, involving participants from three interconnected but hierarchically positioned tiers of communication within a number of ready-made garments factories, explores the various instrumental benefits English provides to its users in business settings, often involving communication with overseas businesses where the only common language between both parties is English. As well as playing an important role in increased employability and career advancement for the individual, Roshid shows how English has a determining role that can lead to the creation of opportunities for empowering individuals and organisations, in turn contributing to the country's economic growth, poverty reduction and sustainable development.

In the final chapter, *Mojumder and Roshid* summarise the relationship among the studies discussed in this book by drawing together the three common themes that have emerged from the book's chapters: (a) access, equity and quality in education; (b) reformation of curriculum, assessment and teacher development; and (c) higher education, employability and economic growth. The authors also discuss the insights gained from the studies showcased in this book and relevant policy implications for future education and educational research in Bangladesh.

Conclusion

As hinted earlier, keeping in mind an international readership, this context chapter has highlighted some of the major aspects that have characterised the education scenario in Bangladesh in recent times. Through a diverse collection of empirical studies, reports and analytical essays, the book showcases the ongoing preoccupations of a group of researchers, all of whom have many years of teaching and research training and experience in both Bangladesh and overseas. It is believed that such a mix of young and experienced scholars would facilitate supplementary insider and outsider perspectives into generating objective albeit highly personally relatable experiences through this wide range of studies.

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Part I
Access, Equity and Quality in Education

Chapter 2
Policy-Relevant Education Research: A Study of Access, Quality and Equity in Bangladesh

Manzoor Ahmed

Abstract The chapter examines the process and findings of a multinational policy-relevant research project undertaken in Bangladesh and the extent to which it influenced policy and strategy discourse in respect of the national goal of achieving quality and equity in Universal Primary Education. The project was the Bangladesh part of the Consortium for Research on Educational Access, Transitions and Equity (CREATE) carried out during 2005–2011, supported by the Department for International Development (DFID) and involving institutions from Bangladesh, India, Ghana, South Africa and the UK. The research focused on the exploration of the status, characteristics, conditions, impediments and promotive factors related to the access of children to basic education at primary and lower secondary levels. The project comprised of the preparation of a common research plan and design, review of relevant data and documentation, sample survey and primary data collection from schools and households, analysis of two rounds of data, drawing inferences and conclusions, preparation of research reports and policy briefs, and national and international dissemination. This chapter first introduces the purpose, analytical framework and research design of the project as well as the main findings of the Bangladesh part of the research and goes on to critically comment on its dissemination process and policy-related outcomes. The extent to which and how the policy discourse on access, equity and quality in primary education in Bangladesh has been influenced by CREATE's research results are also critically examined.

Keywords Policy-relevant research · Basic education · Primary education · Access · Equity · Education policy

M. Ahmed (✉)
BRAC Institute of Educational Development, BRAC University, Dhaka, Bangladesh
e-mail: amahmed40@yahoo.com

Introduction

Although Universal Primary Education (UPE) was largely achieved in the developed world by the early twentieth century, it has remained a cherished and elusive goal in the developing world. This goal was collectively articulated more than a half-century ago in the series of UNESCO conferences in Karachi, Addis Ababa and Beirut in 1960–1961, setting a target date of 1980 to realise it (UNESCO, n.d.). When it became obvious that the UPE target would not be reached, the Education for All (EFA) movement was launched at the World Conference on Education for All in 1990 in Jomtien, Thailand, urging all countries and the international community to commit themselves to meeting basic learning needs for all. In 2000, the Dakar Framework for Action, adopted in World Education Forum, was more specific about promoting Universal Primary Education, eliminating gender disparity in education and reducing adult illiteracy by half in each country by 2015. At the same time, the Millennium Development Goals (MDGs) of the United Nations (UN) also endorsed the Universal Primary Education and literacy targets for 2015.

Once again, although remarkable progress was made, it is obvious by now that the developing world has fallen significantly short of the 2015 EFA targets and MDGs. The national and international discourse on the post-2015 development agenda and the place of education in it have brought to the fore the pertinence of policy-relevant research and how it can inform the dialogue about assessing educational progress and setting policies and priorities in education at national and global levels. Within this context, it is worthwhile to look at the Consortium for Research on Educational Access, Transitions and Equity (CREATE) research project, which focused on educational access and equity, aiming to bring out policy and strategy lessons. The Bangladesh part of the CREATE research results, as will be seen below, has influenced policy discourse in the run-up to 2015 and the thinking for the post-2015 era.

Background: Developing a Research Agenda

The CREATE was established with support from the UK's Department for International Development (DFID) in 2006 as a partnership between research institutions in the UK, Bangladesh, India, Ghana and South Africa. Researching improved access in the context of EFA, and the MDGs clearly had many dimensions. CREATE aimed selectively to address six critical areas: (a) current patterns of access and exclusion in basic education, (b) strategies likely to be most effective in meeting basic educational needs, (c) options available to improve student progression in and completion of primary education, (d) addressing dropout and encouraging re-entry, (e) improving transition from primary to secondary level and (f) political, social and economic conditions under which the EFA goals can be

achieved (Lewin, 2007). These areas were explored empirically in Bangladesh, Ghana, India and South Africa with research teams based in local institutions.

In the first phase, CREATE commissioned analytic reviews at the country level into the status of access to provide baseline data and review key issues and problems located in each national system. These analyses were developed in parallel with a series of thematic reviews and studies which attempted to develop state-of-the art insights into different research questions relevant to access. These included studies of access in relation to health and nutritional status, non-government providers, school processes and school governance, patterns of enrolment growth in sub-Saharan Africa and other selected countries, concepts in policy studies, inclusive education, EFA long-term planning and financing the expansion of secondary education. Both country-level reviews and thematic research reviews resulted in a series of CREATE Discussion Papers.

Through this collection, which includes basic baseline information and its analysis, it was expected that the conceptual frameworks to understand educational access in new ways would be developed, and these could be shared with decision-makers and key stakeholders in each country. It was also expected that new knowledge of the factors that had shaped access and their significance could be analysed and linked to policy and practice at the community level and above. This analysis, therefore, could help the evaluation of the current status, the extent of implementation, and the effectiveness of local, national and international strategies to improve access. As a result, feasible policy options backed by evidence could be identified for progress towards the MDGs and the EFA.

The research activities framework that was constructed to guide the country-level and comparative analysis is shown in Figs. 2.1 and 2.2.

An important conceptual construct for the analytical framework for CREATE research was the zones of exclusion. This concept attempts to focus attention on the exclusion of children from educational participation, the forms of exclusion and how exclusion can be addressed. Seven zones of exclusion were identified, as shown below, of which four—zones 1–4—were used more extensively in the country-level analysis which is reported in this study.

It is generally the case that those who are not enrolled and who will never enrol (Zone 1) are the minority of those out of school; however, they still constitute significant numbers, especially in conflict-prone and unstable situations, and are difficult to reach. By far the largest numbers of school-age children who are out of school were enrolled at some time but had failed to persist (Zones 2 and 4). Children in Zone 3 and Zone 6 are those judged to be at risk of dropping out. The way of identifying such children is generally through patterns of attendance and of low achievement. Low achievement leading to slow progression, failure in promotion tests and repetition is clearly exclusionary. This 'silent exclusion' of children attending but learning little is a useful concept which can only be judged in context on the basis of the analysis of relevant data (Lewin, 2007). Lewin noted that a large proportion of children in developing countries fall into this category; however, they seem to be given relatively little attention in research and policy discussion.

Activities Framework

Inception	Phase 2	Phase 3	Phase 4

Research Activities

Country Analytic Reviews (CARs)
Mapping access issues and identifying research themes within Zones of Exclusion at national level

Cross National Reviews and Studies including Associate Partners and Regional Studies (CNRS)
Mapping access issues, reviewing leading edge research across and within Zones of Exclusion; in depth **thematic studies**

Community and School Based Studies (ComSS)
Household/community characteristics, dynamic tracking of cohorts of children at risk; exploration of better practices at school, community, district level; thematic in depth enquiries

Analyses of Changing Patterns of Access (CPA)
Regional and national tracking and analysing of changing patterns of access; baseline and updating **secondary data analyses**

Policy Dialogue and Analysis (PDA)
Analysis of effective policy interventions and the political economy of EFA; **regional studies**, evidence based policy tools

National and international Research Reports
CARS, CNRS, ComSS, CPA, PDA outputs

Evidence Based Action Plans
Synthetic reports and other outputs directed towards policy and practice

Complementary Actions

Communications, Influencing and Dissemination (CIDs)
Workshops and training on the job, website and data base/gateway development and projection, publication and media activities tailored for different stakeholders, NRG, CAG and PICs inputs to policy dialogue and MDG/EFA processes, strategic conference presentations

Capacity Building (CB)
Workshops and training on the job, visiting fellowships, graduate associateships, conferences, dissemination

Monitoring and Evaluation (ME)
Meetings of PICS and CAG; peer review of outputs, feedback from stakeholders, website+database/gateway usage; impact on policy and practice

Fig. 2.1 CREATE research activities framework (Lewin, 2007, p. 31)

Zone 0 – children who are excluded from pre-schooling

Zone 1 – children who have never been to school and are unlikely to attend school

Zone 2 – children who enter primary schooling, but who drop out before completing the primary cycle

Zone 3 – children who enter primary schooling and are enrolled but are "at risk" of dropping out before completion as a result of irregular attendance, low achievement, and silent exclusion from worthwhile learning

Zone 4 – children who fail to make the transition to secondary school grades

Zone 5 – children who enter secondary schooling but who drop out before completing the cycle

Zone 6 – children who enter secondary schooling and are enrolled but are "at risk" of dropping out before completion as a result of irregular attendance, low achievement and silent exclusion from worthwhile learning

Fig. 2.2 CREATE zones of exclusion (Lewin, 2007, p. 24)

Bangladesh Participation in CREATE

This section explains Bangladesh's involvement in the international research project and how it benefited from the research framework and design and contributed to achieving the overall objectives of the project.

The Institute of Educational Development at BRAC University (BRACU-IED), as the partner institution in Bangladesh, joined the CREATE Research Project Consortium (RPC) because BRACU-IED's mission closely resembled the overall objective of CREATE. BRACU-IED is committed to promoting the application of knowledge and insights from research to improve policy and practice on more equitable access to basic education and contribute to the achievement of the EFA goals and the MDGs. The BRACU-IED team undertook three major tasks in Bangladesh, namely, conducting (a) a country review and analysis of the situation as it existed regarding access and participation in basic education, (b) empirical studies at community and school levels and (c) further analyses of access issues based on the country analytical reviews, the community and schools research and the secondary data sets, which led to a series of monographs and policy briefs on critical issues. The following section provides an overview of research activities undertaken in Bangladesh as part of the CREATE project.

This writer led the Bangladesh part of the CREATE project on behalf of BRACU-IED. He was also a member of the management group of the project headed by Keith Lewin of University of Sussex and comprised of the representatives of the institutions from Bangladesh, Ghana, India, South Africa and the UK which were partners in the project. As a member of the managing group, the writer participated in conceptualising and designing the project, reviewing its progress, commenting on draft materials and contributing to various project outcome documents. This participation required periodic face-to-face meetings of the group as well as on-line communication.

CREATE Research Activities

Over the lifetime of the CREATE project in Bangladesh, 2006–2011, various outputs resulted from the research activities. These included a Country Analytic Review (CAR), Community and School Studies (ComSS), Pathways to Access series (PTAs) monographs, journal articles and other research products including conference presentations, workshops and dissemination events.

Country Analytic Review (CAR)

The CAR was an inception phase activity of CREATE. The Bangladesh CAR attempted to gather baseline information, using secondary sources, on access, equity and participation in education and analyse this information for further research. The secondary sources included published and unpublished research reports, government documents, databases and information from education authorities.

The research team, headed by the coordinator of CREATE in the Bangladesh partner institution, consisted of people who had been involved in research and analysis of aspects of access issues in Bangladesh. The team identified the key components of the report and formulated a structure for it, based on the CREATE generic guideline for CAR. The design and components of the study and the process followed reflected the objective of promoting policy discourse and influencing policy in respect of the national goal of achieving quality and equity in Universal Primary Education (Ahmed, Ahmed, Khan, & Ahmed, 2007).

Community and School Studies (ComSS)

The purpose of the ComSS, a longitudinal research carried out through two rounds of surveys in 2007 and 2009, was to explore how meaningful access to basic education for boys and girls between the ages of 4 and 15 years could be ensured in the context of individual communities. Focussing on selected communities, ComSS examined the pattern of access and exclusion at different stages and identified the reasons for different types of exclusion. In addition, it explored options for improving progression and completion and considered ways to facilitate re-entry into the school system for dropout children.

ComSS focused on six rural areas, one in each division of Bangladesh. Across these 6 areas, surveys were administered to 36 schools and to 6695 households containing 9047 children aged 4–15 years. Further, separate surveys were administered to identify dropout and never-enrolled children and a child tracking survey aimed to act as a bridge between the child data from the household survey and information about schools gathered in the school survey. Literacy tests were administered to parents of enrolled, never-enrolled and dropout children, and to dropout children themselves.

Eight research instruments were developed and used for collecting data in 2007 and 2009: a household survey; a school survey; a child tracking card; interview schedules for head teachers, assistant teachers, never-enrolled children and dropout children; and a literacy test for the parents of enrolled, never-enrolled and dropout children, and for the dropout children themselves. Based on the data collected, two ComSS reports were prepared, and the findings were shared in the CREATE partners' meeting in Sussex, the UK.

Pathways to Access Series (PTAs) Monographs

Seven PTAs monographs were prepared on different aspects of access and exclusion in Bangladesh. The aspects addressed in the monographs included the sector-wide approach, poverty and equity, dropout children, grade congruence and progression, slums children, diversity and financing in basic education. The PTAs provided the main content for a book on overcoming hurdles to access with equity and quality in basic education in Bangladesh, rushed into publication with the cooperation of BRAC University Press, to have it ready for launch in a high-profile national education conference in May 2011 on implementation of the new national education policy (Ahmed, 2011a).

Policy Briefs

Based on CARs, ComSS and PTAs, seven policy briefs were prepared. These policy briefs were prepared in such a manner that policymakers would be able to understand the key policy-relevant message while paying short attention and time.

Key Research Findings

As stated above, the main research questions are centred around understanding the patterns of access, participation and exclusion in basic education and exploring effective strategies for achieving Universal Primary Education. This understanding, it was envisaged, could be shared with decision-makers and key stakeholders in each country. It was also hoped that the new knowledge of the factors that had shaped access and their significance would be analysed and linked to policy and practice at the community level and above (see Fig. 2.1 CREATE activities). The major findings and conclusions emerging from CREATE research in Bangladesh became the grist for the mill in policy discussion, conferences, seminars and informal dialogues on education policy concerns and issues, planning of external educational assistance and assessment of educational progress. The highlights of policy relevant findings are described below.

Having made remarkable progress in terms of initial enrolment in primary education as well as gender equality, Bangladesh still faces enormous challenges in ensuring completion of primary education and acceptable learning achievement. Empirical studies have suggested that Bangladesh, along with other large-population South Asian countries, will fall significantly short of reaching the 2015 goal of Universal Primary Education interpreted as completion of the full cycle of primary education by virtually all in the eligible age group (Ahmed & Govinda, 2010). The key points regarding progress towards access with equity and quality are recapitulated below.

It is evident that the large majority of children in Bangladesh do enrol in some form of education. Progress has been made in enrolment in primary education for both girls and boys; however, there have been small improvements in completion of the 5-year primary cycle and only limited progress in meeting learning outcomes—two main indicators of the efficiency and effectiveness of the system.

Children attend a variety of school types in Bangladesh (e.g. government schools, NGO schools, madrasahs, etc.). These vary in terms of teacher education, building and facilities and teacher-pupil ratios. Overall, the performance of all types of schools (with the exception of NGO run non-formal primary education) has been problematic and less than acceptable in terms of meaningful participation and available evidence about learning outcomes. Fieldwork data suggest that madrasahs in particular, at both primary and secondary levels, are less well-endowed in terms of physical facilities and teachers, and student attendance, continuation and completion rates are lower than those of other education providers.

The Second Primary Education Development Programme (PEDP II) of Bangladesh for the period 2005–2011 set targets for the efficiency of the system (dropout and completion rates) that were modest. Even if the targets were reached during the extended period of PEDP II implementation up to 2011, the completion rate of primary education by children in primary age group would rise only to 55%. There would still be much more to be done to achieve an acceptable standard.

There was some progress in the number of competencies achieved by Grade 5 students in all types of institutions. On average, two-thirds of the basic competencies were achieved, while one-third were not achieved, although the tests were designed with the assumption that a student completing primary education would pass in all competencies. In relation to this, the Education Watch findings were consistent with the Directorate of Primary Education (DPE) assessment (Ahmed & Choudhury, 2015).

In respect of learning outcome, the key quality criteria, the PEDP II targets for basic competencies in literacy and numeracy, were far from ambitious. Even if the targets were reached, a quarter of primary education completers would still be without acceptable literacy skills and one-third of the students without essential numeracy skills (Directorate of Primary Education [DPE], 2009).

The high student-teacher ratio and low contact hours were major factors in poor student performance. These deficits can be explained by the low overall public sector allocation for education and low allocation for primary education, which remained less than 1% of GDP, one of the lowest in the world (Central Intelligence Agency [CIA], 2015). The PEDP II target again projected only a modest increase.

The ComSS study confirmed that non-enrolment of school-age children (exclusion zone 1) remains a significant problem. While official national statistics indicate a non-enrolment rate of around 10%, it was difficult to establish this proportion definitively for a particular time in specific communities, which itself was indicative of the complexities in applying remedial strategies.

The ComSS confirmed a high level of dropout (exclusion zone 2) as a critical problem both at primary and secondary levels caused by a nexus of poverty, reflected in the food-security status of families, parental education and how education is

delivered (school-related factors). By implication, there was a lack of capacity in families to support and guide their children through schooling—a lack that schools were failing to compensate or remedy. Clearly the schools need to do more to grapple with this problem.

The dropout problem was compounded by a phenomenon revealed by ComSS—that young children were participating in rural-urban migration as a livelihood strategy for families, which appears to be a contributing factor to about half of the apparent dropout in primary and secondary levels. The suggestion of the pattern of child migration of the indicated scale had important implications for policy and strategy regarding access, continuation in school, completion of the primary stage and finally transition into the secondary.

The category of silent exclusion or zone 3 was an important conceptual construct that focused attention on the large proportions of children who were enrolled in school, but not effectively engaged in learning. The characteristics of these students included poor attendance, grade repetition and poor performance in class activities and examinations, all of which made them vulnerable to dropping out. It was however difficult to quantify this situation with precision. ComSS indicated that this category, at a minimum, comprised a fifth to a quarter of all primary students.

The ComSS 2009 survey indicates that about a quarter of the children who completed Grade 5 did not enrol in Grade 6—the 1st year of secondary education. This number, however, underestimated the zone 4 problem. The peaking of dropout from Grade 5 (a quarter of total dropout) also implies a high level of nontransition to secondary schools (a zone 4 issue). Data from ComSS 2007 to 2009 suggested that a proportion of children were leaving government institutions, indicating a preference for NGO schools and even private kindergartens. Education Watch recorded a general overall shift in enrolment from government to other schools between 1998 and 2008 (Nath & Chowdhury, 2009). This situation complicates the task of recording and analysing access and participation. It also raises questions about the effectiveness and the *perception* of effectiveness by parents of different types of institutions and points to the importance of coordinated and comprehensive planning and oversight mechanisms for the multiple providers of education at the local (sub-district) level.

ComSS revealed that about 60% of the non-enrolled children were from the 6 to 8 years age group. The culture of enrolling children in school consistently at age 6 had not caught on. The absence of birth registration and birth records also supported a casual approach to age for starting school. The consequences of late enrolment were manifested in dropout in later years, and high opportunity costs for school attendance as children were seen as ready for being engaged in paid or unpaid work. For girls, there was also increased concern among parents about the safety and security of older girls walking to school and family and community pressure to marry them off.

ComSS revealed clear relationships between non-enrolment, dropout, nontransition and socio-economic variables, represented by the food-security status of families, household income and parent's education, as might be expected. Two-thirds of the never-enrolled children were from families with 'always in deficit' (ultra-poor) and 'sometimes in deficit' (poor) status in respect of staple grain supply for the fam-

ily. In the case of dropouts, 55% of the children came from households with food deficit, although 45% of the population were in this category.

A large proportion of school-age children suffered from health problems (about a quarter of children of the school age, in and out of schools, sampled had been sick in the previous 30 days). When ill health or episodes of sickness combined with other disadvantages of children prone to be in exclusion zones, their chances of effective participation in education were further diminished. Their quality of educational experience ultimately suffers, as children with health problems often enrol in school late and have high rates of absenteeism, lower cognitive development and an increased risk of dropping out.

Household perceptions of reasons for non-enrolment and dropout suggested supply-side constraints: schools are located too far from homes, and school education is perceived as of little value to children. Stipends to poor students (conditional cash transfer) in primary school remains a government strategy to promote equity in educational access. The supply-side constraints perceived by parents suggest that the funds spent for stipends could be better used in providing essential quality-enhancing inputs in schools. This question needs to be examined rigorously, especially because of the major budget implications of choices made (Hossain & Zeitlyn, 2010).

Key Policy Messages

A long list of problems and concerns emerged from CREATE research and analysis, as indicated above. Obviously, each of these could not be addressed in isolation, especially as they were interconnected in various ways. They needed to be tackled in a coordinated manner with policy interventions and strategic actions that not just recognised but highlighted the connectedness among the specific concerns. The policy messages and areas for action or further research, as discussed below, were based on this premise.

Birth Registration

The absence of birth registration was a source of confusing and conflicting statistics regarding the enrolment, completion and dropout data necessary for proper planning and management of the system. It was considered by CREATE that measures should be taken through local government agencies to enforce registration of new births required by health and local government regulations, but not enforced rigorously. Retroactive birth registration of 5–6-year-olds should be undertaken as part of the government plan to bring all 6-year-old children into school by the school year 2011. A campaign of awareness-raising and registration drives should be launched at the local and national levels jointly by education, health, local government, NGOs and civil society organisations.

Child Migration

The phenomenon of child migration—children leaving their family either to work or to be closer to a school—was identified as an important dimension of school dropout, needing further research to understand the reasons for migration and the activities of migrants as well as investigation of the scale of the phenomenon. There was a very limited amount of research on the implications for access and participation in the basic education of children arising from the phenomenon of rural-urban migration in Bangladesh. Further qualitative research could trace these children and find out more about their migration and activities.

Development and Trial of Sub-district-Based Universal Primary Education Planning and Management

CREATE recommended that a rigorous trial should be designed involving local government and all service providers in selected sub-districts as a key feature of government educational development strategy in order to rationalise provisions for quality basic education for all children with greater authority and accountability of schools and local bodies. School- and community-based actions to support the poor and the silently excluded and to overcome misperceptions and resistance towards the role of non-governmental and community organisations in education should be a part of the development and trial.

Assessment of Learning Achievement and Unintended Consequences

The peaking of dropout in Grade 5 and the lowering effects on completion of primary education and the newly introduced public examinations needed serious attention. Remedial strategies in teaching-learning, formative assessment throughout the school duration and making the public examinations a genuine assessment of basic competencies taught in school rather than tests of textbook contents should be systematically pursued. In the absence of a systematically applied method of assessing learning achievement at the primary level, the introduction of the end of primary examination was a positive move. However, work had to continue on issues regarding the 'backwash' effects on student participation and effects on classroom practices and making it a genuine and valid assessment of essential competencies prescribed in the curriculum.

Silent Exclusion

Silent exclusion—the phenomenon of children physically present in the classroom but not engaged in learning and thus intellectually absent—was clearly a serious problem affecting a large proportion of children. It involved around a quarter of the students in primary schools identified in this study. This however needs to be probed further into in order to analyse the different types and reasons for silent exclusion. Given the difficulties in identifying the silently excluded, research could focus on ways of identification and quantification of this phenomenon. Longer term qualitative and ethnographic research in classrooms would reveal much more about the nature and prevalence of silent exclusion. Responses to address this situation would entail specific attention to this phenomenon in school and community-based actions indicated under recommendations for sub-district-based planning and management above.

Responding to Family Poverty

Clear relationships were found between non-enrolment and socio-economic variables, represented by the food-security status of families, household income and parents' education, as might be expected. Household perceptions of the reasons for non-enrolment suggested supply-side constraints: schools located too far from home, and school education perceived by families as of little value to children.

Stipends to poor students (conditional cash transfer) in primary school were a government-funded activity linked to PEDP II and remain a government strategy to promote equity in educational access. The supply-side constraints perceived by parents (also indicated in various Education Watch reports) suggest that the funds spent for stipends could be better used in providing essential quality-enhancing inputs in schools, including school meals. This question needs to be examined rigorously, especially because research (Hossain & Zeitlyn, 2010) has pointed out major implications of such choices on the budget.

Urban Poor Children

While the urban people in general were better off than their rural counterparts in respect of educational services, the rapidly growing poor slum dwellers were underserved by both governments and NGOs (see also Banu, Roy, & Shafiq, Chap. 6, this volume). There was a subset of households who comprised of extremely poor families (roughly, the poorest quintile) and for whom even low private education costs were prohibitive. Expanding services for the urban poor, including subsidies and other support, would be essential to maintain high primary enrolments and to reach the UPE goal (Cameron, 2010).

Common Quality Standards

The critical policy challenge in primary and secondary education was to set and enforce common quality standards for all types of schools and ensure acceptable learning outcomes from them, recognising the role and contribution of diverse provisions for educational delivery. The relative strengths of each type of education provider and its potential for contributing to improved outcomes by children in specific circumstances needed to be identified and assessed and best use made of their strengths and potentials (Sabur & Ahmed, 2010).

Making Multiple Provisions: A Source of Strength

Different types of schools (government-managed schools, government-assisted and government-controlled schools, government-assisted madrasahs, NGO-run complementary or alternative institutions and private sector institutions) served learners in different circumstances and conditions and, therefore, were not fully substitutable with each other. Sabur and Ahmed (2010) noted that quality constraints in each category had to be assessed and solutions found. At the same time, a coordinated approach to providing services through multiple provisions and the willingness of schools to learn and adapt would help improve the performance of the system overall.

Greater Authority and Responsibility at School Level

Along with area-based coordination and planning, it was important to move towards greater authority and responsibility at the institutional level for organising teaching-learning, managing personnel, giving due attention to under-performing children and their specific difficult circumstances and using financial resources with accountability to parents and community.

Harnessing NGO Contributions

NGOs, given their record in providing complementary and alternative educational opportunities, should be supported to target educationally disadvantaged areas and groups (Sabur & Ahmed, 2010) and to design and offer inclusive and responsive approaches to underserved populations within the framework of area-based and area-coordinated programmes.

A Major Increase in Public Resources

Substantially greater public resources should be committed within the framework of the sixth 5-year plan and the new education policy in order to assure minimum necessary levels of quality with equity. Equally important is the effective use of resources—for example, sub-district-based capitation formulas, decentralised management of resources and assessing optimal use of scarce resources, a case in point being the spending on stipends. More resources were needed at the school level along with greater discretion with accountability in their use. The question of affordability must be turned around to ask—could we afford not to make the necessary investment in education with quality and equity?

A Pragmatic and Flexible Programme Approach

In designing the new modality of programme management and cooperation with donors, a pragmatic programme approach for primary education development needs to be adopted. It should be based on the principle of a comprehensive programme that includes all forms and modes of primary education, including second chance or non-formal provisions, and all children including those with various special needs, going beyond the domain of DPE. The structure of the programme and its components, and the implementation mechanism, would need to be appropriately flexible (Ahmed, 2011b).

In summing up the highlights of findings described above, it can be said that CREATE research activities and outputs have contributed significantly to the articulation of policy objectives and priorities including the formulation of the new education policy. The overarching challenge is now to move effectively towards realising the objectives and applying the related strategies. The analysis, findings and conclusions from CREATE research also have indicated the strategies and priorities in actions to be followed in fulfilling the key policy objectives.

CREATE Contribution in Policy Discourse

It was clear by 2011 that Bangladesh would come close to achieving universal initial enrolment in primary education by 2015 and, however, would fall short considerably of universal completion of primary education, thus failing to achieve the MDG and EFA primary education goals. Current trends also indicated that there would be a major deficiency in the achievement of essential skills and competencies by primary education completers, an essential element of effective participation and meaningful access in primary education. Both noncompletion of primary education and poor learning achievement were intimately linked with equity in participation.

The critical questions then in Bangladesh, as the PEDP II was winding down by mid-2011, were (a) how the next phase of primary education development in the country up to 2015 and beyond would be shaped, (b) how the government was positioned to design and implement a relatively comprehensive subsector programme, (c) how development partners could support the national effort and (d) what lessons had been learned in these regards. The CREATE country analytic review, studies of communities and schools in six locations, conducted over a 3-year period, provided insights to address these critical questions and explore the dynamics of participation and exclusion of children in schooling.

The analytical framework of 'zones of exclusion' was found highly relevant in formulating research issues, designing tools for research, analysing the data and framing conclusions and recommendations. Drawing on this research, progress and constraints in achieving UPE were examined. The research provided insights into policy priorities and strategic actions for overcoming the hurdles to UPE with equity and quality. These priorities for policy and action were seen in relation to the urgent task of designing the next phase of primary education development, debating issues in external development assistance for this purpose and placing the new UPE programme within the framework of political commitments reflected in the recent Education Policy 2010 and the 5-year national development plan under preparation at that time.

Influencing the 2010 Education Policy

The collaborative approach taken in communication and dissemination in partnership with other stakeholders such as the Campaign for Popular Education (CAMPE), the Centre for Policy Dialogue (CPD) and the Bangladesh Institute of Development Studies (BIDS) proved to be very useful in this effort. The Education Policy 2010 reflected policy priorities important for progress towards meaningful access in basic education for all with equity and quality. The priorities included free and compulsory primary education up to Grade 8; expansion of pre-primary education; multiple delivery modes in basic education with a common core curriculum and standards; student assessment to discourage rote learning; improvement of teachers' status, incentives and training to improve quality; improved governance and management; enhanced education resources; reform of madrasah education; and promoting inclusive education (Ministry of Education, 2010). These priorities, albeit noted in general terms in the education policy, reflected a broad common ground in the views expressed from the civil society. As discussed previously, these views were articulated in the CREATE research studies in Bangladesh.

Discourse on the Post-2015 Education Agenda

Education policy issues and concerns identified and analysed by CREATE research in Bangladesh and the conclusions from these remain pertinent as progress towards the 2015 education goals is assessed and the shortfalls are considered. National and international discussion on the global development agenda beyond 2015 and the related EFA agenda also calls for a critical look at achievements, constraints and a perspective of the future. The Bangladesh EFA 2015 review initiated under the UNESCO auspices has underscored the relevance of the research findings and analytical framework of CREATE applied in examining access, equity and transitions. Having examined progress and constraints related to the six EFA goals, the review (Ministry of Primary and Mass Education [MoPME], 2014) identified continuing issues in respect of:

1. Consensus-building on how the state's role and responsibility for fulfilling the right to basic education of citizens should be exercised
2. How to move the subsectors of primary and secondary education, which constitute the foundation of the national education system, away from a pattern of low investment and low performance
3. Deficiencies in developing and implementing workable strategies for literacy, lifelong learning and building skills and capabilities of people related to work, citizenship and personal fulfilment
4. Problems of effective governance and management in education—establishing ownership, continuity and consensus-building in policy, strategy and priority

In suggesting policy emphases to address the continuing concerns and the way forward, ten action priorities proposed parallel the conclusions and policy suggestions emanating from CREATE research as noted above. The action points relate to major concerns identified including the implications of household poverty, planning and management issues, pedagogy and classroom practices, attention to the urban poor, increasing educational funding, use of ICT and promoting the culture of timely school entry.

Considering educational responses to household poverty is clearly a priority since the socio-economic status of children is a major barrier to effective participation. Schools cannot deal with household poverty; however, schools have to be concerned with mitigating the constraints by their own effort to assist and support the disadvantaged learner.

As suggested, governance, including planning, and management of education to serve all children must be based on planning, implementation actions and monitoring progress for each administrative unit such as the sub-district and the village or town where the children are and where the services have to reach each child effectively. Urban slum dwellers who seem to fall between the administrative rut of the municipal and the sectoral authorities need special attention.

It is suggested that pedagogy, classroom practices and teacher awareness and attitudes have to be directed towards dealing with the neglected issue of children nomi-

nally in school but failing to be active in learning. Such aspects have to be understood better and addressed systematically. A threshold of resource availability has to be ensured commensurate with the objectives of quality and equity; otherwise the funds allocated are likely to be wasted when minimum acceptable results are not achieved.

A large gap between gross and net enrolment indicates high proportions of over-age and underage children in the schools. A culture of school entry with awareness about the right entry age and progression of children through the grades is associated with purposefulness, efficiency and quality in teaching-learning. Actors in local government, community and school have to support birth registration, in time enrolment drives and tracking of children's progress in the education system. Sharing and exchanging relevant experience should be promoted through regional and international cooperation. These initiatives would boost the national and regional EFA efforts (MoPME, 2014).

Conclusion

The CREATE research process and outputs have contributed to the discussion, clarification and formulation of policies, priorities and strategies in respect of participation in basic education with equity and quality. The research work and its outputs have laid the ground for continuing work on policy and strategy with enhanced conceptual clarity and stronger professional capacity. The findings and recommendations remain pertinent in the national discourse on the post-2015 education agenda. Indeed, the research output, as mentioned above, provided the content for the first comprehensive research-based book on pre-tertiary education in Bangladesh.

The Bangladesh CREATE Team engaged in wide-ranging communication and dissemination activities based on the overall CREATE communication and dissemination strategies. The communication activities were carried out as a collaborative effort with other key actors on the national scene, especially the Campaign for Popular Education (CAMPE), a forum of over 200 NGOs actively engaged in educational programmes and the host organisation for the annual research-based Education Watch reports (for Education Watch reports, see CAMPE Website www. campebd.org).

The communication activities were planned and implemented to adapt opportunistically to flows of information for different audiences at national and subnational levels. These included workshops and seminars, popular newspaper articles, electronic media presentations, journal articles as well as dissemination through CREATE monographs, policy briefs, a website and a book on Bangladesh education.

The communication activities were also designed to contribute to the ongoing education policy and planning discourse related to the political pledges of a new government elected in 2008, the preparation of a new education policy (approved by the Parliament in December 2010) and the formulation of the Sixth Five-Year National Development Plan (2011–2015). The research outputs also contributed to

the discussion related to the evaluation of PEDP II (2005–2010) and the preparation of PEDP III (2011–2015) (see DPE, 2011).

Participation in CREATE contributed to capacity building and professional development in several ways. Two staff members of BRACU-IED, the partner institution of CREATE Bangladesh, enrolled in the doctoral programme in education at the University of Sussex to explore different aspects of CREATE research in Bangladesh. The country analytical review and the ComSS research and field work involved hands-on experience and orientation of staff members of BRACU-IED, and the staff of five partner education-focussed NGOs were involved in ComSS design and implementation, along with some 100 young researchers and field investigators.

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Chapter 3
Analysing Bottlenecks to Equal Participation in Primary Education in Bangladesh: An Equity Perspective

Laila Farhana Apnan Banu, Goutam Roy, and Md. Shahriar Shafiq

Abstract Bangladesh has made significant progress in expanding access to primary education, presumably in terms of enrolment, after it became signatory to the 1990 Education for All goals. However, the quantitative gains in enrolment have been counterbalanced by poor-quality education, making the system largely ineffective in ensuring learning for all. Furthermore, gains in the access and quality axis captured in national averages often mask disparities in school participation of children coming from different segments of the society. Drawing from literature available in the public domain and analysing secondary data related to measures of access and participation, this study analysed key participation gaps. The analysis found manifold layers of inequality that a child is likely to experience during schooling based on her/his age, gender, readiness, ability/disability, ethnicity, geographical location, socioeconomic background and parental awareness. Identification of children remaining out-of-school has been further explained by analyses of sociocultural, economic and pedagogical determinants. The study highlights policy and programmatic choices that may lead to more equal educational participation by reducing equity gaps.

Keywords Equity · Access · Social justice · Educational participation

L. F. A. Banu (✉)
International Labour Organization Bangladesh, Dhaka, Bangladesh
e-mail: banul@ilo.org

G. Roy
Institute of Education and Research, University of Rajshahi, Rajshahi, Bangladesh
e-mail: goutamroy@ru.ac.bd

M. S. Shafiq
Government of Bangladesh, Dhaka, Bangladesh
e-mail: shahriarshafique@gmail.com

Introduction

The World Education Forum 2015 took stock of achievements and shortfalls in the implementation of Education for All (EFA) and education-related Millennium Development Goals (MDGs) and agreed on the joint Framework for Action on Education 2030 (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2015a). Later a bold new set of global goals—the Sustainable Development Goals (SDGs)—were adopted replacing the MDGs, calling for action by all countries for all people over the next 15 years in five areas of critical importance: people, planet, prosperity, peace and partnership (United Nations, 2015). Covering 17 key areas, these 2030 development agendas include three goals related to education and inequality, signalling the crucial importance of reducing inequality for achieving sustainable development for all. In particular, Goal 4 calls for ensuring inclusive and equitable quality education, and promoting lifelong learning opportunities for everyone irrespective of their socioeconomic conditions.

Following this, phenomenal successes were reported with primary school net enrolment rates in the developing countries, reaching 91% in 2015, up from 83% in 2000 (United Nations Development Program [UNDP], 2015), and for the first time in recorded history, the number of boys and girls enrolled were almost equal. The number of out-of-school children of primary school age worldwide fell by almost half, to an estimated 59 million in 2015, from 100 million in 2000 (Brown, 2015). Yet large disparities remain, and children from the poorest households are four times more likely to be out-of-school than the richest (UNDP, 2015).

The hardest to reach and the most marginalised were girls married off as children, children forced into work for survival, children living with a disability or an ethnic minority background and the many caught in the aftermath of conflict—these are the 59 million children that the MDG did not reach (Brown, 2015). While simply expanding education systems left behind these children, 38% of the world's 650 million primary school-age children either fail to make it to the fourth grade or are not learning the basics of literacy and numeracy (UNESCO, 2014).

In Bangladesh, according to the South Asia Regional Study on Out-of-School Children (United Nations Children's Fund [UNICEF] & UNESCO Institute for Statistics [UIS], 2014), around one third of preschool-age children are still not in school. The rate of exclusion is lower for primary school-age children at 16.2% but rises sharply for lower secondary at 30.7%. Boys are more likely to be excluded in both primary and lower secondary levels, while slum children are 2.5 times more vulnerable to exclusion. Repetition is a major cause of overage attendance and a risk factor for dropping out. Late enrolment and repetition are phenomena that demonstrate low efficiency of the system. Survival rates are alarmingly low, such that 40% children drop out before they reach the final grade (UNICEF & UIS, 2014).

As the world enters the SDG era, there are renewed commitments to start afresh and guide the development actions for the next 15 years to achieve targets set out by the SDGs. If Bangladesh is to achieve the ambitious education targets, its policies and programmes have to be based on solid evidences guided by an in-depth analysis

of equity gaps, so that the educational rights of the still unreached children can be realised. Aspiring to be a middle-income country by 2021, Bangladesh cannot afford to miss its 6.7 million out-of-school children (Antoninis & Mia, 2012) for another 15 years, as ignoring the human development and social change aspects would only have diminishing effects on its fast-paced economic development.

It is in this context that this chapter aims to review the participation trends in primary education in Bangladesh to identify excluded children and the causes behind their exclusion. Such analysis has the potential to answer queries such as (a) what policy and programmatic actions have so far been taken in Bangladesh to ensure EFA and education-related MDGs; (b) what results they have yielded to date; (c) which groups of children continue to be excluded and why; and (d) what are the most pragmatic, doable strategies to include these traditionally excluded children's groups in primary education within a resource-poor setting?

The next section presents a conceptual framework by defining 'Access', 'Equality' and 'Equity' to benefit from an agreed understanding of these interrelated, but not synonymous constructs. Situating the problem within the broader socioeconomic milieu of Bangladesh, the paper moves onto discussing what policies and programmes Bangladesh has taken so far to ensure primary education for all. It then analyses who falls into the cracks of data, policies and actions and why significant gaps still persist, despite sustained efforts. Based on the analysis, the study concludes with a set of equity-informed strategies that, if implemented in a progressive manner in conjunction with other actions, likely lead to truly equalising the implementation of educational rights for all.

Methodology

This chapter is developed based on a detailed review of scholarly literature as well as on the first-hand empirical experience of the authors. Combining quantitative and qualitative analyses of existing literature, the paper attempts to find answers to 'what' (current status), 'why' (determinants) and 'how' (ways forwards) questions in relation to children's unequal participation in primary education in Bangladesh. A systematic literature review of relevant academic, programmatic and grey literature was carried out to generate qualitative evidences. Grey literature refers to research outputs produced by professional associations, research institutes and government departments, which are not available through conventional academic or commercial publishing and distribution channels but are accepted in almost every scientific field (Alberani, Pietrangeli, & Mazza, 1990). While the academic literature has provided the necessary conceptual framework for explaining causalities, programmatic literature has provided data that can explain trends. Grey literature was used as an alternative to these 'orthodox' sources of information that are often not available in the public domain. In this way triangulation of data sources was achieved.

The key sources of data were Annual Sector Performance Reports [ASPR] (Directorate of Primary Education [DPE], 2015a), Multiple Indicator Cluster Surveys [MICS] (Bangladesh Bureau of Statistics [BBS] and UNICEF, 2007, 2015) and Education Watch reports published by Campaign for Popular Education (CAMPE)—a coalition of civil society organisations (CAMPE, 2011, 2015). The Annual Sector Performance Reports are published annually by the Directorate of Primary Education—the key government agency implementing primary education activities and are the most reliable data source on a set of school- and system-level indicators. Based on large-scale surveys on a triennial basis, each round of Multiple Indicator Cluster Surveys provides data on a broad set of child development indicators, which is also a credible data source. The Education Watch reports provide civil society's reality check to government claims in education development through large-scale surveys.

Data gathered from these sources were analysed thematically to understand trends and causalities, such as how geographical location or poverty influences children's school participation. The equity analysis—based on conventional measures of education development, such as enrolment, retention and completion rates—was further reinforced by the conceptual framework of the 'Five Dimensions of Exclusion (5DE)' model developed by the Consortium for Research on Educational Access, Transitions and Equity (CREATE; for a report on this project, see Ahmed, Chap. 2, this volume). In addition, to a limited extent, the authors have drawn from their experiences and observations from their progressively responsible work in the field of education in Bangladesh as academics, researchers and practitioners, to add qualitative and retrospective insights, largely taking the stance of phenomenologists. A phenomenological orientation towards educational research is 'a methodological endeavour that requires an anthropological onto-epistemological interest in the meaning of educational events, where a basic concern is how to keep the unspoken, or tacit qualities of educational situations open to further questioning', rather than aiming to solve problems and provide definite answers (Saevi, 2015, pp. 13–14).

Access, Equality and Equity: Theoretical Perspectives

According to the 1990 World Declaration on Education for All (WDEFA) and the MDG2, 'enrolment' on its own is not an adequate measure of access; rather it needs to be complemented by a focus on actual learning acquisition (UNESCO, 1990). Therefore, effective access can be defined as the successful combination of enrolment in progression through and completion of the full cycle of primary education with learning achievement. However, in Bangladesh the term 'access' generally denotes children's physical access to school and seldom refers to meaningful learning (Hossain & Zeitlyn, 2010).

The CREATE project developed an expanded vision of access which reconceptualises exclusion as a gradual process rather than a one-off event, requiring not

only looking at children who have already dropped out but also at those at risk of dropping out and not completing the full cycle—children who are 'silently excluded' within school, whose attendance is irregular and often sit at the back receiving little attention from teachers (CREATE, 2008, p. 3). CREATE's five dimensions of exclusion model, presented in Fig. 3.1 below, offers a framework to measure meaningful access, where the first three dimensions capture the out-of-school population of pre-primary (Dimension 1), primary (Dimension 2) and lower secondary school age (Dimension 3). Additionally the model includes two more dimensions that focus on children who are in school but are at risk of dropping out in primary (Dimension 4) and lower secondary schools (Dimension 5). In summary, the Five Dimensions of Exclusion, through both 'out-of-school' and 'at-risk' dimensions, describe children who are not participating in the intended level for the intended duration at the intended age (UNICEF & UIS, 2014). This framework has been applied in this chapter to understand some of the data.

The 1990 WDEFA further emphasised removing all forms of 'discrimination and disparities' in participation in basic/primary education. The declaration stressed that all children should be able to benefit from opportunities designed to meet their basic learning needs (UNESCO, 1990). This means 'access to education' should equate with 'access to equal opportunities' in education, such as to qualified and trained teachers, and safe, protective and enabling learning environments, etc. To ensure equal opportunity and outcomes for all, equitable distribution of resources must be in place to address discrimination faced by certain groups, such as girls or language minorities, and to some extent, reversed by affirmative actions, often referred to as positive discrimination (Noon, 2010). This involves issues of equity and equality.

While the terms equity and equality are often used interchangeably, they essentially stand for two different concepts (Espinoza, 2007). The concept of equality indicates similar treatment for all persons by asserting their fundamental equal worth, which is reflected in different UN declarations on human and child rights (United Nations, 1949, 1979, 1989). For equity, however, there are many factors
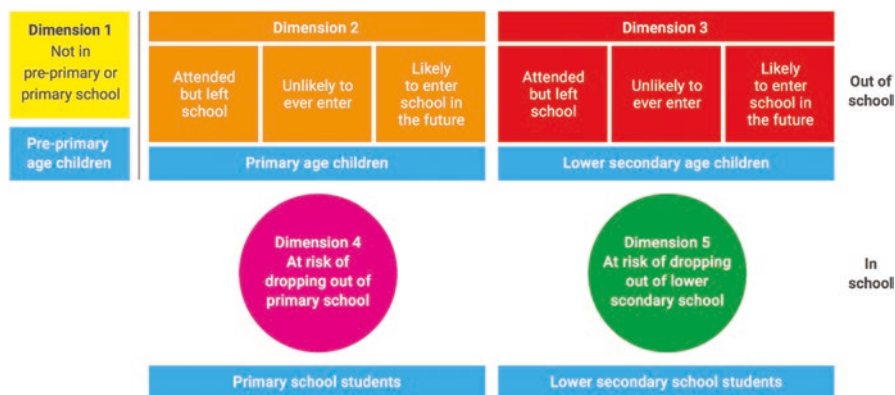
Fig. 3.1 The conceptual framework of five dimensions of exclusion. (Source: Global Initiative on Out of School Children, UNICEF and UIS, 2014, with permission from UNICEF Bangladesh)

including gender, socioeconomic status, history, geographical location, language, ethnicity, religion and disability, which often influence unequal outcomes in education (Wood, Levinson, Postlethwaite, & Black, 2011). Thus the concept of equity is linked with fairness and justice in the provision of education or other benefits that consider individual circumstances and implies a controlled form of equal treatment (Wood et al., 2011). In summary, equality is the goal, and equity is the means to address gaps in achieving equality of opportunities and outcomes.

The Socioeconomic Context of Bangladesh and Its Children

In 2014, Bangladesh ranked 142 out of 187 least developed countries (United Nations, 2014).With the vision to become a middle-income country by 2021, the pace of poverty reduction has been accelerated with significant progress in economic growth (Asian Development Bank [ADB], 2011). However, around one third of its households are still poor and one fifth extremely poor (BBS & World Bank, 2011). Around half of its children live in poverty and are typically deprived of four out of seven basic services: water, sanitation, nutrition, education, health, information and shelter (UNICEF, 2009a).

Undernutrition rates are significantly high in Bangladesh, with 42% of children under five stunted, 32% underweight and 10% wasted (BBS & UNICEF, 2015). Child malnutrition is twice as high in the poorest quintile than the wealthiest (UNICEF, 2009a). There is strong evidence that malnutrition causes irreversible damage during children's early formative years, a critical period for brain development (ICF International, 2013). Nutritional deficits harm education prospects, and children stunted in their early years typically register lower levels of learning achievement and are more likely to drop out (The Lancet, 2011). Around half of Bangladesh's children suffer from mild or moderate anaemia, which is also associated with diminished cognitive development and learning.

Prevalence of harmful social practices such as child labour and corporal punishment is also high. According to the most recent Child Labour Force Survey (BBS, 2013), there are 3.45 million working children, mostly boys, 71.5% of whom are from rural areas. The largest proportion of working children, 45.7%, belongs to the official school age of 6–11 years. To support family income, 30% of working children have never attended school, and another 28.9% could not attend school because parents failed to afford related expenses (BBS, 2013).

A Children's Opinion Poll conducted by UNICEF found 91% of Bangladeshi children experiencing physical punishment, with one quarter reporting having experienced this almost every day (UNICEF, 2009b). With the omnipresence of widespread corporal punishment, schooling does not guarantee a safe environment for children (Rahman & Tareque, 2013). A widely held social norm of accepting violent disciplining marginalises children suffering at the hands of their parents, teachers and caregivers. In 2011, the High Court declared corporal punishment in schools

illegal. However, enforcement of such laws is seldom observed. As a result, the promise of schooling remains undermined.

Bangladesh is one of the world's countries most vulnerable to climate change. Climate change impacts including sea level rise, frequent floods and cyclones threaten to erode gains in poverty reduction (ADB, 2011). Bangladesh's education system is not well-prepared to face climate change-induced vulnerabilities. Flooding and cyclones destroy school infrastructure and materials and result in short- and long-term closures and disruption. In a 2007 cyclone, over 18,000 schools were damaged (for a report on Cyclone Sidr, see Rahman & Missingham, Chap. 4, this volume). More than 13,000 schools were affected by a combination of cyclone and flooding in the following year in 2008, and nearly 3000 were affected in 2009 (Ministry of Women and Children's Affairs [MoWCA], 2010). Such emergencies have serious implications for inclusiveness because of the unequal distribution of risk and coping capacity of families, which often results in parents withdrawing children from school and sending them to work irreversibly.

Despite much progress, governance challenges continue to impede socioeconomic development (ADB, 2011). Government structures are centralised, limiting flexibility to adapt local circumstances and demands in national policies. National development masks wide regional disparities across urban slums, disaster-prone areas, geographically remote and isolated places such as *char* (river islands), *haor* (wet lands) and ethnic minority-inhabited regions, which are later discussed in greater detail.

Achievements in Primary Education

On a national level, Bangladesh has made remarkable progress in primary education, especially in increasing and achieving gender parity in enrolment (Government of Bangladesh [GoB], 2015). The rate of expansion accelerated sharply when Bangladesh became signatory to the EFA and MDG goals in 1990 and 2000. In line with the 1990 Compulsory Primary Education Act and the 2010 National Education Policy, the government has taken many steps to improve the subsector, including the formulation of law for Universal Primary Education, providing free textbooks, abolishing school fees, providing stipends for rural and poor students and for girls up to secondary level, offering second chance education to out-of-school children and expanding pre-primary education (GoB, 2015). An increasingly pro-poor policy environment and subsequent actions have ensured the steady decline of out-of-school children. See Chap. 1 for statistics indicating some improvements in primary education over years.

Currently the primary education development activities are being implemented under an integrated sector-wide program named 'Third Primary Education Development Programme (PEDP-3)' which sets out the framework for an equitable delivery of quality primary education. It includes strategies for 1 year pre-primary,

universal primary and expanded non-formal education provision for reducing disparities. Equity-based targets include narrowing access and learning differentials between children from wealthier and poorer homes and best- and worst-performing regions (DPE, 2011a). The interventions undertaken to reduce disparity under PEDP-3 are discussed briefly below.

In recognition of many children failing to achieve basic learning competencies, the *Each Child Learns* intervention was initiated in 2011, aiming to reduce learning disparity and allow all children a fair chance to learn through activity based teaching-learning methodology (DPE, 2011a). The *second chance education* interventions now cater for an estimated 5.5 million learners in a range of activities from early childhood through basic and continuing education. These non-formal, accelerated learning programmes offer an alternative route to those who missed formal schooling. Parallel to this, the World Bank financed *Reaching Out-of-School Children* project is aimed at supporting 750,000 disadvantaged children aged 7–14 years in 90 less developed sub-districts (DPE, 2011a).

The *Mainstreaming of Inclusive Education* initiative aims at designing appropriate policies and strategies to address the needs of four specific groups of disadvantaged children: girls, ethnic minorities, the poor and children with disabilities. An inclusive education framework is in place, although specific program interventions are yet to reach children (DPE, 2011a; see Malak & Tasnuba, Chap. 7, this volume, for more).

In addition, a well-established *Targeted Stipend* program continues, providing cash payments to 7.8 million children from poor families to offset school-related costs (DPE, Power and Participation Research Centre [PPRC] & UNICEF, 2013). To address marked differences in infrastructure, PEDP-3 introduces *needs-based infrastructure development* in areas facing acute problems, such as impoverished rural areas, *chars*, *haors* and urban slums (DPE, 2011a). Multiple disasters and use of schools as shelters reduce learning hours. PEDP-3 envisages an expansion of *Education in Emergencies* programmes (see Rahman and Missingham, Chap. 4, this volume, as an example of NGO initiatives) aimed at strengthening disaster preparedness to continue education during and after emergencies.

Despite espousing a conspicuous equity focus, most of these interventions are in their infancy and are yet to produce meaningful evidence of reducing inequality. In most cases, the interventions are top-down, without much capacity and consensus building on the ground. As a result, when these interventions travel through the dissemination ladder, many of their true intentions evaporate along the way. In addition, the omnipresence of a culture that values administrative issues over pedagogic components affects the relevance and efficiency of such inputs (White, Cooper & Mackey, 2014). For example, a joint study conducted in 2013 by the Directorate of Primary Education, Power and Participation Research Centre and UNICEF indicated that although the problem of targeting stipends was improved by replacing the uniform coverage of 40% of the poorest by geographical targeting, the stipend amount (Taka 100 per child per month) has not changed since its introduction. This amount is not sufficient to offset real and opportunity costs. Furthermore, the study revealed four types of transaction burdens: disbursement delays, opportunity cost of

1 day's lost labour and/or travel/food costs for guardians, loss of teaching time on payment paperwork and booth assistance and lapse of payment for mothers who miss collection on the appointed day (DPE, PPRC & UNICEF, 2013).

The issues outlined above suggest there is indeed room for improving the efficiency of stipend distribution; however, there is also a need to critically look into how much this has been successful in achieving its goal. Here the classic example of 'validity' and 'reliability' can be cited, where the interventions are producing reliable, quantifiable results, such as the number of students who received stipends, or for training programmes, and the number of teachers trained. Nevertheless, the outcomes are often of little validity, as they mostly fail to produce commensurate qualitative results—little positive change in teacher behaviour or little impact on student learning. As the interventions reach schools in forms of 'grants', 'supplies' or 'capacities', it is time to look into their relevance and validity in serving the core purpose of creating equitable access to meaningful learning, no matter how reliable they are. The following section discusses this at greater extent.

Key Challenges and Persisting Inequalities: An Equity Analysis

Although the headway Bangladesh has already made in universalising primary education has been commendable (World Bank, 2013), there are still a number of formidable challenges that need urgent attention, such as bringing *all* children to school, reducing drop-out rates and improving the quality of education.

Due to EFA and MDG targets, the government emphasised bringing more children to school, without much attention to preparing the schools with conducive learning environments. The consequence of such a purely quantitative expansion meant unprecedented increases in enrolment rates. However the quantitative gains in enrolment were counterbalanced by a strikingly poor-quality education, which is attributed to a complex set of elements, including low coverage of early childhood development (ECD) services, low contact hours, understaffed schools and crowded classrooms with high teacher-student ratios, lack of child-friendly infrastructure and water-sanitation facilities, memorisation-based teaching methods, a dated assessment system, pressure of a high-stakes examination inciting poor motivation and a persistent use of corporal punishment (Asadullah & Chaudhury, 2013; DPE, PPRC & UNICEF, 2013). The system-level factors include intake of low-quality human resources, absence of preservice teacher training and a career development path, a highly centralised decision-making process, low government spending and a poorly governed system with low accountability at every level. All these affect parental decisions to utilise primary education services.

The two most important indicators of quality education are learning achievement and rates of transition to the next level (Scheerens, 2004). In addition to teaching the basic skills of literacy and numeracy, quality education also refers to encouraging critical thinking and a desire for lifelong learning (UNESCO, 2015a) to be able to

respond to the individual and societal needs. Only 25% of Grade 5 children in Bangladesh can read, write and do simple math (DPE, 2015b). Around 55.84% children are enrolled in secondary level schools, with net enrolment coming down to 50.21% (Bangladesh Bureau of Educational Information and Statistics [BANBEIS], 2015). For the children who do not complete primary education and/or do not enter into secondary, primary education remains as the terminal education; many of these children enter formal or informal employment markets with only a minimum ability to read or write.

While the enrolled children struggle to remain in school and learn, an estimated 5.6 million still remain out-of-school (UNICEF & UIS, 2014)—roughly 10% of the global share. Drop-out and survival rates are alarming, with a worse situation for children with multiple disadvantages. The following section examines inequality patterns prevailing in primary education with profiles of excluded children and the determinants of their exclusion.

Wealth Disparity

Poverty emerges as the main cause for pushing children out-of-school, followed by child labour which of course is often the by-product of poverty. Poverty is associated with socioeconomic conditions that are caused by and lead to more deprivations, which in turn reinforce disadvantage and deepen inequality. Age-wise analysis shows poverty-related issues become much more determining for school participation at age 9; around 40% of this age group remain out of school (Nath & Chowdhury, 2009). Child labour is widely practised as a survival strategy by low-income families and remains a major obstacle to the achievement of EFA goals.

Educational access and learning performance have strong positive correlation with household income strength (Hossain & Zeitlyn, 2010). Poverty and inability to afford education is cited by low-income parents of Bangladesh as the major reason for children dropping out (Sabates, Hossain & Lewin, 2010).

Yet, in a review of 50 countries, one quarter of households reported spending more on education than governments (UNESCO, 2015b). Although primary education is free by law in Bangladesh, there are shadow expenses that include examination fees, private tuition, paying for uniforms and supplies. Schools also charge for registration and coaching fees for the Primary Education Completion Examination (PECE), while model tests, private tutoring and guidebooks cause additional costs. Private expenditure has tripled from 2000 to 2010 (CAMPE, 2015). In most cases low-income families are unable to bear these additional costs. Opportunity costs, the potential income that the child could earn during the time of schooling and the forgone income opportunity in the time the child is involved in education (Palmer & Raftery, 1999; Stevenson & Lindberg, 2010), is another factor forcing poor families to withdraw children from school. As mentioned previously the monthly stipend of Taka 100 cannot offset the opportunity cost for working children.

Table 3.1 Wealth quintile differentials on child development and education indicators

Indicator Percentage of children –	Poorest quintile	Richest quintile
Of 3–5 years attending early childhood education	11.7	17.5
With whom biological fathers have engaged in four or more activities	4.9	21.7
With whom biological mothers have engaged in four or more activities	25.5	64.1
Living in households that have three or more children's books	2.4	22.7
Of 3–5 years developmentally on track in at least three of the four development domains: literacy-numeracy, physical, social-emotional and learning	56.7	77.1
Attending first grade of primary school, who attended preschool the previous year (school readiness)	42.8	52.3
Of primary school-entry age entering Grade 1 (net intake rate)	26.2	44.4
Of primary school age attending primary or secondary school (net attendance ratio)	64.5	81.4
Of primary school age out-of-school	35.5	18.6
Reaching last grade of primary school (survival rate)	94.1	96.9
Primary school completion rate	57.1	86.0
Transition rate to secondary school	92.0	95.2
Of secondary school age out-of-school	33.8	10.9

Source: Multiple indicator cluster survey (2012–2013), BBS & UNICEF (2015)

Table 3.1 presents the wealth quintile differences for key child development and education indicators, highlighting that children from the poorest quintile are subject to serious deprivation of development and educational rights than their richest counterparts.

Gender Disparity

Bangladesh has achieved gender parity in primary enrolment, with no marked difference in performance between boys and girls as found in the estimates in National Student Assessments (NSA), competency-based assessment of literacy and numeracy skills conducted by the Directorate of Primary Education every 2 years to measure system efficiency, and in Primary Education Completion Examination results—the terminal exam that each child has to pass to get the certification of completion at the end of the primary cycle (CAMPE, 2015; DPE, 2015a, 2015b). Nonetheless, disparities widen higher up the system with very low female participation in higher education, and retention remains an issue from secondary level onwards. At the official primary entry age, more boys (37%) remain out-of-school than girls (26%) (Department of Foreign Affairs and Trade [DFAT], 2015). However, school participation is at its highest for girls at age 8 and declines thereafter as they hit puberty. At age 15, more girls (46%) remain out-of-school than boys (43%) (DFAT, 2015). The reason behind declining girls' participation can be explained by

the widespread practice of child marriage, where 65% of girls in Bangladesh are married off before they are 18 years old (BBS & UNICEF, 2015). Almost 90% of girls aged 10–18 are victims of public sexual harassment according to Bangladesh National Women Lawyers Association; therefore parents, fearing their daughters' security, withdraw them from school and try to marry them off as soon as they hit puberty (Akhter, 2013, pp. 2–3).

Bangladesh has one of the world's highest rates of child marriage. In 2013, approximately one in three women aged 15–19 years was currently married, while close to one in four women aged 15–49 years had married before age 15 (BBS, BIDS & UNICEF, 2013). Early marriage and threats triggered by this, such as dowry practices, early pregnancy and domestic violence, compel girls to discontinue education beyond the primary level. Girls' progression to secondary level is halted by situations where occupational and life choices for girls and boys are streamed based on stereotypes, not actual ability (DFAT, 2015). Early marriage and education are inversely correlated, where women are more likely to be subject to child marriage if they had no education (73.1%) as compared to those having secondary or higher level of education (31.7%) (BBS & UNICEF, 2015).

Girls' meaningful participation in learning, decision-making, taking leadership roles in school and community and aspiring for further education and work still remain significantly low. Unsafe school environment, lack of separate toilets and menstrual hygiene facilities, and biases in teacher behaviour and textbooks are the factors that affect girls' chances of staying in school (DFAT, 2015). Sexual harassment and gender-based violence still act as significant barriers but are seldom reported, making it difficult to provide valid statistics. Discriminatory social norms contribute to gender inequality, including early marriage and early motherhood, traditional seclusion practices, and the gendered division of labour (UNESCO, 2015b). Because of girls' low-income prospects, family investments in girls' education remain lower. Boys received more support from family members (49.9%) compared to girls (45%) during their Primary Education Completion Examination (CAMPE, 2015). Direct or hidden costs for education can disadvantage girls where family resources are limited (UNESCO, 2015b).

Geographical Disparity

While national averages indicate homogenous development across the country, smaller-area estimates confirm the existence of significant disparities. After poverty, geographical isolation emerges as the strongest determinant for the marginalisation of children and their communities. Distribution of out-of-school children remains highly uneven (Nath & Chowdhury, 2009). Figure 3.2 illustrates which parts of the country host most of the out-of-school children. The actual concentration points become clearer when estimates are taken from district further down to sub-district levels. The mapping makes it clear that averaging at the district level can mask presence of high number of out-of-school children in certain sub-districts, highlighting

the need for availability of data down to smaller area units to be able to better understand the geographical disparity.

For example, tea gardens are home to impoverished ethnic minority communities who work for the tea industry at a minimum wage. A study found 27.4% of primary and 56% of secondary school-age children living in tea gardens remained out of school (Nath, 2009) in a case where poverty was reported as the main reason. The opportunity cost was higher for boys for their likelihood to be involved in the tea industry, however, girls were affected differently, as they were required to work at home.

In Bangladesh a high proportion of rural households remain functionally landless, forcing people to live in marginal areas, such as *chars* and *haors*. The *char/haor* dwellers are marginalised by lack of services, poor communication networks,
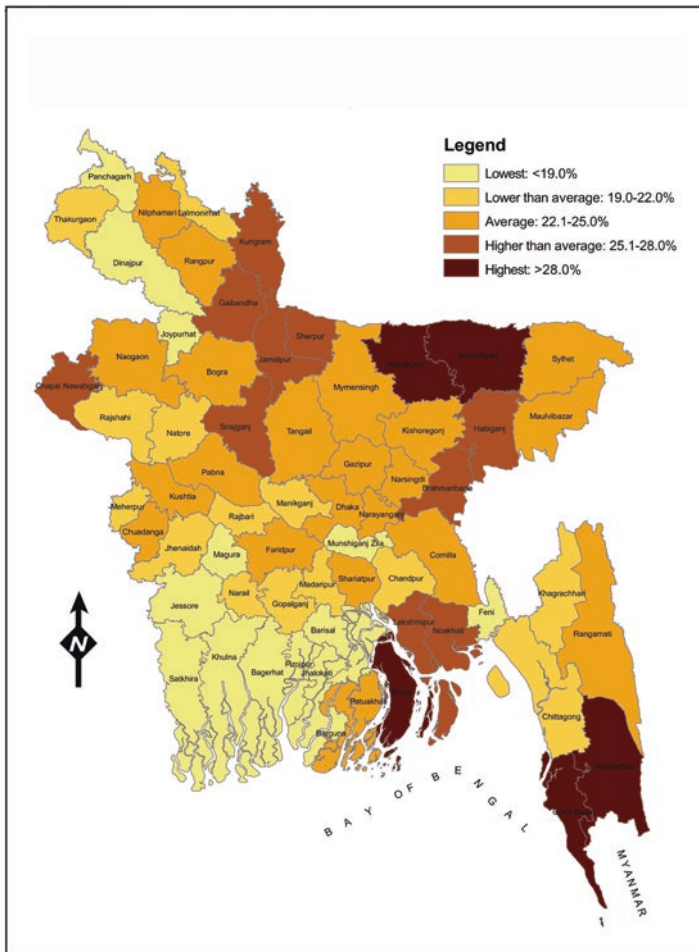
Fig. 3.2 Geographic distribution of out-of-school children aged 6–10 years. (Source: Child Equity Atlas; BBS, Bangladesh Institute of Development Studies [BIDS] & UNICEF, 2013)
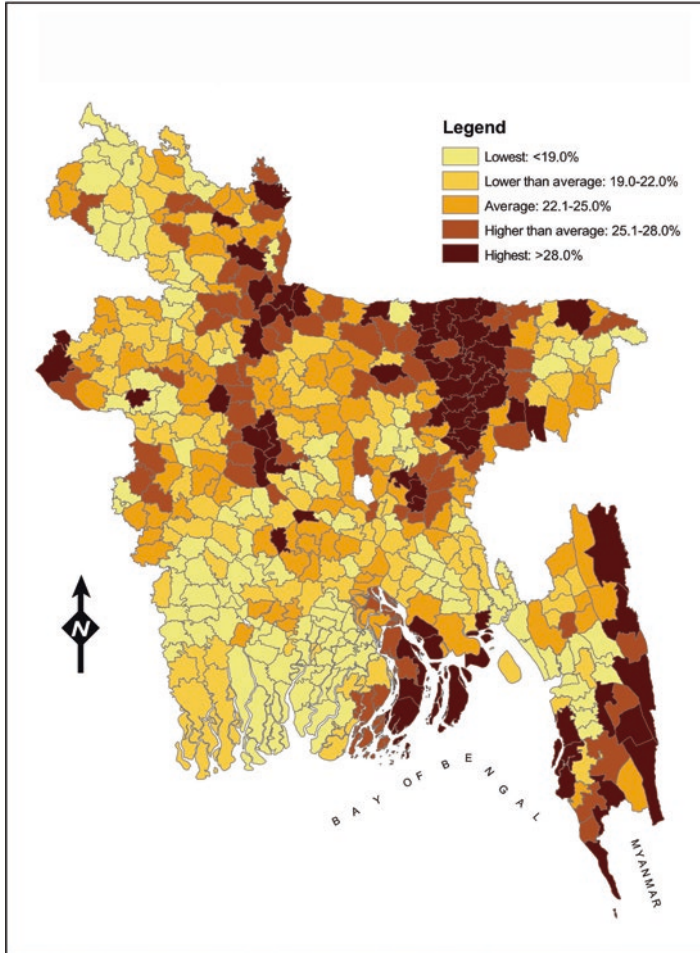
Fig. 3.2 (continued)

and remain disconnected from the benefits of mainland (Raza, Bhattacharjee & Das, 2011). In Sylhet division, for example, *haor* areas hosted most of the out-of-school children, and in these areas, girls were found to be more vulnerable at both primary and secondary levels (Nath, Yasmin & Shahjamal, 2005). Poverty and inaccessibility were reported as the major reasons behind non-participation in *haor* areas.

Access to school in *char* areas has typically been one of the worst factors. An estimated 40% children of age 6–15 years in North Char and 60% in Mid Char areas, and 46.4% in *coastal areas* were out-of-school (CARE Bangladesh, 2006). Due to sudden and slow onset disasters in the coastal areas, cultivable land, crops and homestead are often damaged. Children face a higher degree of hazards to access schools due to the unavailability and unaffordability of transportation facilities. In both cases, high educational expenses were reported as the main cause for pushing children out-of-school.

Characterised by mountainous terrain and dense jungle, the *Chittagong Hill Tracts (CHT)* is a topographically and demographically distinct area from the rest of the country. It is inhabited by 11 ethnic groups, each retaining a distinct language, culture and justice system (Unrepresented Nations and Peoples Organization [UNPO], 2008). Various surveys continue to rank CHT among the lowest performing in different development indicators. According to Multiple Indicator Cluster Survey 2012–2013, more than 40% of children from this region do not attend pre-primary education and miss developmental readiness. In the CHT only 27.63% of school-entry age children enter the first grade. The primary and secondary net attendance rates stand close to national averages with gender parity. However, still one third of primary and more than half of secondary children remain out-of-school (BBS & UNICEF, 2015). The reasons include inaccessible terrain, dispersed population habitat, linguistic and cultural diversity, which, together with straightjacket national policies and programmes, make educating ethnic minority children a major challenge. Lack of transport facilities, high transport costs, tensions stemming from ethnic conflicts and low parental awareness are bottlenecks CHT children face while accessing education. Quality continues to suffer due to chronic vacancies in remote locations. The issue of multiple languages remains as a barrier in ensuring quality interaction (Durnian, 2007), where children from different ethnolinguistic communities may participate in one classroom, while the teacher can come with a different language ability.

Although as a whole the situation of city/urban areas is better than the above-mentioned disadvantaged pockets, they however host a special pocket of disadvantage: *slums*. In all development indicators slums perform worse than rural areas, with better-off urban areas outperforming them both (UNICEF, 2010). The poorest of the poor usually end up in slums, and suffer from severe social-service deprivation. Education indicators for slum children are the lowest. Net enrolment is just 70%, over half of those enrolled leave school prior to Grade 5, and drop-out rates are more than six times the national average (Cameron, 2010). In addition to high drop out and repetition rates, slums have an extremely poor ratio for gender parity in secondary schools and three times more child labour than the national average (UNICEF, 2010). Around 19% of 5–14-year-old slum children were involved in work, the rate being the highest among other marginalised groups (BBS & UNICEF 2007).

Slum children are forced to drop out due to extreme poverty, mobility of makeshift settlements, slum evictions, inadequate schools, poor-quality provision, high opportunity cost and low access to other services and safety net programmes (Cameron, 2010; World Bank, 2007a). Those attending schools are often first-generation learners, and are from markedly poorer households typically headed by a day labourer or a female head, with little education, low access to information, and have low food security and high prevalence of ill health. Lacking a literate home environment, these children are typically ill-prepared for school (Cameron, 2010).

Learning and Assessment Disparity

Wide learning disparities become evident when parameters such as socioeconomic background, gender and geographic location are taken into account. The way instruction is organised raises risk for children 'at risk of dropping out', as their learning needs remain mostly unaddressed due to large class size, low contact hours and a predominant use of group teaching not catering to individual needs. The 35–40 min lesson period makes the learning process fragmented and reduces time-on-task. Equal emphasis on all subjects instead of more time for the foundational skills of reading, writing and numeracy undermines the importance of learning basic learning-tools in early grades (CAMPE, 2015). Performance of PECE examinees in languages was significantly worse than other subjects (CAMPE, 2015), which indicates children's inability to move from 'learning to read' to 'reading to learn' phase.

In National Student Assessment 2013, while 75% and 57% of Grade 3 students performed at Grade 3 level in Bangla and Mathematics respectively, only 25% of Grade 5 students performed at Grade 5 level in Bangla and Mathematics (DPE, 2015b). This shows how learning disparities are widening as children progress through the upper primary grades. In fact the National Student Assessment results in 2011 and 2013 have reported no improvement in student achievement, showing system inefficiency in equipping children with foundational skills of literacy and numeracy.

When many developed countries have banished high-stakes public examinations at primary level considering them more harmful than beneficial (CAMPE, 2015), the Primary Education Completion Examination was introduced in 2009. The exam infused inequality by providing separate treatment to a section of 'good' students to ensure a 'perfect' score (CAMPE, 2015). This not only instilled unfair favour for children with higher academic abilities and marginalised those who could not succeed, but students of other grades were deprived of teachers' attention (CAMPE, 2015). The schools channelled most resources—the best classrooms, best teachers and the most contact hours—for the Grade 5 children to cater to examination demands, thus depriving the lower grade learners. The way the examination is conducted and the use made of it do not support learning, as it is aimed at grading children, not providing feedback so that students can improve their learning (CAMPE, 2015; Odland, 2005; Perrone, 1991). Also there are stark differences in the Primary Education Completion Examination and National Student Assessment results. While the Primary Education Completion Examination results show that 98% of students passed, the National Student Assessment reveals only one quarter actually acquired grade-level competencies. The discrepancies between the two assessment results—both administered by Directorate of Primary Education—not only challenge reliability but also the validity of the system.

Ethnicity Disparity

The issues around ethnicity have been partly discussed earlier for the CHT; however ethnic minority communities also live across other land areas in the plains. Bangladesh is home to around 45 distinct ethnic groups, comprising around 1.6% of the population. About one fifth of the ethnic minority children are out-of-school, and both primary and secondary net intake rates are below the national average (Nath, 2009). Comparison showed CHT children are more vulnerable to non-participation than their plain land counterparts. There are also considerable differences in school participation among the different ethnic groups. For example, *Chakmas* are in a far better position than the *Mros*—one of the most endangered ethnic communities (Chowdhury, 2015).

As in many other countries, ethnic minority children face special educational disadvantages, as the language of instruction and textbooks are in a language different from their mother tongue. From a learning perspective, this is counterproductive (UNESCO, 2012). Children not only find it difficult to cope with a medium of instruction other than their mother tongue, but also find it extremely difficult to engage in learning tasks. Moreover, teachers feel overwhelmed by children's inability to participate, and the early experiences of school failure have a damaging effect on further learning ability (UNESCO, 2008).

As global evidence suggests, teaching and learning in the mother tongue has a positive impact on literacy development and overall learning, especially during the early years (UNESCO, 2012). It increases coping ability during transition from home to school, facilitates meaningful classroom interactions, develops confidence and comfort in learning, and produces better performance (UNESCO, 2008). Although there are 45 ethnic groups, Bangladesh lacks experience in mother tongue-based Multilingual Education (MLE). At present only a few NGOs are implementing Multilingual Education on a limited scale, with no coordination among the key partners.

Children with Disabilities

Children with disabilities (CwDs) are one of the groups most vulnerable to exclusion; however there is a significant lack of data regarding their school participation in Bangladesh. Only 11% had access to some sort of education (CAMPE, 2011), while only children with mild disabilities were enrolled in schools (DPE, 2011b). Mild disability refers to the slow rate of maturation, reduced learning capacity and inadequate ability in social adjustment. Out of 2.6 million CwDs, only about 1500 had access to special education schools which were under the social welfare department (Ackerman, Thormann, & Huq, 2005). Ahsan (2013) identified key barriers in

CwDs' participation in education, including the non-cooperative attitude of teachers and school authorities, the lack of teachers' capacity and access to resources, negative peer attitudes, discriminatory school policies, unavailability of screening tools, inaccessible physical environments, negative attitudes of family members due to the social stigma attached to disability and the lack of inter-ministerial coordination along with confusing and contradictory policies that support both inclusion and segregation (see also Malak & Tasnuba, Chap. 7, this volume).

Children of Sex Workers

Children of sex workers are one of the most marginalised and socially excluded groups in Bangladesh. Roughly half of them do not go to school (Alam, 2005), as there are no government facilities inside brothels. Social stigmatisation results in people withdrawing their children from schools if sex workers' children are enrolled. While a few NGOs have stepped in to provide non-formal education in some brothels, they have been heavily external aid-dependent and unsustainable. National estimates are unavailable in this regard.

Refugee Children

At an abysmal time when the world refugee crisis has reached its peak, Bangladesh has hosted Rohingyas, a persecuted Muslim community facing forced eviction in Myanmar, for nearly 25 years. While 30,000 refugees are registered under two camps, around 100,000–200,000 more live illegally outside camps (United Nations High Commission for Refugees [UNHCR], 2007). The Rohingya children are not entitled to enrol in government accredited formal schools. The host community and central and local government authorities discourage their access to schools, envisaging that any support would encourage more influx from bordering Myanmar. The unregistered Rohingya children, growing up with no formal education, can only look forward to a life of exploitation and underpaid work.

The Need for Equity-Informed Strategies

Bangladesh's performance in economic development has been impressive, most having taken place since the early 1990s (World Bank, 2007b). Yet the benefits have not been evenly distributed, and economic inequalities are in fact widening (UNICEF, 2010). Economic growth is necessary for poverty reduction and overall development. However, evidence from other countries shows that poverty reduction is more dependent on inequality reduction than economic growth, a lesson from

which Bangladesh could largely benefit. There is growing evidence that investing in education and protection of a society's most disadvantaged children affords benefits to all and can lead to sustained growth and stability (UNICEF, 2010).

A recent multi-country study confirms statistically significant relationships between inequality in education and violent conflict (UNICEF and Family Health International 360 [FHI360], 2015). The likelihood of violent conflict doubles in countries with high levels of educational inequality. Reducing inequality therefore benefits not only disadvantaged children, but all. Also the cost of failing the excluded children for another 15 years would be high in deepening poverty and triggering further conflict and violence.

While there is no 'cure' for solving the ubiquitous problem of educational inequality, galvanising programmes and policies with an 'equity' perspective can identify exclusion and ways to address it systematically. Unless this is done, the national averages will continue to mask the deeply entrenched inequalities, pushing many children out of school. The 'equity bottleneck' analysis makes it clear that some issues need urgent attention from upstream policy and on-the-ground programmes to reach children left behind and advance the development agenda more equitably.

Research has categorically proven that *ECD* is critical for building foundational cognitive and behavioural skills and equalising learning opportunities by creating a 'level playing field' for disadvantaged children by preparing them for formal learning environments. However, parental understanding of early stimulation remains very low in impoverished communities, which explains why children from poor socioeconomic backgrounds cannot thrive equally to their wealthy counterparts. Expanding ECD provisions in urban slums and special disadvantaged pockets can be an effective strategy to ensure children are adequately ready to participate in primary education on time.

At any given point, formal education will fail some children, particularly the most disadvantaged ones. Well-targeted, accelerated and flexible *second chance education* programmes linked with vocational skills development are critical to achieve maximum gains in reaching these children. Expanding secondary education is important because low participation in this level means low participation in a skilled workforce, low recovery from poverty, higher incidence of child marriage and child labour and low-quality teacher supply to the primary level. Increasing the number of secondary schools, particularly in remote corners, and enhancing state support to run secondary education combined with special incentives for poor children, social protection for girls, community mobilisation initiatives to combat child marriage practices and creating opportunities for vocational/technical education can offer the ever-increasing primary education completers a route to further education.

Gradually *eliminating harmful social practices* such as child labour, child marriage and corporal punishment need to be addressed through social mobilisation activities. A comprehensive child rights policy backed up by laws needs to be aggressively implemented to combat child labour and violent disciplining in schools. Teachers must receive training on non-violent means to manage classrooms. Prohibition of child marriage should be strongly imposed, and the current

amendment of the Early Marriage Inhibition Act 2014, where the minimum marriageable age for girls is lowered to 16 years (if parents want), should be ruled out immediately, as according to national and international acts, such as 'The Children Act, 2013' and the 'United Nations Conventions on the Rights of the Child', all people under age 18 are children.

Reducing all forms of gender inequalities is a priority for all to benefit. A shift from parity to gender equality is needed to enable all girls to reap the full benefits of education (UNESCO, 2015b). This shift refers to the fact that due to the push for parity by EFA goals, many education systems have achieved gender parity goals referring to equal numbers of boys and girls enrolling in schools. However, as Wiseman (2008) pointed out, the question remains as to whether these parity indicators are masking gender inequalities in the system and in the broader society in relation to the status of women in social, political and economic spheres where the education systems are located. Critical feminist literature suggests that institutionalised sexism is a hallmark of schooling that reproduces a patriarchal system through overt (e.g. formal gender segregation) or subtle (e.g. hidden curriculum) forms. On the other hand, sociological literature suggests that gender differences in higher education and labour markets persist and that these differences affect schooling choices for girls and their integration in economic development (Wiseman, 2008).

In Bangladesh gender-segregated seating arrangements start from Grade 1 throughout the primary schooling, while single-sex schools are a popular form at the secondary level. Therefore, elements of gender stereotyping in the current schooling culture should be carefully examined, and school capacity and resources should be ensured so that gender-inclusive environments can be created within schools, as well as boys and girls being able to start challenging gender stereotypes, leading to an equal participation in socioeconomic and political spheres. This can start with simple strategies such as mixed seating arrangements; breaking stereotypes that encourage reproduction of gender inequality, such as engaging both boys and girls in cleaning and guest entertainment duties—tasks traditionally allocated to girls only; having separate toilets for girls and boys, with menstrual hygiene facilities for girls; and encouraging girls to take leadership roles in various in-school activities. In addition, community awareness raising programmes can be developed to involve community members in creating a truly gender-inclusive school environment.

The government should consider developing a comprehensive strategy for Children with Disabilities' (CwDs) physical, social and pedagogical inclusion. While schools should be physically accessible, they should also be welcoming, nonintimidating and truly inclusive. Parental and community awareness activities should go along with teacher training programmes that equip them with necessary pedagogical tools to address the special learning needs of CwDs. Policy intentions in themselves are not enough; actions must be taken to ensure that the CwDs can participate in schools. These actions should be multifaceted at the service level (schools accessible by CwDs), the capacity level (teachers know how to deal with CwDs integration in learning process) and at the awareness level (communities do not attach stigma to CwDs and take them to schools). Activities in isolation will not

help. Small-scale school level pilots can be undertaken to generate a model that demonstrates inclusion at multiple layers leading to full participation of CwDs.

Ensuring *mother tongue-based multilingual education* along with establishment of geographically appropriate school policies supported by culturally inclusive curricula can lead to the more meaningful educational participation of ethnic minority children. For this too, a sensible and well-planned comprehensive pilot should be carried out, before going for mass-scale intervention. For example, producing textbooks in different languages is not a solution. If the teacher's capacity across ethnic community inhabited regions is not well thought out, textbooks will be of little use. Additionally if logistical readiness at the school level is not ensured, there will be no classrooms and teachers to teach subjects using textbooks written in different languages.

Most fundamentally, if the primary education competency framework does not incorporate learning expectations for mother tongue literacy, as there is for Bangla and English languages, it will mean that communities and schools will not make efforts to teach those textbooks/languages. Therefore well-thought-out concrete action plans need to be undertaken before introducing fancy policy statements and unrealistic inputs, such as textbooks in minority languages. More importantly, in addition to putting pedagogical weightage on the mother tongue of ethnic minority children, it is also important to pass strong messages to children through the official curriculum that their ethnic identities are equally valued and celebrated across the broader curricula, school life and the society at large.

While expanding general service provision, *supply-side factors*, particularly minimum quality standards of services and facilities, should be ensured, so that schools are available, accessible and utilisable. Low levels of parental awareness combined with poverty-related pressures lead to low utilisation of available services. The society's overwhelming bias towards 'first boys'—often the privileged ones—leads to the social perception that children from poor families are not capable of pursuing academic learning. Therefore, addressing *demand-side factors* should be attended to so that parents can make informed decisions in ensuring the timely enrolment and completion of their children's education.

Single-sector interventions cannot lead to expected results, as the functions they perform are considerably stymied by a broad set of socioeconomic factors. Targeting the most disadvantaged children with *multisectoral interventions* is crucial. For example, education interventions in selected poverty-stricken areas could be supported with a comprehensive set of health, nutrition and livelihood support programmes so that the beneficiary communities could come out of the vicious cycle of disadvantage successfully and in a sustainable manner.

Acknowledging that quality data are needed to plan and implement interventions, a regular and *systematic data collection* process should be institutionalised by the government bodies, which can generate authentic, meaningful, usable data to carry out equity bottleneck analyses periodically. For example, the Directorate of Primary Education's sector performance report provides only national level data. Data at district, sub-district or further smaller units are unavailable in the Annual Sector Performance Reports nor are there data on specific disadvantaged groups,

such as children with disabilities or ethnic minority children. In addition to strengthening Education Management Information System (EMIS), investment in grounded, longitudinal qualitative research can provide evidence for information gaps.

Strengthened coordination of government and NGO service providers and complementarity of formal and non-formal education with a call for a more equitable distribution of services is needed to ensure Universal Primary Education. Currently there is no functional coordination among GO-NGO service providers; as a result some areas are experiencing service saturation, while some are remaining service-deprived.

Education sector planning in Bangladesh is highly centralised, with virtually no planning capacity created at subnational and service levels. Meaningful *decentralisation* of authority and resources is important to ensure education services are responsive to local demands.

Conclusion

Educating every child is a social justice imperative. To the degree that any child has an unequal chance in life—in all social, political, economic, civic and cultural dimensions—her/his rights are violated. As per various commitments, the government has to ensure the rights of every child, everywhere. Also, reducing educational inequality is not merely a moral imperative. It is the best possible investment a country can make to yield larger dividends for poverty reduction and economic growth and pave the way for greater social harmony based on egalitarian relationships. If the current inequality patterns do not change, the socioeconomic implications would be high in terms of unskilled workforce, higher levels of poverty, disease and increased risk of conflict, which will not be contained within the country's border (Kim & Hulshof, 2016). Therefore, ensuring quality education for all is a transnational priority.

However, social inequalities are so deeply entrenched that individuals, communities and schools feel that discrimination, bias or favouritism is justified in certain contexts, without fully understanding the consequences. For many, accessing education services is still prohibitive and there is a greater need for state investment in reducing inequalities to boost overall socioeconomic development (UNICEF, 2010). With the new set of SDGs, there is a renewed momentum around the right to education in all settings now.

Understanding education as a common cultural human effort, it is time to take a paradigmatic shift from uniform quantitative expansion to an approach that takes into consideration the differentiated needs of geographies and communities and advocate for an equitable service expansion with targeted interventions tailored to specific needs. In this way the country should start to invest in human capital development in the most disadvantaged children of Bangladesh. Educational provision should ensure that children's location, socioeconomic status or conditions do not determine access, at least during the first two decades of their life—from birth through adolescence.

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Chapter 4
Education in Emergencies: Examining an Alternative Endeavour in Bangladesh

Muhammad Ishaq-ur Rahman and Bruce Missingham

Abstract This chapter presents an example of the relatively new notion of Education in Emergencies in Bangladesh, relates it to existing theory and practice in the field and draws out lessons from applied experience for Education in Emergencies in practice. In doing so it systematically engages with and reviews the international Education in Emergencies literature and applies that knowledge to help analyse and draw lessons from a case study entitled 'Anondo Biddaloy – Alternative Education for Sidr Affected Children'. The project was implemented by the country field office of an international humanitarian organisation – Islamic Relief Worldwide (IRW) – as part of its disaster response efforts in the wake of a super cyclone Sidr that struck coastal Bangladesh in late 2007. The first author was a proactive participant in the development and implementation of the project, and this enabled the authors to draw upon his first-hand experience, as well as relevant project documents to frame the 'Anondo Biddaloy' project into a useful case study. The paper suggests that helping regain the students' interest and confidence in education through alternative education arrangements and transition back to formal schooling rather than teaching to the formal curriculum could be a central goal for Education in Emergencies initiatives in a post-disaster setting.

Keywords Education in Emergencies (EiE) · Alternative education · Nonformal education · Disaster management

M. I. Rahman (✉)
Radiance Community Services Network, Toronto, Canada
e-mail: m.i_rahman@yahoo.ca

B. Missingham
School of Geography and Environmental Science, Monash University,
Melbourne, VIC, Australia
e-mail: bruce.missingham@monash.edu

Introduction

In an emergency response, the provision of food and water, shelter and medical treatment has historically been prioritised over the provision of education. International humanitarian organisations working in emergency assistance have developed rapid-response models aimed at providing such basic essential services for a long time (Kamel, 2006). Yet until fairly recently, there has been a lack of attention to delivering or prioritising education assistance to respond to the psychosocial and educational needs of children and their families in times of crisis and displacement (Burde, 1999; Nixon, Kesler, & Nuttal, 1996; Vargas-Baron, 2005). That trend started changing during the 1990s, and by the turn of the century, many humanitarian agencies developed a growing awareness of the potential for education programs to enhance humanitarian goals such as stabilising communities, providing safe spaces for parents and children and promoting reconciliation in cases of war and civil conflicts. This has paved the way for an increased interest by aid agencies in Education in Emergencies (EiE), an education that accounts for the continuous learning and psychosocial wellbeing of the target groups during an emergency. As Kamel (2006) noted, to the agencies supporting EiE initiatives, while 'education' goals have been important as always, they likewise have valued the broader impacts created by such programs and have therefore become ever more interested in supporting similar programs.

This chapter presents and analyses an example of the provision of education in response to a natural disaster-derived emergency, relates it to current theory and practice and draws out lessons from applied experience for EiE. Hence, pivotal to this paper is the case study of the Anondo Biddaloy (School of Joy) project, an initiative by the Bangladesh field office of the international humanitarian organisation Islamic Relief Worldwide (IRW) as part of its disaster emergency response efforts to a catastrophic cyclone called 'Sidr', which caused widespread death and damage in rural Bangladesh in late 2007.

Cyclone 'Sidr' was a Category 4 cyclone and the third natural disaster to affect Bangladesh in 12 months. A total of 30 coastal districts of south-western Bangladesh were impacted, 8 moderately, while 4 districts were classified as 'severely affected' (BUET, 2008; GoB, 2008). 3.45 million coastal inhabitants were exposed to storm surge-related inundation (Dasgupta et al., 2010), and Save the Children (2008) reported that 3347 people were killed by 'Sidr', 55,282 injured, while 871 were unaccounted for. Furthermore, of the 16 million households in the 30 affected districts, 1 million households lost their dwellings, and an additional 1.5 million households sustained lesser but significant damage (ILO Bangladesh, 2008).

In addition, Sidr also killed around 1.2 million livestock and damaged 2.4 million acres of crops (Chugtai, 2008). The total economic loss incurred was estimated close to US$450 million in the first year (BUET, 2008), but this figure eventually reached US$1.7 billion (GoB, 2008). Its impact on the country's education system was devastating too, having caused full damage to 2429 and partial damage to 7226

school infrastructure and prompted the destruction of local livelihoods, creating economic barriers to children accessing or returning to school (GoB, 2008).

Islamic Relief Worldwide had been acting as a leading response and recovery organisation in the wake of natural disaster-induced emergencies in Bangladesh since the devastating cyclone of 1991 (Rahman, 2012). In this case, in order to assist in the recovery of the outstanding loss in education due to the cyclone 'Sidr', Islamic Relief Worldwide launched the 'Anondo Biddaloy' project, which over a 1-year period had aimed to provide 'nonformal' schooling to affected children in two of the worst affected districts (Bagerhat and Patuakhali), provide the encouragement and educational resources for them to access school education and return to a sense of 'normal' school routine and enable the children to eventually transition back to formal schooling. Although Islamic Relief Worldwide had a lot of experience in disaster response, it had little knowledge of EiE. The project was developed out of a careful situation analysis of children's and their families' needs in affected areas and also well-established formal and nonformal models of schooling in Bangladesh.

As this chapter seeks to explore how the project strategies link with recent literature on effective EiE strategies in order to suggest the important lessons for EiE in practice, the following sections engage critically with relevant EiE literature and knowledge, present the case study in detail and analyse it based on the knowledge from the literature. However, it is worth mentioning that Education in Emergencies is a nascent, emerging field. Almost all of the important international literature about theory and 'best practice' in EiE has been written by development professionals working with international agencies and concerned with practice rather than by academics and scholars.

Education in Emergencies: Context and Characteristics

'Education' is defined as a process of learning (Molteno, 1999), through activities in and out of school and through formal and nonformal initiatives (Tomlinson & Benefield, 2005), and 'emergency' is a crisis situation that overwhelms the capacity for a society to cope by using its resources alone (Save the Children, 2001). A crisis situation can be the result of human (war, armed conflict, etc.) or natural (floods, cyclone, earthquake, etc.) phenomena. As of 2006, there were 75 million children out of school, with almost 40 million estimated to be affected by man-made complex humanitarian emergencies, while the rest are believed to be caught in emergency situations created by natural disasters (Save the Children, 2009; The Sphere Project & INEE, 2009). Both types of emergencies bring about impacts on various aspects of people's life in different stages where education suffers crucially. However, education is believed to be capable of creating an enabling environment for communities in responding to emergencies effectively, and therefore the need for education in emergency situations started getting importance out of these such extraordinary situations.

Development literature from the 1990s such as 'Rapid Educational Response in Complex Emergencies' by Aguilar and Retamal (1998) and 'Education as a Humanitarian Response' by Retamel and Aedo-Richmond (1998) offered discussion on education characteristics in humanitarian crises in countries like Rwanda, Afghanistan, Somalia and other places. Kamel (2006) maintains that the need for Education in Emergencies was first pointed out, although with limited references, during the Jomtien World Conference on Education for All (EFA) in 1990, and since then it started getting attention. Eventually the World Education Forum held at Dakar in April 2000 appeared as the first organised attempt to successfully put education in humanitarian crises on the international agenda. INEE (2010) suggests that the important role of education in response to complex human emergencies had only been recognised with wide attention fairly recently among practitioners and theorists of disaster and emergency response. Apparently a growing consensus about the rights to education and access to benefits derivable from education providing a stabilising and reassuring environment could be recognised as one of the key driving forces that brought education into the limelight. Several human rights declarations such as the rights to education and the rights of children reinforced the call for Education in Emergencies.

Due to the different settings of EiE and the wide-ranging needs, the EiE definition demands that particular focus be placed on the context/settings and reference to a comprehensive need for children affected by any emergency. Hence, Save the Children Alliance defines EiE as 'education that protects the well-being, fosters learning opportunities, and nurtures the overall development (social, emotional, cognitive, and physical) of children affected by conflicts and disasters' (Sinclair, 2002, p. 23). While this definition refers to extensive needs, it refers to the contexts simply as conflicts and disasters, i.e. man-made and natural. On the other hand, the term 'emergency' used by UNICEF includes two types of emergencies, namely, 'loud' emergencies that include human-made disasters, such as civil strife and war, and natural disasters, such as floods, earthquakes, etc., and 'silent' emergencies that include HIV/AIDS, extreme poverty, children living on the streets, etc. (Pigozzi, 1999). Notably, UNICEF adds pandemics as a source and thereby expands the context of emergency.

Varied backgrounds of emergencies again lead to the consideration as to whether education should be implemented during the early rehabilitation and reconstruction phase or during long-term postcrisis reconstruction. While emergencies created by a disaster may last for a relatively short time, emergencies created by ongoing conflict or war may last years, if not decades. Therefore, responses to emergencies need to be devised according to the nature and length of the impact. While Sinclair (2002) maintained that the Dakar Framework affirms EiE emergence during the early phase, the UNESCO definition of educational emergency as a 'crisis situation created by conflicts or disasters which have destabilized, disorganized or destroyed the education system, and which requires an integrated process of crisis and post-crisis support' (UNESCO, 1999, pp. 2–3) suggests the need for educational support in all phases. Also, presumably education activities in emergencies are likely to vary according to the nature of the crisis and the cultural context of a country, which

implies that specific types of education programs might be given preference over others in order to best fit that particular context. The following two sections focus on presenting the rationale of EiE in general and in the specific context of Bangladesh.

Why Education in Emergencies?

Education is a significant human rights, and the world community has long advocated education for all people in all situations because education is not only significant as a right itself, it is also very important in enabling people to access *other* rights and to empower them. Even though emergencies have set a considerable amount of challenge in the realisation of education for all, education as an entry point can be used to provide an array of services during any emergency. Pigozzi (1999) suggests that education plays a critical role in normalising the situation for the child and in minimising the psychosocial stresses experienced when emergencies result in the sudden and violent destabilisation of the child's immediate family and social environment. Nicolai (2003) suggested that education should be seen as a priority component of emergency assistance as it plays an important role in meeting children's basic needs in both the short and longer terms and helps to reduce vulnerability to disaster. Bensalah (2002, p. 11) suggests an educational response in emergencies and reconstruction might be required for the following five reasons:

- Education helps meet the psychosocial needs of children

Simply fulfilling primary needs like food, shelter or healthcare is not enough for people, particularly children, affected by an emergency. An emergency may influence almost all spheres of a child's life. Their private and family life can be disturbed in many ways: death of parents or family members can damage their home or the family livelihood security; they may be separated from family to take up financial responsibility, etc. Other than personal loss, children can face radically changed situations in their social network and the lack of necessary amenities and facilities. In such circumstances schooling or the process of acquiring education provides a child with his/her sense of identity, because school for a child resembles employment for a grown-up (Nicolai, 2003).

- Education is a tool for protecting children in emergencies

The safe and supervised environment of a school can ensure both physical and mental safety for a child. With peers and teachers, they are least vulnerable to trafficking, sexual assault and other crimes which are common during emergencies. This safe environment can also extend care for vulnerable groups like children with special needs.

- Education provides a channel for conveying health and survival messages and for teaching new skills and values

School does not merely provide literacy; it also serves as the most important social environment for children (outside the family), as schools also nurture the children's creativity and provide recreation facilities and socialisation with their peers. Hence, Nicolai (2003) maintains, the routine-based, structured activities of school are able to provide children with stability that will be likely lacking during a time of emergency. Also it might assist children to learn how to cope with increased risks through attaining knowledge. Skills and values that children might learn through education provision during emergencies might include peace, tolerance and conflict resolution.

- Education for All is a tool for social cohesion

'Education for All' has been devised as a significant instrument to ensure that everyone in the society has the capacity to access a significant right, education; thus it is likely to bring social solidity, whereas discrepancies in education might lead to poverty for the uneducated and fuel civil conflict.

- Education is vital to the reconstruction of the economic basis of family

In order to be successful in later life, children need to develop a set of skills that can be acquired through regular schooling and education. Lack of education provision for a significant time due to an emergency situation disrupts the continuity in acquiring such skills. Therefore, Bensalah (2002) maintains education during emergencies has a pivotal role in rebuilding the damaged economic basis for family, local and national life and for sustainable development and peace building in the community.

The erasure of educational opportunities is as damaging as the impacts on socio-political, economic or cultural life, although it is not well understood, recognised and addressed, as it is not visible like other material devastations (Baxter & Bethke, 2009). Situations which emerge out of conflicts or natural disasters deny generations of children the knowledge and the opportunities that education can provide (Humanitarian Practice Network, 2006; INEE, 2010; Nicolai, 2003). Hence, provision of education as an emergency support, in particular for children, has been recommended by scholars and experts working in emergency mitigation.

Education in Emergencies: Bangladesh Context

Taking the above considerations and rationales into account, Bangladesh has additional grounds to justify the need for EiE. Bangladesh has a heterogeneous and complex education system, as different forms of education have been allowed to develop and co-exist simultaneously (Shohel & Howes, 2011). There are three major streams in the system, namely, general education, madrasah education (predominantly Muslim religious education) and technical-vocational education (TVE) which are mainly provided through formal and nonformal channels. The first two streams have again five stages: preprimary, primary, secondary, higher secondary

and tertiary (DPE, 2011). With a total number of 81,500 primary institutions of 10 different kinds, Bangladesh is one of the largest unitary authorities for the primary education system in the world (DPE, 2011). The ten types of institutions include government primary schools, registered nongovernment primary schools, nonregistered nongovernment primary schools, experimental schools, community schools, kindergartens, NGO schools, *ebtedayee* madrasahs, primary sections of high madrasahs and primary sections of high schools (more on the schooling system can be found in Chap. 1, this volume).

While UNICEF Bangladesh (2011) has acknowledged that the primary education system of the country is one of the largest in the world, it has also maintained that the system is still largely unprepared to meet disaster challenges. UNICEF Bangladesh (2010) statistics provide us with an idea of the vulnerability of the education system: between 1971 and 2007, over 120,000 primary schools were damaged by floods and 50,000 by cyclones. This damage to education infrastructure contributes significantly to huge recovery costs and exerts pressure on the country's budget. For instance, the Bangladesh government allocated BDT 11,196 million (US$ 1.7 billion) in just 3 years, 2004–2007, for recovery in the education sector due to three major disasters (HPN, 2010; UNICEF Bangladesh, 2010). The damage to education services caused by a disaster lasts much longer than the storms themselves (UNICEF Bangladesh, 2011). This is mainly due to the use of physical educational infrastructures (school building) as shelters and having fewer shares while competing for resource allocation with other sectors.

The future disaster trend of the country has been assumed to be more extreme. Bangladesh is among the top countries vulnerable to climate change impacts due to a number of geographical and geological factors. Das (2010) mentioned three such factors – first of all, Bangladesh, due to its location in the one of the most geographically vulnerable area of the world, South Asia, is exposed to a number of natural hazards, such as floods, river erosion, cyclones, droughts, tornadoes, cold waves, earthquakes, drainage congestion/waterlogging, arsenic contamination and salinity intrusion on a yearly basis. Furthermore, the predominant geological condition of Bangladesh, which is mostly flat deltaic topography with very low elevation in respect to the sea level, makes it vulnerable to frequent flood and inundation by anticipated global sea level rise. Last but not the least are the cultural attributes, heavily dense population, ever-growing poverty and excessive reliance on primary economic activities (i.e. agriculture) that is highly influenced by climate variability and change.

Such factors are likely to distress Bangladesh in many ways. Das (2010) had estimated that 63 million children in Bangladesh may become physically and socially vulnerable due to the increased frequency and enormity of natural hazards by 2015. While physical vulnerability may include chronic malnutrition, diseases, injury, death, physical abuse and forced labour, social vulnerability includes loss of property and assets, loss of parents and family, internal displacement, risk of being trafficked and lack of educational opportunities. Hence, addressing the need for education in emergency situations induced by natural disasters is gradually being recognised as a priority in the government and its development partners' efforts in

disaster planning and response (DPE, 2011). As the government is stepping forward with policy formulation, aid agencies, community-based organisations (CBOs) and nongovernment organisations (NGOs) have been developing and implementing innovative alternatives (to government systems) in education initiatives, establishing networks and undertaking policy advocacy.

Alternative Education in Emergencies

Emergencies often result in situations where the formal education system (e.g. government operated) might be destroyed or damaged. Teachers and education staff in the government system might be killed or injured or unable to resume normal school operations (Uemura, 1999). Children might have differential needs: when some children may easily re-enter primary education, others may have insufficient knowledge and skills to enter an age-appropriate grade, so they may feel ashamed to join a class with children younger than them (Sommers, 2004). In such situations government capacity for assistance may only provide limited facilities that may deny access of a larger portion of the children in the society (McNamara, 2006). Furthermore, it is difficult for formal schools to experiment with alternative approaches appropriate to their social and environmental context or adapt to local priorities because of control and influence by central state institutions, particularly through a centralised curriculum (Robinson, 1999). In such circumstances, national and international NGOs and multilateral organisations (such as UN agencies) may coordinate and deliver education. Community members and community-based organisations may be involved to an extent that is not normally seen in formal systems, while NGOs and international development agencies may promote 'alternative' approaches to curricula and pedagogy that differ from the government curriculum, which is also referred as 'alternative education', to serve the perceived needs of the particular target population at a given time and in given circumstances.

Alternative education's main features have been identified as a specialised education program taking place outside of the mainstream school system, being an extension or parallel to mainstream education (Cox, 1999), a separate administrative unit with its own personnel and a service that is voluntary and available to everyone, having strong community participation and responsiveness (Raywid, 1983). Baxter and Bethke (2009) defined alternative education as all types of non-formal educational arrangements that lie beyond a country's government education system, mostly operated by organisations like NGOs and CBOs, and that do not have an automatic validation or certification, are ad hoc and tailor-made to specific observed needs and can sometimes work as a bridging arrangement to mainstream formal education.

To summarise, alternative education has two distinguishing features, administration and curriculum, differentiating it markedly from mainstream education. While mainstream education is administered by the government of the country, with

alternative education, the community takes the lead in administering an education program. Curriculum-wise, it lies somewhere in the middle of informal and formal education. While formal education follows a top-down, prefixed curriculum, and informal education does not follow a curriculum and is mainly conversation-based, nonformal education follows a bottom-up and negotiated curriculum (Jeffs & Smith, 1990).

Different emergency situations could call for different types of alternative education. For example, where a specific pandemic is prevalent, an alternative education program could address that issue alongside formal education; a breakdown of a formal education system due to any natural or human-caused disaster could call for a bridging, transitional education arrangement. In their book containing a comparative study of alternative education in different emergency contexts, Baxter and Bethke (2009) classify alternative education into three major types:

- *Alternative access programs*: This type of alternative education program provides an education opportunity to non-enrolled or dropped-out children and youth. They are often operated by NGOs/CBOs to fill the gap of education for particular groups (e.g. the marginalised, victims of an emergency, etc.). An access program may follow formal curricula; however, teachers imparting it may not be recognised by the formal system, and this could follow different pedagogical methods (e.g. learner-centred) from the formal system. This program may be divided into two subtypes:

  - *Bridging program:* This category of access program mainly focuses on enrolling the excluded and drop-outs. Bridging programs are transitional in nature, designed to help the target group to re-enter the formal system (e.g. accelerated learning program).
  - *Parallel program:* This category of access program takes place in a different physical infrastructure than formal schools, enrols mainly marginalised (geographically, racially, etc.) people and is predominantly managed by the community. Pedagogy is traditional, and teachers are untrained and unqualified in this type of program.

- *Alternative subject/curriculum program*: An alternative subject or curriculum provides education on nontraditional subjects which are perceived to be needed for the time. It can be provided for a relatively shorter term to bring some behavioural change to a specific issue such as landmine awareness, or it may be a longer-term intervention to develop an attitude and behaviour in relation to a particular issue, for example, HIV/AIDS awareness, environmental education and so on.

- *Alternative pedagogy program*: This type is usually an adjunct to the alternative access or subject program. Also, it can be used to upgrade the teaching-learning process of the formal school.

However, although the nature of education activities in emergencies inevitably varies according to the nature of the crisis and the cultural context of a country, some common factors should be considered, irrespective of the context. According

to Nicolai (2003), an effective education response in an emergency should be aiming at children's educational continuity; flexible regarding location, timing and methods used; building the capacity of teachers to support children in coping with the mental, physical and social impacts of an emergency; focusing efforts on groups of marginalised children; and finding ways to address community tensions and enhance integration and engage governments, local NGOs or communities themselves as partners. The following sections present the case study of an alternative education initiative in Bangladesh implemented in the wake of an emergency and analyse its effectiveness in light of international case studies.

Case Study: Anondo Biddaloy – Alternative Education for 'Sidr' Affected Children

A tropical cyclone named 'Sidr' devastated the south-west coastal and central areas of Bangladesh on November 15, 2007. The international humanitarian organisation Islamic Relief Worldwide (IRW) Bangladesh was one of many nongovernment organisations which mobilised to implement disaster relief and responses in the affected areas. While 30 out of a total of 64 districts in Bangladesh were affected and IRW had a spatial coverage over 20 districts, it concentrated its efforts in the severely affected areas of south-western Bangladesh, in the districts of Bagerhat, Barguna, Patuakhali and Pirojpur. Most of the responses of the IRW were focused on immediate rescue and rehabilitation and providing emergency shelter, food and medical supplies. The Child Welfare Program of IRW, Bangladesh, was concerned with the broader welfare issues of child survivors, and Rahman (one of the authors of this chapter) visited the impacted area on the 5th day following the cyclone and coordinated the formulation and implementation of an education program entitled 'Anondo Biddaloy – Alternative Education for 'Sidr' Affected Children'.

Although IRW – a specialised organisation that had worked in the crisis relief and recovery sector for a long time – had little inclination to provide education-related support, the project was able to be established as a unique EiE effort in Bangladesh (Rahman, 2012). This section presents the specific context that leads to such an initiative and gives a detailed account of the project in terms of critically examining the educational agenda of the Anondo Biddaloy.

Project Background

As per the UNICEF (2007) report, about 1 million primary-school-aged children had been affected by the cyclone, and about 600,000 children, who were enrolled in primary school, were not taking classes and were unable to attend school, as their school buildings were destroyed. However, after the catastrophe, most of the schools

had reopened in the affected areas, and reconstruction of badly destroyed schools had begun by mid-2008, although normal school lessons had not yet resumed (Save the Children, 2008).

Several presumed reasons could be identified, from Rahman's (first author) personal experience. To begin with, as the cyclone devastated the whole community, teachers were also among the victims, while many of the survivors were busy restoring personal assets, particularly teachers in schools where they do not receive a fixed, regular salary (e.g. teachers at registered and semi-registered primary schools). It was found that while reconstruction of school buildings had begun in some places in mid-2008, schools were not operating by late-2008. Another important factor was communication infrastructure: the cyclone considerably disabled the road network, especially the earthen, semi-paved, brick-surfaced inner roads in rural areas; these were being restored by the government and NGO initiatives with mid- to long-term interventions. However, in the meantime, children living at a distance from their school remained confined within their locality. Save the Children UK and Plan International (2010) research findings supported this fact. The research entitled 'Strengthening Preparedness and Response Capacity in Flood and Cyclone Prone Areas in Bangladesh' that essentially included the Anondo Biddaloy project areas suggested children from pocket areas, especially girls, and students from Grades 1 to 3 could not access schools because approach roads were inundated or damaged even when schools had opened after disasters (Save the Children UK & Plan International, 2010).

Apart from missing education, children were being exposed to various wellbeing issues. Save the Children (2008) child protection rapid assessment commenced 6 weeks after the advent of the cyclone and explored such issues and concerns. Findings suggested that children's emotional wellbeing was disrupted. Evident trauma was acquired due to physical ailments, while loss of parents, siblings or other family members obviously affected emotional wellbeing and was hard to overcome by the children who felt insecure and uncared for. The potential advent of another natural calamity or attack by intruders at night due to the exposed nature of their temporary shelter and living alone, while parents fetched relief, along with the increased influx of 'outsiders' into the village (although mostly due to the relief effort), created security concerns for the children. Exposure to harassment and molestation resulted in part from damage of accommodation and sanitation infrastructures, which forced children to live with new caregivers while often sleeping in the same bed with extended relatives, and the absence of safe latrine compelled adolescent girls and women to go to the toilet in the field after nightfall, which was vulnerable to the occurrence of sexual violence or harassment.

There was a 25% increase in non-enrolment estimated due to a large number of children joining the workforce to help the family to receive necessary resources, and drop-outs increased as children faced added challenges in entering the formal education system due to stigma and shame in school and the inability to catch up. Loss of family livelihoods evidently pushed a marked number of children into a range of dangerous or exploitative labour, such as factory work, day labouring (agricultural, construction) and household help, while exposing them to financial, emotional and

sexual abuse. Unsupervised and irresponsible child migration with families' permission to predominantly urban areas for work or joining an extended family member due to loss of crops and capital items often became cases of child trafficking. Finally, this endemic issue was feared to have increased its appeal to families after the disaster as it could be a survival strategy (lessening the number of dependents) and also a way of protecting family honour (lessening the chance of being 'shamed' by rape).

From such findings, the Child Welfare Program (CWP) could clearly identify gaps in schooling as well as protection for cyclone-surviving children and the need to connect school children back to the formal school system once it was functioning again. Hence, it planned to intervene with an Education in Emergency (EiE) project. Considering school as an entry point to provide services that could address broader child welfare issues along with education, during 2008 the CWP developed the proposal for an EiE project entitled 'Anondo Biddaloy – Alternative education for "Sidr" Affected Children'. It was funded through one of the IRW fundraising partners, Islamic Relief Netherlands (IRN), and with their support the project was finally launched in February 2009, with a budget of approximately US$ 84,000.

Although IRW, Bangladesh, CWP had many years of experience in education – for example, through child sponsorship and adolescent reproductive health education programs – the team had no experience in providing EiE. The CWP team conducted a baseline survey of 690 households (395 in Morelganj and 295 in Galachipa) with the aim of collecting basic socio-economic information about the target families and their children to assess the children's specific needs. The survey revealed that around half of the respondent families had an average monthly income of only US$35 to support a fairly large family (45% of families consisted of 6 or more people). Most families earned a living from informal economic activities (30% were day labourers in agricultural or other sectors, 25% in farming, 15% fishermen). These families were struggling to earn a livelihood after the cyclone and reported that their children's education had become far less important, resulting in school drop-outs for previously enrolled students and non-enrolment for eligible schoolgoers. The survey also found that 99% of children consumed only one meal per day (IRW, 2009).

Project Approach to EiE

The project approach and strategies developed were based on the baseline survey, local research and careful analysis of children's needs in target areas, as well as knowledge of well-established models of nonformal and formal education in Bangladesh. The project approach was inspired by the Basic School System (BSS) of the Centre for Mass Education in Science (CMES) that sought to provide an effective and practical second chance to disadvantaged drop-out adolescent boys and girls for completing their basic education and build self-sufficiency through encouraging social/individual entrepreneurships (CMES, 2012).

Likewise, the goal of the Anondo Biddaloy project was to establish accessible, child-friendly, nonformal schools that would provide education in knowledge and skills which would build children's self-esteem and self-reliance and a supportive school environment including health and recreational services that would help children distressed by the disaster to return to a sense of 'normal' everyday life and routine. However, a key realisation of the CWP team was that many children needed a bridging program that would encourage and support them back into nonformal schooling as quickly as possible and help them to transition back to the formal education system at the end of the project. This fits Anondo Biddaloy within the category of *bridging programs*, while BSS is more aligned to *parallel programs* (see previous section Alternative Education in Emergency).

Project Implementation

Implementation activities were mainly divided into two major parts, *preparatory activities*, e.g. staff recruitment, conducting a baseline survey and setting up the physical structure of Anondo Biddaloy schools, and *execution activities*, such as staff capacity building, project launching, project implementation, monitoring and evaluation, reporting and activities to ensure project visibility, etc. The following sections present a brief description of the activities:

- *Staff recruitment* **–** one of the first and also the most challenging activities was staff recruitment. The project required 20 teachers for 20 schools, 2 project officers (1 for each of the project areas) and 1 accountant for the project – 23 project staff in total. Teachers recruited were mostly local, possessing at least a Secondary School Certificate, and emphasis was given to prior experience of teaching. Project officers were recruited on the basis of their prior experience with leading the implementation of development projects. They were mainly responsible for monitoring day-to-day activities, supporting the teachers with necessary resources, reporting on progress and advocacy and networking with relevant stakeholders.
- *Baseline survey* **–** with the aim of collecting socio-economic information about the target children and their families to assess the children's specific needs, a baseline survey was conducted by the project staff in February 2009. Starting with a Focus Group Discussion (FGD) and then using a snowball method (selecting families who were referred by the primarily selected target families), a total of 690 (395 from Morelganj and Bagerhat and 295 from Galachipa and Patuakhali) households were selected for the survey (results discussed briefly earlier).
- *Anondo Biddaloy school set-up* – the project established 20 Anondo Biddaloy schools in the target subdistricts, 10 in each. Sixteen out of 20 school premises were freely donated for the duration of the project by community members, while the rest were rented. Most of the houses were spare houses not in frequent

use by their owners. While choosing the location of school premises, preference was given to those which ensured closer access to the maximum number of the students. Classroom furnishings were basic – jute rugs on earthen floors, similar to most other NGO-operated nongovernment schools in rural Bangladesh.

- *Staff capacity building* – staff capacity building was a very important issue for the project as the school teachers were not responsible merely for teaching but rather for a whole range of activities, such as surveying students; networking with community people, local leaders, government officials and educational institutions; monthly reporting on planned activities; purchasing different types of materials; and event management.

In addition, the project officers needed to understand the underlying issues related with alternative schooling apart from their regular administrative duties. Therefore, the staff needed to develop an insight into the project, and in order to familiarise staff with the project's spirit and overall IRW culture of project implementation, the project started with an induction program which was arranged centrally. The project also had staff foundation training and periodical refresher training imparted by the CWP. A comprehensive teacher's guidebook for the teachers was developed and made available to them, which contained detailed explanation of the syllabus/curriculum, class routine and how to conduct the class and how to operate everyday activities of an Anondo Biddaloy school.

- *Community mobilisation* – field-level implementation of the project started with a formal community mobilisation meeting in both areas. Government officials from the respective areas, representatives of local government and diverse professionals attended the meetings, whereby they were informed about the project in detail and were approached for possible support. Also, an informal mobilisation meeting was organised at the village level (where the preliminary space for the school had been selected) in participation with the potential students' parents, local elites, representatives from local governments and so on. This attracted huge community participation.

Besides providing free space for the school, the community also engaged in monitoring the school program by forming a formal 'Local Support Group (LSG)' for each school. The LSG comprised seven members including parents and local government representatives, while the respective school teacher supported the Group with secretarial activities, and it monitored the school operation and documented its findings. The LSG met on a monthly basis to discuss their findings and to suggest their recommendations relating to the development of the school program (e.g. maintaining timeliness for school activities, ensuring students' attendance, etc.) and also for rendering necessary support for the schools (IRW, 2010).

- *Structure of Anondo Biddaloy* – each Anondo Biddaloy school housed two classes (of 15 students each), consisting of children of two different age ranges, taught and managed by a single teacher. Thus, 600 children were enrolled in total, taught by 20 teachers. Students were enrolled in a class based on their age. The Sikhon ('learning') class enrolled children aged 5–9 years (i.e. primary

school age), while children aged 10–16 years were enrolled in the Goron ('developing', secondary school age) class. With limited resources to hire teachers or set up separate classrooms, multiage classes are common among NGO-operated schools in rural Bangladesh. The project provided all the children with free educational materials such as school bags, textbooks, notebooks, pencils, etc. as the baseline survey, and secondary research suggested that the diminished financial ability of parents to buy educational materials was one of the important causes for student drop-outs or non-enrolments.

- *Curriculum and syllabus* – the curriculum, developed by the project team, was an alternative curriculum, focused on providing the student with an overall competency rather than grade-specific requirements as set in the government curriculum because as per EiE priorities, teaching to the formal curriculum was not a central goal of the project; rather the project aimed to help regain the students' interest and confidence in education and transition back to formal schooling.

However, the subjects were still chosen mostly in line with formal schooling and also drew upon some of the formal school teaching materials. As the students of an Anondo Biddaloy class were of different ages who were supposed to be in different formal school grades, the curriculum aimed for a common and general competency requirement for both primary and secondary levels based on the expected literacy levels of formal school classes. Baxter and Bethke (2009) endorsed the use of such curriculum for refugees, internally displaced persons and children in post natural disaster situations based on their study in Kenya, Nepal, Sierra Leone and Bangladesh. The curriculum included general education which comprised English and Bengali language, mathematics, general knowledge, practical science, disaster preparedness and response, drawing, health education, trade education that offered age-suitable hands-on trade practice and extracurricular activities such as participating in social improvement initiatives, school operation and various sports (Rahman, 2012).

The academic year was divided into two semesters and each semester was divided into two terms. A quarterly evaluation of the achievement of the syllabus helped monitor the achievements. Oral and written assessments took place, and an alphanumeric grading system was introduced in order to display the achievement rather than the traditional numeric marking. The numeric system easily shows the difference between two students which can be a source of disappointment for them; therefore, the alphanumeric grading system was introduced as a more meaningful alternative. To encourage children in improving their grade, teachers used to track the numeric marks of individual children to ensure consistency and compatibility with the formal system.

- *Class management* – a child-centred teaching-learning method was encouraged by the project, inspired by nonformal methods called the Basic School System (BSS) in CMES schools which is claimed to be different from the nonpractical, formal and rote-learning-based formal government school methods by CMES. The system was mainly designed to enable one teacher to conduct two classes simultaneously and manage all day-to-day activities required for school

operation at the same time. The child-centred teaching-learning method, where children are engaged proactively and the teachers play a facilitator role mainly, was instituted through a range of strategies, such as activity-based and problem-based learning, small group work, older buddies helping younger students and students assessing each other and providing feedback.

- *Activity-based curriculum* **–** achievement of the required competency, set in the curriculum, was designed to be gained through proactive participation by the children. For this, the teachers were trained to impart the curriculum through activities rather than the usual lecture method followed by Bangladesh's formal schools. For example, where the expected competency was that the children would learn to compose words consisting of three letters, the teacher might divide them in groups and engage them in a game of 'as many words as a group can make' within a certain period; later assessment would be carried out by their peers. This method of activity-based teaching is the technique which most engages the children so that the teacher may act as mere facilitator (CMES, 2012).

- *Small buddy group* **–** the whole class was divided into small peer groups. Each group contained five students where there was a mix of better performer and relatively average/below-average performing students of whom one person was the group leader. This worked in two ways: it brought a 'balanced' state of learning, and also the group leader ensured the presence of his/her peer/buddy group member, which resulted into a higher attendance rate in school.

- *Flexible class routine* – the group leader's role as peer educator (for mentoring group members) substituted the teacher's presence in every class. The class routine was devised based on this flexibility. However, the teaching period of two classes was divided in such a way that when one class would attend general education facilitated by the teacher, the other class would conduct a science experiment in their mini-portable science lab, or play indoor games, or learn some livelihood skills (for instance, garment making) supervised by the peer educators or skills training instructor and vice versa.

- *Children's participation in school management* – incorporation of children in day-to-day school operation through the School Operation Committee (details later in life skills education section) was one of the unique components of the teaching-learning method. While this was devised to provide children with hands-on leadership and empowerment training, it also enabled the teachers to manage schools more smoothly. Accordingly, the effort undertaken to establish children's authority in the school, ensured by the curriculum, enabled them to attain 273 days of general education class with, on an average, 95% attendance by the students (IRW, 2010).

- *Healthcare support* – even though healthcare facilities are not part of the education system in Bangladesh (across both formal and nonformal systems), the project provided a healthcare support component for a number of reasons. First, there was evident need for physical and psychological support for cyclone-surviving children, as was established through research by organisations such as Save the Children (2008) as well as the baseline survey undertaken by this project. Second,

all the initiatives by the CWP had an in-built health support component which facilitated its strategic aim of ensuring balanced child welfare. To ensure the health (both mental and physical) improvement of enrolled children in the school, regular monthly health checkup sessions were arranged, providing necessary prescribed medicine, deworming medicine and vitamin A supplementation twice a year and regular tiffin (lunch/light meal) during school days.

In order to provide health support, four doctors were contracted in Galachipa and one in Morelganj, operating nine 'health sessions' (IRW, 2010) in each area, which included services like counseling, basic health checkup, referrals and medicine prescription where necessary. Under this component, 765 students received free prescribed medicine, 594 children received deworming and vitamin B medicines twice during the project period, and 111,437 children received supplementary food, such as fruits, eggs, cake, biscuits, etc., during school days (IRW, 2010).

- *Livelihood skills development* **–** The students who were able and eager to gain livelihood skills were provided with skills training, such as basic computer training, tailoring (garment making), agricultural training (homestead gardening) and so on. To facilitate such training, the 2 areas (Morelganj and Patuakhali) were equipped with 2 computer labs (consisting of 7 computers each) and 14 sewing machines based in different schools. While aimed at developing self-dependency and empowerment among the children, this component enabled skills training in the above-mentioned trades for 537 children, 260 from Morelganj and 277 from Galachipa (IRW, 2010).
- *Life skills education* **–** The school curriculum also included different life skill-focused education for the children. To generate managerial capacity and leadership among the children, each school formed a 'School Operation Committee (SOC)' consisting of students from the school who helped the teachers in managing the school properly. Each SOC was comprised of five members selected (elected in some schools) by fellow classmates and vested with specific responsibilities, for example, the school's physical environment management and event management. The Committee held regular meetings to discuss necessary issues in the school's operation, as well as planning community development work. Thus, the SOC played a leadership role in 114 social and community development projects (IRW, 2010), ranging from activities like tree planting, campaigns against early marriage and dowry, cleanliness campaigns, voluntary road repairing and so on. The school children also organised the observation of two national days of significance, the National Independence Day (26 March) and World Mother's Day, during the project period, focusing on specific issues like commitment to the nation and society, the importance of a family, and the need for safety and recreation for children. These were events which mobilised the community.
- *Recreation* – Recreation with indoor games was built into the EiE curriculum. All the schools were equipped with a mini-portable lab for science experiments (science kit box) and five items of indoor games materials. Furthermore, an annual sport event, one excursion and one picnic were arranged for all of the students in order to provide a recreational dimension to the schooling.

- *Networking and advocacy with formal schools* **–** Project staff were involved with formal and informal networking and advocacy with formal educational institutions in the adjacent area throughout the project period. As part of this activity, the teachers and project officers visited nearby formal schools and madrasahs (religious educational institutes), meeting with teachers to discuss the project and the possible placement of their students at the conclusion of the project. Teachers from formal schools also visited the schools to understand the education process and the students' progress. Networking with the Government Education Officers of the relevant area with CWP staff and project officers, and coordination with other NGOs working in the same sector, also fostered a wider awareness and acceptance about the project and its objectives.

With the inputs discussed above, the project was able to bring about the expected outcomes at different levels. The following sections critically discuss the achieved outcomes and lessons learned for broader EiE scenarios.

Project Outcomes

By creating access to formal education for most of the enrolled project participants, the project produced success in at least two ways. First, in terms of the project itself, for the surviving children, it contributed to their overcoming the barrier to their schooling and offered continuity by returning them to the learning process. Second, in terms of the regional education sector, the project demonstrated its potential for retaining and introducing a significant number of primary-aged children in education after the cyclone. This was significant because Save the Children (2008) had estimated a further 25% increase of non-enrolment on top of the existing rate due to the catastrophe. However, the outcomes can be better understood if analysed at different levels such as at the goal level and the objective levels.

- Achievement at goal level – Most of the schools started teaching students in February 2009 and operated for almost 12 months (or about four school terms). Six hundred children, who would otherwise not have attended school for reasons discussed earlier, had enrolled. The bridging goal of helping children transition back into formal government schools once these were rebuilt or repaired, and function effectively again, was achieved to a good extent. Four hundred forty-four children (74%) out of the total 600 went on to enrol in formal educational institutions. Out of those 444 children, 198 were enrolled for the first time, i.e. in Grade 1, and the other 246 were re-enrolled in Grades 2–9 (IRW, 2010).
- Achievement at objective levels – The Project had three objectives, achievement of which would contribute towards achieving the goal:

  - *Establishing a safe and secure school environment for regular school presence of the children*: Being situated within walking distance of the enrolled children's houses, furnished with local materials and looked after by mostly

their parents and guardians, the school premises were able to offer a safe refuge for children during the daytime. Engaging the children in school operation, making the schooling experience as much learner-centred as possible, the school endorsed a child-friendly, emotionally and academically supportive environment where students felt safe and able to participate in 'normal' school routines. Evidently, the 95% attendance rate (on average) despite the interruption by another cyclone ('Aila' in May 2009) in the middle of the project suggested that the schools were able to attract the children (and their families) successfully (IRW, 2010).

– *Foster a group of healthy and happy children and adolescents*: The project's medical intervention (please refer to earlier section on *Healthcare Support* for details) was able to help children continue with necessary health maintenance, particularly that which was necessary after the catastrophe. The psychosocial activities, such as recreational, sports and cultural activities, and expressive activities like the School Operation Committee seemed to raise the children happily and cheerfully (IRW, 2010). However, though the number of interventions claiming to help children develop physically and mentally healthily – and cheerfully – are basically the outputs, the project was not equipped to measure the outcomes brought by them.

– *Building the capacity of children*: The project worked towards building and improving the capacity of children in different ways, such as enabling them to pursue a livelihood skill and build their self-esteem. Development of a skill (in trades like tailoring, basic computing and homestead gardening) tends to engender a sense of security among the children in such a way that they showed confidence in being able to support their educational costs back in the government system if their parents were unable to do so (Rahman, 2012). The School Operation Committees helped to develop leadership and self-esteem among the students which led towards 114 social interventions (IRW, 2010) fully organised and implemented by them.

Conclusion: Some Lessons for EiE

While the analysis in previous section suggests that the project succeeded in producing significantly positive outcomes, three key lessons for EiE in both theory and practice can be highlighted in concluding this chapter.

The first is the flexibility and responsiveness offered by the 'alternative' education approach in starting up an education initiative in a post-disaster situation. Alternative education is perceived as most flexible during emergencies due to its unique structure, which allows having a separate administrative unit with its own personnel and strong community participation and responsiveness (Raywid, 1983) in contrast to formal education, which has difficulty experimenting with alternative approaches appropriate to a socio-environmental context or adapting to local

priorities (resulting from the special situation) because of control and influence through a top-down curriculum (Robinson, 1999).

Cyclone Sidr damaged and destroyed the existing government school infrastructure and killed, injured or affected many teachers. Because of this, and also the need for financial resources along with alternative uses of school buildings (such as for shelter), the local formal school system took a long time to be reopened and become accessible again. These paved the way for endorsing an alternative education that was allowed to offer a useful education program to the affected community. Once the proposed project was approved and funded, IRW, Bangladesh, was able to recruit human resources for the project quite quickly, consult with local community leaders and officials and find basic but safe and accessible village houses which could host the classrooms. The prospect to offer a negotiated curriculum through alternative education (Smith, 2012) also allowed the project to serve the perceived needs of the target community. This indicates alternative education's high potential to respond to education needs quickly and efficiently during an emergency.

Second, clearly the 'bridging education' approach was a pragmatic choice but also an important aspect of the project's success. The project was never intended to provide schooling for the long term; however, it made underprivileged children, in badly impacted communities, get back into regular schooling, and after 1 year 74% of those were back into regular (formal) government schools. Formal schooling and the educational qualifications it brings are widely valued in Bangladesh. The transition back into government schools at the end of the project was one of factors that had motivated children and their families to attend and support the Anondo Biddaloy schools. Nevertheless, although alternative education is deemed appropriate to serve in a unique situation due to its unique feature of being tailor-made to specific observed needs, the lack of the automatic validation or certification (Baxter & Bethke, 2009), which formal education has, might mean that such initiatives remain successful mainly under ad hoc arrangements rather than being systemic options.

Finally, in this regard, the cooperation and collaboration of local community leaders, government officials and government teachers and principals were crucial in building those bridges back to the government schools. Community meetings and local stakeholder meetings were well attended during the stage, and the Local Support Groups for each school provided an avenue for consultation and cooperation with local leaders and officials. This support from the community refers to Nicolai's (2003) suggestion of a core guiding principle for EiE, which is that a community might prioritise on continuing education for their children during emergencies; however, due to lack of resources, they might be obliged to call for external support. Hence the emergency response and mitigation system should be established in a way that invites and assesses such appeals and reacts on it promptly.

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Chapter 5
Students' Sense of Belonging in Urban Junior Secondary Schools in Bangladesh: Grades, Academic Achievement and School Satisfaction

Ahsan Habib and Saira Hossain

Abstract While much study has focused on external variables such as poverty and child labour to document high dropout, absenteeism and poor academic achievement in the secondary schools of Bangladesh, little research has been undertaken to elucidate these issues from students' psycho-emotional perspectives. The present study explores students' sense of belonging to school and its correlation with student achievement and school satisfaction. Seven schools participated in this study with 869 boys and 574 girls from junior/lower secondary years 6, 7 and 8. The Bangla version of the Psychological Sense of School Membership (PSSM) Scale (Goodenow, Psychol Schools 30(1):79–90, 1993) was used to measure students' sense of belonging to school. The findings indicate positive and significant relationships among school satisfaction, academic achievement and school belonging. The findings have important implications for both pedagogical practice and intervention programmes, emphasising strong social environment in school and illustrating students' psychosocial component as an important aspect of school outcomes.

Keywords Sense of belonging · Academic efficacy · Academic achievement · School satisfaction

Introduction

A growing number of studies have indicated that students' sense of belonging has a substantial influence on their emotional wellbeing and academic outcomes across different academic levels and disciplines (Osterman, 2010; Reilly & Fitzpatrick, 2009). It has a direct and significant effect on students' psychosocial adjustment at

A. Habib (✉) · S. Hossain
Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh
e-mail: md.habib@du.ac.bd; sairahossain@hotmail.com

school, academic engagement and school attendance, academic self-efficacy and perceptions of the value of school (Uwah, McMahon, & Furlow, 2008; Walker & Greene, 2009; Walton & Cohen, 2011). On the other hand, a lack of belonging can lead to social exclusion and a higher 'incidence of disciplinary conflicts, absenteeism, truancy, and dropping out of school' (Margalit, 2010, p. 118). Students who have a strong sense of belonging are motivated, engaged, and participatory and are more likely to learn than those with a lower sense of belonging (Causton-Theoharis & Theoharis, 2008). They may also remain in school longer, and school belonging is thus a critical factor in retaining students in schools (Finn, 1989; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989).

In this regard, student's school belongingness is a significant factor to be studied, particularly in Bangladesh where high dropout rate has been identified as one of the major problems of the education sector (Sabates, Hossain, & Lewin, 2013). This situation is even worse at the secondary level of education, where about half of the students leave school before completing the secondary education cycle (Bangladesh Bureau of Education and Information Statistics [BANBEIS], 2013). A gradual dropout pattern is seen across the years of secondary schooling (Grades 6–10), particularly between Grades 6 and 8, beginning with a slow pace of approximately 8% at Grade 6 and increasing with a high of approximately 15% at Grade 8 (see also Banu, Roy & Shafiq, Chap. 3, this volume). Afterwards the dropout rate tends to decrease from Grade 9, ending with 7.32% by Grade 10 (BANBEIS, 2013). Next to dropout, disengagement is another problem that affects a large proportion of students' academic performance in Bangladesh (Ahmed, Ahmed, Khan, & Ahmed, 2007; Sabates, Hossain, & Lewin, 2010). Ahmed et al. (2007) further reported that although a large proportion of children physically attended school, they were often psychologically or intellectually absent and not engaged in the learning process which eventually resulted in poor academic performance and low achievement.

In order to reduce the overarching problem of dropout rate, school disengagement and low academic performance, several initiatives have already been taken up by the government. Most of the studies and intervention programmes to date have focused on objective variables such as poverty, child labour and lack of training and resources in schools (Chowdhury, Chowdhury, Hoque, Ahmad, & Sultana, 2009; Sabates et al., 2013). Intervention programmes were often initiated to mitigate socio-economic aspects of students' parents and household through various cash or food transfer programmes. For instance, cash rewarding interventions, such as the Female Secondary School Stipend Program (FSSSP), which has been used in Bangladesh for decades (since 1993), provide free tuition and a monthly stipend with the expectation that such cash will ease the burden of household poverty, enhance enrolment and reduce the likelihood of dropout (Schurmann, 2009). Several studies (Baulch, 2011; Hossain, 2010; World Bank, 2013) showed that the aforementioned intervention programmes initially increased enrolment but eventually failed to retain and enhance attendance, retention and academic attainment.

In the intervention programmes, there is a need to look beyond the objective variables and include subjective variables like students' school belongingness in

relation to positive school outcomes such as high retention rates and academic achievement. However, in spite of its direct and significant effect on increasing school retention, the concept of school belonging largely remains neglected both in educational research and intervention programmes in Bangladesh. The present study aims to measure secondary school students' belongingness to school in Bangladesh and its association with three distinct factors: grade, academic achievement and school satisfaction.

Operational Definition of Terms

The operational definition of terms including school belonging, school satisfaction and academic achievement is given below.

School belonging is 'the extent to which students feel personally accepted, respected, included and supported by the others in the school social environment' (Goodenow, 1993, p. 80). As Wehlage et al. (1989) explained, having a sense of belonging at school means developing a social bond with peers and teachers and adhering to school norms.

School satisfaction is defined as 'the subjective, cognitive appraisal of the perceived quality of school life' (Baker, Dilly, Aupperlee, & Patil, 2003, p. 210). It is a student's own judgement of their school experience.

The term academic achievement refers to students' academic scores in the last school exam. In addition to academic scores, students' academic self-efficacy, which denotes student perceptions of competency on academic tasks (Midgley et al., 2000), has also been used as a measure of academic achievement.

Methodology

The present study recruited participants only from junior secondary schools in Dhaka. The secondary education system in Bangladesh follows a 3-2-2 pattern, consisting of 3 years (Grades 6–8) of junior secondary school, 2 years (Grades 9 and 10) of secondary school and 2 years (Grades 11 and 12) of higher secondary or college education. The study utilised a purposive sampling, and the participants included 1443 students (boys = 869; girls = 574) in Grades 6 (boys = 471; girls = 311), 7 (boys = 246; girls = 166) and 8 (boys = 152; girls = 97) from 7 urban secondary schools in Dhaka. Schools were chosen irrespective of their administrative categories (i.e. government or non-government schools, single-sex or co-education schools) and socio-economic status. The number of participants from each school ranged from 97 to 357, with a mean of 206 students per school. The students ranged in age from 11 to 14, with a mean (M) of 12.50 and a standard deviation (SD) of 0.909 years.

Measures

The study used four distinct measures that included one demographic information input and three scales.

Students' Demographic Information

A self-reported demographic information sheet was used to collect student information. The demographic information included students' age, gender, school grade level, last examination score and the length of time in the respective school. The participants were given multiple choices from which they could select their answers.

Psychological Sense of School Membership (PSSM) Scale

The PSSM is a psychometric scale developed by Goodenow (1993), to measure school belonging. The scale has been widely used as a reliable and valid measure of students' school belonging across different cultural contexts, such as the USA (Hagborg, 1994; Booker, 2007), China (Cheung & Hui, 2003) and Australia (You, Ritchey, Furlong, Shochet, & Boman, 2011). The original 18-item scale assesses students' feelings of being an important part of their school; feelings of acceptance, value and inclusion; and connections with school, teachers and peers. A sample item reads as follows: 'I feel like a real part of my school'. Responses were given on a 5-point Likert scale from '1' (not at all true) to '5' (completely true). In this study, a Bangla version of the PSSM scale was used as a measure of student's school belonging in Bangladesh. The internal consistency reliability ($\alpha = 0.824$) of the Bangla version of PSSM (Habib & Hossain, 2013) is close to the original English version ($\alpha = 0.80$) and Spanish version ($\alpha = 0.771$) (Goodenow, 1993), which confirms the reliability of the scale.

The Academic Efficacy Scale

The academic efficacy subscale from the Patterns of Adaptive Learning Scales (PALS) (Midgley et al., 2000) measures student perceptions of competency on academic tasks. It consists of five items evaluated on a 5-point Likert scale, ranging from '1' (not at all true) to '5' (completely true). A sample item reads as follows: 'Even if the work is hard, I can learn it'. The academic efficacy subscale of PALS was translated and adapted in Bangla to measure the academic efficacy of the study

sample. To measure the reliability of the scale, Cronbach's alpha was calculated; a value (α = 0.72) close to the original English version (α = 0.78) (Midgley et al., 2000) was found, confirming the scale reliability.

School Satisfaction Scale

The School Satisfaction Scale is a subscale of the Multidimensional Students' Life Satisfaction Scale (MSLSS) developed by Huebner (2001). This scale assesses students' life satisfaction based on multiple satisfaction judgements including family, friends, school, living environment and self. The School Satisfaction Subscale consists of eight items including positively and negatively worded items regarding school experiences (e.g. 'I look forward to going school' or 'I wish I didn't have to go to school'). Students rate their satisfaction on a 4-point Likert-type response scale ranging from '1' (never) to '4' (almost always). For the purpose of the present study, like the other metrics, the school satisfaction subscale was translated and adapted in Bangla to measure students' satisfaction with school. The Bangla version of the scale has an internal consistency reliability of (α = 0.77) which falls within the estimated range of Cronbach's alpha (0.70–0.90) of the original scale (Huebner, 2001) and confirms the reliability of the scale.

Results

In the present study, the average PSSM score of students was 3.8 *(SD = 0.*65, range = 1–5). Compared with boys (84%), girls (88%) reported a stronger sense of school belonging and were more likely to score above the scale midpoint (3.00). On average, girls had a stronger sense of belonging (*M* = 3.8, *SD = 0.*619) than boys did (*M* = 3.7, *SD = 0.*672). However, according to the result of independent *t*-test analysis [*t* (1443) = −1.591, *p* = 0.112], the difference between boys and girls was not statistically significant – that is, the sense of belonging of the sampled students was not characterised by gender.

A gradual decrease in PSSM scores was observed from Grade 6 (*M* = 3.9, *SD* = 0.62) to Grade 8 (*M* = 3.7, *SD* = 0.68) (Table 5.1). The data further indicated that for both boys and girls, the sense of belonging decreased with grades. A two-way ANOVA was used to investigate whether there was a significant effect of

Table 5.1 PSSM scores by grades

	Grade 6	Grade 7	Grade 8	Total
Boys	3.8	3.7	3.6	3.7
Girls	3.9	3.8	3.8	3.8
Total	3.9	3.8	3.7	3.8

Grades (6, 7 and 8) and sex (boy, girl) on students' sense of belonging. The overall F-ratio was significant ($F = 4.741$, $p < 0.001$), and there was a main effect of grades on belonging ($F = 7.482$, $p < 0.001$) such that students in lower grades had a stronger sense of school belonging than students in higher grades.

An interesting pattern was revealed when comparing students' PSSM scores and the length of time in school. Newly enrolled students who had spent less than one academic year at school reported a mean of 3.71 ($SD = 0.632$) on the PSSM scale. On the other hand, students who had spent the minimum time a year at their school demonstrated a greater sense of belonging, with a mean PSSM score of 4.0 ($SD = 0.598$). Though the sense of belonging was found to have decreased over time, an ANOVA confirmed that the length of time in school did not have a significant effect on school belonging ($F = 1.480$; $p = 0.218$).

Sense of Belonging and Academic Achievement

The positive association between a stronger sense of school belonging and higher levels of academic achievement was clearly evidenced in the data. The present study used both objective (academic score) and subjective (academic self-efficacy) indicators to measure students' academic achievement. Sense of belonging was found to be positively associated with both academic score and academic self-efficacy. For academic scores, the difference in the degree of belonging was noticeable in the group that scored above 70% in their last school exam. The mean PSSM score ($M = 4.1$; $SD = 0.666$) of those students exceeded the average mean score ($M = 3.8$) for the study sample. Students' academic achievement had a moderate rise in PSSM scores (from $M = 3.71$ to $M = 4.1$) associated with academic outcomes (below 50% to above 70%). The results also revealed that students who scored below 50% on their exams reported a sense of belonging ($M = 3.71$; $SD = 0.598$) above the midpoint (3.00) of the PSSM scale. Furthermore, students who had a 50–70% average reported a slightly greater sense of school belonging ($M = 3.87$; $SD = 0.645$). An ANOVA also confirmed that these differences in PSSM scores among the three groups had significant contribution to the main effect of academic scores ($F = 9.876$, $p < 0.001$).

For academic efficacy, the correlation analysis indicated that a higher level of academic efficacy is positively related to a stronger sense of school belonging ($r = 0.43$, $p < 0.05$). A linear regression analysis was calculated to find whether academic efficacy (a dependent variable) could be predicted from sense of belonging (an independent variable). The result of the regression suggested that sense of belonging significantly predicted the academic efficacy scores ($\beta = 0.37$, $p < 0.001$). The regression coefficient (β) indicates that if the score of sense of belonging scale increases by 1 standard deviation, the academic efficacy score increases by 0.37 standard deviation. Further, a fair portion (i.e. 14%) of the variance of academic efficacy was accounted for by the sense of belonging ($R^2 = 0.137$, $p < 0.001$) alone.

This means that 86% of the variance of academic efficacy scores could not be explained by sense of belonging alone; there might be other predictor variables not included in the present model. However, the large value of F-ratio (F (1, 1441) = 229.37, $p < 0.001$) further indicated that there was a significant effect of sense of belonging on academic efficacy and the present model is a dependable predictor of academic efficacy.

Sense of Belonging and School Satisfaction

A strong positive correlation was found between students' sense of belonging to school and school satisfaction (Pearson correlation $r = 0.53$, $p < 0.001$). A linear regression analysis was conducted to find if students' sense of belonging to school (independent variable) could predict their school satisfaction (a dependent variable). The regression results suggested that sense of belonging to school could significantly predict the school satisfaction scores ($\beta = 0.460$, $p < 0.001$). The regression coefficient (β) indicates that if the score of the sense of belonging scale increases by 1 standard deviation, the school satisfaction score increases by 0.46 standard deviation. Further, a fair portion (i.e. 21%) of the variance of school satisfaction was accounted for by sense of belonging alone ($R^2 = 0.211$, $p < 0.001$). This means that 79% of the variance of school satisfaction scores could not be explained by sense of belonging alone – there might be other predictor variables not included in the present model. However, the large value of F-ratio (F (1, 1441) = 387.689, $p < 0.001$) further indicated that there was a significant effect of sense of belonging on school satisfaction and the present model is a better predictor of outcome school satisfaction.

Discussion

This study generated three significant results. Firstly, sense of belonging to school decreases with progression through school grades. Secondly, sense of belonging to school makes a significant contribution to students' academic achievements. Finally, students' sense of belonging to school significantly contributed to their school satisfaction.

This study revealed that students in the lower grades have a higher sense of school belonging than students in the higher grades and the extent of belongingness decreased with grade promotion. This finding is consistent with previous studies on middle and high school students in the USA, which demonstrated that students' belongingness to school decreases over the course of high school years, especially during the transition period into middle school (Grades 6–8) (Anderman, 2003; Benner & Graham, 2007; Ding & Hall, 2007; Whitlock, 2006).

As students move to upper grades, they face an increasingly complex and challenging curriculum, and an increased pressure to get good academic grades and meet the upcoming demands for graduation (Benner & Graham, 2007). Students may find it challenging to face and adjust to the transition into middle school and possibly tend to feel a lack of school belongingness. A decline in belongingness during the transition period into high school year is also true in Bangladesh.

The present study found that the sense of belonging gradually decreased from Grade 6 and fell to its lowest level at Grade 8. In Bangladesh, Grade 8 is marked as the transition from junior secondary to secondary level, which is characterised by a high-stakes public examination (the Junior School Certificate [JSC]) and an increased sense of academic pressure. This is the time when students prepare themselves to earn entry into their desired stream of courses for continuing studies (i.e. Humanities, Science and Business). In other words, students' academic performance at Grade 8 plays a significant role in determining their subject stream at Grade 9. Getting entrance into the desired subject stream is considered very important in deciding the future career and further education path for most students. For example, if a student aspires to become a doctor, then they must achieve a high academic score at Grade 8 to enter the Science stream in Grade 9 in order to pursue the medical profession in future.

In the face of such increasing academic demands and competition for future career prospects, students may feel a lack of belongingness, since it is known that when students find school more enjoyable and feel less pressure for academic achievement, they tend to feel a higher sense of belonging (O'Neel & Fuligni, 2013). With grade promotion, students also approach the transition phase of the early adolescence stage when their socio-emotional needs are salient (Eccles et al., 1993). At this stage, they are in need of more positive social relationships outside of the family environment (Anderman, 2003). In this regard, a positive and enriching relationship with teachers is even more crucial. Students' relationships with teachers not only influence their relation with other members of the school community (e.g. peers) but also play an unequivocal role in promoting belongingness (Cemalcilar, 2010; Nichols, 2008; Tillery, Varjasa, Roachb, Kuperminc, & Mayers, 2013). Research suggests that teachers' warmth, positive support, empathy and peer affiliations act as social resources at school and promote a sense of belonging among students (Booker, 2007; Goodenow, 1993; Hallinan, 2008).

In contrast, reverse effects are expected when there is little occasion to develop enriching relationships with teachers in the school social context. Young people who experience difficulties and feel disconnected from their teachers, peers and school staff are likely to experience a lower sense of belonging (McMahon, Parnes, Keys, & Viola, 2008). However, in Bangladesh, amidst the large class size and high emphasis on academic achievement, secondary school teachers hardly ever have the opportunity to pay individual attention and form close bonds with their students. It is therefore possible that teachers mainly focus on students' academic needs as they move to higher grade levels, whereas students' socio-emotional needs (e.g. social relationship, need to belong) might remain (or feel) neglected, which in turn possibly decreases their sense of school belongingness.

One other possible explanation of the decrease in students' belongingness during middle school can be found in the stage-environment fit theory which accounts for the mismatch between a student's developmental needs and the school environment (Eccles & Roeser, 2009; Eccles et al., 1993). As per the theory, during the transition stage of early adolescence, students' socio-emotional needs are as important as their academic needs. When school provides students with an environment which emphasises only academic needs and neglects their socio-emotional needs, schools fail to match the development needs of the students. Consequently, they start to feel 'uncomfortable' in that environment and a sense of avoidance develops, which further results in lack of belongingness to school. This notion can help explain the gradual decrease in students' sense of school belonging with their school grade level. However, the study did not intend to confirm the reason behind the negative association between school grade level and students' belonging. The finding only suggests that students begin to experience lack of belongingness as they approach upper grades, especially when they encounter both the developmental and the school level transition phase.

Positive association between sense of belonging and academic achievement was another significant finding of this study. It was found that students' sense of belonging made a significant contribution to both objective (academic achievement) and subjective (academic efficacy) measures of their academic outcomes, indicating that a higher sense of school belonging influences higher academic achievement and academic efficacy. This finding is in accordance with a number of previous studies where school belongingness has been found to be positively associated with different measures of academic outcomes such as academic grades (Anderman, 2003; Walton & Cohen, 2007), academic persistence (Moallem, 2013), academic motivation (Aerts, Van Houtte, Dewaele, Cox, & Vincke, 2012) as well as academic self-efficacy (Uwah et al., 2008).

However, although previous studies concur regarding the positive association between academic achievement and sense of belongingness, there are some discrepancies in the nature and direction of this relationship. Some studies found a linear and direct influence of sense of belonging on academic achievement (see, e.g. Anderman, 2003; Walton & Cohen, 2007). When students feel accepted as a valued member of the school community, they can easily identify themselves with the school environment and feel motivated to learn (Aerts et al., 2012; Anderman, 2003). Nevertheless, in some studies, the effect of sense of belonging on achievement is not direct; rather they found the effect of sense of belonging to be moderated by other factors such as engagement in school activities which in turn results in high academic achievement (Walker & Greene, 2009). Students with a higher level of school belongingness tend to be highly engaged in learning activities, which further results in higher academic achievement (Uwah et al., 2008; Walker & Greene, 2009).

The findings of the present study are consistent with both of these explanations as it found the sense of belonging to directly contribute to the objective indicator of students' academic achievement, namely, academic scores. On the other hand, the study also further extends this relationship with a subjective measure of academic

achievement – academic efficacy. The study revealed that sense of belonging can predict academic efficacy – students who have higher academic efficacy feel more confident about their ability and tend to perform better (Uwah et al., 2008). This suggests the possibility of an indirect effect of sense of belonging on the objective variable of academic achievement – the academic score – which can be moderated by the subjective variable of academic achievement, academic efficacy.

The third relevant finding was the positive and significant relationship between students' sense of belonging and school satisfaction. This association can be explained by the positive effect of relatedness with teachers and peers. A caring relationship and acceptance in the school environment, particularly positive relationships with peers and teachers, act as major contributors to students' sense of school belongingness. Teacher and peer relationships are also important factors in promoting students' sense of school satisfaction. Studies have shown that student-teacher relationships and peer support account for the highest amount of variance in school satisfaction (Jiang, Huebner, & Siddall, 2013; Zullig, Huebner, & Patton, 2011). 'Dislike of school' is pervasive among students in Bangladesh and is considered one of the major reasons for dropout (Ahmed et al., 2007, p. 34). Therefore, this finding is particularly important in the context of Bangladesh, as it indicates the important role of school belonging in promoting school satisfaction and reducing dropout.

From the discussion above, it is seen that despite the cultural and contextual differences, the nature of Bangladeshi students' school belongingness in relation to grade level, academic achievement and school satisfaction is quite consistent with studies conducted in the western context. As need to belong is an innate and universal motivation of human being (Baumeister, 2012; Baumeister & Leary, 1995; Maslow, 1943), such similarities of findings irrespective of cultural context are not surprising. However, students' need to belong is required to be nurtured and gratified by the school social environment composed of parents, teachers and peers (Habib, 2015; Maslow, 1943; Ryan & Deci, 2000). Given that Bangladesh particularly possesses a collectivistic cultural context where social interdependence and achieving social belongingness are considered very important (see Diener, Diener, & Diener, 1995; Sapyta, 1997), the wider social and cultural context of Bangladesh might have an influence in shaping the perception of students' feeling of school belongingness.

Conclusion

The study findings reveal that junior secondary school students begin to experience lack of belongingness with school as they approach higher grades. This trend is seen in terms of the dropout rate in Bangladesh which tends to increase with school grade level (BANBEIS, 2013). The study did not confirm that the lack of a sense of

belonging is the sole reason for school dropout in Bangladesh. However, it underscores the importance to consider the rather neglected phenomenon of school belonging in the educational endeavour to reduce dropout.

The present study confirmed that students' sense of belonging is positively linked to their academic achievement and positive feelings about school in Bangladesh. These findings have practical implications for enhancing attendance, attainment, and classroom engagement and for reducing dropout rates in Bangladeshi secondary schools. The core components of Bangladeshi students' sense of belonging are similar to those found in other places and can thus be enhanced through similar measures, such as improving school social environments and implementing programmes for building peer and student-teacher relationships.

The study findings recommend schools to focus on the social climate and create a culture of positive interaction and interdependence within the school community, especially during junior secondary level when students encounter different types of transitions at both the developmental (e.g. pubertal onset) and school levels (e.g. intense academic competition). In order to help students to successfully overcome these significant transitions, their sense of belonging to school has to be nurtured. This culture of school belonging can be developed by acknowledging every student as a valued member of the school community, providing individual attention to those who are in need of it, and fostering warmth and care towards students. Schools can create social bonds among classmates by creating a culture of academic cooperation instead of competition. Teachers can also nurture students' belongingness through classroom learning activities (e.g. cooperative group work), a range of co-curricular activities (e.g. sociodramatic play) and observing different events important for students (e.g. birthdays). To facilitate the students' school belongingness, teacher training programmes could also include the topic of students' psycho-emotional issues such as belongingness.

The present findings have implications for future research. The study underscores the importance of understanding the issue of school satisfaction and academic achievement from a psychosocial perspective such as school belongingness. It opens a way to explore schooling experience from students' perspective in the south Asian cultural context including Bangladesh. Future researchers might examine if there any specific cultural components is related to sense of school belonging. Researchers might also investigate the issues of absenteeism and dropout in relation to students' sense of belonging to school.

The present study has a number of limitations. First, it did not identify students whose attendance was irregular. Thus, the level of school belongingness experienced by students with irregular attendance has not been observed. Second, the study did not include children who had special needs, students from rural, other urban cities, ethnic backgrounds and those from marginalised community groups, thus limiting the study's representation of adolescent groups in Bangladesh. Third, although the internal consistency, item-total correlation and factors were highly consistent with those found in previous research, we believe that narratives of school belonging experiences from students might provide a better understanding of school belonging in the Bangladeshi socio-economic and cultural context.

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Chapter 6
Social Class Systems in Communicative Language Teaching in Bangladesh

S. M. Ariful Islam

Abstract Among significant pedagogical and policy reforms in the late 1990s in language-in-education policy in Bangladesh, communicative language teaching (CLT) replaced the previous grammar translation method (GTM). This nationwide policy change was intended for equal application to all schools across all socio-economic classes. Similar to social classes and their relation to the economic condition of people, schools in Bangladesh are stratified in relation to economic conditions, teachers' qualifications, classroom teaching practices and the overall pass rate in the national school-leaving examinations. In a given society, high-performing schools with higher socio-economic conditions have a higher pass rate in contrast to the low pass rate of the low-performing schools with lower socio-economic conditions. Far from being democratic, education in general and English learning in particular become representative of the socio-economic conditions of both people and schools, which creates and sustains a social distance among them. This chapter shows how CLT implementation, much on the contrary to the constitutional declaration, exacerbates existing school stratification and works as a hegemonic tool for social reproduction through institutional practices. In investigating this question, this paper follows a historical-structural approach (Tollefson, An introduction to language policy: Theory and practice. Blackwell Publishing, Oxford, pp. 42–59, 2006; Handbook of research in second language teaching and learning, vol. 2. Routledge, New York, pp. 801–816, 2011) influenced by critical theory of social inequality and hegemony (including the works of Bourdieu, Language and symbolic power. Polity Press, Oxford, 1991; Foucault, The archaeology of knowledge. Pantheon, New York, 1972) in language policy. Using mixed methods, data were collected through classroom observation of class 10 from seven schools, semi-structured interviews with seven English teachers and survey questionnaires from 231 students. Qualitative and quantitative data analysis shows significant qualitative difference in teaching English communicatively among schools with diverse socio-economic circumstances.

S. M. A. Islam (✉)
Department of Culture and Global Studies, Aalborg University, Aalborg, Denmark
e-mail: arif401@yahoo.com

Introduction

With the spread of English around the world, programmatic changes in ELT policy and practice have affected pedagogical practices in many countries (Canagarajah, 2008). Among these changes, the communicative language teaching (CLT) approach has been adopted around the world (Luk, 2008). Both English and CLT originate from the West, where CLT nomenclature is a part of the dream of a better world through better jobs for English learners around the world (Luk, 2008). Indeed, 'terms like "communicative approach", "learner-centredness", and "group work" have long become for many non-native teachers and learners synonymous with progress, modernization, and access to wealth' (Kramsch & Sullivan, 1996, p. 200). This has been the primary argument to revere CLT methods 'as [the] ideal model in places outside its origin' (Luk, 2008, p. 247) particularly in the far Eastern part of the world, where English is learnt as either a second language (ESL), as a foreign language (EFL) or as an international language (EIL).

While adopting CLT in Bangladesh, it was argued by the National Curriculum and Textbook Board (NCTB, 2003) that learners had not been able to learn English successfully after 12 years of learning in primary, secondary and higher secondary levels of education. Their failure to learn English was attributed to the pervasive and almost exclusive approach of the grammar translation method (GTM) which characterised the English teaching and learning for decades (NCTB). CLT commenced in the year 1997, supposedly with an added emphasis on removing the previous method's drawbacks involved in learning English, upon which its adoption was unanimously applied to all schools in government, non-government and private sectors.

However, not all these schools were equally capable of addressing CLT in their academic practices, since they differed from each other in relation to teachers' qualifications, school administration, infrastructure and logistics. Resource restriction and low budgetary allocation from the government thwarted education, which was largely to be managed by social communities. Except for 2% of government schools, the vast majority of 98% of schools are either non-government or private, where schools (DSHE; Haq, 2004) are 'sponsored and managed by local communities with government grants in-aid' (Haq, 2004, p. 31). These school institutions are administered by school managing committees (SMC), where committee members are the representatives of the social community. Schools throughout the nation are situated in a 'social gulf', with knowledge of English as the dividing factor (Choudhury, 2001) since not all schools could equally address the challenges in ELT.

This divisive nature of achievement in English language proficiency is mediated by several factors, namely, socio-economic status, private investment and the geographic location of learners (Hamid, 2009). This social stratification is further strengthened between those in the population who can afford to go to school and take extra English lessons and those who cannot, as is reported in a study by

Tollefson (2000). These variant levels of school capacity for adopting CLT create diversified impact on learner education. Institutional capacity and approaches in ensuring English language learning serve as a tool for constantly reproducing the social class from which students are coming. With a historical-structural approach within critical theory and hegemonic practices, these issues will be discussed further below.

After initiating CLT in the curriculum, two important effects were clearly evident. Firstly, the sharp contrast in learners' pass rates could be observed among high- and low-performing schools. Secondly, a sharp increase in the overall pass rate was noticed in public examinations in the last 14 years. It is worth mentioning that passing in the subject of English is the main determinant factor in both of these cases (Hamid, 2009; Sharifuzzaman, 2011). The correlation between passing in the subject of English and the overall pass rate is thus perceived as strong in Bangladeshi educational contexts. With the exceptions of 2001 and 2003, steady progress in the overall pass rate leading to the record percentage of 92.6% in 2014 is observed. This overall pass rate was as low as 41.58% in 2000 (BANBEIS, 2014). This steady increase in the pass rates may indicate a remarkable progress in secondary education in Bangladesh. While the Education Minister remarks on this record pass rate as a sign of quality development (Nahid, 2014), the Chairman of the Intermediate and Secondary Education Board, Dhaka, argues that the communicative curriculum, lesson topics and question papers are easy to learn, and as such students have easily scored high marks (Sharifuzzaman, 2011).

In fact, the quality of education in general and the quality of English teaching in particular came under direct criticism when a majority of these students, after passing the SSC and Higher Secondary Certificate (HSC) examinations, could not even score the pass mark in admission tests to various public universities in 2014. Of all the students who took such a qualifying test for the University of Dhaka, approximately 80% failed (University Reporter, 2014). The quality of English teaching is directly relevant here, as the high failure rate in the admission test was particularly due to failure to pass in the English section of the admission question paper. In other words, students were not assessed as well as prepared to study in English at the university level with the knowledge they gained from their SSC and HSC educations. It is worth mentioning here that out of 135 available places at the Department of English in the University of Dhaka, only 2 candidates were able to qualify in the admission test (University Reporter, 2014; see also Alam, this volume). It has been argued that this is the general picture for most other public universities in Bangladesh (Wadud, 2014).

While this deterioration of the quality of education occurs throughout the nation, it takes place to varying extents in various schools. In post-result analysis of every public examination, government schools and some selected non-government schools are found to be performing constantly well (in terms of pass rates and the quality of teaching and learning). In contrast, the rest of the schools are performing at levels that can be considered average, low or extremely low. Schools' continuous performance has also labelled them *good schools* versus *bad schools* with an implicit function of social class reproduction. This social class reproduction is par-

ticularly taking place when so-called good schools are admitting students primarily from social elites and upper classes. Students from poor socio-economic classes do not have access to those schools due to the high tuition fees and other expenses.

Critical literature has shown that education in general and learning English in particular exacerbate school stratification and work as tools for social reproduction through institutional practices. Although it has been emphasised in the National Constitution that effective measures shall be taken by the government to ensure 'a uniform, mass oriented and universal system of education' (Bangladesh Constitution, 2015), it is hardly observed in reality as will be explained in the following sections.

Critical Theory, Ideology and the Conflict of ELT Methodologies

As mentioned previously, this study is based on critical theory, which allows to show the relationship between English language learning and hegemony. The concept of how reproduction in social inequality takes place in a society has been explored elaborately in studies influenced by Marxist theory along with critical theories developed by Bourdieu (1991) and Foucault (1972). With a view to diminishing this social inequality and maintaining social justice, critical theory aims at uncovering 'systems of exploitation, particularly those hidden by ideology, and to find ways to overcome the exploitation' (Tollefson, 2006, p. 44). According to Tollefson (2011), it is essential to discuss ideology in relation to the role of language learning. This is particularly important in second-language acquisition (SLA) amidst a wider array of challenges concerning conflicts in national and ethnic interests, inequality in social and economic conditions. He says:

> Standard language ideology, the ideology of monolingual (English) classrooms, the ideology of variation, and implicit ideologies in teacher education, SLA, research methods, and other aspects of L2 [second language] education have direct consequences for the social positions of learners, teachers, and others; and it is [through] such social positions that individuals gain (or are denied) access to economic resources and political power. (Tollefson, 2011, p. 813)

The concept of ideology starts with 'the fundamental idea that social knowledge represents "natural", necessary, and inevitable social relations that are in fact contingent, historical and advantageous to the ruling class' (Tollefson, 2011, p. 801). It refers to processes by which existing ideas and hidden systems of thought, assumptions, beliefs and behaviours that favour ruling classes become common-sense assumptions and are neutralised, normal, natural, inevitable and invisible. In this way, common-sense ideology helps in sustaining the interests of the ruling class through education and other institutional training, where children are prepared 'to fit into and accept the existing class relations' and 'unequal power relations' (Fairclough, 1989, p. 33). To unpack these 'neutralised' systems in society is the most frequent research aim within the domain of this ideology where

'language is of the central concern because it is viewed as always ideological' (Tollefson, 2011, p. 802).

This theoretical argument is particularly relevant in the educational context of Bangladesh, where, through policy change, learning English through CLT was made applicable to all schools. However, prerequisites for effective practices were either kept hidden or ignored, and, as such, schools from lower social strata were not ready to embrace it. They lacked expert English teachers with CLT background and other logistics for practising the four skills in classroom teaching. Many of these schools are in a methodological vacuum where they are teaching with a CLT textbook but using GTM (Islam, 2015). Implicitly this policy change has turned out to favour only people from the upper classes, who can afford to send their children to high-fee-paying schools.

Again, in language education, it is of particular interest that dominant classes select their preferred language as the medium of education and their preferred language teaching methodology to gain control over their preferred language, a practice that helps them in securing their social positions. In the concept of hegemony, this process is naturalised so that this access to the preferred language by the dominant class becomes a common-sense belief among subordinate people. The question of English learning and social inequality is pertinent here since students from lower social class have financial barriers to accessing the high-performing schools. Again, low-performing schools cannot employ qualified English teachers with ELT background, which requires a high salary scale. In many schools, English teachers do not have their bachelor's degree education in the subject of English. Poor infrastructure and lack of educational equipment and other basic requirements (Haq, 2004) constitute the common picture of depressing conditions of these extremely low-performing schools. With their economically disadvantaged conditions, students from lower social strata cannot expand their choices to learn English (Hamid, 2011).

Such choice constraints, according to Tollefson (1991), are the products of structural and historical factors that most social science fails to explain. Within the historical-structural approach, language policy is a mechanism that serves the interests of dominant sociopolitical groups and reproduces those interests repeatedly. In order to study very distinctly stratified and centralised education systems (Hossain & Tollefson, 2007) in Bangladesh, a historical-structural approach, based on critical theory, can serve as a theoretical framework. In Bangladesh there are three types of instruction, differentiated according to the medium of instruction, religion and, above all, social stratification: Bangla-medium schools, English-medium schools and madrasa (for more, see Context Chapter, this volume). In Bangla-medium schools, in both government and non-government categories, all subjects are taught in Bangla. There are many schools where the subject English is taught in the medium of Bangla language (Islam, 2015). In contrast, English-medium private schools provide a 'globalized curriculum, imported from the UK, for the preparation of the social elite' (Imam, 2005, p. 477). Due to the lack of democratic access to English language education, 'social division' (Hossain & Tollefson, 2007) and 'social polarisation' (Imam, 2005) prevail perilously between the social elites (who can

ensure English education for their children) and the masses (who can bestow only Bangla-medium education).

Research on English language teaching in Bangladesh shows that there are qualitative differences among English teaching across schools primarily due to differences in teachers' qualifications (Haq, 2004; Hasan & Akhand, 2009; Siddique, 2004; Yasmin, 2009). Hasan and Akhand (2009) mention the critical qualification problem of teachers who themselves have been educated in the GTM. They add that it is paradoxical that 95% of college teachers are products of GTM, and now they have to teach CLT to their students. In her paper on ELT in Bangladesh, Yasmin (2009) discusses several aspects of CLT where she explains that there is a serious lack of English teachers and, as such, graduates from other subjects are allowed to teach the subject at the secondary level. These teachers are often methodologically unaware of ELT and find themselves teaching CLT materials according to GTM (Islam, 2015).

Research works on ELT methodologies indicate that the paradigm shift from traditional GTM to CLT method concerns major changes in pedagogical practices (Bax, 2003; Kramsch & Sullivan, 1996; Littlewood, 2011). CLT involves process-oriented instruction and meaning-based learning, whereas GTM involves memorising forms, structures and translation activities (Jacobs & Farrel, 2003). In contrast to the GTM, CLT requires teachers' methodological awareness in CLT approaches particularly in relation to the nature of learning and language, syllabus design and procedure of lessons (McDonough & Shaw, 2003). In addition, there are changes associated with the CLT paradigm shift, namely, emphases on learner autonomy, the social nature of learning, curricular integration, a focus on meaning, learners' thinking skills, alternative assessment and the notion of teachers as co-learners (Luk, 2008; Mitchell, 1994; Thompson, 1996; Wu, 2008). Without sufficient training, it is a severe challenge for a teacher with a GTM background to realise these differences from the practice of CLT alone.

There is need for teachers with GTM background to be aware of how their traditional English teaching practices may be converted into CLT in an informed manner. When this methodological shift takes place, it may form a communicative continuum (Littlewood, 2011), a glimpse over which is helpful to understand how this happens. Littlewood (2011) explains that this communicative continuum has five stages, namely, *non-communicative learning* (teachers' focus is on form and structure in a traditional manner), *pre-communicative practice* (teachers give occasional attention to meaning- and situation-based practice along with form and meaning), *communicative language practice* (attention is given to pre-taught language practice but in new contexts), *structured communication* (here the focus is on eliciting pre-taught language skills in unpredictable situations through structured role play) and *authentic communication* (here the focus is on using language in situations where meanings are unpredictable through creative role play). Data about how CLT is practised in classroom teaching in both high and low pass rate schools can help in positioning participating schools on this continuum. The following section will focus on the methodology used for data collection of the present study.

Table 6.1 Results statistics of participating schools

School	School pass rate	Pass rate in 2011	School category
School 1	Low pass rate	12.5%	Non-government
School 2	Low pass rate	35%	Non-government
School 3	Low pass rate	56.67%	Non-government
School 4	Medium pass rate	71.74%	Government
School 5	High pass rate	99.76%	Government
School 6	High pass rate	100%	Non-government
School 7	High pass rate	99.89%	Non-government

Methodology

For this study, schools were selected on the basis of percentage of pass rate in the SSC examination in the year 2011 from one education board in Bangladesh. From these result statistics, three schools with a very high pass rate and four schools with a very low pass or average pass rate were selected. Table 6.1 presents more information about the participating schools. Students from Grade 10 and their English teachers were selected for the study. As mentioned previously, a mixed method research approach was used to collect qualitative data through classroom observation and teachers' semi-structured interviews and quantitative data through students' survey questionnaires. The purpose was to observe both teachers and students along with their authentic practices during classroom activities. For this study, data from classroom observation (CO) is primarily used to focus on how CLT lessons are implemented in high- and low-performing schools.

The second data tool, the semi-structured interview with teachers, followed an interview protocol. Among others, this protocol included specific topics on teachers' academic background, their recruitment process, their experience in teaching through CLT and the challenges they confronted while practising CLT. The third data tool was a survey questionnaire for students which was used to collect data about students' family backgrounds and their learning experiences through CLT. In each school, classroom observation was followed by the students' survey questionnaire, which was then followed by teachers' semi-structured interviews. The audio-recorded data of the classroom observation was of approximately 4-h duration; the students' survey questionnaires were returned by 231 students, and semi-structured interviews were conducted with 7 English teachers and totalled 3.5-h duration.

Findings

During actual classroom observation, a checklist of 17 characteristics was followed for a comparative overview of classroom activities among participating schools. Table 6.2 presents some of the comparative features that were observed during classroom observation.

Table 6.2 Comparative overview of classroom activities among high- and low-performing schools

CO feature	Low-performing schools			High-performing schools			
	1	2	3	4	5	6	7
Students' use of English	No	No	No	Some of them	Yes	Yes	Yes
Teacher's language of instruction	Bangla	Bangla	Bangla	English	English	English	English
Pair/group work	No	No	No	Attempted but failed due to lack of time	No	Yes	Yes
Teacher's role during the classwork	Check, control and correction	Standing at the desk	Check, control and correction	Oral Q/A	Wrote next tasks on the blackboard	Wrote next tasks on blackboard	Wrote next tasks on blackboard
Pre-discussion before reading/writing	No	No	No	Yes	Yes	Yes	Yes

In low-performing schools (schools 1, 2 and 3), it was observed that communicative lessons were taught according to GTM with special attention to Bangla translation of the text. There was a lack of students' use of English while communicating with teacher or classmates. Maximising the use of the target language, one of the basic characteristics of CLT, was noted to be absent during classroom observation. Again sharing information and having discussions with fellow classmates through pair work or group work provide students with essential opportunities to be communicative inside the classroom. This type of pair work and group work was missing in low-performing schools.

Furthermore, teachers were not found to prepare students through pre-discussion on the lesson. Rather teachers were found to start with reading the text line by line with the Bangla translation, followed by a question and answer session. Special attention to word forms, reading aloud with translation, vocabulary meanings in Bangla and finding English synonyms from the text were repeatedly conducted in these classes. Finally, repetition and rote learning – fundamental characteristics of the GTM – were noted to be conspicuously present in all these classes. The teachers in these schools had the sole authority both in selecting students and the tasks. While students were engaged in writing question answers or paragraphs, teachers were observed to be standing at the desk, controlling and checking answer scripts. This was entirely contrary to the 'facilitator' role of teachers expected in CLT approaches. All these typical teacher roles of the GTM were significantly present throughout the sessions in the low-performing schools.

Table 6.3 Teachers' qualifications in the participating schools

School name	School category	School performance	Education	Training
School 1	Non-government rural	Low pass rate	Bachelor's degree with 300 marks course in English	CPD 1, 24 days
School 2	Non-government rural	Low pass rate	Bachelor's degree without 300 marks course in English	No
School 3	Non-government urban	Low pass rate	Undergraduate second year	No
School 4	Government urban	Medium high pass rate	MA English	CPD
School 5	Government urban	Highest	MA English, PhD	ELTIP, CPD
School 6	Non-government urban	Highest	MA English	ELTIP, in- service training
School 7	Non-government urban	Highest	MA English	TQI

In contrast, high-performing schools had more communicative and interactive activities. As can be seen from Table 6.2, students' use of English in speaking, teachers' encouragement of students to participate in pair work, holding pre-discussion, teaching grammar whenever it was related to the text lesson and finally teachers' use of English as a medium of instruction were consistently practised in these high-performing schools. Teachers at these schools were often found initiating argumentative or descriptive topics, namely, *International Labour Day*, *experience in travelling by air* or *lifestyle of ethnic minority people*, so that students could voluntarily participate in the discussion. At this point, questions may be raised about *why* there are qualitative differences in conducting CLT activities. The analysis below focuses on this issue.

From this classroom observation data, it is noteworthy that teachers' approaches to teaching CLT lessons were observed to be qualitatively different among the participating schools. Teachers who conducted CLT activities with lesson objectives had qualifications and experience that had prepared them for the task, which was evident in data from teachers' semi-structured interviews. This data indicated that teachers' own academic qualifications and their training, along with their proficiency level of English, were primary factors resulting in the qualitative differences in the ways they conducted these communicative lessons. Teachers from low-performing schools (schools 1, 2 and 3) did not have their bachelor's and master's degrees in English. As Table 6.3 shows, the teacher from school 1 had the minimum requirement to be an English teacher which was 300 marks on a course in English in his general bachelor's degree. Although he had received training on CLT from a

continuing professional development (CPD) programme, this training did not create any difference in his teaching practices. Two English teachers from these schools did not even have the minimum requirement to become English teachers, and they were teaching English, since their schools had no English teachers. In fact, the teacher from school 2 was concerned about the critical need for qualified English teachers in Bangladesh in general – 'challenges are already well known to the government. There is a serious lack of English teachers in our country. There are many schools where there is no English teacher at all'.

It is worth mentioning here that in all these three low-performing schools, the job of teaching through CLT was offered by teachers who were ill-prepared or not qualified with sufficient methodological knowledge in CLT. However, these teachers were allowed to teach English by the School Management Committee (SMC) of the schools because these schools could not appoint properly qualified English graduates as English teachers due to low socio-economic conditions and the low salary they could offer.

In contrast to these low-performing schools, all English teachers from the high-performing schools held bachelor's and master's degrees specialising in English or ELT. Besides this, they had also received their training in CLT either from the CPD programme or ELTIP (English Language Teaching Improvement Project). All these teachers were proficient in English and opted to speak in English (in contrast to Bangla for teachers from schools 1, 2 and 3) during interview. While talking about CLT characteristics, classroom techniques and limitations and challenges for implementing CLT, these high-performing school teachers commented critically on their experiences on CLT which were clearly shaped by their academic backgrounds. Similarly, these qualitative differences in their views on CLT were also evident in the ways they conducted communicative lessons in their classrooms.

In general, it is possible that these differences among teachers' qualifications are due to various types of recruitment processes (Islam, 2015) conducted at various types of schools which are supported by various social communities. The semi-structured interview data revealed that low-performing schools had a very flexible and negotiable type of recruitment process where a qualification in English was important only at a low level (school 1) or no level at all (schools 2 and 3). Two of these teachers were given the job of English teachers because their friends were in the school management committee. One of them mentioned:

> …those who had set up this school are my school friends. One day they told me they required an English teacher. By that time I had completed 300 marks in English and a B Ed (Bachelor of Education)… Since this school was close to my home, I joined as an English teacher.

In contrast, English teachers from high-performing schools (graduates in English or ELT) had to go through a rigid recruitment process involving three stages of qualifying tests. As informed by one of these teachers, this 'process includes first a written test, then viva voce; lastly he will have to demonstrate in the class. If he is suitable, then he will be a teacher' (Islam 2015). A similar process was experienced by teachers of other high pass rate schools. After performing well on competitive written

Table 6.4 Total approximate family income with parental occupation

School name	School setting	Fathers' occupation	Mothers' occupation	Monthly income range	Average income	
School 1	Non-government rural	Farmer	Housewife	1800–9000 BD taka	BDT 3526	US$44
School 2	Non-government rural	Farmer	Housewife	4000–9000 BD taka	BDT 6000	US$75
School 3	Non-government urban	Business	Housewife	5000–3000 BD taka	BDT 13,230	US$165
School 4	Government urban	Business, service	Housewife	4000–3500 BD taka	BDT 12,764	US$159
School 5	Government urban	Service, business	Housewife	6000–90,000 BD taka	BDT 34,545	US$432
School 6	Non-government urban	Service, business	Housewife	20,000–85,000 BD Taka	BDT 46,488	US$581
School 7	Non-government urban	Service, business	Housewife	16,000–150,000 BD taka	BDT 46,857	US$585

tests, the shortlisted candidates are called for interview to be finally selected after a satisfactory demonstration class in front of the recruitment committee.

It is worth mentioning here that these teachers from high pass rate schools generally have double the salary of teachers from low-performing schools (Islam, 2015). It is possible that high salary, esteem and higher promotion opportunities in the teaching career attract graduates in English to be teachers only at the high-performing schools. This new generation of English teachers with their methodological knowledge in ELT finds few career prospects in the low-performing schools. This may be one of the reasons for the difference in teachers' qualification between high- and low-performing schools.

Another crucial reason is the possible influence of SMC members on the recruitment of teachers. Islam (2015) found that there was a wide difference in educational and socio-economic backgrounds among the members of the SMC and recruitment committees of the participating schools. It is worth mentioning here that for government schools, this recruitment committee is formed of the governments' Public Service Commission. For non-government high-performing schools, the recruitment committee and SMC are formed of elite members of the society such as businessman, public and private service holders. For the non-government low pass rate schools, the SMC is formed of people from lower social strata with a lower academic qualification. It is likely that these recruitment committees from diverse socio-economic classes might play a role in recruiting English teachers with varied levels of qualification. More about the socio-economic conditions of the students' communities are reflected in the students' survey questionnaire data (Table 6.4) discussed in the following section.

Among other information in the students' survey questionnaire form, students were asked to provide information about their approximate family income. These data were collected to gain information about students' socio-economic conditions. Table 6.4 shows students from schools 5, 6 and 7 reporting high average incomes of their families – taka 34,545, 46,488 and 46,857, respectively. On the other hand, for schools 1, 2, 3 and 4, the average incomes were extremely low – taka 3526, 6000, 13,230 and 12,764. Data from these participating schools reported that high pass rate schools had students from upper-class socio-economic backgrounds.

It may be assumed that the higher tuition fees and other academic costs of the high-performing schools could be defrayed by these higher family incomes. Data about students' socio-economic backgrounds are also likely to be congruent with the logistics, infrastructure and social class conditions of their schools, a description of which is beyond the capacity of this paper.

Apart from information about the family income, students were also asked to show their level of agreement or disagreement on a 5-point Likert scale with 24 statements about their learning experience through CLT. Their responses were later analysed in a two-paired sample significance test. It was found that several fundamental activities of CLT were significantly less practised in low-performing schools. These significant differences were found in the case of *speaking in English with teachers and friends in the class, doing lots of classwork in the class, asking teachers for solving any problem in English, doing many pair/group works in English class, doing 'role play' in English in the class* and *getting equal chances to participate in any of English learning tasks.* These differences might have accelerated the gap in students' pass rates from high-performing to low-performing schools.

Discussion

As seen, the understanding and nature of teaching according to CLT approaches varied qualitatively in the participating low pass rate and high pass rate schools for this study. These variations in CLT practices can be linked to the stages of the communicative continuum described by Littlewood (2011) in which schools 1, 2 and 3 were observed to be at the non-communicative learning end, whereas schools 4, 5, 6 and 7 were on the side of structured communication. It can be argued from the data analysis that CLT practices inside classrooms are largely dependent on teachers' qualifications which, under the contextual specifics of this study, are only appropriate at high pass rate schools. Teachers of these schools have a higher salary scale and career trajectory, which are ultimately ensured by the socio-economic conditions of students and people from higher social classes.

This means students from financially solvent families can secure a position in a high pass rate school by investing money which is thus used as a gatekeeper for social hierarchy and for reproducing elite classes. In contrast, students with poor socio-economic backgrounds cannot have access to these high-performing schools. Here the institutional approach (Fairclough, 1989) is to reproduce the social class

systems through historical-structural factors (Tollefson, 2011) such as teachers' qualifications, tuition fees and the socio-economic conditions of learners.

Research has shown how private investment has facilitated the hegemonic practices of using financial constraints of the masses to make high-quality education accessible only to social elites. The lack of sufficient public budget makes private investment essential and validates class systems in education through institutional approaches. By allowing private investment in education and by letting 98% (only 2% are government schools) of secondary educational institutes be managed by the community or private entrepreneurship, the government is in a way encouraging social divides in the nation. This raises questions about the government's sincerity regarding the constitutional declaration:

> The State shall adopt effective measures for the purpose of – (a) establishing a uniform, mass oriented and universal system of education and extending free and compulsory education to all children to such stage as may be determined by law. [Bangladesh Constitution, Section 2, Article 17(a)]

And

> The State shall adopt effective measures to remove social and economic inequality between man and man and to ensure the equitable distribution of wealth among citizens, and of opportunities in order to attain a uniform level of economic development throughout the Republic. [Bangladesh Constitution, Section 2, Article 19(2)]

The spirit of these constitutional declarations was not found in the teaching-learning ambience of the participating schools of this study, and it would not be an exaggeration to say that this is more or less representative of schools across the entire nation. Students are attending schools which suit their socio-economic conditions and as such are not receiving a democratically sensitive equal education. Under the circumstances, one can hardly expect the eradication of social and economic inequality through education in general and in English learning in particular.

Conclusion

In this paper, it was reported that teaching practices within CLT approaches are often possible only at the high pass rate schools through public and private investment, administered by social and government elites. CLT activities in these schools are prominently related to teachers' qualifications, training and their own proficiency in English. These important factors for teaching within CLT approaches are wholly or partially absent in low pass rate schools, a gap that has inherently exacerbated social class representations in education systems in Bangladesh, risking the reproduction of stratified social systems with engulfing distances (Choudhury, 2001) since the task of nation building and human resource development lies in the hands of private investment.

At this stage, several initiatives need to be taken to democratise English learning for students from all social classes. This chapter recommends ensuring equal man-

agement and administration to all schools from the MoE. This would reduce the social divide and stop discrimination between government and non-government schools. It is also essential to implement a standard salary scale for all teachers, so as to attract new generations of teachers with bachelor's and master's degrees in the subject of English. In order to ensure capacity building for English teachers, it is necessary to conduct regular (instead of random) in-service teacher training courses with post-training evaluation activities. Without ensuring qualified teachers for education in general and English learning in particular, the government's aim for providing English linguistic capital to its population will remain only a verbal dream rather than an achievable reality.

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Chapter 7
Secondary School Teachers' Views on Inclusion of Students with Special Educational Needs in Regular Classrooms

Md. Saiful Malak and Tanjilut Tasnuba

Abstract Inclusive education (IE) has widely been recognised as a philosophy to facilitate the goal of Education for All (EFA) worldwide. One important aspect of IE is that it can serve as one of the most pragmatic strategies to respond to student diversity in developing countries (Ainscow and Miles, Developing inclusive education systems: How can we move policies forward? Available at http://www.ibe.unesco.org/fileadmin/user_upload/COPs/News_documents/2009/0907Beirut/DevelopingInclusive_Education_Systems.pdf, 2009). Bangladesh, as part of the developing world, has undertaken several initiatives including policy reforms, awareness creation and teachers' professional development for addressing inclusivity in regular schools. In particular, in secondary education, the IE initiative is being implemented through government development projects such as Teaching Quality Improvement in Secondary Education (TQI-SEP). Teachers have been trained on various aspects of IE including pedagogical knowledge, curriculum flexibility, and disability and diverse learning needs under TQI-SEP largely since its adoption in 2005. Research, however, has identified the 'pessimistic views' of teachers as one of the major hindrances to IE in secondary education in Bangladesh (Khan, Critical Literacy: Theories and Practices 6(2):102–118, 2012). In this chapter, our aim is to better understand the factors embedded in the views of secondary teachers regarding the inclusion of students with special educational needs (SEN) in regular classrooms. Based on a semi-structured, one-on-one interview approach, we collected data from 15 purposively chosen teachers from 5 secondary schools in Dhaka city. Following a general inductive thematic analysis procedure, we found that although most of the teachers held favourable views on the inclusion of students with SEN, they seemed to lack the pedagogical knowledge of IE, which resulted in inadequate provision of pragmatic teaching practices. We also

M. S. Malak (✉)
Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh
e-mail: saiful.malak@du.ac.bd

T. Tasnuba
Social Enterprise, BRAC Education Programme, Dhaka, Bangladesh
e-mail: tanjilut.tasnuba@yahoo.com

found a generally sympathetic view rather than a spirit of access and equity in the responses of the majority of the teachers in relation to the need for IE for students with SEN. We discuss the findings in line with other studies as to how secondary education teachers can be better prepared for addressing more in-depth inclusive practices in their classrooms.

Keywords Inclusive education · Teachers' attitudes · Secondary education · Pedagogy · Students with SEN

Introduction

During the past two decades, significant attention has been paid in scholarly research to different approaches to education around the world seeking to ensure that diversity is addressed effectively in regular classrooms. Since our schools are increasingly expected to be more diverse, meeting the demands of students with diverse learning needs has now become obligatory. Accordingly a shift in pedagogical practice from a teacher-controlled ideology to student-centred approaches has been seen as a desirable move in the last two decades. It is, however, a challenge for schools to ensure that every student is academically engaged in classrooms. Research suggests that the role of 'regular' teachers (herein, referring to mainstream teachers not trained in inclusive education) is critical in addressing diversity in the classroom (see Lindsay, 2007; Rouse, 2008). There is no doubt that ensuring justice, equity and quality in education for all learners is an urgent agenda in education systems across the world today.

In essence, the ultimate philosophy of embracing all children in a school is recognised as inclusive education (IE) – the goal of which has been to ensure access, achievement, presence and participation of all students including those from diverse backgrounds (UNESCO, 1994). IE does not only stand for including a group of marginalised students in regular classrooms; rather the broader philosophy is to embrace *all* students within a uniform education system (Ainscow, 2005). It could, however, be argued that the process of inclusion may vary based on the individual needs of different groups of students. In an IE context, research has identified that students with SEN rather than those who are from other underprivileged backgrounds, for example, indigenous or socio-economically disadvantaged groups, are the most vulnerable group (OECD, 2012). Therefore, countries that are at an embryonic stage of implementing IE, such as Bangladesh, need to explore the challenges and strategies to address inclusivity for the vulnerable groups as an initial step towards including all learners.

Research has also suggested that as a vulnerable group, students with SEN are the least favoured by their teachers within the context of IE (Ainscow, Dyson & Weiner, 2013). Although the definition varies across countries, students with SEN generally refer to those who have a disability (OECD, 2012). Hence, this study conceptualises IE as an approach to ensure participation and engagement of students with SEN (i.e. students having a disability) in 'regular' (or 'mainstream' as often described in related literature) classrooms together with their 'regular' peers.

In this chapter, our aim is to analyse the views of a group of secondary education teachers to understand whether or to what extent they hold adequate knowledge, favourable attitudes and skills for addressing inclusivity in regular classrooms within the context of a developing country like Bangladesh where the adoption and practice of IE is still rudimentary. We also aim to explore the concerns and challenges they perceive while practising IE in their classrooms.

In the following section, we present some key issues regarding IE policy and practice in the context of Bangladesh. Next, we describe the methodology used, data analysis and findings and discuss the findings for possible implications.

Inclusive Education: Policy and Practice in Bangladesh

Over the past several decades, disability has generally been conceptualised via a deficit view in Bangladesh. A clear reflection of this view is likely to be prevalent in the general population as well as in governmental policy-making bodies. Accordingly, exclusionary practices were found in Bangladesh in addressing children with disabilities (Zaman & Munir, 1992) and the policies addressing the rights of persons with disabilities were likely to be segregated from mainstream policies (Ahsan & Burnip, 2007). For example, while the education of 'regular' students is solely managed by the Ministry of Education (MoE) and/or the Ministry of Primary and Mass Education (MoPME), the educational arrangement for students with SEN has never been a priority of these ministries. Instead, the education of students with SEN is assigned with another ministry – the Ministry of Social Welfare (MoSW), which deals with issues that are more relevant to social marginalisation and those that are considered to need social support.

Irrespective of these challenges, it is important to note that Bangladesh has made significant progress in establishing the rights of persons with disabilities. Bangladesh is a signatory of all major international treaties on disability and IE. For example, Bangladesh has signed the declaration of *Education for All* (EFA) (UNESCO, 1990), the *Salamanca Statement and Framework for Action on Special Needs Education* (UNESCO, 1994), the *Dakar Framework for Action* (UNESCO, 2000) and the *UN Convention on the Rights of Persons with Disabilities-UNCRPD* (UN Enable, 2008) in which it is stipulated that education should be provided to all children within an inclusive approach. In addition, Bangladesh had strong commitment to the *Millennium Development Goals (MDGs)* (United Nations, 2008) and has also promised to achieve the *Sustainable Development Goals* (SDGs) which articulate the rights of all children to education through a uniform system. It is noteworthy that the trend of enacting IE policy and legislation in Bangladesh is primarily based upon the above-mentioned international treaties (Malak, Begum, Habib, Banu & Roshid, 2014).

To date, Bangladesh has undertaken a number of policy initiatives to ensure access and equity for all children in education. Indeed, the constitution of Bangladesh (Article 17) clearly describes that the education system should be uniform,

mass-oriented and universal to all children (Ministry of Law, Justice and Parliamentary Affairs [MoLJPA], 2000). Article 28 of the constitution further articulates the state's stand against any discrimination in education as follows:

> No citizen shall, on grounds only of religion, race, caste, sex or place of birth, be subjected to any disability, liability, restriction or condition with regard to access to any place of public entertainment or resort, or admission to any educational institution. (MoLJPA, 2000, p. 5)

In addition, IE has been in the agenda of several legislations over the last two decades. For instance, guidelines for IE can be traced in the Compulsory Primary Education Act, 1990, where primary education was declared compulsory and free for all children of the state. IE has also been underpinned by the Bangladesh Persons with Disability Welfare Act, 2001. This Act postulates the requirement to 'create opportunities for free education to all children with disabilities below 18 years of age and provide them with books and equipment free of cost or at low-cost' (Ministry of Social Welfare [MoSW], 2001). This Act was abolished by the 'Rights and Protection of Persons with Disabilities Act, 2013' (Ministry of Social Welfare [MoSW], 2013), and it comprehensively underpins several aspects regarding children and persons with SEN, including how they are to be defined, their education, healthcare, employment, transport facilities and social security. Indeed, this Act was the first initiative to legitimise the rights of children with SEN within regular education in Bangladesh.

In Bangladesh IE was emphasised in the mainstream education policy for the first time in 2010, through the National Education Policy, 2010. This policy calls for every child to have access to education through its main objectives. For example, Objective 7 focuses on 'Eliminating discrimination on grounds of nationality, religion, class and gender; building up an environment that promotes secularism, global-brotherhood, and empathy towards humanity and respect towards human rights' (Ministry of Education [MOE], 2010, p. 1). IE for a range of underprivileged children was recommended in several objectives of the policy document including objectives 22 (socio-economically disadvantaged), 23 (indigenous and ethnic groups) and 24 (children with disabilities) (MoE, 2010). Teacher training was highlighted in this policy as a means of transmitting the spirit of inclusion into regular classrooms in primary and secondary levels of education throughout the country.

Despite the existence of these IE-friendly policy guidelines, the progress of inclusion of students with SEN in regular classrooms seems to have been sluggish to date. Early literature showed that only 11% of students with SEN had access to formal education in Bangladesh (Directorate of Primary Education [DPE] & Centre for Services and Information on Disability [CSID], 2002). A baseline survey conducted in 2005 revealed that a total of 45,680 children with disabilities were accommodated in primary schools and among them a significant number of students were those with intellectual disabilities (DPE, 2011; PEDP Completion Report, 2011). Based on data recorded in the Bangladesh Bureau of Educational Information and Statistics (BANBEIS) (2012), Fig. 7.1 shows the increasing trend in the numbers of students with SEN in primary education from 2005 to 2012, while Table 7.1 depicts the category of students with SEN enrolled in 2012.
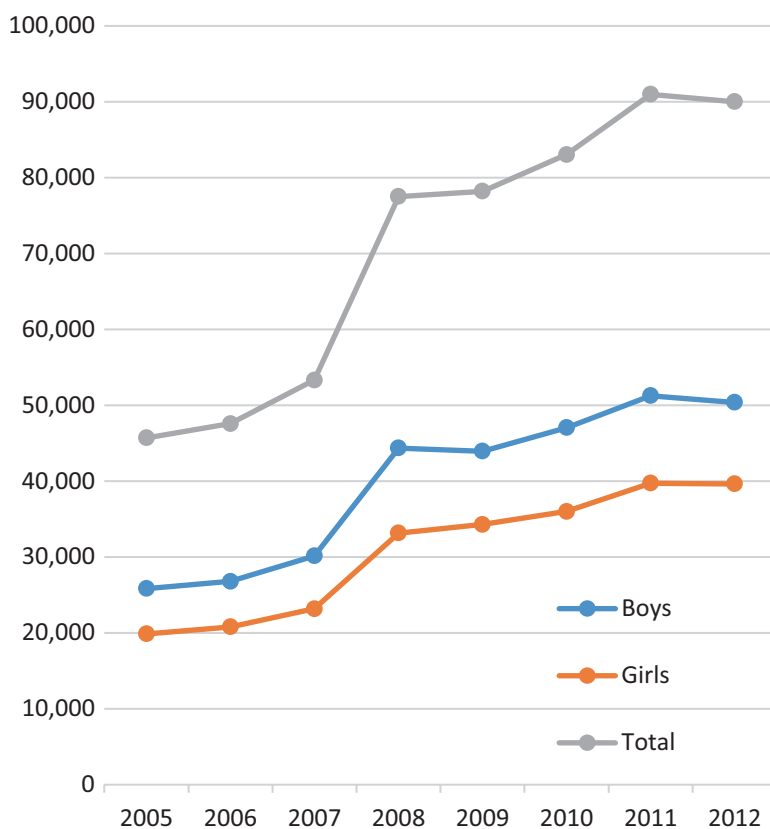
Fig. 7.1 Enrolment of students with special educational needs children (2005–2012)

Table 7.1 Prevalence according to types of students with special needs

Types of students with special needs	Grade I	Grade II	Grade III	Grade IV	Grade V	Grand total
Physical impairment	7353	6794	6688	5359	3565	29,759
Vision impairment	2499	2852	2957	2433	1797	12,538
Hearing impairment	1038	1201	1268	1039	756	5302
Problem in speech	5807	5182	4603	3342	2008	20,942
Intellectual disability	6300	5035	4082	2715	1451	19,583
Others	553	432	357	298	230	1870
Total	23,550	21,496	19,955	15,186	9807	89,994

Source: Bangladesh Bureau of Educational Information and Statistics (BANBEIS, 2012)

It is claimed that the enrolment of children with SEN in primary education increased by 5% each year (DPE, 2010). However when measured against the total number of primary school-aged children, recent data show that the enrolment of students with SEN represents only 0.57% (DPE, 2013). This means that in primary

schools, students with SEN constitute less than 1% of the total enrolment estimation, indicating that a large number of children within this group are out of school as 10% of the total population of Bangladesh is reported to have special needs, the majority of which are school-aged children (World Health Organization, 2006).

Statistics on the enrolment of students with SEN in secondary education are almost non-existent in any relevant sources including BANBEIS, the Directorate of Secondary and Higher Education and the Ministry of Education. However, there is a pool of research literature that provides information about secondary schooling facilities for students with sensory disabilities – such as visual and hearing impairment. There are 64 government-funded integrated secondary schools for students with vision impairment in 64 districts (Hossain, 2008). A specially trained resource teacher is appointed in each of these integrated schools. While the function of these integrated schools is highly emphasised in government documents, the reality of their functions remains unclear (Malak, 2014), probably because little evidence exists to support that these schools are contributing to the IE reform agenda in secondary education. In fact there are seven government-sponsored special schools for students with hearing impairment which have a capacity to facilitate schooling for 700 students, of which 180 students receive residential facilities. The educational provision of these schools is based upon special education, although they are reported as following the national curriculum for both primary and secondary levels (Hossain, 2008).

In order to facilitate IE in secondary education, an influential government development project called the 'Teaching Quality Improvement in Secondary Education Program (TQI-SEP)' was launched in 2005. A number of reform activities were undertaken in TQI-SEP to enhance inclusive practice. Examples of the major activities of this project include strengthening school capacity to provide effective learning environment for all children, including children with SEN; an IE awareness raising program for head teachers and members of the school management committee; an awareness raising program for district level officers (District Education Officers, DEO); an IE orientation program for teacher educators from Teacher Training Colleges (TTCs) and relevant NGO representatives; and professional development programs for secondary in-service teachers.

Despite such training initiatives, TQI-SEP has been criticised as having little impact on training activities on real settings. Studies by Khan (2012) and Rahman and Sutherland (2012) demonstrated that secondary teachers in Bangladesh have shown inadequate understanding and a variety of interpretations of the IE concept. Khan summarises that teachers have unfavourable attitudes towards children with SEN and only a vague understanding of the term 'inclusion'. An indication regarding IE practice revealed from the study of Rahman and Sutherland was that teachers were less likely to take responsibility for facilitating learning for *all* students including those with SEN. Hence, it is imperative to understand why secondary teachers are reluctant to take the initiative for including students with SEN.

Methodology

To explore the views of secondary education teachers in relation to the inclusion of students with SEN in regular classrooms, a qualitative research methodology was followed for this study involving semi-structured, one-on-one interviews to collect data from teachers in five purposively selected secondary schools. The schools were non-government-registered secondary schools located in the central part of the capital city, Dhaka. We formulated criteria to select schools for this study – specifically, a school was chosen only if it had at least one student with SEN studying with other regular students, had at least one teacher who had participated in IE training organised by TQI-SEP and had both male and female teachers. Based on these criteria, five schools were selected for this study. The number of teachers from the selected schools ranged from 8 to 15. In fact, the majority of the schools had a total of ten teachers. The average student-teacher ratio in the selected schools was 50:1, which is characteristic of the most secondary schools located in Dhaka city.

Participants in this study were 15 secondary education teachers (7 female) who were selected from the 5 identified schools. The teaching experience of the teachers ranged from 5 to 20 years with the majority ($n = 9$) having taught for more than 15 years. A large majority of the teachers ($n = 12$) were qualified at the Master's level, while the others had Bachelor degrees. With regard to professional qualifications, a minority of the teachers ($n = 5$) had received a Master of Education (M Ed) degree, while the others had a 1-year Bachelor of Education (B Ed) degree ($n = 7$) or a 10-month Diploma in Education (Dip-in-Ed) certificate ($n = 3$). Of 15 teachers, 5 had participated in IE training, which consisted of a 7-day continuous professional development program (CPD) organised by TQI-SEP, 3 had participated in a day-long workshop on IE and the other 7 had not had any training related to IE.

Participants for this study were selected after conducting a short meeting with the principal and teachers of each of the selected schools. The first three teachers of each school, who agreed to participate in the study after going through the consent form and explanatory statements, were selected as final participants for this study. An interview protocol was developed as a guide for conducting the interviews. Following are a few of sample questions included in the interview protocol:

a. How would you respond to the recently adopted pedagogical reform regarding inclusive education?
b. How do you consider the inclusion of students with special educational needs in your classrooms?
c. How would you comment about the existing arrangements of your school to implement inclusive education?

Interviews were conducted in participants' native language, Bangla, and were audiotaped with their permission.

Interview data were transcribed into Bangla verbatim. In order to maintain trust-worthiness in this research, we considered *member checks* (Shenton, 2004) as a suitable strategy to allow the participants to read and comment on the transcripts of interviews in which they had participated. An inductive approach using a thematic analysis procedure (Braun & Clarke, 2006) was used to analyse the interview data.

Results

This study investigated secondary education teachers' views on the inclusion of students with special education needs (SEN) in regular classrooms. Six themes which emerged from analysing the data were teachers' knowledge of IE and disability, attitudes towards students with SEN, adaptations for students with SEN, expected support from stakeholders, challenges to implementing IE and efficacy and professional development. The following section presents a detailed analysis of these identified themes under each of which relevant statements of the participants are added with the intention to describe the individual themes in greater depth.

Knowledge of Inclusive Education and Disability

'Inclusive education' as a term was familiar to all the teachers interviewed, although conceptual variations were seen to exist between participants who received training on IE and those who did not. Generally, the participants described IE as a system of education that includes 'all types of students' in the same classroom. Participants further elaborated the notion of 'all types', where most ($n = 10$) of them referred to students with different socio-economic status and intellectual abilities. While the majority of the participants ($n = 10$) described 'socio-economic status' as students' various socio-economic backgrounds including solvent, extremely poor and socially marginalised families, their narrative of 'intellectual abilities' was limited to students' good and poor academic performances only. Students' special education needs or disability was not emphasised as the basis for potential groups for IE. The following statement reflects how reluctant a teacher was to consider the inclusion of students with SEN:

> IE is such a system where children from higher class, middle class and lower class family as well as good students, bad students all stay in the same classroom… Students with disabilities can also participate there.

Like this participant, several others ($n = 4$) who did not receive IE training indicated students with SEN were at the bottom of their list of students who they thought could participate in regular classrooms. For this one of them explained that students with SEN would be deprived of getting special care if placed in regular classrooms.

'They learn things differently. They will need more support. Do we have that? A special school might be a good solution'. It should be noted, however, that even though these participants seemed to be reluctant with regard to the inclusion of students with SEN, they all appeared to have sympathy for them.

Trained teachers, however, had a relatively broader understanding of IE, in which students with SEN were accorded more emphasis. For example, a teacher who had received training on IE a year earlier noted:

> My understanding is that every child has a learning ability. No doubt students with disability can be taught in a regular classroom… All you need to do is give extra attention, that's it. Children coming from an ethnic background or from a lower class are very easy, I mean you can accommodate them easily, but kids with disability are different. That's why extra attention is needed.

Another participant who had participated in a day-long workshop on IE stated that he used to think that the goal of IE was to bring all the curricular aspects of the mediums of education—English and Bengali—together. However, his understanding changed over time and he started acknowledging that different children might have different abilities within the same system of education.

When participants were asked about disability, they mostly explained it as a condition, which hampered the 'normal living' of a person. According to most ($n = 8$) of them, students with disabilities cannot behave like 'regular' students, and they lag behind others in many ways. Most of the teachers also knew about different types of disabilities—for instance, visual and hearing impairment, intellectual disability, physical disability—although a few of them were not familiar with the correct terms for such conditions. Further, several participants ($n = 5$) showed a very positive view towards students with disabilities. One participant explained:

> There is a student in my school who is hard of hearing and also cannot speak. We try to teach her using different signs. Recently her mother bought her something like a microphone. Now she can hear us. Her happiness after hearing is beyond imagination. She has developed much better than before.

It is evident from this statement that this particular teacher participant had little knowledge about assistive technologies for students with disabilities as she failed to recognise that the student was using a hearing aid.

The views of the participants make it clear that although the terms 'disability' and 'IE', were familiar to them, many related factors embedded in IE were not yet widely understood to most of them. In addition, a few of the participants seem to believe that without getting adequate sympathy from teachers, inclusion of students with SEN in regular classrooms would be a challenging task. All these issues are indicators of the limited knowledge of participants about IE and disability, which is ultimately constraining the teachers' ability in taking proper measures in the classroom to make it inclusive for students with different abilities and needs. Moreover, as teachers themselves lack proper knowledge, naturally the dissemination of appropriate information to change the perception of society at large will take a lot of time.

Attitudes Towards Students with SEN

Most of the participants (*n* = 10) were optimistic about the idea of including students with SEN in their classrooms. As the selection criteria of this study demanded experienced participants, we found all teachers of the five schools had some experience of teaching such students in their classrooms. In their responses most of them seemed very confident and mentioned that they provided necessary support to students with SEN while teaching in the classroom. However, many of them were unsure about the *ability* of students with SEN. They tended to think that extra support and care would be essential for including students with SEN in regular classrooms. For example, one of the teachers stated:

> There is a boy in grade IX who has problem in both of his legs. He cannot walk straight. He also lacks intelligence. Before the last terminal examination, I hinted most of the questions to him indirectly before the examination so that he could pass. And he did quite well in the exam.

This statement is evidence of a teacher's empathy and support towards a student with physical disability whom he had assumed to be a student with 'low intelligence' but yet made efforts to help him to do well in the examination. This indicates that even if teachers had possessed limited knowledge about disability and inclusion, while dealing with students with disabilities directly, a certain level of commitment and engagement developed inside them, which demonstrated through their classroom behaviours and practices.

Another teacher explained that she firmly believed that as per the nation's constitution, education indeed was a basic right for all students, including those with SEN. However, a small number (*n* = 3) of teachers thought that good results should not be expected from them. However these teachers also believed that if students with SEN had suitable learning environments in the classrooms, they would have a higher chance of passing the examination. One of the teachers went to the extent of suggesting certain modifications in the schools to accommodate students with SEN:

> I don't have any problem in including students with SEN. But in the context of our country there are lots of difficulties. Therefore I think at first we need to concentrate on the infrastructure. There is a ramp at the downstairs of our school. Many more changes like that need to be made.

It is clear from this statement that the teachers were aware of challenges that existed in the present infrastructure of schools and they are willing to make changes and welcome students with SEN in regular classrooms in ways that would ensure a suitable environment for them in the true spirit of IE.

Further, some teachers (*n* = 5) believed that inclusion was not good for students with severe disabilities. They preferred to send such students to separate schools. One of these teachers explained the 'problem' of inclusion in this way:

> It is a matter of reputation of a school… I feel there will be a problem regarding results. Every institution wants to achieve 100% pass. But when students with disabilities will take part in the examination from a school, there will be a risk.

It can be said that although teachers generally had sympathy for students with SEN, they were still concerned with several practical issues which they thought could pose challenges for their schools and compromise the quality of education they provided as well as the matter of social recognition and social acceptance. Teachers were apprehensive as to whether or not the inclusion of students with SEN had the potential to jeopardise the academic results and reputation of their schools. This issue also revealed the possibility of other challenges such as receiving less government funding and more parental pressure for not performing up to expectation.

Participants' response suggested that there were many factors involved in shaping teachers' attitudes towards the inclusion of students with SEN such as a disability-friendly infrastructure, direct involvement of teachers with students with SEN and reduced pressure for academic achievement all of which might help teachers change their attitude towards these students.

Adaptations for Students with SEN

Teachers in this study tended to believe that certain necessary adaptations need to be considered for including children with SEN in regular classrooms. They affirmed that adaptations were necessary in several areas including teaching materials, textbooks, the assessment system, teaching planning and technological support. Surprisingly, most of the participants ($n = 10$) seemed to have had little knowledge about instructional materials and appeared to be uncertain with regard to the term 'technological support'. However, some teachers ($n = 6$) had reservations regarding the teaching materials they normally used in the classroom. They thought these materials were neither 'appropriate' nor 'adequate' for an inclusive classroom. They explained that it would be helpful for the students if they had the scope to use 'extra' teaching materials that were attractive, colourful, vivid and realistic. Besides, most of the participants also believed that major adaptation was required for textbook contents. One participant explained as follows:

> It would be better if the load of textbooks could be minimised. Only the essential contents should be included and all others can be eliminated and this would reduce the load.

Several participants ($N = 8$) suggested using 'more colourful' pictures in the textbooks and making the cover of the book more attractive and interesting with 'easier' contents for students with SEN. A few participants ($n = 4$) also highlighted the need for Braille books.

All participants agreed that the assessment system should offer flexibility for students with SEN. Most of the participants ($n = 12$) suggested oral tests rather than written tests for such students. They also argued that extra time should be provided to these students if a written test was offered. One of the respondents expressed her wish to learn sign language to assess the students in 'their own way'. Another participant suggested:

Students with SEN become very enthusiastic when we assess them. If we can encourage them even if by giving a chalk, they become very happy and try to pay more concentration to their studies. Considering the type of disability, a separate assessment system should definitely be made for them.

Most of the participants ($n = 11$) agreed that they should bring modifications to their teaching plans if students with SEN are included in regular classrooms. They mentioned managing proper seating arrangements for students with SEN in the front row, engaging them in group activities with 'good students', keeping in mind the number and level of such students while teaching and restructuring the teaching-learning method. Most of the participants ($n = 9$) further felt the need for various forms of technological support such as audio recorders, television, computers, multimedia projectors, etc. which they believed would greatly enhance the learning experiences of students with SEN. This is in line with the findings of Becta's (2003) ICT research, which suggests that ICT can support inclusion by unlocking the hidden potentials of students with SEN and also by helping teachers in tailoring tasks to suit individual students' abilities and skills.

Expected Support from Stakeholders

When the participants were asked about their expectations from stakeholders, they explained the type of support they expected from parents, the school management committee, the special education teacher and the head teacher. Several participants ($n = 8$) described the role of the parents of children with SEN as crucial. According to them, more support is needed from parents than teachers. They expected the parents to communicate with the teachers on a regular basis regarding their children's progress. Some other participants also mentioned the need for additional support from children without disabilities and their parents:

I can see that parents of children without disabilities are very much impatient. A few years back, we admitted a student with disability. She didn't do very well but didn't fail either. She used to salivate often... Mothers of her classmates came up with complaints to me and requested me to change their daughters' seat. I don't understand why they don't think that the girl could have been her own daughter. These parents need to be more supportive.

Several others had similar expectations of the school management committee (SMC), believing that it should hold positive attitudes towards students with SEN; in particular, they stated that the SMC should not be discriminatory while considering the admission of such students to their schools. According to them, SMC members can motivate both teachers and parents most effectively, provide technological support and make the school environment barrier-free for students with SEN:

SMC members are the parents of a school. They must have a well-thought attitude and they should take important steps for proper classroom management. Like other children, children with SEN can also come to school – they should hold this attitude.

All the participants from the five schools admitted that the head teachers of their respective schools are encouraging towards these students and they had received help from them whenever required. The participants also voiced their expectation of getting more support from the head teacher with several issues including managing extra time for teachers to let them help students with SEN, counselling parents of children with and without SEN and monitoring overall management. One of the participants emphasised the role of the head teacher in this regard as he/she was the coordinator of SMC members, teachers, parents and students. The participant said, 'he must monitor all the issues regarding students with SEN continuously and create more facilities according to their needs'.

Most of the participants also demanded the support of a special education teacher. For example, one of the participants explained,

> To be honest, we are not experts in managing students with disabilities. Special education teachers possess a lot more experience than us and they understand the psychology of these children. We should receive training from them in dealing with SEN students.

The statements above suggest that the teachers had an understanding of the type of support they needed from stakeholders to manage students with SEN in regular classrooms. They were also aware of the fact that besides the above-mentioned support from parents, SMC members and head teachers, they also needed to receive proper training from special educators to understand the requirements of students with SEN better. This also indicates that collaborative support and the engagement of all the stakeholders might make the inclusion of students with SEN more effective in regular classrooms.

Barriers to Implementing IE

It appeared from interview data that the peer group of students with SEN was unlikely to accept them in the same classroom after they had enrolled. Many teachers ($n = 8$) experienced these students teasing and making fun of students with SEN. Some participants ($n = 4$) noticed that if they paid more attention to students with SEN, other students often became irritated. However, these participants also mentioned that they had received affirmative responses from peers when they tried to make them understand the condition and needs of students with SEN.

Most of the participants highlighted time constraints, the overwhelming load of the syllabus, lack of resources and technological support, an improper environment and the workload of teachers as barriers to implementing IE for students with SEN. A few of them suggested major curriculum and textbook reform. One of the participants explained:

> There are lots of students in a classroom – sometimes more than 75. We get only 35 minutes for one class. That's why I cannot do anything special for those students with SEN even if I wanted to. The environment is also not suitable for such students.

In sum, teachers were indeed aware of the challenges they faced while including students with SEN in regular classrooms. Although they mostly mentioned peer group challenges and challenges related to curriculum and textbooks, they were aware of other challenges as well. This brings back the hope that if the challenges could be mitigated, it would be easier to include students with SEN in regular classrooms in Bangladeshi classrooms.

Efficacy and Professional Development

Participant teachers of this study discussed at length their confidence in teaching students with SEN in regular classrooms and the type of professional development they felt would be necessary for that. A few of the participants ($n = 3$) who had received training on IE confirmed that they were confident in teaching students with SEN in regular classrooms:

> I have full confidence in myself. Maybe students with SEN will not get an A+ like other students. But they will get an A or B grade. At least I will be satisfied that I have helped them reach their goals.

It is evident from the statement above that the teachers had the inner will to work with students with SEN and helped them reach a certain level, which also indicates teachers' positive attitudes towards these students. However, this also indicates teachers' focus on academic achievements only, rather than thinking of other forms of development for students with SEN.

Yet another participant who had received training in IE mentioned that he would be able to teach students with SEN only if he could get 'proper facilities' from the school. He said,

> A proper environment and teaching aids should be supplied. I don't have any training to handle such students, so I also have many weaknesses. But I will try my best.

It is clear from this statement that the participants lacked pedagogical knowledge of teaching students with SEN, which gave rise to the demand to receive practical training from special educators. It can also be said that if the teachers were to get the required support for teaching students with SEN, possibly they would develop a feeling of confidence. Teachers were also sincere enough to talk about their weaknesses, which needed to be identified in order to provide support accordingly. All the participants emphasised the importance of training for IE, especially for managing students with SEN in regular classrooms:

> I have taken several subject-oriented training courses. After getting new training I feel that I have learnt something new. Continuous training should be given to teachers according to the need. Issues related to IE came up as a topic in a 14-day training. Only one class was taken on this issue. We haven't got any separate training. But it is needed.

It is evident from the above statements of the participants that training is one of the most important variables in making teachers feel confident in teaching students with

SEN, where a huge gap still exists. Whatever knowledge teachers currently possess on IE is the result of very minimal initiatives taken so far. This shows the urgent need for government initiatives, priorities and budgetary decisions for the successful inclusion of children with SEN in regular classrooms.

Discussion

The main purpose of this study was to understand the viewpoints of secondary education teachers regarding the inclusion of students with SEN in regular classrooms. Our analysis revealed that the majority of the participating teachers had favourable attitudes towards the inclusion of students with SEN in their classrooms. It is, however, noteworthy that a common message from their positive feelings was that these emerged from sympathy rather than a spirit of access and equity. One of the possible explanations of the sympathetic attitude of teachers could be linked with their belief system about persons with disabilities, which might have been developed from years of experience within the context of Bangladesh where disability has widely been treated as a 'charitable' issue (Siska & Habib, 2013).

Misconceptions and superstitions, as well as widespread discrimination about disability, can also be found in every setting in Bangladesh including home, school and playground (Kibria, 2005; Miles & Hossain, 1999; Zaman & Munir, 1992). Little evidence of acknowledgement exists to support the rights of people with disabilities to be able to live equally with others in the society. Instead they were more likely to be labelled as 'deficient', someone who needs 'help' from other people in the society (Munir & Zaman, 2009; Zaman & Munir, 1992). Accordingly, whatever measures have been taken by the government of Bangladesh to support children or persons with disabilities remained excluded from the government's mainstream policy agendas (National Forum of Organisations Working with Disability [NFOWD], 2009).

As a result, as stated earlier, despite increased attention on the inclusion of students with SEN in the National Education Policy (2010), all education-related activities (for instance, funding for students with SEN) are still controlled by the Ministry of Social Welfare rather than the Ministry of Education. Traditionally, the Ministry of Social Welfare deals with issues that are more relevant to social marginalisation, and redressing this needs social support. Perhaps due to such contextual aspects, the teachers might have perceived educational arrangements for students with SEN as a welfare matter rather a rights-based issue. It is, therefore, important for individuals involved in policy-making bodies in both the Ministry of Primary Education and the Ministry of Social Welfare to make all required adjustments for a 'responsibility shift' in order to establish the rights to education of students with SEN. Inevitably, such a central level initiative may bring enormous benefits in shaping teachers' belief systems more positively towards the inclusion of students with SEN in regular classrooms.

Several other factors might be involved in the attitudes of the teachers of this study. Consistent with previous studies conducted in the context of Bangladesh (see Khan, 2012; Rahman & Sutherland, 2012), the present study revealed that teachers had limited knowledge of IE and students with SEN. Khan (2012) argued that because of their limited pedagogical knowledge of IE, teachers were confused and uncertain about the idea of inclusion of students with SEN in regular classrooms in Bangladesh. Possibly Khan's argument is even more pertinent for the teachers of this study, who might have felt themselves less confident in dealing with issues related to students with SEN, which in turn, may have negatively influenced their intention towards the inclusion of these students in regular classrooms.

It is evident from the well-known theory of planned behaviour that an individual's intention to perform a task is closely linked with how confident they are to carry out such a task (Ajzen, 2011). An appropriately designed professional development program is thereby warranted for secondary education teachers. The positive effects of training on teachers' attitudes and efficacy have been extensively recorded in the contemporary literature (e.g. Loreman, 2014; Scanlon & Barnes-Holmes, 2013; Sharma, Shaukat & Furlonger, 2015) indicating that teacher training is extremely important for promoting IE in regular classrooms.

One finding that is of particular interest is that despite having IE training, many teachers in this study appeared to have inadequate attitudes and understandings regarding IE for students with SEN. A clear sense of hesitation was predominantly conveyed by the teachers in their views about the inclusion of students with SEN in regular classrooms. This is perhaps an indication that the training they had received from TQI-SEP might have been ineffective in shaping their attitudes towards students with SEN. However, since there are no data regarding the effectiveness of TQI-SEP training, it is hard to provide clear evidence for such a claim. A large-scale study is therefore warranted to determine whether or to what extent the IE training offered by TQI-SEP impacts on secondary teachers' knowledge, attitudes and efficacy regarding the inclusion of students with SEN in regular classrooms.

As mentioned earlier, the government of Bangladesh has been striving to promote and encourage IE in secondary education through the TQI-SEP project since 2005. One of the specific focuses of this project was to equip in-service secondary teachers with the necessary knowledge and skills of IE to facilitate the enhancement of effective instruction for all students. To achieve this goal, all teachers of grades 6–10 from both government and private secondary schools were targeted to be involved in professional development programs (Asian Development Bank [ADB], 2008). However, like this study, it is argued that more professional development activities are needed to enable secondary teachers to address diversity in their classrooms (Khan, 2012; Malak et al., 2014; Rahman & Sutherland, 2011). Appropriately designed IE professional development programs have also been suggested by some previous studies to promote better inclusive practices in Bangladesh (e.g. see Ahsan, Sharma & Deppeler, 2012; Malak, 2013a; Tasnuba & Tsokova, 2015).

Findings of this study also indicate that even if the teachers are in favour of including students with SEN, they are concerned about certain IE issues such as the inflexible assessment system, high workload, inadequate instructional materials,

large class and lack of support from stakeholders. These findings are consistent with several previous studies (e.g. see Ahmmed, Sharma & Deppeler, 2012; Ahsan et al., 2012; Horne & Timmons, 2009; Malak, 2013a; Mullick, Deppeler, & Sharma, 2012). The assessment procedure of the education system of Bangladesh is still fully examination-based, and there is little scope to make the assessment flexible for students with SEN. In addition, Bangladeshi teachers have to deal with large class sizes and the workload of teachers is very high. It is also evident that parents of regular students themselves impede the inclusion of students with SEN (Malak, 2013b; Mullick et al., 2012). Taking all these challenges into consideration, it is understandable why teachers, despite their best intentions, may not in reality support students with SEN being included in their regular classrooms.

The teachers of this study expected supportive attitudes from parents, SMC members and the school principal. Over 98% of the secondary schools in Bangladesh are non-government (MoE, 2006), and the principal along with the SMC of the school plays vital roles in the decision-making process regarding school improvement. Therefore, the attitudes of SMC and the school principal are important in addressing inclusivity in secondary education. It is, however, evident that the roles of the school principal and SMC members often obstruct IE initiatives (Ahmmed et al., 2012; Malak & Khanam, 2011; Mullick et al., 2012), suggesting that school support, including parents, the SMC and the principal, is significantly related to the attitudes of teachers towards including students with SEN in their classrooms.

Several teachers in this study mentioned special teachers' support for practising IE. It is worth noting that in the school culture of Bangladesh, the provision of paraprofessional and support teachers does not exist and is impractical. Despite the class size usually being extremely large, there is little scope to have a co-taught inclusive classroom in regular schools. This indicates that the success of inclusion of students with SEN in the context of Bangladesh depends greatly on the 'regular' teachers' attitudes, knowledge and skills, rather than provisions made to facilitate inclusion, including availability of resources or even legislative obligations.

Concluding Remarks

Research shows that policy changes and legislative recognition facilitate the adoption of the discourse of inclusion in developing countries, although very limited actions are taken to build the necessary institutional capacities and to translate these into school and classroom practices (Ahsan & Burnip, 2007; Armstrong & Sahoo, 2011). It must be remembered that IE is not just a new educational term gaining enormous currency in today's world; it is a shift from one set of beliefs to another (Argyropoulos & Nikolaraizi, 2009) which needs the collaborative concentration of educationists, practitioners, researchers and policy-makers for its sustainable development. Practitioners, in this regard, have a great role to play since it is their insider perspectives that can inform the practical challenges and solutions for the development of IE.

The findings of this study suggest that there is a need for substantial efforts to bring about changes in practitioners' own skills and pedagogical knowledge and thus changes in culture, rules and practices which can support the development of IE. This study thereby has implications for teacher training for professionals, teacher educators at university level and teacher trainers of Teacher Training Colleges (TTCs). It is time to rethink the role they have to play for preparing pre- and in-service teachers to address inclusivity for all learners within the framework of IE.

The classrooms of the twenty-first century are expected to be a safer place for both students and teachers, where ensuring social justice underpins teaching-learning activities. It is therefore, our collective responsibility to make teachers aware of the changed scenario in order to ensure that each student is equally welcome, academically engaged and proactively learning in the classroom. In this regard, besides research done by educationists, there is huge scope for practitioners to delve themselves deeper into action research (see Chowdhury, this volume for more on action research in Bangladesh) to identify the problems and solutions from the practical ground where they work for the greater development of practitioners themselves, students and broadly the society as a whole.

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Chapter 8
Teachers as Leaders and Learners: Building Teacher Leadership in a Bangladeshi Secondary School

Abu Salahuddin, Janinka Greenwood, and Lindsey Conner

Abstract This chapter examines the ways a creative and innovative principal in a Bangladeshi secondary school developed his teachers as leaders. The leadership practices that have developed in this school are significant because they offer a model of shared responsibility for engagement with students and community in the Bangladeshi context where authoritarian leadership is still the more common practice and the norm. This case study uses a qualitative approach that draws primarily on the principal's perceptions and experiences. It offers a contribution to educational change that is drawn from working within a local context rather than simply based on outside, and possibly alien, international models.

Keywords Leadership · Teacher leadership · Educational change

Introduction

> Since beginning, our school faced the problem of students failing in public examinations and of huge dropout in different grades. We tried to solve these issues but could not. Change took place when the current principal started to engage teachers and students in teaching and learning. Now students are active participants in classes and teachers lead them to a

A. Salahuddin (✉)
Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh
e-mail: abu.salahuddin@du.ac.bd

J. Greenwood
College of Education, Health and Human Development, University of Canterbury, Canterbury, New Zealand
e-mail: janinka.greenwood@canterbury.ac.nz

L. Conner
College of Education, Psychology and Social Work, Flinders University, Adelaide, Australia
e-mail: lindsey.conner@flinders.edu.au

bright destiny. We lead our faculty members, coordinate tasks and enjoy freedom. Our school walks to a greater success and we are proud to be part of that. (Tasnim, teacher and faculty leader)

Tasnim, a teacher in Shanjeebon School, described in these words how teacher engagement with students and their participation in leadership are changing in his school. Shanjeebon is an urban secondary school of 67 teachers and 3500 students. It is located in a poor community bounded on one side by a bazaar, a slum on another and a river on the third. Most of the parents have low income and many are illiterate. Due to social, economic and political factors, changes for improvement are often complicated in such areas of Bangladesh. However, in Shanjeebon School the principal is working to improve the current practice, mainly through the effective engagement of teachers. This chapter explores the principal's strategies to see how the processes may benefit other schools in similar contexts.

The Principal and the School

This is a case study of a principal named Nazrul and his school which has been given the pseudonym of Shanjeebon School. Initially the principal was chosen because of the way he was using his students as teachers' assistants in class. When we talked further, other aspects of his entrepreneurial approach to managing people and resources emerged. We investigated how he made a difference to student learning and to the professional development of his teachers. The primary process for examining his actions and ideas was through an extended sequence of conversations, or *professional dialogues*. In these dialogues, we discussed extensively his work as a principal and our respective understandings of what education is about, what changes are needed for schooling in Bangladesh, how he interprets his role and the initiatives he has taken in his school to improve student learning and the greater wellbeing of the community.

As stated above, Shanjeebon School is located in an urban district that has a lot of people living at or just below subsistence level. Many of them are day labourers, working in the local bazaar or in garment factories. In the past, parents of students in this school, similar to many other parents from similar socio-economic backgrounds, did not perceive they had the capacity to engage actively with the school or with the education of their children. While the school under study cannot be considered as the representative of all schools in Bangladesh, there are many schools where parents experience similar degrees of hardship and where teachers perceive that students are not truly engaged in learning.

The background of this school in terms of the socio-economic status at local and national level and the complete findings of the research into Nazrul's strategies are described elaborately in Salahuddin (2016). This chapter particularly focuses on the ways that the principal followed to develop teacher leadership in learning.

Educational Change in Bangladesh

A host of global and local economic and political forces are currently triggering an expectation of change in education in Bangladesh. As a result, school authorities and many principals feel the pressure for improving the teaching and learning practices (National Academy for Educational Management [NAEM] & BRAC, 2004; Salahuddin, 2013). Current training practices continue to draw principals to focus more on administrative responsibilities than on the encouragement of creative and innovative thinking. However, some principals are exploring ways of engaging teachers and students more thoroughly in the processes of teaching and learning (NAEM & BRAC, 2004).

   This chapter focuses on a case of evolving teacher leadership practices in a particular urban secondary school, resulting from the initiative of one creative principal. His practices are grounded in the realities of the Bangladeshi context as well as drawing on exemplars from international sources. The chapter also reports how these practices enhanced student learning both in terms of success in examinations and the development of life skills. It identifies strategies, initiated by the school principal, that aimed at developing and supporting teacher leadership. Finally, it offers a potential framework for building teacher leadership in the Bangladeshi context.

   Although many Western studies indicate that principal leadership is a key factor in school improvement (Elmore, 2005; Fullan, 2011; Harris, 2008; Smylie, 1995), it is widely acknowledged that principal leadership is not sufficient to achieve all the goals of an educational organisation. Assistant teachers are also required to take leadership roles and responsibilities. The following discussion considers how this need can be addressed in a Bangladeshi context. Many of the studies on school leadership in developing countries have been carried out by Western researchers; therefore a gap between the researcher's values and expectations and the educational context within the country is often observed. This study has been conducted by a Bangladeshi researcher, the first author, who grounds the investigation and the analytic reflection of the findings within the social, political and economic context of Bangladesh.

Context of School Leadership in Bangladesh

Education in Bangladesh is still largely structured on postcolonial lines and so remains somewhat hierarchical and authoritarian. Formal authority resides in the role of a principal as well as a deputy principal. Most principals come into the position due to mere fact that they have met the requirements of teaching background and practices. However, often they have limited theoretical knowledge of how to lead and motivate their teaching staff (Abdullah, Haq, & Ismail, 2008; Salahuddin, 2012, 2013). They tend to apply administrative codes developed at the national level without adapting them to their school-specific context and without also developing

the professional capabilities of their teachers. They are also found to have not considered the social and cultural expectations and the needs of the community at large. There are few introductory training courses for principals that provide opportunities to explore leadership. There is therefore a need to develop training courses that would empower principals to improve the leadership capacities of assistant teachers, as studies have strongly suggested that tapping into the leadership skills of teachers can lead schools in Bangladesh to achieve better learning outcomes (Hoque, Alam, & Abdullah, 2011).

Power structures that typically operate within Bangladeshi schools are as they read this account of innovations. For example, teachers are appointed to teach specific subjects, but there are seldom any organisational structures that support collaborative development of particular disciplines. Therefore teachers tend to teach from the mandated textbook and in isolation behind closed classroom doors; there are few schools where teachers are able to pool expertise or actively seek advice from colleagues. Delegation of authority in forms of distributive leadership is not typical practice. Thus the overarching, and largely accepted, authoritative power of the principal tends to preclude communally negotiated change. At best, a creative and innovative principal may initiate changes that allow his teachers to be more effective and students to be more engaged. At this stage in Bangladeshi educational development, teachers do not yet have a strong professional voice. Within their own classrooms, however, teachers tend to have complete authority. Other power structures that may exist within a school tend to be unofficial and may be based on age or relationships with politically influential members of the community. Working against the micropolitical influence that may operate within a school as well as in the wider community is a challenge for any principal seeking to reform the system.

In the system stated, some principals set specific achievement goals for their schools, and they attempt to distribute their workload and leadership to teachers to make the school system more diverse and innovative (NAEM & BRAC, 2004). These principals are often inspired by national and international training programs; they aim to create more successful outcomes for students by introducing new ideas and strategies that they have learned into their schools in ways that match their own contexts. Nazrul, the principal studied in this chapter, is one of them. While keeping within the stated aim of funded education projects asking participants to imitate and implement the best practice in developed countries (Asad, 2009), this principal has been evolving teacher leadership in a way that is grounded in the unique realities of his own school community. The following section presents a brief account of the research method.

The Study

The methodological approach used in this research is that of case study within a qualitative framework (Creswell, 2013). The intention of such an approach is to highlight the complexities of place and situation (Stake, 2005) at the same time as

identifying the key features of the case itself—in this instance the details of what the principal did to make a difference in his school and how he addressed the challenges he encountered. A qualitative case study shares some of the elements of ethnography as it seeks to create a thick description (Geertz, 1988) of events, actions, reactions, perceptions and consequences. It focuses on the singularity of the case itself, rather than seeking to reconceptualise it through the parameters of external theories, although theorisations developed from other cases might be utilised to illuminate aspects of the case. This approach was chosen because the goal of the overall research project was to investigate the situated and constantly evolving circumstances of how the principal initiated and managed changes and how he involved others in sharing aspects of his leadership. It is believed that it is precisely the detailed nature of his strategies and changes that can be useful to others, particularly other leaders and policymakers in Bangladesh as well as in other similar contexts.

Within this broad approach, the process of narrative inquiry (Clandinin & Connelly, 2004) promotes attention to the ways in which actions and consequences are mediated by people's experiences and by the social contexts in which they are embedded (Chase, 2005; Davis, 2002). Accordingly, this inquiry utilised a series of professional dialogues (Grey, 2011; Simoncini, Lasen, & Rocco, 2014) with the principal, interviews with teachers and school managing committee (SMC) members, group discussions with students and parents and an analysis of the school's reporting documents and records of projects.

A defining element of a professional dialogue is the engagement by both participants and researcher in *talking* together over a prolonged length of time, not to answer predetermined questions but to explore and 'make meaning' from professional experiences. Analysis is thus an ongoing process that is shared by researcher and participants, with primacy given to reflection on experience rather than on codification. It is from these dialogues that participants' narratives were constructed. In this chapter a number of key themes are identified and reported that define the leadership style in the school and the ways teachers are developed as leaders.

Any names in this chapter are pseudonyms, given to respect the rights of participants to anonymity.

Teacher Leadership in Current Literature

Teacher leadership has emerged from world literature as an important factor in enabling future leaders in a school. Katzenmeyer and Moller (2009) have argued that in the past many principals have not understood the importance of facilitating the role of teacher leadership. Many principals in developing countries consider teacher leadership only in terms of the team leader or the subject leader. The concept of teacher leadership is useful across the education sector as is the notion that all teachers have expertise and can improve the way they lead learning (Harris, 2003; Lovett & Andrews, 2011). However, developing their own expertise warrants further understanding of this concept among teachers in different contexts. Ackerman and

Mackenzie (2007) defined teacher leadership as a collective and collaborative endeavour in schools rather than centralised leadership. Crowther, Kaagan, Furguson and Hann (2002) focused on its potential in leading whole school reform. Stein, Smith and Silver (1999) explained how teachers learn in a social setting in their school context rather than individually. Through their own approach to work, teachers try to influence other teachers to find ways to improve teaching and learning. Formal leadership positions are not essential to develop teacher leadership, and teachers can engage and contribute to leadership tasks from any position (Robinson, Hohepa, & Llyod, 2009).

Although developing teacher leadership in traditional hierarchical schools is acknowledged to be complicated, theorists (see, e.g. Harris, 2008; Lovett & Andrews, 2011; Robinson et al., 2009) have argued that principals can expedite the process by creating opportunities for the professional development of teachers as leaders. In particular, Katzenmeyer and Moller (2009) proposed that when teachers engage in professional learning to develop their leadership, by improving instruction, mentoring others and planning collaboratively, they are learning through their own reflective practice. Du (2007) emphasised the importance of principals recognising the work of teacher leaders, motivating them to develop their leadership further and supporting them to take responsibility for their own learning. He expressed the hope that in this way teachers as leaders will come to realise that leadership is part of their ongoing work for the success of the school. Reeves (2008) pointed out that when teachers do understand their leadership roles, they become conscious of and are able to identify barriers to growing their leadership. They learn that blaming others can be a fundamental barrier to their development of teacher leadership and seek to develop alternative strategies to surmount barriers and to build their own capacity for leadership in the school.

In discussing how to develop teacher leadership, Merideth (2007) described teacher leaders as risk-takers, who are efficient in teaching, enjoy autonomy, are collegial and have a sense of respect to others. It is to encourage the development of such qualities that Katzenmeyer and Moller (2009) suggested inviting teachers to explore their own beliefs, to help teachers to understand their positions as leaders and to enhance how they lead others. In order to support the development of these concepts, Fullan (2007, 2010) advocated that changing the existing school culture is more important than changing structures or positions.

Teachers as Leaders in Shanjeebon School

In the school system of Bangladesh, leadership is almost always principal-centred, and all the tasks are expected to be led and guided directly by this leadership. In Western research, however, the centrality of the principal positioned as leader has been identified as a potential barrier to strengthening teacher commitment and involvement in school improvement (Dimmock & Walker, 1998; Walker & Ko, 2010).

In Bangladesh, teachers rarely have the scope to be engaged with and lead activities outside their allocated teaching (Thornton, 2006). Despite such a system, the principal of Shanjeebon School has developed a culture of teachers as leaders in his school. This has been achieved through personal encouragement, by redesigning some of the organisational structures in the school, enabling teachers to act as leaders, and by opening up the scope for leadership throughout the institution. These are discussed in the following sections.

Changing Structures to Enable Engaged Teaching

Redesigning the school's classroom structures was an important first stage in the process that the principal implemented in engaging teachers in the vision of the school and in developing them as leaders. One of the problems most evident in Bangladeshi secondary schools is the large number of students in a class and the consequent difficulty teachers face in actively engaging with student learning (Hamid, Sussex, & Khan, 2009).

Nazrul, the principal, addressed this challenge by regrouping students in the classes. In Shanjeebon School, as in many schools, students are allocated a roll number based on their ranking of their achievement in examinations. Previously students were ability-streamed into sections in each year level with those above a certain rank in Section A and those below in Section B. In Shanjeebon's system the grouping of students was changed so that odd and even number ranked students were clustered together, thus avoiding a division based on previous academic achievements, resulting in more homogeneous sections.

Nazrul explained how he started his position in Shanjeebon School with a dream to lift the expectations and the performance of the school and noted that students in the previous Section B (those in the lower achieving half based on the roll numbers) were seldom attentive in class and often performed poorly in examinations. Neither students nor teachers felt comfortable being in Section B; rather they all showed disappointment. Nazrul reflected, 'I was conscious of issues about sectioning from my own earlier experience and knew how frustrating it would be for teachers and students'. The reorganisation of sections meant that there would be no difference now in the achievement levels of each section. While this change did not eliminate the problem of large class sizes, it seems to have enhanced the motivation levels of both teachers and students to be more engaged in class. Shahrim, one of the school's teachers, affirmed the benefit of the principal's action:

> Previously, we used to be disappointed whenever we were assigned as a course teacher for section B. Now we do not mind since there is no difference in sections. There was an impact on students due to the new policy. Students in section B do not get their face red to tell their section's name what put them in pressure in families and society. As we both (students and teachers) are out of this mental pressure, we are now more focused in learning.

Despite this change, teachers were still challenged in finding ways to ensure student participation since each class often held over 70 students. In many cases teachers

could not make contact with all the students in class because of limited time, and students could not engage with lessons properly as many of them needed additional personalised support in order to understand the content. In response, the principal and teachers discussed ways to engage students within the constraints of existing resources.

The decision was made to develop small student clusters in each class. In order to make each group diversified, teachers created clusters involving students across the range of academic abilities. In addition, teachers nominated a student within each group as their assistant during teaching. These students worked as leaders to communicate between the teachers and group members. Teachers and students both reported that they benefitted from the clusters in various ways.

Mahathir, a teacher in the school, explained the problem and the solution that was put into place:

> It was impossible for me to reach every student in a class since the class size is quite big. I would walk through the class but could watch work at best for ten students only. So, many students could not understand the content I taught. Students did not assist each other since they were not used to doing so. Now they sit in a cluster system and help each other. Since the clusters are made of mixed ability students, they can easily help each other.

The teachers happily observed that a culture of sharing responsibility for learning was being developed where teachers and students were now active participants. The change in the composition of students within sections and clustering students with their own leaders may not be considered as a major change in some Western countries; however in Shanjeebon School it has proved to be significant: teachers and students are now much more motivated and engaged in class.

Extending the Scope of Leadership Throughout the School

To develop teachers as leaders, it is essential to create leadership opportunities, and in order to offer such opportunities, Nazrul developed a communication system among teachers. In 2011, he developed a system of faculties that was inspired by his visit to a number of secondary schools in New Zealand. He saw that dividing the schoolwork into different faculties helps build the capabilities of teachers, where a faculty is defined as a unit in which a group of teachers from a similar academic field of courses work together.

However, introducing this new idea into a traditional system was not simple. It needed to 'make sense' to teachers in order for them to welcome it. The principal proposed the new system in a meeting, explained how it would run and how it would enhance learning. He emphasised how previously there had been a lack of communication among teachers and a lack of shared planning for their courses. He pointed out how this system might be a way of overcoming these issues and that it had the potential to enhance student learning. The discussion resulted in teachers being willing to develop the faculties of Bangla, English, Science Education, Business Education and Arts Education.

To run the faculties systematically, more teacher leaders were needed in addition to those that already existed in the roles of principal and vice-principal. The principal and selected members of the staff set up a project within the school to identify and divide the tasks within the school, specify job responsibilities and boundaries and set the targets and goals of each of the faculties. They decided that faculty leaders would be the key people and that they would resolve problems whenever possible at the faculty level. The faculty leaders were to be accountable directly to the principal.

School leadership was shared out into these faculties and they started working beyond centralised leadership. In selecting faculty leaders, Shanjeebon School developed a process that was different from what is most common in Bangladesh where seniority of age is often a key factor. Instead, the principal proposed a process that focused on teachers' professional skills, interest, commitment and experience. Whereas in most schools, teachers who are senior in age would normally lead tasks, leadership in Shanjeebon School was now based on qualifications and level of commitment, and thus some leaders turned out to be relatively young.

This approach of selecting and developing leaders has the potential to set an example for other secondary schools in Bangladesh. However, political issues within a school might arise if older teachers who may feel they have lost their status resist this process. According to the principal, in Shanjeebon School there was indeed the need to overcome resistance from some older teachers who initially felt they had been slighted and their seniority undermined. Nazrul explained his perception of the initial problem and his belief that this was resolved over time:

> At the time we started the new system of selecting leaders, some senior teachers were not happy since some of them had lost their standing. It took time to show the benefits of the new system and how it worked and convince them. They are happy now because they can work under close supervision and support of a leader which was not possible in earlier days.

Nazrul as well as several other teachers reported that there is now enhanced collaboration among teachers due to the decentralisation of leadership as well as a redistribution of leadership based on a new set of criteria where productivity and effort are emphasised. In this way older teachers were not only reconciled to the appointments but also showed enthusiasm about the new faculties when the new leaders were seen to be offering useful academic support to their teams.

In order to make this productive, the faculty leaders needed to develop sound communication with their team and systematic coordination of programs; therefore a monthly faculty meeting is now held allowing teachers to exchange their views, compare progress and plan their different courses which keeps them updated in terms of the principles of teaching and learning. Mahtab, a faculty leader, reflected on the way he perceives the change:

> Before developing faculties, there was limited communication and coordination among teachers. As a result, students became the ultimate victims in examination and evaluation. Sometimes parents came to the principal and complained that the course teacher did not teach the content in classroom that had been set in examination questions. Now there are no complaints as teachers update themselves regularly with their faculty leader as well as in the monthly faculty meetings.

For good communication and coordination to develop among teachers in a faculty, there is need for relationships of trust (Lovett & Andrews, 2011; Robinson, 2010). The principal played a strong role as an advisor, supervisor, advocate and friend in various situations, helping to build trustful relationships among the teachers. Being motivated by such inspiring leadership of the principal, the faculty leaders were able to build trust and reliable relationships within their own teams. The faculty leaders help the teachers in their teams so they are engaged in the continuous process of developing a culture of reliability, trust and interdependency in the school. The principal noted:

> They know very well that I stand beside them in any situation. For any of their problems if they want to phone someone, that's me. It does not matter how big the problem is. Even for family decisions they sometimes ask for my suggestions. So we have very good relationships and I try to maintain that.

Dialogue with participant teachers confirmed that there is now a strong culture of trust in this school and that teachers respect the principal highly. The principal and faculty leaders play strong roles in building relationships among staff. Democratic practices are driven by the principal's approach which has established the climate and culture of trust for teachers to feel comfortable about contributing, and this has resulted in teachers talking to each other and to the principal about the school's goals and projects.

Building a Teacher–Parent Relationship

The principal realised how important it was to engage parents and community for the benefit of students. Many of the parents are illiterate day labourers, which limits their confidence and capacity in taking an active interest in their children's schooling. These parents very seldom came to school to look at how their children were progressing. To address this challenge, the principal engaged the students in a campaign to motivate parents to come to school and to join the parent meetings. Students were instructed to give a letter from the principal to their parents and to collect signatures from parents agreeing to be present. He was able to get almost all parents to his first parent meeting. Getting them to come to the meeting was the first step, but the more important challenge was to help them engage with their children's progress in learning.

To engage parents he opened the floor at the meeting to listen to them. He wanted to get suggestions and to hear about the successes and weaknesses of the school. Most of the talk was positive and parents and teachers talked through a range of issues. However, since parents were not always diplomatic, what they had to say was sometimes uncomfortable for teachers. Nazrul tried to note all of their concerns and answer them if he could or at least acknowledge them if there was no answer ready. Not unexpectedly, he encountered strong resistance from some of his teachers. Nazrul explained:

> When they were talking against us, I saw that my teachers' faces were getting red. They were not habituated to hearing these things in a public forum. Parents were talking about what they get, do not get, and what they expect from teachers. My teachers were not happy and I had to sit with them afterwards.

After the first parent meeting, the principal met with the teachers and discussed the importance of constructive criticism and how it would benefit their school in the near future. As they explored the benefits of building relationships with families, the teachers became happier and began to develop real interest in creating bridges that would support student learning at home. Now teachers prepare for the public examination by each taking responsibility for a small group, visiting them at home to support them if that is needed; this close care enhances student learning.

When he first came into the school, Nazrul noticed that there was a culture of keeping the principal's door closed to parents except for one hour in the morning and another in the evening. The parents who work in the garment factories could not visit the school during these hours. Nazrul began to welcome parents and community people into his room at any time and he got very positive responses. The vice-principal was initially cynical about this initiative as she was accustomed to keeping a formal distance from parents.

Indeed, the culture of formal respect towards teachers in Bangladesh tends to create a distance between teachers and parents, and leaders in particular are accustomed to speaking from a position of unchallenged authority. However, when she observed the benefit of talking with parents and engaging them in the school, she came to understand the reason for the principal's suggestions. Ointika, the vice-principal, explains:

> Previously I preferred to talk little to parents, with a very strong attitude, so that they can understand my position. Parents or students never saw my smiling face and I thought smiling might lose my personality. When the principal started openly talking to parents in a very generous way, I felt embarrassed, and that challenged me. At first, I could not be positive about his way of interacting, but when I observed the benefits it convinced me to change myself.

In this way the principal modelled behaviours that motivated his colleagues to change their own ways of communicating with parents and students. When teachers now talk to parents in a positive way, it breaks down the power relations between them, and this in turn makes it easier to engage parents more actively in their children's learning and improves educational outcomes as well as building the self-esteem of students.

Building Capacity Through Leading

Shanjeebon School has created leadership opportunities beyond ordinary classroom activities. Through Nazrul's initiatives, teachers lead work within national and international projects, such as *Connecting Classrooms* and *Tree Plantation*. *Connecting Classrooms* offers international leadership opportunities; the *Tree*

Plantation project connects teachers with their local communities to provide leadership in changing their own neighbourhoods.

Connecting Classrooms is run by the British Council and aims to develop young students as global citizens. It has created a number of leadership positions for teachers and students in this school. It provides professional training for teachers and principals to develop ideas about global citizenship and offers leadership training to principals, teachers and students for preparing leaders in schools and classrooms (British Council Bangladesh, 2016). This project links Bangladeshi schools to a number of schools in the United Kingdom, where they learn from each other. There is a coordinating teacher who leads interactions and discussions with the counterpart school. Through this project teachers get an opportunity to be global leaders. The coordinator shared his experience:

> For the project, I need to communicate with our connecting school in the UK. Students exchange their views on different issues through e-mails. I got the opportunity to visit our connecting school and attending a short training on leadership through the project.

This project has opened doors for teachers and their students to get leadership experiences from home and abroad.

As they gained benefit from involvement in international programs, teachers became motivated to lead a program to make their local environment safe. To counteract the effects of industrial pollution, the school initiated a program of free tree plantation in nearby communities. Although the idea came from the principal, a teacher led the program and gained grounded experience in leading students and young people within the community. The teacher shared his experience:

> We have a programme to keep our environment safe. We call it 'Tree Plantation Programme'. Every year we organize the programme to distribute some trees free to our young generation. Our students monitor how they are taking care of those trees. Through this programme we are connected to our society and lead it in keeping our environment safe.

The school also runs clubs, including debate, drama, Red Crescent and Scouts events, where teachers lead students. There is a teacher assigned to lead each club who is responsible for student engagement, learning and leadership in that club. The work benefits the community, and the experience helps teachers to understand leadership in contexts that are different from school.

Discussion

The project of building teacher leadership within Shanjeebon School is summarised in the following model.

As the model in Fig. 8.1 indicates, the principal has created opportunities for teacher leadership in a number of ways: realigning organisational structures within the school, providing scope for such leadership across the activities of the school and actively engaging teachers in the building of school-parent relationships. Throughout, there has been an emphasis on building the capabilities of teachers
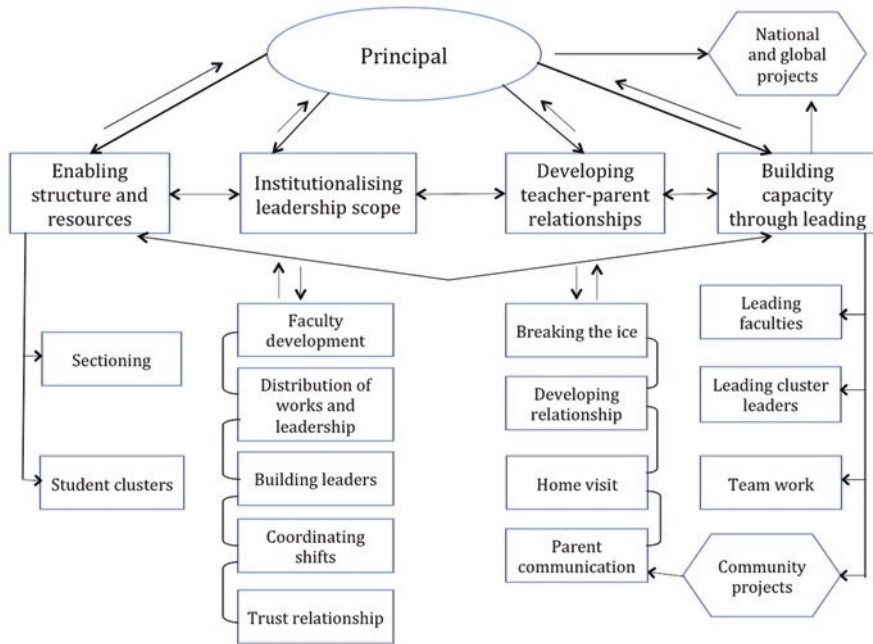
Fig. 8.1 Strategies for building teacher leadership in Shanjeebon School

through their experiences of leadership and on building the capacity of the school through its teachers to improve student learning, both academic and life skills.

International literature (see, e.g. Bush, 2008; Fullan, 2010; Robinson, 2010) has affirmed the positive impact of good leadership on school and student outcomes. The benefits of developing faculties in this school include teachers becoming more involved in their job and the school achieving better examination results. Students, parents and community are also part of the school improvement process, especially when they are encouraged to support the school and contribute to the vision by helping the students to learn. Leadership in this school, characterised by the principal sharing responsibilities and creating new opportunities for teachers to lead, has enabled collaboration with teachers, students, parents and community by engaging them in shaping vision, rather than assigning them as receivers of delegated tasks. The key strategies for building teacher leadership are reshaping school structures and reassigning leadership roles to enable teachers to focus more on teaching and learning. The principal's idea of sectioning and clustering differently was successfully innovative because it changed the culture in the school (Fullan, 2010, 2011) and it did not cost anything.

Another initiative that is not commonly found in Bangladesh is institutionalising leadership opportunities by developing faculties and delegating responsibility for tasks among teachers. Whereas in many schools in Bangladesh principals tend to use their power in an authoritative and dominating manner, this principal *shares* the

responsibility for student outcomes. Blankstein and Noguera (2015) advocated for leaders to find new solutions for teaching and learning that support teachers for enabling more effective learning outcomes. The principal has created leadership opportunities for his teachers by creating faculties and involving them in national and international projects.

Initially the new faculty leaders had little idea about how to lead their faculties. Therefore the principal prepared teachers to take on new responsibilities in supervising their colleagues. This strategy is similar to work in the United States reported by Merideth (2007) where teacher leaders were risk-takers and collaborated with their colleagues when they were supported in doing so. In the case school in Bangladesh, the initiative taken by the principal seemed like an absolutely ground-breaking idea to the teachers, quite different from the traditional boundaries in school management within which they had always worked. Nazrul had to win the teachers' trust to persuade them to operate differently. Leaders in this school are now selected on the basis of their skills, interests and experiences which is a break with normal school practice in Bangladesh.

Faculty leadership works well but it is recognised that there was initial resistance to the selection of leaders. Some older teachers were unhappy when young, skilled colleagues began to work as faculty leaders. This challenged both the principal and the young faculty leaders; however in time the older teachers accepted it as a good practice once they experienced the benefits to them. Research has shown that strong resistance against any good initiative makes its success difficult (Brundrett, 2010; Fullan, 2007; Reeves, 2008). Nazrul may not have been able to stop all resistance to his changes, however he strategised to achieve positive outcomes early so that resistance weakened through informed understanding.

This study identifies a number of significant personal characteristics and skills of the principal and within his team of leaders that enabled them to convince others and lead in new ways, even though there were no apparent immediate solutions. Examination of these qualities and the ways they were translated into action is of particular interest for determining future directions in policy and for developing leadership training courses. This study identifies five key aspects of this principal's approach that are summarised in Fig. 8.2 and described below.

The first aspect in the figure involves personal skills and attitudes. Key among these is the ability to think differently and being prepared to take risks. Also important is the capacity to adapt ideas learned from the outside (perhaps international practice or research or another school) to the specific needs and opportunities of the local context. These personal qualities were evident in the shaping of this creative plan for change.

The second aspect involves values and interactive strategies. The building of trust is central here, as affirmed by other research (Fullan, 2007; Reeves, 2008). The personal courage and the skills of being able to inspire and motivate others are important. So is the demonstration of respect and support. These allow the building of relationships and the opportunity for collaborative action. These values and
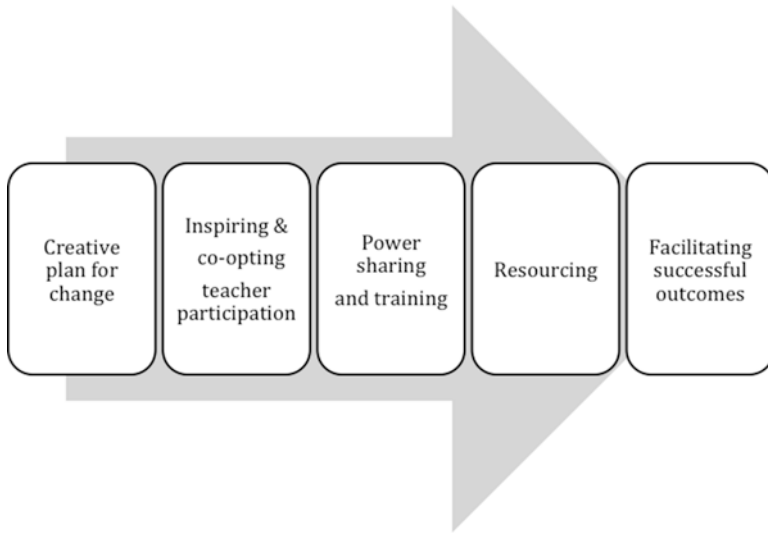
Fig. 8.2 Leadership for change

interactions enabled the principal to solicit, inspire and co-opt the collaboration of others.

The third aspect is using a range of processes that allow new leaders to emerge and consolidate their roles. These involved the principal surrendering aspects of control and sharing power. They also involved a process of training those who picked up the emerging new roles so that they were set up for success rather than failure.

The fourth aspect is resourcing. In Shanjeebon School this involved setting up meetings so that communication could occur and problems be tackled. It included restructuring aspects of the organisation that had previously created obstacles or reallocating responsibilities so they were more manageable. Financial expenditure was allocated to set up projects and link with other, international, organisations that already had established resources and that welcomed collaboration.

The fifth aspect is a clear and determined focus on promoting opportunities for visibly successful outcomes, so that the emerging leaders and their collaborating communities feel reinforced in their efforts and are able to let go of their fears. In student terms, in Shanjeebon School, it involved more personal engagement in learning and better examination grades. In community terms it involved being heard and parents becoming more engaged in their children's learning. In teacher terms, it involved feeling more effective in creating learning and in contributing to the local community.

Conclusion

This chapter has reported a single case study of a resourceful and innovative princi-pal and his work in developing teacher leaders in a secondary school in an economi-cally disadvantaged area in Bangladesh. It has shown that even in a highly centralised and seemingly restrictive system, real differences can be made and can be effective, although time has yet to tell whether they can be sustained in the long term. It has shown that while there is still a lot to do in improving education in Bangladesh, it is not always necessary to look outside for effective models for change: some already exist within the country.

An effective model for change may not imply that there is no further need for exploration and development. This case study has reported change that has come through the principal's vision and analysis of challenges. The case may indicate that a strong and creative leadership is important to break through some of the existing structures that limit teachers' capacity to facilitate students' learning. As teachers become more empowered to lead, it would be interesting to develop, critically analyse and report projects where principals engage in a dialogue with teachers, students and even communities, allowing co-learning to occur. We see such projects as important for future directions. The further development of teachers' capacity for participatory action and professional dialogue is a necessary prelude to such reciprocity in educational change and educational research. The case reported here offers an example of how the bases for incrementally collaborative and reciprocal dialogues may be developed.

It is widely recognised that there are significant gaps in Bangladesh between policy on school improvement and the practices in schools. There are numerous research studies that identify reasons for such gaps, including poverty, incomplete national and local infrastructures, low wages for teachers, large class sizes and limited training. This study offers an example of how a creative and adventurous principal involved his teachers in repositioning the school in terms of the overt obstacles and significantly overcoming the gap between vision and outcomes. Action in one school in itself cannot make a large impact on education in the country as a whole; however it can be taken as a model for critical reflection that can provide working models for guiding the professional development of both principals and teacher leaders and for informing policy about the selection of principals and the resourcing of more distributed leadership within schools.

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Chapter 9
Collaborative Partnerships Within Communities of Practice: The Need for School-Based Action Research in Bangladesh

Raqib Chowdhury

Abstract The pervasive binary that has divided 'research-incapable' school teachers from university academics has often led school teachers to believe that research is the prerogative task of so-called 'experts' in education – university academics, while their job is merely to translate and implement the results of research. Even if school teachers were to carry out research, the common perception is that it is of questionable validity. Teachers themselves on the other hand often complain of having little time or energy left for research because of heavy workload as well as a lack of extrinsic rewards for research-based activities. Why should teachers do research when they are already overwhelmed with the daily tasks of teaching and teaching-related commitments? This paper, based on a critical analysis of literature on teacher research, as well as a consideration of a number of recent action research projects in Bangladesh, looks at why it is important for teachers and academics to form collaborative partnerships by integrating research into their everyday practices and how this has benefits for both. The two objectives of this paper are each aimed at its two main readers – to familiarise or re-familiarise school teachers with research, in terms of why this is needed and how they can be involved in it within the daily challenges of teaching, and to encourage university teachers, for their own benefit, to build collaborative partnerships with school teachers to build truly meaningful and useful education research. This is possible when everyone can see opportunities for all to benefit from being part of a community of practice and to invest in the trustful symbiotic and complementary roles between school and university teachers.

Keywords Collaborative partnership · Action research · Teacher research · Continuing professional development

R. Chowdhury (✉)
Faculty of Education, Monash University, Melbourne, VIC, Australia
e-mail: raqib.chowdhury@monash.edu

Introduction

Collaborative cultures do not just arise by a kind of emotional spontaneous combustion; they have to be created and sustained. Hargreaves, 1992, p. 226

In a recent newspaper column, Melbourne-based high school teacher Christopher Bantick expressed his frustration at a university-based academic research which had placed teachers like him as the object of research – the 'problem':

Every decade I have taught, I have been told by researchers who have almost exclusively never been in a classroom, how to do my job. I am now in the autumn of my career. It is still happening… Teaching has to be the most criticised and over-researched profession imaginable. Everyone has been to school so they have an opinion. Researchers have built careers travelling the world with their power points explaining what needs to be done about "the problem": teachers. (Bantick, 2015)

Bantick's frustration is directed towards 'teacher guru' Professor John Hattie, Head of the Education Research Institute at the University of Melbourne, whose research, Bantick thinks, states the obvious – that the person who teaches the children matters more than any other variable. The 'Hattie list' includes, he points, issues such as smaller class sizes, performance-based pay, greater use of technology and longer school days that can improve the quality of teaching in schools in Australia.

Why taking such frustration seriously matters is because it comes from a veteran educator – Bantick is a Melbourne writer and a senior literature teacher at a Melbourne boys' Anglican grammar school. There are two possible scenarios here: either university lecturers (referred to in this paper as 'academics') really are not sufficiently familiar with the reality of schools or they consider teachers (referring to school teachers in this article) as research incapable and their research 'casual', perfunctory and of questionable reliability. In addition, addressing the friction and distrust that has emerged between university academics and school teachers, this paper, based on a critical analysis of literature on teacher research, as well as a consideration of a number of recent teacher research projects (in the form of action research) in Bangladesh, looks at some of the ways in which teachers might not only be capable of research (as understood by academics) but perform research in their everyday lives. In this paper it has been generally assumed for the sake of argument that academics are research active, although it is acknowledged that most academics in Bangladesh might not be research active in reality. By extension it is also assumed that school teachers do not do research whereas in reality it is possible that many do.

Since the time when I began teaching some 20 years ago, there has been a conspicuous paradigm shift in our understanding of the notion of what 'teaching' is, what it involves and who, really, the 'classroom teacher' is. Broadly speaking, in the 1980s school reforms more or less all over the world were of the 'top-down' category (Le Cornu, Peters, & Foster, 2002) where the emphases were on centralisation, standardisation and bureaucratic/administrative responsibilities and teachers were at the receiving end. This slowly gave way to a more diversified, if demanding, role of the teacher in the next two decades. In this current globalised era

of transnational knowledge and skills migration, the teacher is no longer a citizen of their classroom alone. Whereas the teacher used to be the transmitter of knowledge, they have now assumed the role of the 'reflective practitioner' (Bintz & Dillard, 2007; Bracken & Bryan, 2010; Collin & Karsenti, 2011; Farrell, 2007; Loughran, 2002b) and a collaborative member of an educational community of inquiry (Darling-Hammond & Snyder, 2000; Potter, 2001; Rodgers, 2002) whose role stretches far beyond the confines of the classroom, the school and the immediate social community.

In addition to embracing a more diversified role, throughout these years there has also been increasingly prominent acknowledgement of the need for the empowerment of teachers through researching their *own* practice, for teachers to become more aware of the complexities of the school environment and of teacher research to be the self-reflection of one's own professional practice.

In a transformative world that seeks social justice and an increased awareness of how education positions us in society at large, teachers now find themselves faced with new demands, often with no precedent models to follow or to seek guidance from, and equipped only with old strategies that had worked in the past. The twenty-first century education scenario is now characterised by new paradigms of teaching, new demands and expectation of our roles and new innovations in pedagogy and curriculum initiatives.

Although Stenhouse (1976) had put it 40 years ago that 'it is not enough that teachers' work be studied; they need to study it themselves' (p. 143), the reality cannot be any more pertinent today. Reading journals and conducting research on a regular basis are not considered extra professional responsibilities for university teachers only. The relationship between research and teaching is not accidental nor mechanistic any more but intimate and profound, espousing the processes of enquiry with an open mind and heart and adopting 'a "researcherly" disposition' (Lingard & Renshaw, 2010, p. 27). Those who fail to embrace research are likely to fall behind in their commitment to serving society.

It is now quite generally accepted that teaching in the classroom can be more productive only if teachers are willing to accept changes as an important component of their professional practice and are willing to newer and more innovative ways of teaching and learning, that teaching is, and should aspire to be, 'research informed' as well as 'evidence based'. This new attitude could only thrive when we can think beyond paying too much attention to top-down instructions (Rahman, 2011b), a rigid curriculum, a set syllabus and teaching resources, constraints that continue to characterise school teaching in Bangladesh.

Such powerful and versatile roles of school teachers have been documented all over the world over the past two decades (see, e.g. Darling-Hammond, 1999; Gore & Morrison, 2000; Kemmis, 2001; Rodgers, 2002). In the current age, research is no longer the task and privilege of an élite cadre of teachers. Discourses have shifted, and increasingly teachers deemed competent are research literate and research active, as it becomes increasingly evident that there are both immediate and longer-term gains in this for teachers and schools. It is now widely recognised that there can be an increase in the potential for understanding the complexity of the school community as an effective learning environment only when we recognise

that school teachers are not just required to be research literate but are indeed capable of researching within their own school community in the same capacity and to the same extent as university academics do. To that end, this paper also explores the need for the development of school teachers as active teacher researchers though the resources are already available at their disposal.

In a study that focussed on identifying constraints in developing a sustained collaborative culture in Bangladesh, Thornton (2006) noted that teacher collaboration and support with an aim to improving teaching and learning in the classroom are 'notable by their absence' (p. 181) in secondary schools across the country. Some of the reasons behind this, she points out, are a difficult curriculum, students' low ability, the educational background of teachers as well as a number of other contextual factors. She notes the 'isolated nature' of the teacher's involvement in the classroom where most teachers worked in 'autonomous isolation' (Fullan, 1991, in Thornton, 2006) without scope for collaborative partnerships in conducting classroom-based research.

Critical literature on nearly any aspect of teaching experiences is rife with accounts from teachers who complain that they are overburdened with workload, leaving insufficient time for them to stand back and systematically reflect on their practice. Within their daily workplace, teachers are faced with time constraints, lack of adequate preparation, pressure from school communities, accountability to the leadership and parents and what Sim (2010) calls cross-institutional 'cultural politics' (p. 19). In their defence, as well as lack of confidence and experience in conducting research, teachers feel placing priority on their own teaching makes it difficult to conduct research. The research process – which often involves recording lessons, interviewing or observing students and analysing data – are simply not feasible to accomplish alongside such daily teaching loads. Indeed one of the main defences offered against a teacher's pursuit of research is that it potentially undermines their quality of teaching and eventually compromises their efficiency as a teacher so that a heavy teaching workload and a large amount of research-based work being carried on simultaneously are likely to produce unsatisfactory results in both commitments. So why bother?

According to 2011 statistics, only 58% (World Bank, 2016) of teachers in Bangladesh had received the 1-year BEd training, delivered to large classes in mainly lecture mode, leaving little space for developing teachers to flourish as fully fledged professional educators. While pre-service training propagates the transmission mode of learning – which is the same method trainees would employ once they begin their careers, in-service training is 'sporadic' (Thornton, 2006, p. 182) and only reaches out to a small handful of teachers.

As elsewhere, the dynamics of schooling in Bangladesh are inevitably context bound, with frictions shaped by an intricate persistence of traditional Bengali culture and colonial heritage, the effects of a more globalised outlook, as well as the influence of Islam (Hasan, 2013; Islam, 2012; Jahan & Shahan, 2014). In counterbalancing the persistence of often incompatible Western discourses in informing educational practices in the Global South and in the absence of indigenous knowledge bases (Alam, 2016), scholars have traditionally framed scholarly critique

using the notion of the so-called Confucian heritage cultures (CHC) which is said to characterise the temperament of vast swathes of landscapes, stretching from the Far East all the way to the Middle East. Such conveniently homogenising frameworks have vastly overlooked that South East Asian cultures, especially those within the subcontinent, often starkly contrast with the homogenising traits of the CHC framework. In Bangladesh the residual effects of more than 200 years of colonial rule, contrasted with a strong sense of nationalistic fervour in traditional Bengali culture (Chowdhury & Farooqui, 2009) and a strong undercurrent of the Islamic culture, have resulted in greater emphasis on an adherence to norms embedded by local beliefs and practices compared to the collectivist nature of some Asian cultures, making western frames of understanding crippled to a large extent.

For example, Thornton (2006) points out that the stark 'divide' (p. 183) between primary and secondary sectors continues to reflect colonial traditions which separated the mass education characterised in primary education as opposed to the more 'elitist' secondary education – even after nearly 60 years after the end of the British rule in the subcontinent. Memorisation-heavy rote learning helps sustain the centralised and authoritarian position of the teacher who is tempted to stay safe within the comfort zone of the secure status quo. There is still a mismatch between 'the elitist curriculum and learners' needs' (Thornton, 2006, p. 194), which she argues needs to be bridged at the policy level to make teachers understand their students' needs more efficiently.

A Culture of Blame and a Xenophobic Distrust of Research

Bangladeshi teachers do not write about their problems in journals, nor do they share classroom issues to colleagues as it may 'damage their image' (Harun & Al-Amin, 2013, p. 75). For the same reason peer observation is an impossibility (Harun & Al-Amin, 2013) as it leads to 'fearing to develop a negative image of them among their colleagues' – the fear that to share one's teaching experience may tantamount to soliciting 'wide publicity' and 'negative propaganda' (Harun & Al-Amin, 2013, p. 77). The likelihood of one's weaknesses to be exposed to a large number of people both in and out of school prevents them from speaking out and doing things in individual manner. Thornton (2006) argues that such status quo arises from teachers' obsession for striving to teach 'perfect lessons' rather than identifying learner's problems within a culture of sharing and collaboration.

In this cultural ambience, teachers seeking help is akin to loss of face and a mark of professional incompetence. Sharing and exchange of ideas is not encouraged; any display of ignorance is frowned upon, and collegiality is undervalued in the teaching profession in this 'culture of blame' (Thornton, 2006, p. 189). Thornton (2006) explains – 'maybe it is easier to complain about the students than to tackle the problem of discussing how to teach students of widely varying abilities in the same class' (p. 189). Thornton argues that the resultant condition is the lowering of morale of teachers and the reluctance of teachers to take up research.

Yet the role of teacher as researcher is often misunderstood by teachers themselves, especially when they have not done any 'research'. Many teachers believe that research is the prerogative task of so-called 'experts' in education, that is, university academics, while their job is merely to translate and implement the results of research. Despite often being involved in important, albeit 'informal' classroom research, teachers are often reluctant to label themselves as 'researchers' or their hard work as 'research', calling it as 'just observation' or 'just keeping a journal'. Indeed, even if school teachers were to carry out research, the common perception is that it is 'imprecise', nonsystematic and therefore of questionable validity. A lot of teachers themselves often believe, together with critics of small-scale qualitative studies, that the only legitimate research worth of future policy and strategy planning is large scale with precise quantitative results – such as those done by academics from universities.

Such culture of fear and reluctance towards research often originates from how research has been propounded by their higher education counterparts, creating the gap that has separated university researchers from school teachers. To the latter, research is formal and involves entire schools or districts – classroom-based research simply does not qualify to be legitimate research. This positions school teachers in the out-group (Tajfel & Turner, 1986) within a perceived hierarchy where they assume the role of subjects, participants or targets of investigation for researchers but not as professionals and practitioners who can *themselves* produce research work.

The creation of such a gap can be explained using McIntyre's (2005) classification of knowledge. McIntyre (2005) classified constantly evolving knowledge into two broad categories – codified (explicit) knowledge, formally set using a system of symbols and language (e.g. the journal article format or the APA style) which can be conveniently disseminated in forms such as textbooks, and tacit (implicit) or 'practical' knowledge used by teachers to teach and make 'sense' of classroom phenomena. This second type of knowledge, often referred to as the 'craft' knowledge (Black-Hawkins & Florian, 2012; Day, 2005; Simons, 2002), is action based and therefore hard to codify and can only be acquired informally through participation (in this case, teaching). Such taken for granted knowledge is context specific and cannot be codified or formulated in the form of theories, in the manner of academic research.

McIntyre argued that there is a gap between the first and second type of knowledge and that the gap was created because the kind of knowledge that research can offer is of a very different kind from the knowledge that classroom teachers need to use. Such codified research knowledge is not easily translated into practical knowledge because each classroom context is unique and what works for one teacher, or in one school, class or occasion, may not translate directly into action in another. The role of the teacher is to try to bridge the gap between codified research knowledge and the everyday 'craft' knowledge of teachers.

In addition, research is often understood by university academics in a largely reductive manner – that it is only possible through the *deliberate* management of thinking and activity through setting aside time to be aware of 'theories' (codified 'explicit' knowledge). It requires the execution of implicit tacit knowledge in

teaching and asks that such creation of new knowledge is developed, defended, justified and subjected to the critical scrutiny of other practitioners. This view in effect disempowers teachers and consolidates the aforementioned gap.

Yet school teachers might already be doing some of these in their daily lives, without however subscribing to the terminology used by academics in describing their day-to-day work. Every day, teachers engage in informal research in their classrooms working with students to facilitate learning; develop lesson plans; evaluate student work; share outcomes with students, parents, and administrators; try new lessons; test a new strategy; or simply critically reflect on how to manage disruptive behaviour from a particular learner or to address a student's reading difficulty. Teachers then begin again with new units and lessons to clarify and review concepts and develop new understanding. While all of this might not sound much like 'research', if we were to describe those activities in slightly different language, we could say that on a daily basis, teachers design and implement a plan of action, observe and analyse outcomes and modify plans to better meet the needs of students.

In other words, the continuous trial and error and experimentation teachers undertake in their attempts to improve their classroom teaching is hardly recognised as a form of research, let alone discussed with colleagues or the wider community of teachers, barely spoken about or shared. It remains a quiet and thankless accomplishment which teachers do not perceive to be productive or beneficial.

The Case for Doing Classroom-Based Research

By nature the classroom is an infinitely variable and dynamic space. Every classroom is different, and it is this complexity that provides compelling reasons for teachers to take a closer look into their own teaching practice. One way for them to do so is to conduct research right in their own classroom. Teachers continuously make choices about how to act and what to do in the classroom. These judgements or choices are mostly intuitive and subconscious and based on subjective emotions rather than on conscious and rational thinking. However, over time, teachers become so familiar with 'typical' and well-anticipated classroom scenarios that rather than responding sensitively to these situations through habitual physical reflexes, they will react in ways they have always done through what we can call fossilised reactions. This is when we need to stand back and critically reflect about an issue through classroom research. Teacher research lends to the day-to-day act of teaching a greater and more deliberate degree of systematicity, accountability, documentation and dissemination with a view to improving classroom practice.

Teacher research is not less credible, reliable, valid or rigorous as far as its findings and conclusions are concerned; nor is it more theoretical just because they are only based on facts and actions. Every time a teacher critically engages in understanding why a particular learner behaves in a certain way or why students of particular demographics act in a way different to others, the teacher is essentially

problematising these phenomena and is theorising and cross-referencing on the first-hand experience of past events. The need for designing valid methodologies and accounting for issues such as triangulation and replicability which characterise academic research can be ignored in favour of the more immediate rationale for doing research – to improve student learning.

Teachers choose how to act and what to do by exercising spontaneous, intuitive and on-the-spot judgements based on their tacit knowledge of student behaviour and their subjectivities as teachers. Through their engagement in classroom-based action research, teachers can stand back and reflect on these subjectivities and question their 'automatic' and fossilised actions and reactions in teaching. Research powers teachers to think about how their findings clarifies and challenges their own often taken-for-granted beliefs and assumptions about the processes of teaching and learning. In other words, research can bring to the surface our deeply held beliefs, biases and preferences and makes us critique the choices we make on a daily basis. Through their increasingly fine-tuned capacity to make appropriate judgements in the changing classrooms, teachers become better teachers.

Academic Research and Teacher Research

> Teacher-researchers can be characterised as those practitioners who attempt to better understand their practice, and its impact on their students, by researching the relationship between teaching and learning in their world of work. (Loughran, 2002a, p. 4)

In understanding the above-mentioned 'gap' that has separated school teachers from university academics, this section looks at whether there are indeed functional differences between the two types of research that has marked a binary in critical scholarly discourses, often in favour of situating academic research as superior to practitioner (or teacher) research.

Teacher research, often within educational settings referred to as 'action research' or 'practitioner research' (see, e.g. Campbell, 2013; Ellis & Loughland, 2016), began at the turn of the twentieth century (Masters, 1995) and is traditionally practiced by teachers, education leaders and professionals to solve specific and tangible problems and to produce plans of action to facilitate decision-making (Flick, 2009; Wiersma, 2009). It is often referred to as 'cooperative inquiry' or 'collaborative inquiry' and involves a dynamic and practical focus on the researcher's own practice. Action research is essentially situational, and it identifies and solves specific problems within the confines of a well-defined context, such as a single classroom. However, the scope of action research extends beyond problem-solving – at its heart is the desire to systematically improve current practices through personal and professional development. It is also participatory and encourages distributive leadership and openness within the spirit of a democratic environment (Greenwood & Levin, 2007). In this paper teacher research is generically referred to as action research; however, it is acknowledged that 'all action research conducted by

practitioners can properly be termed teacher research, but not all teacher research can properly be labelled action research' (Check & Schutt, 2011, p. 264).

As a method, action research is not fixed or mechanistic; philosophically speaking it stresses the use of collective to trigger change. It directly combines research with action, which allows a simultaneous enactment of investigation and critical reflection of phenomena. Action research is characterised by providing simultaneous attention to carrying out research on existing practice, enacting change on the basis of emergent findings and further researching shifts in practice. Most importantly perhaps, action research is an excellent form of lifelong learning and continuing professional development (CPD) because it facilitates the adoption of changes through reflection providing teachers with a high level of autonomy and empowerment (Lee, 2011). In other words, it gives teachers a greater sense of ownership and control over their own teaching. Rather than seeing action research as an 'extra' responsibility beyond their usual teaching responsibilities, it can be helpfully seen as an integral part of their primary responsibility as professionals dedicated to continually developing their own practice of teaching. In essence, teacher research is the perennial optimisation of the relationship between these curriculum and pedagogy.

Although mainly centred on problem-solving, teacher research, like academic research, can also be 'a disciplined attempt to address questions or solve problems through the collection and analyses of data for the purpose of description, explanation, generation and prediction' (Anderson & Arsenault, 2005, p. 6). While academic research is tasked with producing new knowledge, teacher research is usually more immediate, happening in real time, context specific and concerned primarily with improving practice (Hine, 2013). This approach helps bridge the gap between the codified knowledge of academic research and teachers' tacit everyday knowledge – in McIntyre's (2005) terms, therefore, teacher research produces knowledge in action which is employed to solve immediate problems 'in situ' (Opie, 2004, p. 81). Even if academic research produces codified knowledge to improve practice, classroom-based teacher research utilises such codified knowledge (in the form of theories) to understand and inform their practice. In addition to creating 'new knowledge', teacher research is built on the main aim of developing, optimising and calibrating the teaching situation in a way that it enhances the productivity of the overall teaching-learning experience.

Academic research can be large scale and involving multiple sites, while classroom teachers often conduct small-scale research confined to the familiar territory of their own classrooms. Academic research usually involves a range of background behind-the-scenes work such as administrative formalities and paperwork, ethics applications, participant recruitment and informed consent and a more systematic approach to analysing and interpreting data; teacher research is primarily based upon pragmatic considerations. The 'formal' nature of academic research mean that it is also subject to greater critical scrutiny in terms not only of the findings but also with the credibility, trustworthiness, validity and reliability of its methodology through peer reviews and feedback, although action research certainly is judged by the quality of the new knowledge it generates.

In comparison, the somewhat 'relaxed' (Coghlan & Brydon-Miller, 2014, p. 684) nature of teacher research makes it possible for teachers to develop strong relationships among colleagues through the sharing of ideas and thoughts in a culture of collegiality, openness in communication and networking. Although usually publishable, publication is at best the teacher's secondary concern; rather more important is the effect conducting the action research will have on the classroom in terms on improving teaching and learning. Action research empowers teachers by making them more autonomous, responsible and answerable.

The most important dimension of teacher research is its participatory, insider nature (Opie, 2004) which aims to improve teaching and learning rather than contribute to the pool of human knowledge by facilitating insights into teaching and generally producing positive changes in the school environment and to educational practices. The findings of teacher research are immediately meaningful because they are generated in the contexts wherein they will actually be used, contested and further developed. It is in this way that teacher research empowers teachers and shows how research can be a potent form of professional learning and development.

Classroom-based teacher research provides opportunities for continuous learning through teaching and is the most reliable source of making informed judgements about teaching and learning. Being embedded in teaching practice, the benefits of teacher research are immediately tangible: increased student performance and increased legitimacy of teacher-designed and teacher-initiated professional development and teaching resources and, crucially, increased collaboration, communication and dialogue across and among schools, departments and beyond.

School-University Collaborative Partnerships

It is certainly possible for a single, lone teacher to pursue research on their own; however, the effectiveness of teacher research is greatly enhanced when several teachers at a school work collaboratively in a community of practice (CoP) (Lave & Wenger, 1991; Wenger, 1998) and through an informal, even loosely structured research group which works as a platform for feedback and encouragement. Such groups give a sense of ownership, community and accountability to teachers who might otherwise feel isolated in their single causes.

Contemporary scholarly debates on teaching and teacher education have emphasised collaborative partnerships as a major topic and a priority (see, e.g. Brook, Sawyer, & Rimm-Kaufman, 2007; Donohoo, 2011; Duncombe & Armour, 2004; Graham, 2007; Jones, 2008; Kruse & Louis, 2009; Lunenburg, 2010; Waldron & McLesky, 2010), often with members beyond the immediate school context, such as with universities. Yet in a historic sense when it comes to collaborative research, the relationship between schools and universities has been built on scepticism and suspicion (Kruger, Davies, Eckersley, Newell, & Cherednichenko, 2009; Sim, 2010).

The complexities around a partnership between two very different institutional contexts require negotiating a relationship that is of value to all involved. The concept of communities of practice can provide a framework to establish the collaboration needed. (Sim, p. 18)

Teachers often feel 'used' (Sim, 2010, p. 19) or exploited by researchers in collaborative projects where the only beneficiary is the academic or their university resulting in a 'more-or-less suspicious relationship' (Kruger et al., 2009, p. 13) between the two levels of education. Sim (2010) stresses the need for truly sustainable productive collaboration between faculties and schools. She stresses that this can be achieved through continuous/continuing professional development (CPD) (see also Day & Sachs, 2004) which entails teachers' ongoing attempts to develop themselves throughout the tenure of their active profession rather than stopping to learn, unlearn and relearn once they have secured full-time and ongoing employment. Edwards (2010, in Harun & Al-Amin, 2013, p. 69) defines continuous development as 'a systematic maintenance, improvement and broadening of knowledge and skill, and the development of personal qualities necessary for the execution of professional and technical duties throughout the working life' (p. *x*). Edwards argues that CPD can only be achieved through the dual adoption of reflective teaching and action research as a means of professional development.

Sim (2010) goes on to explain that improving the quality of the 'complex relationship' (p. 20) between academics and teachers (and by inference, between universities and schools) can only be achieved through creating an environment of learning based on the principles of Wenger's notion of the community of practice (Lave & Wenger, 1991; Wenger, 1998) as well as 'learning communities' or 'knowledge building communities' (Cardini, 2006, in Sim, 2010, p. 20) and sometimes 'professional learning communities' (DuFour, DuFour, & Eaker, 2008; see also Rahman 2011a, 2011b, 2012). Practically, often these communities are centred on an action research initiative focussing in some kind of professional development.

Given the 'cultural politics' (Sim 2010, p. 19) in the teaching context of Bangladesh discussed above, there are, however, challenges in establishing a CoP. Wenger, McDermott and Snyder (2002) explain that one of the most critical phases towards the development of a CoP is the initial contact phase. It is crucial that enough time and resources are available for all members to utilise in order to understand the motivations, views, expectations of others within the context of the action research project or the professional development activity. Wenger et al. (2002) explain that there are three components which combine to form any CoP – 'a *domain* of knowledge, which defines a set of issues [in this case, say, the enhancement of students' communicative competence]; a *community* of people who care about this domain [in this case this could be a given local school and a university within the same wider area]; and the shared *practice* that they are developing to be effective in their domain [say, the use of extended role playing or drama]' (p. 27). Such CoPs facilitate the informal, often amorphous transfer of knowledge where 'membership is about each participant seeing the opportunity for him or her to benefit from being part of the community' (Sim 2010, p. 21) as much as seeing the trustful symbiotic and complementary roles between school and university teachers that make this possible.

Fundamentally based on trust, reciprocity and mutual respect, partnerships in research are essentially a social practice, which bring together all vested interest groups around local and personally relatable common interests in learning and teaching. To make this happen, stakeholders need to get involved in a mutual spirit of trust, respect and intellectual reciprocity and respect everyone's unique contributions and their collective commitments. An effective partnership focuses on learning for all stakeholders, including those researched – often the students. CoP-based conversations act as a stimulant to produce genuine learning relationships among teachers and students. The process of a community of practice inducing its members is unconscious, and while these communities may or may not have empowered them, and whether or not such communities are acknowledged or not, it can be said that teachers in Bangladeshi schools exist in quite powerful communities of practice.

Recent Action Research Projects and Projects on Action Research

Although Salahuddin and Khatun (2013) note that action research in education is 'totally absent' (p. 15) in Bangladesh, there are a number of examples that can be offered; however it is believed that due to lack of systematic and consolidated documentation, not all such research projects are known. In this section we briefly look at a number of recent action research projects as well as projects *on* action research. In 2010 Salahuddin and Khatun themselves conducted a case study at the Engineering University High School in Dhaka which looked at a conflict management situation among boys and girls in a particular class. In a highly gender-segregated class, it aimed to promote cross-gender co-educational cooperation and friendship which involved counselling them on gender equity and the importance of group work. This was done by assigning them with group work and using gender-specific topical discussions. Their report outlines the project's success as well as the challenges faced in implementing their plans.

In 2013 Harun and Al-Amin conducted a study involving 40 English language teachers from a number of secondary (25) and higher secondary schools (15) in Dhaka exploring reflective teaching and action research as a means of CPD. Through questionnaires and interviews, the study found that most teachers were not familiar with the terms action research or reflective teaching at all, nor were they practiced at any of the 40 secondary and higher secondary schools. They argued that if these two were 'executed systematically', they would make significant changes in 'improving teachers' overall proficiency' (p. 69). They reported that the main challenge was that there was no incentive for teachers to reflect on their classes methodically in order to improve their teaching practices. For this, they blamed the typical 'contextual factors' (p. 77) such as lack of logistic and infrastructural support, a supportive educational ambience and a positive and congenial attitude towards education, as reported earlier in this paper.

In 2011 Rahman conducted a study (2011b) involving 14 secondary science teachers forming pairs from seven schools in Bangladesh. He engaged the participants in the establishment of a professional learning community through which he explored how these teachers had used teaching aids in their classrooms, developed their understanding of science content with their students and tried to explain the relevance of science in the real lives of learners (see also Chap. 10 by Sarkar, this volume). Through the intervention of a constructivist teaching approach, the study also aimed at guiding these participant teachers to explore ways in which they could overcome their reliance on their 'traditional' (p. 14, 257) teaching approaches and emphasis on rote learning.

Hoping that through their engagement in a professional learning community (both within and across schools) their science teaching might improve, the study aimed at 'changing the culture' (p. 257) of their professional practice by encouraging them to have more open conversations with their colleagues. Through their involvement in a collective learning process, over several months the teachers were reported to have developed a shared understanding and to have felt more comfortable in openly communicating their problems with colleagues in a manner that was impossible before the intervention. Such spirit of sharing also had an 'empowering' (p. 252) effect on them by enabling them to articulate their lessons with greater confidence. As a welcome bonus, Rahman reports, this also led to a transformation in the students' learning approaches from surface to deep learning.

Rahman found that it was through a teacher-led, community-based and bottom-up *cultural* (rather than structural or logistic) change in their existing professional practices that the teachers could be eased into accepting changes to their approaches to teaching science. In addition to these tangible benefits, the study reports that the intervention process also influenced these teachers to *think* about the need for change in the 'culture of their existing professional practice' (p. 250) by making a 'cultural shift' (p. 2) in their teaching practices and community engagement and to develop a personal vision for their own teaching practice.

Rahman is hopeful that, despite all the limitations of resources and the burden of teaching load, a professional learning community-based teaching approach will work in the Bangladesh context and will facilitate a 'tremendous change in the teaching and learning situation' (p. 263).

In a more recent longitudinal study, Alam (2016) reports a participatory action research (a type of action research which focuses on the role of the participants within a practice) project located in a remote rural secondary school in Bangladesh. By developing a learning community of teachers over a period of 6 months, this project examined their existing teaching practices and how they evolved and tracked the shifts in their understandings of their role as teachers in improving student learning. Through a framework of four interrelated approaches – action research, reflective practice, learning communities and situated learning, and in particular using a framework offered by Kemmis and McTaggart (2005) which positions participatory action research as a social process of learning, the study examined their teaching practices.

Alam's study (2016) aimed at creating a 'communicative space' to explore the teachers' challenges, to develop plans for action and to experimentally implement

them. Alam showed that by providing exploratory tools otherwise unavailable in other methodological approaches, the model of a participatory action research process provided unique opportunities which facilitated a better understanding of their teaching practice. In the absence of such studies in Bangladesh, Alam hopes that this framework could serve as an 'illustrative model of possibilities' (p. 3) for future teacher research.

Over these 6 months teachers were observed to be increasingly aware of the potential of collaborative learning towards their common goal of quality teaching. It is reported that over time, participants grew to learn to take risks and accept critique in a spirit of congeniality and developed dialogues that were genuinely exploratory – 'opening both the physical and the metaphorical doors of their classrooms the teachers showed they were gradually surrendering aspects of a role they had thought they had to act out, that of the authority' (Alam, 2016, p. 243).

Through the example of one such school, the creation of the learning community illustrates in what ways, even within persistent constraints such as 'the guidelines of the national curriculum, the confines of the examination system and within their limited resources' (p. 3), bottom-up positive changes can occur through the mutual support of teachers locally. Alam, a university lecturer, who ran this project as part of his doctoral studies, shows how opportunities created locally can make slow but steady incremental changes to teachers' attitudes and actions. No doubt this project is also an example of how collaboration between academics and teachers can be productive and yield useful results for both parties.

Alam showed that sustainable differences can be made locally by teachers who have better knowledge of what works best for their students; an approach that will have the added benefit of empowering our teachers by enhancing their sense of agency rather than a sense of inadequacy stemming from dependence on international models.

Alam warns however that there is the need to take risks and to think about ways to develop our teachers as 'collaborative challengers of one another's thinking' (p. 246) rather than relying on high-level policymakers and advisors 'disconnected from the school's practice' who are little more than 'tick-box monitors of school performance' (p. 246). He also stresses the need for a bottom-up approach to teachers' professional development, and this he believes can best be done through a rolling out of school-based and participatory professional development programmes, perhaps across specific regions so that schools within the network can mutually support each other.

Inculcation: Change in Culture and Mindset

Research can be helpful in improving the quality of classroom teaching, but equally on a second premise that research cannot be helpful except through quite complex processes culminating in classroom teachers engaging in dialogue with research-based proposals. (McIntyre, 2005, pp. 362–363)

In this day and age, the notion of the teacher as a public servant or a transmitter of knowledge is anachronistic – a view that needs to give way to a recognition of them as empowered, critical and reflective practitioners who are engaged in the perennial evaluation and evolution of their own professional practices. There is need for the government and other stakeholders to acknowledge this and arrange the provision of sufficient logistics and resources to facilitate useful teacher research.

In particular, there is need for us to consider changes to the pre-service content, such as inclusion in the curriculum of topics that encourage critical and reflective thinking – especially those that are needed in action research, the involvement of final year trainee teachers in actual research projects and, perhaps, supplementary in-service programmes that encourage criticality. Such programmes will facilitate opportunities for trainees to acquire the skills and confidence to conduct their own research in the classrooms of the future.

However curricular changes alone are insufficient in making sustainable progress. Regardless of size, resources and funds, the leadership in any given school plays an important role in inculcating research culture among its teaching staff. Through the provision of timely and adequate professional development, school leaders can build school-wide capacity for conducting independent research. Instead of one-off workshops on action research, teachers will benefit in a more sustainable way from a dedicated consultant or experienced mentor teachers to guide them in their path to conducting research. There is also need for teacher and their trainers as well as for the school leadership and government education officials to be aware of global trends and developments in curriculum and pedagogy, which is best done through partnerships with university academics. University academics, especially those working in education departments, on the other hand, need to adopt a more inclusive approach in designing their research, particularly when the subjects of their investigation are teachers and classroom teaching.

Above all, for truly sustainable change, creating a culture of criticality and enquiry, reflection and collaboration is an ongoing change for schools, and this requires significant investment in time, planning and patience in overcoming age-old and culturally sanctioned traditional practices which have remained unquestioned for decades. Such cultural change can only be possible if teachers can themselves recognise the value of a research mindset which will facilitate professional development through ongoing self-scrutiny and the collegial sharing of ideas. The teacher who only reads, without having any first-hand research experience, is likely to lack confidence in making informed judgements on adapting their teaching behaviour. It is only natural that students will value suggestions made by a person more informed about their learning rather than someone who teaches in a routinised manner insensitive to their ever-changing needs.

Cultural change and a change in the mindset of teachers will also make them see themselves as 'provokers of curiosity rather than the holders of knowledge' (Alam, 2016, p. 252; see, also, Rahman, 2011b) and, through reflective teaching, make them feel secure in taking risks and making mistakes. Teachers who are research active develop an enhanced understanding of the complexities of the learning environment, and this enables them to be capable of making better use of critical

insights gained from their pedagogical and curricular experiences throughout their careers.

Education, especially state-run education, is the 'strongest political instrument of our time' (Tremblay, 2012, n. p.) and is vulnerable to exploitation by vested interest groups to serve their political interests. On the other hand, embedded within the profession of teaching is a moral dimension which espouses the belief that education should serve to liberate our ways of thinking and promote equity and inclusivity, access and social justice for everyone.

Field (2011) warns that if our enactment of education is not based upon research-based evidence and insights, it runs the risk of being based on dogma and prejudice, static theories, personal biases and the encroachment of vested interest groups – a scenario Bangladesh is particularly vulnerable to, given the political unrest and the general lack of mutual trust among the major political parties as manifested in its post-independence political history. In the absence of research, the ideologies of vested interest groups persist, allowing education to be used as a propaganda tool for political purposes. Pedagogy devoid of research-informed knowledge undermines our responsibilities as teachers to develop conscientious citizens who develop the values of the day and age. Research facilitates a culture and a mindset which allows all of these to be questioned because this becomes an act of moral responsibility.

Conclusion

> What has to change is that institutions staffed by academics who pore over their graphs and number crunched statistics revealing where teachers fail, might like to ask what teachers think. (Bantick, 2015)

Changing the mindset of a whole generation of teachers across the nation cannot be done through individual initiatives; rather governments, schools and universities need to come together and form sustainable collaborative partnerships. Pushing for policy changes may be the beginning step to trigger such changes; however, policy in itself will always remain inadequate in supporting local initiatives building sustainable relationships. Besides, even if conditions require us to comply to top-down policies and initiatives such as those from the Ministry of Education and prescribed formula, there is still room for innovation and bottom-up approaches which provide options for teachers taking up responsibility for self-development. Kruger et al. (2009) explain that it is 'difficult to see how the conditions needed to create enduring spaces spanning university and school borders might be formed without the direct participation of resourceful school/education system authorities' (p. 11), for which we need optimised institutional conditions which foster sustainable partnerships.

There is need for a mutually symbiotic and respectful relationship between schools and universities and between teachers and academics. As social beings

entrusted with the power to change our conditions, it is any teacher's moral responsibility to promote the principles of equity, access and inclusiveness for all. The teaching profession has always helped maintain the stability of societies around the world. We need to create the conditions that will foster research-informed knowledge about teaching and learning by the best means available, despite the challenges that discourage us from taking up such challenges. One robust way of making a difference is by actively encouraging and consolidating partnerships between schools and universities in Bangladesh.

Schools themselves need to move away from expecting the teacher to work as an isolated practitioner in the classroom and instead see them as part of ongoing dialogue within the community of practice and having full access to the vast pool of scholarly knowledge created by academic research (Thornton, 2006). Within the community of practice approach, partnership itself becomes the learning environment wherein the dialogue, communication and eventually the dissemination of ideas occur in the space in between all the community members.

Professional development can be achieved through activities such as attending pre-service and in-service training, as well as workshops, seminars and conferences, and through affiliation and memberships to teachers' associations such as the Bangladesh English Language Teachers Association (BELTA) and the Bangladesh Literacy Association (BLA).

In addition to a cultural change and a change of mindset, there is also the need to create nurturing conditions within the school for spontaneous collaboration. A respectful partnership based on mutual respect enables new structures among stakeholders which stretch beyond the school and the university and reach out to the community at large. By committing to such respectful relationships where everyone contributes with personal and professional resources and allowing members to value individual and collective contributions of everyone, such structures also initiate new learning opportunities.

Crucially, the results of action research projects need to be disseminated in intelligible and sensible ways considering who the stakeholders are, which may include teachers and the school leadership, parents and the community at large, local and state governments and of course seats of higher education, especially those involved in providing teacher training.

There will indeed be challenges and resistance in convincing teachers, academics and other stakeholders that such school-university partnerships will deflect the most research-able teachers from their primary tasks – to teach students – and this will certainly not work if involvement in action research means committing to additional workload. An 'appropriately resourced re-direction' (Kruger et al., 2009, p. 11) of collaborative partnerships will make sure such collaborations are a desirably regular part of their professional responsibilities and practices.

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Part II
Reformation of Curriculum, Assessment and Teacher Development

Chapter 10
The Promotion of Science Values: Science Teachers' Perspectives and Practices

Mahbub Sarkar

Abstract Based on a qualitative case study, this chapter analyses science teachers' perspectives and practices with regard to the promotion of two curriculum-intended values—curiosity and rational thinking. Six science teachers representing a range of geographical locations, school types with different class sizes, lengths of teaching experience and educational qualifications, along with their associated science classes, each representing a case, participated in this study. Data were gathered through observing the teachers' science lessons, interviewing them as well as interviewing their students in focus groups. The cross-case analysis suggests that while both of the values were perceived to be important by the teachers, there were marked differences in their perceived importance and the corresponding teaching approaches. The discussion explores the meaning of these findings in terms of school science educational practice in Bangladesh.

Keywords Science teaching · Scientific literacy · Science values · Curiosity · Rational thinking

Introduction

Like in many other developing countries (see, e.g. Nargund-Joshi, Rogers, & Akerson, 2011; Rampal, 1994), superstitious beliefs have been historically embedded in Bangladeshi society (Hossain, 2010). Hossain mentions some common superstitious beliefs held by Bangladeshi people, for example, wearing a *tabeej* (amulet) or ring for protection from evil spirits, getting pens blessed by a priest before exams and using a *tabeej* or voodoo doll to bring harm to enemies by using *kufri kalam* (incantation)—a common practice of black magic. As Bangladeshi, many students' worldviews are likely to have been shaped by such superstitious

M. Sarkar (✉)
Monash Centre for Scholarship in Health Education (MCSHE), Faculty of Medicine, Nursing & Health Sciences, Monash University, Melbourne, VIC, Australia
e-mail: mahbub.sarkar@monash.edu

beliefs as they grow up. It is only natural therefore that from the very first Education Commission report published in the independent Bangladesh (Qudrat-e-Khuda et al., 1974) to the recent 2010 National Education Policy (Ministry of Education, 2010), it has been emphasised that learning science in schools would help students replace or marginalise their superstitious worldviews and assimilate within them the rational culture and spirit of science. In line with this, promoting science values has always been an important component in the intended school science curriculum (National Curriculum and Textbook Board [NCTB], 1995, 2012).

However, while the curriculum intends to promote science values, at implemented level science teaching and learning mostly still follow a content-dominated approach. This approach is manifested in two major but interrelated ways: (a) science textbooks, which are considered as a de facto curriculum, mainly focussing on academically oriented content (Sarkar, 2012a) and (b) school education, which is exam-driven where exams mostly demand memorisation and recall of the content from the textbooks (Holbrook, 2005; Tapan, 2010). In such a content-dominated education context, it is interesting and important to look at how science values are understood in science classes in Bangladesh. More specifically, in this chapter I discuss how science teachers perceive the notion of two curriculum-intended science values (e.g. curiosity and rational thinking) and how they translate their perspectives into actual classroom teaching. As teachers play a vital role in promoting science values (Corrigan, Dillon, & Gunstone, 2007), examining their perspectives and practices is perceived to be important in the teaching and learning experience. The following section presents a theoretical discussion on how values play roles in science curriculum and, in turn, in science teaching practices.

Values and Science Curriculum: Theoretical Underpinnings

While traditionally science was perceived as a value-free discipline (Gunstone, Corrigan, & Dillon, 2007), 'values have always been explicitly and/or implicitly taught through the science curriculum because no curriculum is ever a value-free zone' (Hildebrand, 2007, p. 45). In recent times, there is an amplified awareness of the embeddedness of values in school science curricula in many countries including the United States, the United Kingdom and Australia (Corrigan et al., 2007). As Allchin (1999) argued, values intersect with science in three major ways:

> First, there are values, particularly epistemic values, which guide scientific research itself. Second, because the scientific enterprise is always embedded in some particular culture, values enter science through its individual practitioners, whether consciously or not. Finally, values emerge from science, both as a product and a process, and can be redistributed more broadly in the culture or society. (p. 1083)

In a similar vein, values embedded in a science curriculum are the result of choices made by each of the contributing domains (e.g. science, education, curriculum developers and the community) and thus are diversified. Because of such diversity, there is no consensus in the science education community regarding which

values should be included in a given science curriculum (Hildebrand, 2007). Hodson and Reid (1988, p. 106), for instance, listed 17 values (e.g. intellectual curiosity, self-criticism, open-mindedness) to be incorporated in school science curricula for designing appropriate learning experiences for all students. While there is disagreement on which values should be included, a general agreement in the science education community suggests that values play an important role in the promotion of scientific literacy, which is worldwide considered as the primary purpose of school science curriculum (Organisation for Economic Co-operation and Development [OECD], 2006).

In Bangladesh, a common science curriculum caters for all students at the junior secondary level. Its aims are to build a strong foundation in science while still providing students with opportunities to use science in everyday life (NCTB, 2012)—an aim consistent with the notion of scientific literacy (Tytler, Osborne, Williams, Tytler, & Clark, 2008). However, no universally accepted consensus exists on *how* scientific literacy is understood (Roberts, 2007), and this may be due to the context dependency of scientific literacy. Experts in science education, however, agree that students must have some science knowledge to be scientifically literate (OECD, 2006; Osborne, 2007), and this knowledge must be understood and applied in contexts which individuals come across in everyday life (Bybee, Fensham, & Laurie, 2009). This notion suggests perceiving a scientifically literate person as an informed user and consumer of science knowledge who would be able to:

- Ask, find or determine answers to questions derived from curiosity about everyday experiences.
- Read with understanding articles about science in the popular press and to engage in social conversation about the validity of their conclusions.
- Pose and evaluate arguments based on evidence and to apply conclusions from such arguments appropriately.
- Make informed decisions about the environment and their own health and well-being.

(Summarised from Goodrum, Hackling, & Rennie, 2001; National Research Council [NRC], 1996)

The importance of science knowledge in scientific literacy can further be discussed with respect to its intrinsic and instrumental justifications (Millar, 1996). Intrinsic justification refers to cultural aspects, that is, science knowledge can help people satisfy their curiosity about the natural world, which is also very important in learning (Howes, 2001; Murphy, 2009). On the other hand, instrumental justification refers to utilitarian aims, that is, science knowledge is necessary as a foundation for making informed practical decisions about everyday matters, participating in decision-making on science-related issues and working in science and technology-related jobs (Millar, 1996).

However, how people use (or fail to use) science knowledge in making and evaluating decisions and arguments is often guided by the values they espouse (Rennie, 2005, 2007). For example, the value of open-mindedness promotes an encouragement of curiosity and wonder in students, which in turn encourages them to ask

questions and challenges them to support their own views with evidence and logic (Hare, 2009). Open-mindedness also prompts a person to explore and consider all available alternatives (Hare, 2009), and it is rational thinking which helps one choose among the alternatives (Tan, 1997) and help to build an argument and to reach an informed decision or a conclusion (Hare, 1979). Since scientific literacy is perceived as related to the making and evaluating of decisions and arguments, values therefore are an important facet of scientific literacy (Graber et al., 2001; Koballa, Kemp, & Evans, 1997; OECD, 2006).

As noted previously, while there is a range of values that can be included in the school science curriculum, this chapter focuses on two of them—curiosity and rational thinking. The reasons to focus on these two values are, firstly, the fact that both the current junior secondary science curriculum (NCTB, 2012) and its predecessor (NCTB, 1995) emphasised them and, secondly, an in-depth discussion on all other values would need more space that this volume does not allow. The following section presents how these two values have been problematised and understood in this research.

Curiosity

Curiosity refers to 'wondering how things work; possessing an orientation to inquiry, to speculation, to chasing ideas and testing them against evidence' (Hildebrand, 2007, p. 53). It is the 'spark that ignites research' (Tan, 1997, p. 561) and leads people to ask questions and seek answers, which also lead to *new* questions to explore (Osborne, Collins, Ratcliffe, Millar, & Duschl, 2003). This notion of curiosity may be manifested in science classrooms through encouraging students raising questions from their experiences and encouraging them to explore the questions or solve problems. Grandy and Duschl (2005) argued that even though the questions students generate at an early age may not necessarily be scientific, students should not be discouraged to ask 'unscientific' questions. Rather, teachers need to be empathic to students' questions but with intentions to help students learn ways to ask 'scientific' questions. Also, teachers may ask students questions to stimulate their thinking and to act as a role model of the enquiring individual, raising questions from experiences.

Wallace and Louden (2002) suggested that teachers ask 'what if'-type questions in order to help generate *new* 'what if'-type questions from the students themselves and to promote their curiosity. In order to encourage student thinking, Goodrum (2004) suggested teachers allowing sufficient 'wait time' for students and to listen carefully to students' responses. Wait time provides the opportunity for student reflection, while listening to students' responses helps teachers understand the thinking behind the responses, which eventually helps teachers ask follow-up questions to extend students' thinking.

Rational Thinking

Rational thinking refers to being 'systematic and logical in thinking through ideas' (Hildebrand, 2007, p. 52). Rational thinking, therefore, emphasises 'argument, reasoning, logical analysis and explanations' (Corrigan & Gunstone, 2007, p. 145). Richetti and Tregoe (2001, pp. 7–8) described rational thinking as a process that entails an individual's 'ability to consider the relevant variables of a situation and to access, organise, and analyse relevant information (e.g., facts, opinions, judgments and data) to arrive at a sound conclusion'. At the macro level, rational thinking promotes an understanding of the rationality of science, which is why Matthews (1994) insisted rational thinking to be pertinent to science teaching. The importance of rational thinking, at the micro level, is that it helps people evaluate alternative ideas and reach an informed conclusion based on their evaluation (Padilla, Okey, & Dillashaw, 1983). This notion of rational thinking, as Siddique (2010) argued, can be manifested in science classrooms by encouraging students to be involved in arguments, debate and deductive reasoning.

Research Design and Methods

This chapter presents Bangladeshi science teachers' perspectives of the promotion of curiosity and rational thinking in their science teaching practices. Data draw on from a multiple case study approach (Stake, 2006) while analysing six science classes as six cases. The rationale for considering multiple cases is that the individual cases would share both common and contrasting characteristics that would provide opportunities for an in-depth understanding of the research problem (Stake, 2006).

In the case selection process, demographic information of the participant teachers (e.g. school location, school type, teachers' teaching experiences and class size) were considered to ensure 'maximal variation', which helped provide a sound qualitative data set (Creswell & Plano Clark, 2007, p. 112). Considering these demographics, six teachers were selected as participants for the case studies. Selected teachers' demographic information presented in Table 10.1 show that they represent

Table 10.1 Demographics of the participant teachers

Criteria	Sabina[a] (F)	Alam (M)	Ashim (M)	Morshed (M)	Rashid (M)	Jasmine (F)
School location	Semiurban	Urban	Rural	Urban	Rural	Semiurban
School type	Co-ed	Co-ed	Boys'	Boys'	Girls'	Girls'
Class size	53	50	100	65	85	70
Teaching experiences	12 years	13 years	10 years	18 years	16 years	9 years
Educational qualifications	BSc	MSc	BSc	MSc	BA	MSc

[a] All names are pseudonyms to protect the identity of the participants

a range of geographical locations (rural, semiurban and urban), school types (co-educational, boys' and girls') with different class sizes (from 50 to 100 students), lengths of teaching experience (from 9 to 18 years) as well as educational qualifications (science and non-science backgrounds). The six teachers and their associated science classes (including students) were considered as six cases. The research reported in this chapter is part of a PhD study (Sarkar, 2012b), which was approved by the Monash University Human Research Ethics Committee (CF09/1352 – 2009000712).

Data Sources

A number of data sources, for example, interviews, lesson observations and focus group interviews, were used in this multiple case study research. Initially, a pre-lesson semi-structured interview (Patton, 2002) was conducted with each participant teacher to explore their perspectives on curriculum-intended science values. This pre-lesson interview, in addition, allowed to build familiarity with the study, to develop a sense of mutual trust and build rapport (Babbie, 2011) and to make practical arrangements for observing their lessons.

The researcher then observed a series of lessons (each lesson was for 30–35 min; three to four lessons for each participant teacher) as a passive observer (Mertens, 1998) to understand the ways in which they translated their perspectives into classroom teaching. In order to avoid any interruption to the usual school schedule, the teachers were not asked to teach any particular content/unit, although all the lessons on a particular unit taught by a particular teacher were observed. Considering that a unit may have different emphases at different times in the progress of the topic, observation of teaching the entire unit was thought to help understand a teacher's overall teaching approach. These observations provided rich examples of teachers' practices in science classrooms and acted as additional data sources to their espoused practices indicated in their pre-lesson interviews. In addition, observation of teachers' lessons helped me identify important aspects of their teaching, which became significant in further exploration during the post-lesson interviews by generating follow-up questions based on their teaching practices.

Observation data were recorded in two ways: note taking and audio recording. Jotted or sketchy notes were taken in order to keep abreast of what was happening in the class. In order to minimise the possibility of compromising the integrity of data, as soon as an observation was completed, elaborate notes were written in the form of brief reports with the help of the audio recording. If a classroom lecture quote seemed to be worthwhile to the researcher, he transformed the audio-recorded piece into words and put it in the report.

Each teacher was interviewed a second time (post-lesson interview) at the end of the last observation. This post-lesson interview provided teachers with opportunities to explain their classroom practices. Given that the teaching episodes would necessarily be varied from teacher to teacher, the post-lesson interviews were

loosely guided by a list of questions that allowed to respond to a range of classroom episodes observed.

As students are an integral part of a class, their views about their class experiences are worthwhile in understanding how particular issues were raised and explored in science classes. Therefore six students from each of the selected teachers' science classes comprised each of the six focus groups. These focus groups provided insights into the range of views or experiences (Morgan & Krueger, 1993) that students had about the ways science was taught in their classes. In this research, focus group interviews were used as supporting and supplementary data sources to understand teachers' practices in science classes.

Data Analysis

Digitally recorded individual interviews with teachers and focus group interviews with students were transcribed. The interview transcripts were sent back to the participant teachers to confirm the accuracy of the transcripts in order to enhance the credibility of data (Creswell, 2007). Along with the transcripts of interviews and focus group interviews, analysis of observation data was conducted from the written observation reports. Transcripts and observation reports were read several times to develop a deeper understanding of the data (Creswell, 2007). Data were then coded reflexively to identify emergent themes using a grounded theory approach to thematic analysis (Charmaz & Belgrave, 2012). Repetitions, local terms, metaphors and analogies and transitions in the transcripts were looked for while assigning codes to the data (Ryan & Bernard, 2003). Similar codes were iterated under the major codes which guided to identify emergent themes (Saldana, 2009). The software NVivo was used in managing coding; however, all coding was performed manually, with the written transcripts interpreted in context rather than as target words or phrases. This approach allowed for the perspectives and practices of the respondents to be identified without applying preconceptions. As this research sought respondents' perspectives and practices in the absence of a prior set of research findings from which a framework could have been constructed, it was reasonable not to impose a preconceived framework, which could potentially impose excessive and unnecessary rigidity to the study.

Based on the analysis procedure described above, detailed case reports for the participant teachers were then produced. These case reports were finally analysed applying a cross-case data analysis procedure (Stake, 2006) to understand the comparison of commonalities and differences in the themes that emerged across the cases. Following Stake, it was perceived that the common research questions (i.e. how science teachers perceive the notion of curiosity and rational thinking and how they translate their perspectives into classroom teaching practices) tied together all of the cases. Meaningful linkages and relationships were then constructed by analysing the degree of congruity or disparity across the cases. Concurring with Miles and Huberman (1994), it was perceived that a cross-case analysis helped

achieve a deeper understanding of teacher's perspectives of the selected values, as well as the translation of their perspectives into classroom teaching.

Results and Discussion

In presenting the cross-case analysis of the six case studies, it is necessary to offer a discussion on the results in order to provide exemplary elaborations of the themes that emerged. In this section the chapter presents the pattern of teachers' perspectives of the importance of each of the two values along with the teaching approaches they adopted to promote these values in their science classrooms.

Curiosity: Teachers' Perspectives and Practices

Perceived Importance of Curiosity

From the cross-case analysis, it appeared that the teachers did perceive curiosity as an important element in learning science and generally for scientific literacy. The following are two comments from pre-lesson interviews with teachers, as examples:

> Curiosity brings questions and then it generates action to answer the questions. It is necessary to learn science. (Ashim)
>
>   If I can foster students' curiosity, this will provide students with questions to explore. This [curiosity] will lead them to find answers to such questions. In order to answer such questions, they will explore various science books, magazines, newspapers. They will get science knowledge from these [resources]. This science knowledge can satisfy their curiosity and they can then use this [knowledge] in their everyday life as well. So, you see, curiosity is important for scientific literacy. (Sabina)

As evident in the comment above, Ashim made the case for curiosity in science learning as it prompted students to find the questions about the natural world and which could lead to finding ways to answer the questions. Sabina added that in answering questions, students would explore different resources (e.g. science books, magazines, newspapers) and extend their science knowledge, which would potentially be useful in their everyday life.

Teaching Approaches to Promote Curiosity

While all of the participant teachers perceived curiosity as important, their views on teaching approaches to promote this value varied. Based on the nature of teachers' attempts to promote curiosity, they were clustered in three categories: (a) teachers who articulate a teaching approach to promote curiosity but whose approach may

actually be not helpful in promoting curiosity, (b) teachers who seem to fail in articulating a teaching approach to promote curiosity, and (c) teachers who articulate and practise a teaching approach that may promote curiosity. These categories were also found pertinent in regard to the value of rational thinking as will be discussed in the section following the next.

Teachers Who Articulate a Teaching Approach but Whose Practice May Not Be Helpful to Promote Curiosity

Analysis of the cases reveals that while both Sabina and Alam attempted to promote curiosity in science teaching, in practice their attempts might not have helped promote students' curiosity. For example, in a bid to promote students' curiosity, Sabina considered asking students questions and encouraging them to ask questions as well. It seemed that she considered modelling the asking of questions as important in helping students to perceive this as a good thing to do. However, it was observed in her teaching of acids that she had asked students only verification-type questions, such as 'Have you heard about acid or alkali?', 'Do you know you take acids as food?' and 'What is the chemical name of edible soda?'

Such questions prompted students to answer the questions rather than encouraging them to identify and explore their experiences of acids in everyday life. Moreover, as observed, Sabina did not encourage students to ask questions *themselves*. Also, Sabina's classroom questioning did not include any 'what if'-type questions, which, as Wallace and Louden (2002) argued, could help students generate new 'what if'-type questions from themselves and help promote their curiosity. Therefore, it seemed that she had limited knowledge of the kinds of questioning that could promote students' curiosity.

While most of Sabina's students in the focus group interview could not articulate questions that they thought were generated from their curiosity, one of them was able to give voice to such a question. As can be seen in the comment below, curiosity led Sagar to seek the reason for the change in colour of litmus in acidic conditions:

> I saw that blue litmus turns into red if I put it in an acidic substance. I was wondering what the reason for this colour change is.

However, the failure of most students to generate questions as a result of their curiosity may render Sabina's views and teaching practice for promoting students' curiosity as questionable.

In a similar vein, while Alam perceived his students as 'very curious'—also observed in the focus group interview with students—his teaching approach could be seen as not helpful in promoting students' curiosity. Alam, in the pre-lesson interview, expressed the view that he could do so through providing 'thought provoking questions or statements at the beginning of a lesson and presenting stories on scientific discoveries that exemplify a scientist's curiosity'. As observed in his

teaching of gravity, he presented the famous 'Newton and apple' story in the following way:

> When you throw something up, what happens? It falls to the ground, doesn't it? Do you know why this happens? Let me tell you a story. One day Newton was sitting under an apple tree and thinking about the motion of the planets. Suddenly, a ripe apple fell from the tree and hit him on the head. Many questions came to his mind at once. He started wondering, why did the apple fall towards the ground? Why did it not go upward? Why did it not stay still? Can you answer these questions? These questions led him to discover the famous laws of gravitational force.

While the veracity of this story is not beyond criticism (Patricia, 1999), this can be seen as an example of how an incident can cause people to wonder about the reason behind the incident. When presenting the story, he asked students questions; he did not, however, leave any wait time for students nor did he seem to be interested in listening to students' responses. As Goodrum (2004) argued, wait time can provide students with opportunities to articulate their thoughts and reflections, and listening to student responses helps teachers understand the thinking *behind* the responses, which eventually helps them ask follow-up questions to extend student thinking. Therefore, Alam's reluctance to be empathic towards students' responses and provide them with the appropriate 'wait time' may not have helped students extend their thinking and thus may not have been helpful in promoting their curiosity.

Teachers Who Seem to Fail in Articulating a Teaching Approach to Promote Curiosity

Although Sabina and Alam's teaching approaches were questionable in regard to promoting students' curiosity, they were both at least able to articulate on their attempts. In contrast, Ashim and Rashid, in the pre-lesson interviews, could not specify how they taught to promote curiosity. As observed, their classroom teaching was found not to be helpful in promoting students' curiosity. For example, it was observed in Ashim's classroom teaching practice that he did not consider students' questions; in fact, on certain occasions, he even stopped students from asking questions. Here is a common example of classroom scenario as observed:

> Mishu: Sir, what will happen if I pour water...
> Ashim: Let me proceed, OK?

In the class lecture, Ashim described pouring water into sulphuric acid as dangerous but did not explain the reason why. In responding to this description, Mishu, a student, intended to ask what would happen if he poured water into sulphuric acid. Ashim did not allow Mishu's question to interrupt his procedure nor did he encourage his student to find the answer. In the post-lesson interview, I broached this issue with Ashim and asked for his explanation. He explained:

> Curiosity is good, I know. But it is also a fact that there have been some students who ask too many questions and create noise in the class. I can't tolerate that.

Classroom quietness, often in the form of pin-drop silence, is a traditionally expected norm in Bangladeshi classrooms as it is in neighbouring India (Rampal, 1994). It seemed that Ashim was concerned with maintaining classroom 'discipline' by preventing students from asking questions and keeping them quiet. Although Ashim discouraged students from asking questions, the focus group interview with his students elicited their curiosity about the natural world. Here are some examples of student questions that they were curious about:

> I wonder why spraying water extinguishes fire. I asked my cousin and he explained it to me. (Akil)
>   Halley's Comet is seen from the Earth every 76 years. I wonder why it is seen every 76 years. I got a book in the [school] library and found the explanation. (Mizan)

As seen in the comments above, Akil and Mizan generated their own questions from their curiosity about the natural world yet sought answers in places outside their classrooms. I asked them why they did not ask these questions to their teacher. Both of them kept silent in response, possibly reflecting their discomfort in asking questions to their teacher. This in turn would seem to indicate that students had little scope or encouragement to ask questions in Ashim's science classes.

Teachers Who Articulate and Practise a Teaching Approach That May Promote Curiosity

On the surface, the teaching approaches of Jasmine and Morshed could be seen as useful in promoting students' curiosity in science classes. However, there were marked differences in their teaching approaches as discussed below.

As observed in Jasmine's classroom lessons, she engaged students in observing different parts of the flowering plants available in their school surroundings. When the groups had completed their observations, they were then asked to have discussions on their observations and produce a brief report in which they were asked to include any questions they had from their observations. Each of the student groups was then asked to present their report. Jasmine acted as a moderator of this discussion, which was elaborated on further in the theoretical discussion on the life cycle of plants in general and then the life cycle of a chilli plant in particular. In the post-lesson interview, she elaborated on how this approach could promote students' curiosity:

> I asked them to discuss their observations about the plants they see around the school yard and then write a summary of the discussion. In the summary, they articulated what they had observed and what questions they found in their observations. I then led a discussion in order to address their questions.

Jasmine's approach to engaging students in observing different parts of plants around their surroundings helped them find questions from their observations. One such question from students, for example, was:

> A mango has just one seed in it, but a jackfruit has many seeds inside. Why? (Saba)

As observed in Jasmine's teaching practice, student Saba raised a question from her observation. Jasmine expressly appreciated Saba's question and went on to answer it. Such appreciation may encourage students to ask further questions to their teacher (Goodrum, 2004). In fact a reflection of the effectiveness of this teaching approach was also evident in the focus group interview with her students who provided examples of questions that they thought had generated from their curiosity about plants, and they appreciated Jasmine's encouragement in asking her such questions:

> Why are chillies hot? Maybe there is something in chillies. I asked Madam. She explained about capsaicin that makes chillies hot.... She liked the question. (Toma)

Similarly, Morshed was found to be empathic in addressing student's questions in his science class. He also acknowledged the limited time of a science class to address students' every curious question and, therefore, encouraged students to look at other available resources, for example, the school library, as observed in his lesson:

> But the thing is when you get an answer to one question, there would be another one, and then more coming. You can't get all answers in the classroom. But I keep trying to get it. You need to have a mind to look at other resources. … As I told you many times, go to the [school] library. Hundreds of books are there. They will help you open your eyes.

Morshed believed that science-related books available in the school library would help students find answers to some of their questions and, importantly, would lead to new questions to explore. In the focus group interview, his students also reported how they appreciated Morshed's encouragement to explore various resources seeking more in-depth responses to their questions:

> Sir encourages us to read science-related books and watch science-related programmes on TV. [By reading such books and watching such programmes] I come to know many things that I didn't know before. I like to know such new things. They are wonderful. (Moni)

The focus group interview with students also indicated that Morshed was actively responsive in helping students get answers to their questions:

> We learned that the valency of iron can be both 2 and 3. But the other elements that Sir discussed with us have only one valency. So I was wondering why iron has two different valencies. I asked Sir about this. He appreciated [my question] and explained it to me. (Atiq)

In the comment above, Atiq is curious to know the explanation for there being two valencies of iron, and his teacher appreciated his question and helped him in getting the explanation. Morshed's appreciation for student questions may further encourage students to raise and explore curious questions in science classes.

Rational Thinking: Teachers' Perspectives and Practices

Perceived Importance of Rational Thinking

From the cross-case analysis, it appeared that all the teachers within all of the cases perceived rational thinking as an important value of science education and scientific literacy. They believed that rational thinking could help students in making

justifications and rejecting unjustified explanations. In particular, Sabina and Ashim extended the importance of rational thinking to challenge superstitions that were embedded in Bangladeshi society. For example, Sabina, in the pre-lesson interview, exemplified a superstition relating to acidity and explained how rational thinking could help students challenge superstitions:

> Last year, one of my students told me that she heard [from someone] that if one does not say Bismillah[1] before having meals, God produces acids [in the stomach] and the person will suffer from acidity pain. From learning about acids, they will know that we have acids in our stomach. When these [stomach and digestive tract] secrete more than the required amount of acids to digest food, we get pain from the acidity. They will use this knowledge in rationally analysing this superstition.

Sabina argued that science learning in school could help students form a scientific explanation of familiar everyday phenomena, such as the occurrence of acidity. Such an explanation can challenge these superstitions and promote rational thinking which would help students decide which explanation (scientific explanation or prevailing superstition) is more plausible to accept. The point here is that the causes of acidity may be explained in various superstitious ways (ignoring God being one of them), and these explanations may vary in different local contexts. However, the power of scientific explanations (e.g. explaining acidity scientifically) is that they are relatively universal and hence usable in different contexts. Sabina seems to have firmly espoused the belief that rational thinking would help students understand the power of scientific explanations in explaining natural everyday phenomena.

Teaching Approaches to Promote Rational Thinking

The three categories of the teachers' teaching approaches to promote rational thinking are discussed below.

Teachers Who Seem to Fail in Articulating a Teaching Approach to Promote Rational Thinking

While the cross-case analysis suggests that teachers had perceived the importance of rational thinking in science teaching, there is evidence that Ashim and Morshed could not specify *how* they considered rational thinking in their teaching practices. For example, Ashim, in the post-lesson interview, explained that rational thinking would be developed as a by-product of science education:

> There is no scope for any irrational thing in science; so, rational thinking will grow [automatically] with studying science.

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[1] 'Bismillah' is an Arabic word, and the meaning is 'In the name of the Allah (God)'. As an Islamic convention, Bismillah is commonly uttered as a blessing before eating food and other actions.

This view could be seen as an indication of how little the value of rational thinking had explicitly framed his teaching. A corroboration of this lack of emphasis on developing rational thinking processes in his science class may also be seen in his students' focus group because none of the students were able to recognise how rational thinking was considered in the science class.

Teachers Who Articulate a Teaching Approach but Whose Practice May Not Be Helpful to Promote Rational Thinking

The cross-case analysis shows that many of the teachers (Alam, Rashid and Jasmine) argued that engaging students in practical activities was useful in promoting rational thinking. However, observation of a series of lessons by Alam and Rashid did not provide any instance of engaging students in such activities. Focus group interviews with their students also suggested that they had no opportunities to be engaged in practical activities in science classes.

Jasmine, on the other hand, engaged students in an outdoor activity to teach about flowering plants and claimed that such an engagement would be useful in promoting rational thinking. However, she could not explain *how* this engagement could promote rational thinking. In addition, observation of her approach to engaging students in activities suggested her belief in the myth of a single universal 'scientific method' (see Abd-El-Khalick & Lederman, 2000; Lederman, 2004), which she had mentioned in the post-lesson interview: 'You have the systematic steps to follow when you are doing scientific activity and your rational thinking is developing'. As was observed in her class, she did not explicitly encourage students to design and conduct the activity in different ways. Such lack of explicit encouragement may suggest to students that there was only one single way to conduct an activity in science.

This message may further discourage students from devising and considering different ways to conduct science activities. If students were to offer suggestions about different ways to conduct the activities and to justify the plausibility of their suggestions, they would have used rational thinking in making their justifications. In this manner, students could have an opportunity to develop and use rational thinking in doing science activities. However, students were not given such opportunities as Jasmine attempted to engage them in science activities, and, therefore, it could be argued that she had failed to promote rational thinking. Rather it seems that her approach did not go beyond adopting 'cookbook' or 'recipe-like' science activities that engaged students in verifying the result of the activities rather than engaging in open inquiry, and this is still a common practice in Bangladesh (Siddique & Rahman, 2007).

Teachers Who Articulate a Teaching Approach That May Promote Rational Thinking

Sabina's teaching approach could be seen as useful in promoting students' rational thinking in science classes. Sabina explained that she could promote rational thinking by encouraging students to emphasise justification in making arguments and communicating ideas and thoughts. As was observed, there were a number of instances in her classroom teaching that reflected her explicit encouragement of students to engage in this process of argument:

> Sabina: Now, can you describe what the taste of acid would be?
> (Some of the students raised their hands indicating they can answer. She invited one of them to explain.)
> Sabina: OK, Benu will tell us.
> Benu: It would be sour.
> Sabina: Sour? But why do you think so? What is your justification?
> Benu: We found from the litmus test that blue litmus turns red in contacting these foods [lemon, tamarind and vinegar]. Therefore, these [foods] contain acids. I know the taste of lemon, tamarind and vinegar; all of them are sour. So, the taste of acid would be sour.
> Sabina: Hmm … Good justification.

As can be seen in this classroom conversation, Sabina took an opportunity to promote emphasising justification in reaching to a conclusion. This notion of valuing justification was also reflected among her students. Comments from two students from the focus group interview are as follows:

> Madam (Sabina) always encourages us to talk rationally. When I go to say something, she will ask me to justify it. (Benu)
>   There is a superstition that if you eat pineapple after taking milk, you may die from acidity. My grandmother always tells me this. Maybe people think that as both pineapple and milk are acidic, eating both of these foods together causes the stomach to be too acidic and causes acidity. But I learned that eating acidic foods does not cause the stomach to be more acidic. During the process of digestion, the stomach secretes hydrochloric acid, which is much more acidic than any kind of food. So, there is no point in believing in this superstition. (Abu)

Benu's comment above reflects the success of Sabina's encouragement of valuing rational thinking through emphasising justification in the communication of ideas. As an example of the use of rational thinking, Abu explained how science learning had helped him explain a superstitious belief regarding acidity. It seems from this comment that he was more convinced with the scientific explanation that he deduced from his science learning. This could be seen as an indication of the valuing of rational thinking as perceived by Corrigan and Gunstone (2007) who described emphasising justification and arguments as concepts of rational thinking; Sabina's practice thus may be viewed as promoting rational thinking. In addition, students' capacity to exemplify the use of rational thinking suggests that Sabina's teaching approach was helpful in promoting it.

Concluding Remarks

This chapter analysed how science teachers in Bangladesh perceived curiosity and rational thinking and how they translated their perspectives into their classroom teaching practices. It is apparent from the cross-case analysis that both of these values were perceived as important for scientific literacy by these teachers. However, there were marked differences in their teaching approaches.

As can be seen, some participant teachers demonstrated teaching approaches which were arguably conducive to promoting the target values. This is encouraging in the existing teaching–learning contexts in Bangladesh, as has been highlighted in the context chapter (Chowdhury & Sarkar, this volume)—that in Bangladesh, school education is exam-driven because the success of teachers and schools is measured by students' results in the public exams. Since these public exams mostly demand memorisation and mechanical, noncritical recall of content from the textbooks, the power of exams reinforces teachers to encourage students in rote learning of content (Tapan, 2010). Teachers, therefore, often work on preparing students for the exams and feel reluctant to find ways to promote affective components (e.g. values) of the curriculum in science classes. While such contexts may not encourage teachers to think and develop strategies for promoting values (which are not assessed in exams), it is apparent that some of the participant teachers have indeed taught beyond the box in creative and productive ways.

This study has also revealed that some of the participant teachers found it difficult to find, develop and implement suitable teaching approaches to promote the target values. The teachers cannot be criticised for their limited capacity, since very little of their own academic and professional education in science have included attempts to understand the concepts of values in science education. Traditionally, as in many other contexts (Gunstone et al., 2007), school science education in Bangladesh has presented a content-dominated approach to science. Similarly, professional development programmes for science teachers have focussed primarily on promoting science content knowledge to teachers, possibly because specialised content knowledge is required to teach science at the school level, not to mention that many science teachers are from non-science backgrounds (Sarkar & Corrigan, 2014). Thus professional development practices may limit the scope for promoting the concepts of values and developing pedagogic knowledge for teachers so that they can develop the concepts of values and learn how to teach to promote them.

Since promoting values is a stated curricular aim of school science education in Bangladesh, it is reasonable to argue that these values should be taught explicitly in science studies at different educational levels and in different teacher education programmes designed for science teachers. Given this situation, I have felt the need for further research to understand how teacher education programmes in Bangladesh could help science teachers frame values in their science teaching practices.

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Chapter 11
'School Science Is Irrelevant': Why Still Do Science? A Case Study on Secondary Students in Bangladesh

Foez Mojumder and Stephen Keast

Abstract 'School Science is irrelevant, but I still want to study it' is a common comment among Bangladeshi school students. In this chapter the authors explore why secondary students in Bangladesh continue to study hard to achieve high scores to get into a science class, despite the common perception that science is boring, overloaded with content and not relevant to their lives. They want to learn science that is hands-on and engaging and makes links to their life beyond the classroom. Students commented that studying science took up much more of their student time than other subjects. They also found science teaching to be conducted in mostly transmissive styles where they remained passive recipients. So, why is science still a popular choice? Why do students study hard to learn science? This would be a recipe for disaster in Western countries in terms of enrolments, where the curriculum is designed to engage and encourage greater student participation. However it appears that due to socioeconomic pressure on students in Bangladesh, participation is not a problem and students are still highly motivated to take science subjects to have prosperous careers in science and lift themselves out of poverty. This is not unusual in developing countries where the economic development depends on scientific and technological industry growth. While the aim of the country is to produce scientifically literate citizens capable of working in science and technology careers, students in this study are not making the connections between school science and science outside the classroom. Changes are needed, especially in the curriculum and pedagogy, to make science more appealing and engaging so that understanding of science concepts is improved and scientifically literate citizens are produced.

Keywords School science · Scientific literacy · Student career choice · Relevance

F. Mojumder (✉) · S. Keast
Faculty of Education, Monash University, Melbourne, VIC, Australia
e-mail: foez.mojumder@monash.edu; keasty@monash.edu

The Context

In this chapter, the authors focusing on a school in Bangladesh as a case study investigate the students' evaluation of school science.[1] While the case study is not meant to be representative, it does give insights into how one group of students in Bangladesh perceive and value science education. It has been reported that students in developing countries have different views of the use, relevance and importance of science compared to those in developed countries. In fact Bybee and McCrae (2011) suggested that interest in science may be related to a country's developmental status; students from more advantaged socioeconomic backgrounds often showed more interest in learning science than students from more disadvantaged socioeconomic backgrounds (OECD, 2009). Contrary to this, Lyons (2006a) reported that students in developed countries find science boring and irrelevant for their lives outside the classroom; an overwhelming feeling of these students was frustration and lack of interest in school science due to the irrelevance of science as it was taught. In contrast, Sjøberg (2002) reported that students in developing countries had strong positive images of science and scientists, since they view science importantly as a way of developing their living standards. These students reported science to be useful and important for everyday life and society (Sjøberg, 2002; Sjøberg & Schreiner, 2010). While these studies focused mostly on the students' perceptions of science, the authors here were interested in gaining insights into how students evaluate school science as is taught in school. It is one thing for students to be interested in science in general, and another to consider is whether they are interested in studying science at school.

To begin the exploration, it is important to first discuss four major ideas that frame this study; school science, scientific literacy versus science knowledge, relevance of school science and the context of science education in Bangladesh. School science is the science that is studied in school by students, but also includes the *way* it is taught, both the formal and informal learning of science, the type of instruction and its relevance to a student's everyday life. Scientific literacy is different to science knowledge, in that it is about *how* students can take their science knowledge and apply it to situations in their everyday life (see Sarkar, this volume). Other studies such as the ROSE (Relevance Of Science Education) project (Sjøberg & Schreiner, 2005) found it important to define relevance, in terms of relevant for whom and in what context. It is also important to establish the Bangladeshi context as a developing country in which this study was situated.

School Science

School science is the science taught in schools and is different to science outside of school and learnt at university. In this study, the focus is on students' evaluations of school science, whereas other studies have asked about scientists and science more

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[1] 'Science' in this chapter has been capitalised to distinguish it as a school subject.

generally. The science taught as a subject in a school which includes the teaching–learning-related activities that occur in, as well as those set for outside of school, is school science. School science is guided by an official or 'formal' curriculum and is associated with formal learning as Hein (1998) explains, 'schools provide primarily formal education; they teach a specific, hierarchical curriculum, and they usually have rules about attendance, time spent in classes, classmates, and requirements for successful completion' (p. 7).

Rennie (2007) suggested that learning in the school context is more compulsory in nature, structured, curriculum-led, competitive, assessed and graded, whereas learning outside of school is learner-led and intrinsically motivated, where involvement with learning is of free choice and the activities are non-evaluative and non-competitive. Glen Aikenhead (personal communication, 9 July 2011) suggested taking an operational definition of school science for this study. He defines school science as the 'instruction found primarily in schools related to an appropriate taught science curriculum'. Further, Aikenhead writes that 'instruction' includes all the formal teaching–learning activities in and out of school, including homework, fieldwork and visits to museums, etc. as part of the school curriculum.

The authors of this chapter focus on school science in terms of what is actually taught by a science teacher in formal settings, which may extend beyond the classroom. This was chosen because in Bangladesh the national curriculum, in most cases, is not made available to the teachers and students. Rather, teachers are given a state-sanctioned textbook that covers the curriculum. Science teachers teach science mostly in their own ways from the textbook in formal settings (Tapan, 2010). Hence, the intended formal curriculum is not a concern of this study; instead the *actual* teaching and learning activities (the taught curriculum) in formal settings were considered as school science for this study.

Scientific Literacy Versus Science Knowledge

Emerging as an important focus for curriculum developers, policymakers and teachers is the growing expectation that science education will produce scientifically literate students (OECD, 2006). But how is scientific literacy different from typical science knowledge taught in schools and written in textbooks? Firstly, in explaining scientific literacy, it should be noted that there is little consensus in the research community about what exactly it is, and there is no universally accepted definition (DeBoer, 2000; Osborne, 2007; Roberts, 2007). Partly this can be explained by the highly contextual nature of scientific literacy. What has been agreed is what makes up scientific literacy, such as a reasonable level of reading and mathematical literacy (Hodson, 2008) and at least some science content knowledge (OECD, 2006; Osborne, 2007).

In a review of 50 years of scientific literacy research focussing on how it has been understood, Roberts (2007) proposed two visions for it. Vision I is scientist-centred and based on the processes and products of science that come from within science

itself. Vision II is considered student-centred and is focused on the situations that students could encounter as engaged citizens. Vision II of scientific literacy guides teachers to create links in their science content to the experiences of their students in the world beyond the classroom. In this way, it is highly contextual as urban students can have very different real-world experiences to rural students, as can students from, say, urban Australia compared to students from urban Bangladesh. For this chapter when we refer to scientific literacy, we are referring to Roberts' (2007) Vision II focus which 'seeks to enhance students' capacities to function as life-long, responsible, savvy participants in the everyday lives; lives increasingly influenced by science and technology' (in Aikenhead, 2007, p. 1).

Teachers' Views of Scientific Literacy

Sarkar and Corrigan (2014) reported that students in Bangladesh had difficulty relating school science to their everyday lives and issues in society, which, they found, was due to the teachers having different views of scientific literacy. The teachers in their study reported naïve perspectives of scientific literacy with little capacity or opportunity of incorporating ideas of scientific literacy into their own classrooms (see also Sarkar, Chap. 10, this volume).

While the curriculum in Bangladesh aims at encouraging students to become scientifically literate through being engaged in scientific processes linking science beyond the classroom (Rahman, 2011), teachers' reliance on the use of the textbook was failing to promote this view of science. Sarkar and Corrigan (2014) stated that the de facto curricula in Bangladesh as represented in the science textbooks emphasised a highly academic and theoretical content. This was delivered by teachers through direct instruction in ways that did not allow the students to connect the content to their everyday lives.

Relevance of School Science for Students

Researchers (Lyons, 2006a; Osborne & Collins, 2001; Osborne, Simon, & Collins, 2003) have reported that many secondary school students in developed countries lack interest in and motivation for learning science subjects. A major reason often mentioned by students is that science as taught in schools is 'irrelevant' both for themselves and for the world in which they live and operate (Dillon, 2009; Jenkins, 2006; Lyons, 2006b; Stuckey, Hofstein, Mamlok-Naaman, & Eilks, 2013; Tytler & Osborne, 2012). What exactly is meant by 'making science learning relevant' has been a question asked by researchers such as Newton (1988) and Stuckey, Hofstein, Mamlok-Naaman, and Eilks (2013). Stuckey et al. (2013), for example, found that the term *relevance* has been used as a synonym of the terms 'interest', 'importance' and 'enjoyment'. However, the meaning of 'relevance' in science education is

broader than the meaning of other terms like 'interest', 'importance' or 'meaningfulness'. Stuckey et al. (2013) proposed that science learning becomes relevant whenever learning has a positive consequence for the student's life. Such positive consequences include meeting the students' needs of a personal interest or educational demands. Their model of relevance in science education suggested three dimensions: individual, societal and vocational. For example, individual dimension includes 'good marks in school' as an extrinsic element, while 'satisfying curiosity and interest' is considered as an intrinsic element (see also Millar, 1996). Similarly, 'behaving as a responsible citizen' is considered as an extrinsic element of the societal dimension of the model. At the same time, 'contributing to society's economic growth' is regarded as an extrinsic element of the vocational dimension of relevance of science education.

The ROSE study (Schreiner & Sjøberg, 2004) adopted the following definition for relevance in relation to school science: '[T]he angle of the learners – what the young people themselves express as their concerns' (p. 20). Incorporating elements from the ROSE study and those stated above, this study defined relevance from the students' point of view in terms of their school science, from what they reported based on their perspectives and experiences between school science and aspects of their lives and society.

Science Education Context of Bangladesh

In Bangladesh, science is compulsorily taught at all years from Year 1 to Year 10. Science teaching in Bangladesh has been reported as consisting of a predominantly transmission approach of expert knowledge from textbooks with students as passive recipients mostly memorising information (Mojumder, 2014). Students themselves reported science teaching as lecture-dominated with an exam focus that encouraged memorisation and few hands-on activities. According to Tapan (2010), science teachers often lack content and pedagogical knowledge and training. As a consequence, they frequently use traditional teacher-centred methods instead of student-centred hands-on strategies (Tapan, 2010).

The science curriculum in Bangladesh can be characterised as a crowded or overloaded curriculum (Banu, 2011) not dissimilar to some other countries (Duggan & Gott, 2002). In Sarkar's study (2012), teachers reported that this forced them to rush through the content in a limited way with little opportunity for promoting true scientific literacy. Banu (2011) found that due to an overloaded curriculum, teachers felt the pressure to teach to cover the most content in the shortest possible time and thus revert to transmissive modes of teaching. This leads to many students with limited understanding of the concepts and 'cramming' by memorisation as the best way to study in the given time (Mojumder, 2016). While it is acknowledged here that other subjects may suffer from an overloaded curriculum as well, it seems to generate more concern from teachers and students alike in science than in any other subject.

Textbooks published by the government are considered as the de facto curriculum in Bangladesh (Siddique, 2007). All the teaching and learning activities in the classroom come from these textbooks. In most cases, assessment items are also chosen from the textbooks and demand answers to be copied from the same (Sarkar, 2012). What is clear is that Bangladesh is typical of developing countries seeking economic development through educating its people with greater emphasis on science knowledge.

Methodology

It was reported that quantitative approaches (using Likert-type instruments) to measure students' attitudes were found to be problematic (Ryan & Aikenhead, 1992; Tytler, 2014) in offering anything other than superficial understanding of student attitudes. This study, therefore, used a qualitative research methodology to undertake a more in-depth investigation of Bangladeshi students' evaluation of school science.

Data were collected in two phases: in the first phase, five focus group interviews (FGI) were conducted with 32 purposively selected secondary (Years 9 and 10) students from an urban school in Bangladesh. The students came from two distinct streams: science students (who chose to study subjects from physics, chemistry and/or biology) and non-science students (who study a compulsory *general* science subject). Based on the key ideas found in the FGI data, an open-ended questionnaire was developed (for more detail, see Mojumder, 2016) and administered to all the secondary students (453 approx.) in the same school. The questionnaire consisted of five statements and three open response questions. Each of the statements contained two parts, e.g. 1. Science is interesting, but it is very difficult to study. Students were asked to respond agree (to both parts of the statement), partially agree (agree with one part of the statement), disagree (to both parts of the statement) or neutral (neither agree nor disagree to the statement). The other statements were:

2. Studying science requires me to memorize scientific laws, facts and information for responding to exam questions, but I want to learn science by doing it practically.
3. I study science only to get good grades; it has very little/no use in my life.
4. Science that I study is useful for my life, but because of the way that science is being taught, I do not know whether school science has any practical use in my life.
5. The chapters to be studied in science are huge, and we are always racing to finish them.

   The open response questions were the following:

6. Do you like your science textbook(s)? Why or why not? Explain with examples.

7. (a) What would be the qualities of your ideal science teacher?
   (b) How would these qualities help you like/enjoy science?
8. (a) For science stream students: Why did you choose to study science?
   (b) For non-science stream students: Why did you choose to study business studies/humanities rather than science?

The questionnaire included space for each student to explain their reasoning for their response to the statements. There were 141 questionnaires returned, which represents the data set reported here.

The questionnaire data were analysed using a hybrid approach to thematic analysis; such a hybrid approach is a combination of inductive and deductive approaches to thematic analysis (Fereday & Muir-Cochrane, 2006). The inductive approach was to explore new ideas and themes in the questionnaire data, while the deductive approach was used to explore the pre-existing themes – those that previously emerged from the FGI data and used for the development of the questionnaire. Later on, questionnaire data were analysed to identify these themes through a deductive process (see Braun & Clarke, 2006). The following section reports on the results under several key themes associated with the data.

Results

Relevance of Science as Taught in School: Student Responses

For this chapter we report on student responses to the questionnaire statements associated with the relevance of school science. In response to the first statement 'Science that I study at school is useful for my life', more than half of the students (87 of 141) agreed that school science was useful for their life. A small number of students (five), on the other hand, believed that their school science was not useful in their life, while only two students agreed partially – they found only *some* of the school science were useful. For example, one of the partially agreed responses was as follows:

> Some part of school science seems to be necessary. For example, "Variegation of Human Body", "Sound", "Electricity" are needed for us to learn. But "House Building Materials", "Minerals", "Cellular Structure of an Organism", and many more – what exactly are we going to do with these after learning them?

Twenty-seven out of 141 students remained unsure or neutral, as one explained:

> We know that in the developed world there are many applications of science knowledge. The students who belong there benefit from this. But how we learn science in school is just to let us know about scientific things but do not show us any practical application of them.

This student made an interesting observation of Bangladesh as an underdeveloped nation and the way science was taught here, which helped determine his position regarding the second statement. Twenty students made no comment, which

may indicate they could not decide on its usefulness; therefore, they seemed to be unsure about the uses of school science in real life. After determining student positions, several key themes emerged through the analysis of the data. The following sections discuss the results under the key themes that emerged from the analysis.

Science Is Everywhere

The first theme that emerged was *science is everywhere*, with 24 students stating science is useful because science is ubiquitous – 'all around us'. They felt that without good knowledge of science, the world would be more confusing and less well understood. Prominent in their comments were perceptions of science more generally as useful compared with their school science: 'everything around us is dependent on science. Now-a-days almost nothing is possible without using science'.

Other responses presented a view that science knowledge was important whether or not it had any practical value: 'We can acquire lots of knowledge by studying science. Due to studying science we know a lot of things about the world'. For this student, learning science was equivalent to learning about the world around them; it did not need to be useful, rather it was more about gaining knowledge in general. This represents somewhat a naive view of science knowledge in that this does not help the student become scientifically literate. While science knowledge was seen as useful in 'explaining the world', the need for its relevance to students was not necessarily realised and therefore did not add to the student's scientific literacy. Others, though, reported that science knowledge informed them about a broad range of experiences:

> We can know about so many things by studying Science at school. For example, we can be aware and stay alert by knowing about electricity. … Chapters on population and disaster management help us be greatly aware of our environment. Considering all of these, I feel that science is very important.

Another questionnaire statement was 'because of the way that science is being taught, I do not know whether school Science has any practical use in my life'. More than half of the students (91 out of 141) agreed with the statement, while only 18 students disagreed; 29 students were unsure and/or gave no response, while three students partially agreed.

For the very few who were able to recognise the practical use of science in some areas, they believed that with better teaching they would be able to connect with the uses of science more frequently. To make connection to their lives, they wanted science teaching to be done in a more 'practical' way.

Content-Dominated School Science

The 'content-dominated school science' was another feature (theme) reported as impacting on students' evaluations of the relevance of school science. The content in the textbooks mostly appears as theories, laws, postulates and facts, which are not

linked or given application in a manner that would assist students to accommodate such knowledge. As a result, students felt it was necessary to memorise a lot of theories and facts without knowing their implications in everyday life.

> The fundamental principle of Calorimetry is, heat lost by one = heat gained by another. This information is very important. From "Galileo's Law of Fall" we know that in vacuum, light and a heavy material will touch the ground at the same time if they start falling with zero velocity. We never experienced these important theories practically. As a result, we never can realise the practical application of these scientific phenomena.

To understand why students did not engage in applying their science knowledge, we needed to investigate the nature of science practicals. The curriculum document of the National Curriculum and Textbook Board (NCTB, 2012) states that science students should spend 25% of their time engaged in science practicals – a requirement in order to learn the required science processes, skills and the application of science knowledge. However, the reality is that practicals are taught as teacher demonstrations, while students merely observe rather than engage hands-on. One student explained: 'we are not given any opportunity to do science practicals by ourselves', while another commented: 'we are just demonstrated some fixed conventional practicals. So we don't understand the practical uses of science'.

How Science Is Taught

Of the 91 students who agreed with the statement, 66 explained that they did not have any hands-on experience with science. For them, teachers followed a lecture format with little or no demonstration of the application of school science:

> Our teachers do not give us any hands-on experience while teaching science. So we are deprived of having any real-life-oriented science education. As a result we do not know any application of science knowledge, and so we can't do any practical application of science knowledge.

Students reported that the general teaching approach was a direct instruction using the textbook to transmit knowledge. This student reported: 'just the content of science is being read and lectured; apart from that there are no hands-on activities and nothing is explained for us to understand clearly'.

Rather than being shown a diagram, or completing a practical task, students are required to contemplate the text and 'make sense' of the words on the page. From this, students are expected to build their own ideas in order to understand the concepts, regardless of whether they got it right or wrong: 'for example in chemistry, atom, molecule, or their size and structure, acid, base, we have to imagine [and make our own conception] these while studying'.

Many mentioned they were exposed to incorrect teaching methods for learning science: 'the ways that are used to teach us science are wrong so that the uses of science in our life are not clear'. As a consequence of the teaching approaches, the students found topics difficult to learn; they failed to realise the importance of science knowledge and reported that studying science was meaningless and irrele-

vant: 'chapters like "Thermal Machine" and "Electronics" are not taught practically so that we do not realise the importance of these chapters and also find these chapters quite difficult'.

Students from non-science streams explained that not having practical classes like science students was the main reason for not being able to apply knowledge of school science to their lives outside of school: 'we (non-science students) do not do any practical in Science, so we do not know any application of science taught in school'. This was an interesting finding, because non-science students felt disadvantaged by not having practical classes like the science students, whereas in reality the science students were disillusioned because practical classes they received were only teacher demonstrations. As evident however, both groups realised and acknowledged the importance of hands-on practical classes for them to learn and understand the concepts of science.

A few students reported that the way science was taught suited them and was 'applicable' in reality. Interestingly, none of them could however give any example of where nor how they related their school science to real-life uses of science: 'our teachers teach us science with care and make science interesting for us so that we can learn about applications of science in everyday life'.

This was typical of the most common responses from these students. The two students who gave a specific example mentioned knowing science knowledge. This student responded:

> We benefit from studying Science and using it in daily life. For example, what we see in the Chemistry lab, or in Biology what we learn about identifying plants and animals, in reality we could become cautious or stay safe by identifying them [useful and harmful plants and animals].

Exam-Focused Education

Another theme was the nature of the teaching described as *exam-focused education*. The students thought everyone (students, teachers, the school authority and parents) only focused on them passing the exams and achieving the best grades – regardless of what was actually learnt or understood. Comments such as this were common:

> We are being taught to achieve good grades in exams, not to use science in real life. In school, I learn what section would be the best to write the answer of which question, what would be the length of an answer, how to write the best answers for the exam questions. If we want to learn any application of science we are told that this is not what we need to learn; we should learn how to do well in exams.

The national examinations are high stakes, and therefore high scores on these assessments allow students admission to the best courses in the best colleges and universities. In Bangladesh, as in other developing countries, there is a lot of social pressure on students to aim for highly paid professions. In the wider community, there is the instrumental view that doing well in certain subjects such as science and mathematics opens up opportunities to climb the social ladder by gaining access to wealthy professions. While students do want to understand what they are learning,

they are pressured to consider achieving high scores in science subjects in national examinations as their foremost priority. As a result, many students reported that they were 'taught science in school only to pass the exams' with high scores, but at the same time they realised that their learning about 'the applications of Science is so limited'.

Exam Focus Encourages Learning by Memorisation

Another feature (a subtheme) of exam-focused education is an overlap of the previous two themes, where the strong exam focus influences the pedagogy of teachers. Here the dominant pedagogy of science teachers is to focus on exam preparation, and learning is predominantly reduced to rote memorisation – a practice that defeats the purpose of acquiring *useful* science knowledge. The process of learning science from such a position involves reading books, memorising the content and practising only examination-type questions. The examinations are designed to assess students' memory about the content, to the point where most test items required students to regurgitate the exact text from the textbooks. As a result, there is little relation between school science and everyday life:

> The way of learning science is – we read, we memorise, we give exams and then we forget. We really forget what we learn because we do not understand science and we must forget. As a result, we do not know where exactly science knowledge can be applied.

Students generally see science itself as a useful and relevant subject to study that should help to explain the world around them. However, for many different reasons, they find that the school science they encounter reduces their learning into memorisation of lots of information for high-stake national examinations. Most are generally interested in science but are unhappy with how it is taught. The focus on memorisation, examination preparation and lack of practicals discourages students to make sense of science in ways they can relate to the real world.

Reasons for Choosing and Not Choosing the Science Stream

Grades in Science and Mathematics (JSC Results)

Scores obtained in science and mathematics were singled out as the main reasons for 15 students among the participants to have chosen to study in non-science streams. Based solely on their academic results in the JSC examination held at Year 8, students were directed to science or non-science streams, regardless of their interest and choices. Anyone who achieved an A+ grade in science and mathematics and a minimum CGPA of 4.29 (out of 5) was placed in the science stream. Students who could not achieve the benchmark were placed in non-science streams: 'I got lower than this score and that's why I have been placed in Business Studies group'.

Table 11.1 Frequency of responses for reasons for choosing or not choosing to study science

Key reasons for students	Frequency of responses of science students	Frequency of responses of non-science students
Better future career	48	7
Personal interest or enjoyment in subject	39	4
Socio-economic pressure	20	1
Grades in science and mathematics (JSC results)	8	15

In reality, such students might have had an interest in learning science subjects; however, this was not considered in their placement as they did not make the benchmark. The following responses may explain their urge to study in science stream regardless:

> Science is my favourite subject. Since my childhood I very much wanted to study in Science. But I could not achieve the required score in the JSC exam; as a result school authority did not allow me to study in Science. I was so disappointed! I really had a strong desire to study in Science.

The only students with real choice are those few that made the science stream scores but still choose the non-science streams. To find out the reasons for students studying science, they were asked: 'Why did you choose to study science? (for science stream students) *or* why did you choose to study business studies/humanities rather than science? (for non-science stream students)'. Students' responses revealed several reasons for studying in science and in the non-science streams including the prospect of a better future career, personal interest in the subject, socio-economic (including family) pressure as well as academic results of the JSC examination, especially the grades in science and mathematics subjects.

Students often provided more than one reason so that these frequencies were counted rather than the actual number of respondents. Table 11.1 presents the main reasons and the frequency per reason.

Better Future Career

The most popular reason of all, as can be seen in Table 11.1, was *better future career*. Forty-eight students from the science stream chose to study science due to the prospect of having a better career in the future. Within this group, nearly half (22) of the students wanted to be either a doctor or an engineer. Twenty-three science students explained that studying science opened up opportunities and pathways for all their career choices: 'anyone can move to any profession from Science; in future, any subject can be chosen for higher studies. But no one will be able to move back to Science from non-science streams in future so you are quite locked in'.

Personal Interest or Enjoyment in Subject Matters

Thirty-nine science students reported that they chose science to study out of their own interest or because of their personal enjoyment in science. Typical of responses was: 'science has been my favourite subject since my childhood. I have huge interest in Science and never thought of any other option at all'.

Socio-economic Pressure for Science-Related Careers and on Science Students

Twenty responses identified the reason they chose to study science as *socio-economic pressure for science-related careers and on science students*. Most of these stated parents wanting them to study science.

Students reported strong socio-economic pressure because well-paid careers such as doctors and engineers are highly respected in the society. Parents and families wanted their children to have one of these careers, and they see studying science and achieving high grades as a pathway to these careers. One such response was, 'my parents planted a dream in me that if I become an engineer or a doctor in future, everyone in the society will respect me and give me honour'.

On the other hand, non-science student responses revealed that because of their knowledge of the aforementioned benefits of studying science, they did not have a strong personal interest in studying non-science subjects. They did not choose non-science streams themselves but rather were allocated to non-science streams because of their low scores in the JSC examination.

Although in most cases science students stated instrumental reasons as well as external factors such as socio-economic pressures in their choice to study science, students in the non-science streams often registered an equally strong desire to study science, despite not being able to, often due to insufficient eligibility scores on entry. It was also seen that while science students perceived science as a generally 'difficult' subject, they recognised the future benefits of studying it regardless; non-science students, on the other hand, realised that not studying science disadvantaged their career choices, but they had no other choices regardless.

Discussion

The results above build a comprehensive picture of student evaluation of how relevant they found their school science education. In further understanding the relevance of school science for these students, we will consider several emerging themes: a modernist faith in science as a source of solutions, teacher pedagogy, the curriculum and career in science and associated societal pressures.

A Modernist Faith in Science as a Source of Solutions

One contradiction that emerged was that while students stated that school science was useful in their lives, they also agreed that it was not relevant to them. How can school science be useful and not relevant at the same time? It appears from the responses that the science teaching they were experiencing was not helping them to make connections between school science and their world beyond their school (see also Sarkar, Chap. 10, this volume). Science teaching was often described as dominated by a lecture style with little hands-on practical work. It was highly exam-focused and encouraged memorisation as the form of learning. In identifying the usefulness of school science, students focused on the general values of science in society and their own personal benefits in the future, such as better-paid employment and the prospect of highly respected careers. They were unable to provide a single example where school science was actually relevant to them.

Similar to the views of student participants of Osborne and Collins's (2001) study, students in the current study seemed to have a modernist faith in science as a source to everyday problem solutions. In their study, students reported the general value of science in society often with examples of its instrumental value, i.e. the way science had contributed and added to their lives through comfort, technological development and a better understanding of the world. Sjøberg (2002) explained that the image students have of science and scientists has an influence on the motivation and willingness to engage with science, which appears to be applicable for Bangladeshi students too.

Teacher Pedagogy

Using students' perceptions of what is effective teaching to improve their learning while interesting in itself should not be the sole basis of evaluating teacher performance. This is not what was intended at the beginning of this study. Rather the intention was to give voice to students' opinion about the science curriculum, the way it was presented and ultimately how it was taught. The consistent and strong message here is that students had concerns with the teaching they received. It was because of the vigour and constant line of the message of students about science teaching that the authors make the following comments.

As previously mentioned, the dominant pedagogy of science teaching for the science students was reported to be 'traditional', using transmissive approaches with little practical work mainly in the form of non-participating observed demonstrations. Students complained that this type of teaching was not conducive to quality learning. They complained that their learning did not make links to understanding science outside the classroom. Non-science students similarly complained that they had no practicals. Overwhelmingly, the large majority of students believed that a lack of hands-on practical work had negatively impacted their understanding of science, confirming what Lyons (2006a) had earlier reported.

The students in the current study made it clear that they wanted to learn science that was engaging and meaningful; importantly they wanted to learn science in ways that encouraged them to understand the concepts in ways relevant to their everyday lives. Failure to understand science concepts had frustrated students even if the content itself was interesting. Lyons (2006a) found that such frustration contributes to the perception that science is difficult to learn by affecting students' sense of self-efficacy.

Students' views of teaching also confirmed the scenario of science teaching in Bangladesh presented by Tapan (2010). Tapan suggested that science teachers were reluctant to use innovative methods due to lack of interest, motivation and proper in-service training, and rather continued to teach the students to rote learn. Other studies (Lindahl, 2003; Lyons, 2006b; Osborne & Collins, 2001) have confirmed similar practices of transmissive teaching methods in science classes elsewhere. Lyons (2006b) declared that frequent use of transmissive modes of teaching left participants with the impression that science is a body of knowledge to be memorised. Such teaching was indeed identified by the students in this study as guiding and driving them to learning only by memorisation. Similar to the participants in the three studies (Lindahl, 2003; Lyons, 2006b; Osborne & Collins, 2001), the students reported here were overwhelmingly critical of the use of transmissive modes as the default option for teaching science and thought there should be far more hands-on engagement for truly meaningful learning of science.

The Curriculum

The students' experience in Bangladesh of 'irrelevant' school science is not unexpected – Tapan (2010) found that the 'new' curriculum and textbooks, introduced in 1996, differed from hands-on practice to more theory-laden and text-dominated focus. This view of school science is contradictory to the ideal perspective of science described by Goodrum, Druhan and Abbs (2012). According to the ideal scenario, school science should be relevant to the needs, concerns and personal experiences of students, and the teaching and learning of science should be centred on enquiry, where students investigate, construct and test ideas and explanations about the natural world.

Considering the disparity between students' evaluation and the ideal of how it should be taught, it is reasonable to infer that school science education in Bangladesh lags behind students' expectation of its relevance. The government-sanctioned textbooks represented a pseudo curriculum for science students who found these books with often dated examples and unrelated content to their lives (Mojumder, 2016). For example, one student complained that they did not understand why the textbook had used examples such as black and white televisions in their explanation: 'Who of us has even seen a black and white television?' he questioned. The non-science students, on the other hand, reported having engaging textbooks that were well written for their level of understanding. Siddique's (2007) analysis of

secondary science curricula may explain the reason while confirming that applied content was emphasised and included in the general science textbook for non-science students, whereas the textbooks for science students were focused mostly on pure, descriptive and highly academic factual content.

Career in Science and Associated Societal Pressure

There are several reasons why students were taking science in large proportions despite most students being frustrated with the way it was taught. Science students seemed to have both extrinsic (e.g. better future career) and intrinsic (e.g. self-interest) motivations for choosing science. Similar motivations for choosing science at Year 13 have been reported by Hipkins, Roberts, Bolstad and Ferral's (2006) study in New Zealand. The most common reasons provided by the participants included a science-related career interest, a strong personal interest in science and taking science for strategic reasons. Similar to Bangladesh, students in New Zealand were also keen to having a traditional science profession like doctor or engineer. Such interest among the students in New Zealand was substantially influenced by their families, just as it was in the case of this study in Bangladesh.

Parental (or family) influence seems to have been a significant factor for students choosing science in Bangladesh and around the world. Parental influence on decision about science courses and science career choices was reported by the students in Lyons's (2006b) study. Lyons's survey of high-achieving Year 10 students in Australia revealed that their parents, and particularly their mothers, had the greatest capacity to influence their enrolment decisions in science courses. Interviews with a small cohort of students (14) referred to a parent's regret for lost career opportunities as a reason for being keen to see their children in a position that they had failed to achieve themselves. Lack of useful qualifications, interruptions to their education or careers because of family reasons and dissatisfaction with employment prospects were suggested as possible reasons for lost career opportunities.

Similar regrets for interruptions to education and career opportunities are likely to be more acute in developing countries like Bangladesh. In such countries, education and career opportunities are still very limited for the greater population. Parents in such developing countries are much more likely to expect their children to achieve a high level of education and career which they had failed to achieve and which offers better prospects and higher social status.

Overall, students evaluated school science as unengaging and irrelevant to their lives. This would normally be a recipe for disaster in Western countries in terms of enrolments, where the curriculum is designed to engage and encourage greater student participation. However, in Bangladesh participation is not a problem – students are still highly motivated to take science subjects.

At the same time, students viewed science and science knowledge as very important for explaining the world and everything within it. They recognised that science knowledge is different to the science taught in school. Secondly, there was enormous social pressure on students to study science, as it was viewed as the most prestigious of subjects by both parents and the society. Parents felt proud to share with others that their child was studying science; they want to be viewed by others as having a 'smart' child who studied science. Children in Bangladesh are, at the same time, motivated by pleasing their parents – they feel it to be a matter of responsibility to live up to their parents' expectations.

Thirdly, science is viewed as the pathway to a better life. Studying science at secondary level leads to higher scores for university entrance, and high scores guarantee the best courses at the best universities and, in turn, the highest paid careers. In a developing country such as Bangladesh, the opportunity to improve one's place in society and social standing in the community is highly important. So while students do not enjoy studying science and find it irrelevant, they also view it as a valued commodity as science study can be the most tangible passport to a better future career.

Conclusion

Students generally reported that they found school science irrelevant to their everyday lives; despite this they demonstrated a high motivation to study science even though they found it unengaging. For such countries, economic development relies on strong economic fundamentals supporting a growth in science and technology industries – South Korea is but one recent example. For the country to grow, its science and technology industries require a workforce with strong science knowledge. Improving science education is one step in the path to stronger and a more sustainable economic growth.

In order to make school science more relevant, it is suggested that learning needs to be more meaningful with science concepts taught in a context based on the everyday experiences of students. Every effort should be made to link the science taught in school with students' world beyond the classroom. By learning science in context and as relevant to life, students are more likely to develop strong scientific literacy, being able to apply science knowledge to understand and improve everyday life.

One issue raised by this study is that the curriculum needs to be reviewed and fine-tuned to reduce the amount of content that students are expected to cover in a school year. Less is more here, and students with stronger understanding of the key features of the domains (physics, chemistry and biology) will be better placed to relate these to their lives and be encouraged to study these subjects at the tertiary level. There also needs to be greater opportunities for students to complete hands-on practicals and other hands-on activities that not only confirm and strengthen their

understanding but also give them experiences of *doing* science rather than watching science being done. More than this, students need real opportunities where they can engage in learning that makes them more active and less passive in the learning process to build a sense of *active* learning in science.

The type of change to occur in Bangladesh where students are more comfortable with the teaching and their learning will require significant changes in teaching. Such changes in teaching will require ongoing, dedicated and widespread professional development for teachers and learning programs to develop and extend the pedagogy of science teachers. This needs to be accompanied by textbooks that engage, both visually and with concepts in context that students want to learn from. Outdated explanations of black and white televisions need to be updated, and instead visual explanations of LCD colour screens should be introduced to make the concept more relevant to life.

On the other hand, the requirements of the scores in the JSC examination were arbitrarily set by the school authority as an ability-streaming filter, with no concern for students' aspirations for studying science. Children grow and learn at different rates, and there are many examples of students starting slowly and completing great work, as Einstein is testament to. Each child should have the opportunity to study science, and the arbitrary restriction on students returning to science study after Years 9 and 10 should also be lifted. An important finding of this study is that most of the non-science students expressed their positive views on and interest in science and motivation for taking science courses.

One easy improvement would be the introduction of a uni-track curriculum as was proposed to be enacted from 2006 (Siddique, 2007). In such curriculum, a general science subject combining the content of physics, chemistry and biology was proposed to be compulsory for all students in Years 9 and 10. Therefore, according to the proposed structure, streaming students was meant to happen at Year 11 instead of Year 9. However, while this curriculum was developed, it was never implemented due to resistance from academics in the country, particularly (and ironically) from science (Siddique, 2007).

Further, such a change offers benefits to society by fully utilising skills and talents of all students, rather than disregarding science interests among many students at a very early age and labelling them as 'less bright' and 'less talented'.

Like many other developing countries, Bangladesh seeks strong economic growth for its continuing development. One proven way is to grow the economy scientifically with the technological development of industry and infrastructure. First, it needs to grow a strong and independent scientifically skilled workforce, and such a workforce requires informed citizens leaving secondary education with a sound understanding of science as well as strong scientific literacy. This chapter also provides some insights into what country's science curriculum needs, from the perspectives of students. Revisions to the curriculum such as those suggested here are but one small step towards building a more scientifically literate citizenship for Bangladesh and similar contexts elsewhere.

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Chapter 12
An Analysis of the Secondary School Certificate Examination: The Case of Creative Questions

Farhan Azim

Abstract The Secondary School Certificate (SSC) examination is arguably the most important public examination in Bangladesh with its results affecting students in a number of ways, including access to higher education and future job opportunities. A number of previous studies have looked at this examination from various perspectives, analysing specific areas within the examination and within different subjects. However, these researches have not extensively focused on critically analysing this examination and the assessment activities related to it. The lack of research-based knowledge is particularly worrying with the current SSC examination protocol in which Creative Questions have been introduced a few years ago. This chapter analyses the SSC examination, taking into consideration the existing system of assessment in Bangladesh in light of contemporary theory and practice of assessment. After providing a contextual understanding of the SSC examination, various aspects of this assessment – validity, reliability, comparability, standard setting, grading, and bias – are critically discussed with reference to widely accepted assessment theories. Existing studies on SSC examination are reviewed to assess and highlight different aspects of the current situation based on the assessment theories. A number of issues in the existing practice (e.g. construct under-representation, inappropriate assessment condition, marker error, and coarseness of grading) are identified as well as measures for improvement suggested. The theoretical and practical issues discussed in this chapter endeavour to provide insights into education policymakers in shaping the SSC examination for future years.

Keywords Assessment · Public examination · SSC examination · Secondary education

F. Azim (✉)
Melbourne Graduate School of Education, University of Melbourne,
Melbourne, VIC, Australia
e-mail: farhan.du@gmail.com

Introduction

Bangladesh has observed a number of changes in the development of national curriculum and textbooks in the last few years. However, there has been little change in the assessment system for more than a century (Kabir, 2010). Investigating the prevailing Secondary School Certificate (SSC) examination, Hossain (2009) noted that the examination did not change in keeping with the intentions of the curriculum over the past several decades. He also reported that despite the curriculum objectives of developing higher-order cognitive skills, secondary education is still dominated by rote learning and the SSC examination does not match the objectives described in the curriculum. In addition, a huge difference in results across different examination boards in the same year, across different years in the same board, or across different subjects due to erroneous item selection and scoring has established a good case for considering major changes to this assessment (National Curriculum and Textbook Board [NCTB], 2008).

This chapter analyses the SSC examination with a special focus on the 'constructed response items' within it. First, the chapter briefly discusses the features of the SSC examination and how a new question-setting method, named the Creative Questions (CQs), has been introduced to the SSC examination in the recent past. Then some literatures on various characteristics of assessment are briefly discussed which form the theoretical basis for this study. Next, a number of issues relevant to the current administration of SSC examinations – such as validity and reliability, grading, comparability and standards, and bias – are discussed in light of contemporary theories on assessment.

The SSC Examination

On completing grade 10, students in Bangladesh sit for a national public examination, called the Secondary School Certificate (SSC) examination. The purpose of the SSC examination is to determine if students have achieved the necessary knowledge and skills to be awarded the Secondary School Certificate. Crucially, this examination works as a gateway to higher education and employment.

The SSC examination is administered countrywide through eight separate Boards of Intermediate and Secondary Education (BISEs). The question papers of SSC examination consist of multiple choice questions (MCQs) and constructed response items. BISEs select a handful of senior teachers from the secondary level to construct the items following the national curriculum. After the examination, MCQ answer scripts are checked with the help of optical character recognition (OCR) machines, and *examiners* check constructed response items. Once examiners finish checking and marking the answers, they send the scripts to *scrutinisers* who do a general check of the scripts and forward them to *head examiners*. Examiners, scrutinisers, and head examiners – all are practising teachers at secondary level. Hence, to avoid

conflict of interest, caution is maintained throughout the whole process so that teachers do not get scripts of their own students at any stage. The final results for individual subjects in SSC are expressed in letter grades, with each grade having a certain numeric value. The overall result of an individual student is then calculated by averaging the numeric value of his/her achieved grades on all subjects.

In the last few years, the Government of Bangladesh has implemented two large-scale changes in the educational assessment at the secondary level – namely, school-based assessment (SBA) and creative questions (CQs) – in summative assessments. The SBA provides secondary school teachers with a framework to do continuous assessment of their students' work and behaviour during the school years. There are six areas within SBA: (i) class test, (ii) class work and practical work, (iii) homework, (iv) assignments, (v) oral presentations, and (vi) group work. Teachers are supposed to do assessment of these areas and use the scores as part of the final summative assessment. Scores from the SBA constitute 30% of the total marks available for any subject in the final assessment. Even though the SBA had the potential to greatly improve assessment at the school level, research suggests that its implementation has suffered several drawbacks, and it has not been operationalised as per the original design in many instances (Azim, 2012; Khan, Azim, & Ahmed, 2010; Tanzeen, 2011; Tarana, 2011).

In addition, the Government of Bangladesh also introduced the CQ-based assessment in 2008 at the secondary level with a view to renovating the extant assessment system at the secondary level (Billah, 2015). As part of this new assessment regime, the tests for SSC examination were redesigned with questions developed based on the cognitive skills mentioned in Benjamin Bloom's taxonomy of cognitive domains (Maleque, Begum, Islam, & Riad, 2011). Developmental taxonomies, such as the one proposed by Bloom (1956), use the concept of 'stages of development' to develop progressions of increasing competence – they are general in nature and can be applied to many different situations (Hutchinson, Francis, & Griffin, 2014).

Bloom's taxonomy (Bloom, 1956) consists of six levels: (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis, and (6) evaluation. These levels are often depicted within a pyramid (see Fig. 12.1) where students gradually move from knowledge to evaluation through the other stages. The levels are ordered from simple to complex and from concrete to abstract. They also represent a cumulative hierarchy, i.e. mastery of each simpler level is prerequisite for mastery of the next more complex one (Krathwohl, 2002). In the *knowledge* level, students can only recall specific information, for example, dates of certain events or names of capitals. Learning at this level is often regarded as 'rote learning'. When students move past recalling facts and start to understand the information and interpret the facts, they are considered to be at the *comprehension* level. At the *application* level, students are able to apply or use the knowledge they have learned. When they are at the next level, *analysis*, students can see patterns that they can use to break down a concept/problem into its legible components. As they reach at *synthesis* level, students are able to *use* the given facts to develop new theories or make predictions. Sometimes this entails accruing information from multiple subjects/areas so that a conclusion can be reached. *Evaluation* is the top level of this
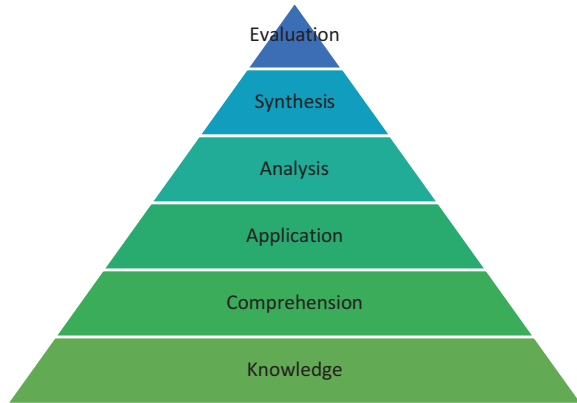
taxonomy where students can assess information and come to a conclusion regarding its value or the bias behind it.

In their discussion of Bloom's taxonomy, Hutchinson et al. (2014) suggest that it can be used to classify and monitor the development of cognitive skills. As Hossain (2009) suggests, introduction of CQ into the SSC examination was intended to test a range of cognitive skills including knowledge, comprehension, application, and higher-order thinking (analysis, synthesis, and evaluation). He also points out that the model answers and marking guide were expected to make script marking more reliable. A brief explanation and example of creative questions adapted from Hossain is given in Table 12.1.

Creative questions have been gradually rolled out in the SSC examination with two subjects containing such questions in its first year of implementation in 2010, all but four subjects containing them in 2012, and finally all subjects in 2013. For most subjects, creative question carries 60% marks, while 40% are allocated for MCQs. However, apart from the integration of creative questions, not much has changed with the SSC examination in the past years.

This chapter attempts to identify some key issues regarding the constructed response items of the SSC examination in its current state, i.e. with the creative questions. Before discussing different areas of the SSC examination, an overview of the critical aspects of assessment is presented that briefly discusses theories related to validity, reliability, grading, comparability, standard setting, and bias. This discussion will be helpful in critically analysing different aspects of the SSC examination later in the chapter.

Table 12.1 A brief explanation of creative questions

Creative questions count for 60% of the marks of the examination and replace the current essay-type non-MCQs. The CQs have features designed to make the examination more meaningful and closer to the intentions of the curriculum. Each question has two parts:
1. Scenario
All CQs begin with a scenario (also called 'stem' or 'stimulus'). This scenario is unique and is not in the textbook. In most cases, it describes a specific situation and may be given as a picture, diagram, table or chart. The scenario is not long, typically about six lines. The answer of the questions will not be in the stem, but the stem will help students to answer.
2. Questions
CQs have four parts and are written to represent hierarchy of skills. These are labelled (a), (b), (c), and (d). All CQs cover 10 marks. Part (a) tests at the factual knowledge level and is allotted 1 mark (it is the easiest part); part (b) tests at the comprehension level with 2 marks; part (c) is designed to test the application of knowledge to a new situation, and hence responses are expected beyond what is written in the textbook, and is allotted 3 marks; and part (d) is intended to test higher ability of thinking and is allotted 4 marks.
Example of a creative question
Salam hired a truck to sell the eggs produced in his farm. The packets of eggs were properly loaded on the truck. The mass of the truck with eggs is 1605 kg. The truck was running at a velocity of 72 km h^{-1}. On the way, the driver lost control of the truck. The driver, seeing that the accident was unavoidable, ran the truck into a heap of straw at the side of the road. The truck stopped after 1.0 s. As a result Salam escaped from a great accident. In the collision, Salam suffered minor injuries and almost all his eggs were saved from damage.

a. What is called velocity?	1 mark
b. In the accident, though Salam was injured, yet almost all of his eggs were saved. Explain	2 marks
c. Calculate the force experienced by the truck	3 marks
d. 'The driver ran the truck into a heap of straw. Salam was saved from a serious accident'. Justify it by mathematical analysis	4 marks

Source: Hossain (2009)

Critical Aspects of Assessment

Validity

Although the terms *validity* and *valid* are used often in education and in everyday life, what they mean are not always clearly defined. In educational assessment, validity of a test is sometimes depicted as the test's ability to measure what it is supposed to measure or portrays to measure. In essence validity is not a characteristic of a test itself. Rather, it is used to describe a specific inference or conclusion based on a test score (Koretz, 2008). This means that even though a given test score is used to support a number of conclusions, some of them might be justified, while others are not. Therefore that particular test will be valid for the inferences which are justifiable and not valid for others, i.e. validity depends on the particular *use* to which a test is put.

According to Koretz (2008), there are four different types of evidence that can be used to evaluate validity: (1) analysis of the content of the test, (2) statistical analysis of performance on the test, (3) statistical analysis of relationships between scores on the test and other variables, and (4) responses of students in taking the test. He also identifies three broad categories of factors that could undermine validity. These are: (a) construct under-representation, i.e. failing to measure adequately what ought to be measured; (b) construct irrelevance variance, i.e. measuring something that should not be measured; and (c) using a test in a manner that undermines validity.

Crooks, Kane, and Cohen (1996) suggested an approach of determining validity that combines the virtues of a clearly defined set of validation criteria and the structure of an argument-based approach. They depict assessment as divided into eight conceptually distinct stages that are likened to eight links of a chain where weakness of any one link weakens the chain as a whole. In addition, they described a number of validity threats associated with each link. The eight stages they suggest are:

1. *Administration* of assessment tasks to the student
2. *Scoring* of the student's performances on the tasks
3. *Aggregation* of the scores on individual tasks to produce one or more combined scores
4. *Generalisation* from the particular tasks included in a combined score to the whole domain of similar tasks
5. *Extrapolation* from the assessed domain to a target domain containing all tasks relevant to the proposed interpretation
6. *Evaluation* of the student's performance
7. *Decision* of actions to be taken in light of the judgements
8. *Impact* on the student and other participants arising from the assessment processes, interpretations, and decisions (p. 268)

Rigorous considerations of the strength of each of these eight links are required when validating an assessment with the help of this model.

Reliability

In most assessment literatures, especially in technical reports, reliability and validity are discussed as very distinct issues. In actuality, they are closely related. Some research (e.g. Black & Wiliam, 2012) even argue that reliability is best thought as an aspect of validity. Koretz (2008) suggests that reliability is necessary for validity but is not sufficient in itself. An assessment can be reliable without being valid; however, a valid assessment is always reliable. Let us consider an example of a clock. When it is working properly but the time is not set to the correct local time, it indicates an incorrect time consistently. It is reliable but not valid. Once the correct time is set but due to some error in the clock mechanism it malfunctions and slows down sometimes and quickens other times, it could become unreliable in giving the

time, and then it is both unreliable and invalid. But when the correct time is set and there is no error in the clock mechanism or lack of power, it consistently gives the correct time, i.e. it is both valid and reliable.

Black and Wiliam (2012) describe three main sources of error that threatens the reliability of an assessment. The first source, termed as 'marker error' or 'rater error', is caused by different raters/examiners giving different scores for the same piece of work. While discussing this threat, they also recognise that the same rater giving different scores on different occasions is also an equally significant issue. The second source of error stems from the same student performing better or worse from one occasion to another. This can happen for many reasons, and even though it is not easy to address this issue, acknowledging it is important. The third source of error is differences in students' scores caused by the particular set of items selected for a test. An individual student might perform better or worse because of the actual questions that have been selected for a particular administration of a test. For example, when taking a mathematics test, some student might find word problems more suitable, while others find them difficult because of their language ability and are more comfortable with problems presented through equations or numbers only.

Grading, Comparability, and Standards

Koretz (2008) classifies different scales used for describing performance on tests into two types. According to him, one approach is selecting a number of levels of performance based on judgement, splitting the distribution of performance at those points, and reporting achievement based on the resulting categories. This is widely used in standards-based testing systems where students' attainment is described through levels such as 'basic', 'proficient', and 'advanced'. The other approach, which is more traditional, is to create a numerical scale representing the range of performance on the test. Such scales include using arbitrary numerical scales, percentile ranks, and grade equivalents.

The scoring and grading of different subjects and different examinations/assessment would be fundamentally different in any education system. To make sure the decisions based on these different assessments are fair, it is necessary to ensure comparability among them. Assessment experts have tried to develop concepts, methods, and techniques so that comparable assessment standards can be provided for students' achievement across different assessments and examinations, syllabuses, subjects, and over time (Isaacs, 2013). Since it is necessary for comparable examinations or assessments to be of the same standards, we need to understand what *examination standards* mean. Baird (2007) offers a number of conceptions of examination standards and comparability that are used by different experts. The first one among these is *cohort referencing*. Under this definition of examination standard, the same proportion of students is awarded the same grades each year. This is sometimes called 'norm referencing'; however, norm referencing actually means a

population with known characteristics which is used beforehand to contextualise a newly developed test. Cohort referencing is considered as the simplest possible statistical approach to the definition of examination standard, and it gives very little information about examination comparability.

The next one is called *the catch-all definition* (Baird, 2007). Here two examinations are considered to be of comparable standards if students with the same characteristics (general abilities, socio-economic status, etc.) are awarded the same grades on average, no matter which examination they enter (Cresswell, 1996). The standards are generated through statistical solutions in this definition. Although the concept might seem common sense, it is quite difficult in practice (Isaacs, 2013). The third definition described by (Baird) is *criterion referencing*. Here a student's work is judged against a fixed set of performance standards – known in the UK as 'criteria' and in the USA as 'rubrics'; there is no limit as to how many students can achieve a grade if they can fulfil the criteria (Isaacs).

The fourth and final concept of examination standard posited by Baird (2007) is called *weak criterion referencing*. Both statistical solution and criterion-referenced judgement are used in this method where examiners not only assess students' test performance based on a number of criteria but also take into account their earlier performance and percentage of students getting particular grades in the past. The final definition is called the *conferred power definition* where society empowers certain individuals to judge where the examination standards lie. Once the individuals are appointed, there can be no arguing against their judgement of examination standards if the due process (set earlier) is followed.

Even though none of the techniques and methods used to measure or ensure comparability is without its flaws, it is important to understand how better comparability can be achieved. In addition, it is crucial to keep in mind the limited comparability of assessments while making inferences based on them.

Bias

Since issues of bias and fairness in testing can have a direct impact on test scores, it is important to avoid it. Koretz (2008) defines bias as a systematic distortion in scores that undermines the validity of a particular inference. Mullick and Begum (2005) argued that to avoid bias and to make tests fair, we need to consider a set of questions in three different stages of assessment process: (a) development of instruments/tasks (if assessment tasks/tools are fair to students of different genders, cultures and socio-economic groups; if students have equivalent resources at home and/or school to complete the task; and if students have received equal opportunity to learn what is being measured), (b) administration of the tools (if all students had equivalent environment while the tools are administered), and (c) assessment of the responses of the students (if the assessors are unbiased with respect to halo effects, personal choices, students' identity, and so on).

An Analysis of the SSC Examination in Light of the Critical Aspects of Assessment

It would be ideal to compare the details of how the SSC examination is conducted with the different yardsticks mentioned under the critical aspects of assessment above. For example, it can be helpful if we could discuss the validity of the SSC examination by judging it thoroughly based on the validation model of Crooks et al. (1996). However, not enough evidence/literature is available on the SSC examination as of yet to do such a rigorous analysis. Besides, determining the validity of SSC examination in detail is beyond the scope of the space provided in this chapter; the same applies for the other critical aspects of assessment mentioned here.

Given this scenario, the discussion of different aspects of the SSC examination will only be limited to the areas where explicit evidence/literatures are available, i.e. areas where previous studies have information that can be used to critically analyse the SSC examination based on the theories discussed. Furthermore, brief comments and recommendations on what could be done differently will be proposed while discussing some of the perceived and reported shortcomings of the current implementation of the SSC examination within the sections for different critical aspects, instead of dedicating a separate section for recommendations.

Validity Issues in the SSC Examination

As seen in the example of creative question presented in Table 12.1, questions in the constructed response part of the tests in SSC examination now start with a stem (also known as a scenario/stimulus) related to a particular content. The four items from different subdomains of Bloom's cognitive domain are then set in an ascending order (simple to complex and concrete to abstract) and allocated marks reflecting their complexity (National Curriculum and Textbook Board [NCTB], 2008). Each question (typically a set of four items) carries 10 marks and students answer six such questions. The contents these questions can cover have to be very narrow because of the stimulus–item pattern.

Consequently, only six specific areas can practically be assessed through the six questions. Many of the subjects in SSC have 15 or more unique chapters included in them (some more than 20). As a result, it is almost impossible to construct a test that covers all the areas in a given curriculum. Furthermore, no mechanism is in place to ensure a proper sampling of topics. The traditional practice of using a rotation pattern (where if question is set from a chapter in 1 year, that chapter is skipped while setting questions for the next year) while selecting topics to set questions from different years might open an avenue for guessing questions and skipping certain topics (Holbrook, 2007), a practice common among the students in Bangladesh.

This may pose a serious threat to the valid use of these tests as failing to measure adequately what ought to be measured – it can be said that construct under-representation is a factor that undermines the validity of such tests (Koretz, 2008). Even if some of the topics are covered in the MCQ section, they will be given little weight as each MCQ item carries 1 mark only. Crooks et al. (1996) argued that not assessing parts of the target domain or giving them little weight weakens the extrapolation link of the validation model, and this in turn threatens the validity of this assessment.

While increasing the number of questions might seem like a good idea to counter the construct under-representation issue, a brief discussion of what increasing questions will suggest that it will only worsen the situation. Students now get 2 h and 10 min to answer the six sets of creative question items. Riad (2010) found that many of the students struggle to finish answering within time and often have to leave some items unaddressed. He argued that the time now given is inadequate if students are to utilise cognitive skills like application, analysis, synthesis, and evaluation to answer the questions. Allowing inadequate time for an assessment undermines its validity because it constitutes an inappropriate assessment condition (Crooks et al., 1996).

Another challenging aspect of creative question is the risk of the task or the expected response not being communicated to the students. Crooks et al. (1996) consider the miscommunication of expected response to be a threat to the validity of an assessment. They suggest that students' performance may be misinterpreted as an inability to carry out the task when in fact the task has not been properly understood. Although the Government of Bangladesh has repeatedly claimed training more than 300,000 teachers on creative questions (Ahmed, 2012; Talukder, 2012), researchers (e.g. Billah, 2015; Tarana, 2011) have found that teachers are not confident in developing and utilising creative questions. An academic supervision report prepared by the Directorate of Secondary and Higher Education (DSHE) in 2014 found that teachers of only 55% schools were able to develop creative questions by themselves, whereas in reality the number might even be worse (Billah).

Furthermore, Ibrahim (2010) suggests that if summative assessment is based on creative questions, classroom teaching and learning practice also needs to be changed accordingly. Teachers need to engage in creative discussion that supports students' learning by helping them towards the solution of a problem. However, the reality is, in many schools, teachers do not practise creative questions and students in those institutes are not familiar with such questions as expected (Tanzeen, 2011). In other words, students from these institutes might possess the cognitive abilities but will surely have trouble *demonstrating* those in SSC examinations due to not properly understanding creative questions. This weakens the administration link of the validity model of Crooks et al. (1996) and also introduces construct irrelevance variance as depicted by Koretz (2008) to threaten the validity of this assessment.

As mentioned earlier, the creative question method is fostered by the policymakers in Bangladesh with the intention of assessing the subdomains of Bloom's cognitive domain hoping that it will cultivate these skills among students (Maleque et al., 2011). However, setting the test items in a certain format cannot predict the types of

skills student will actually employ in answering them (Koretz, 2008). Riad (2010) observed that many of the creative questions are similar to examples of such questions given in guidebooks published by commercial producers, which inadvertently lead to students using simple recall instead of higher-order cognitive skills to answer them.

This practice further threatens the validity of assessment through creative questions and can be described to be exceedingly dependent on *faith validity*. As Koretz (2008) discussed, Mehrens first used the term 'faith validity' to describe instances where test developers and educators assumed that setting up complex tasks for students alone will necessarily tap into higher-order skills in them, and researches later confirmed that reliance on these types of items was indeed a matter of faith.

Reliability Issues in the SSC Examination

If we consider how the reliability of the SSC examination is affected because of the introduction of creative questions, it appears that testing time limitation is one of the reasons that can decrease the reliability of this assessment. Koretz (2008) argues that if testing time is not increased, using more complex formats may result in decreased reliability. He mentions two reasons for this decrease, both of which can be observed in the current SSC tests. Firstly, as only a limited number of uniquely themed questions can be set from a broad range of topics, the homogeneity of questions decline over time. Secondly, there is far less prospect of measurement error to wash out because of fewer per-hour testing time, since answering the creative questions takes more time (Riad, 2010).

The reliability of creative questions can be further doubted heeding Black and Wiliam's (2012) argument that if the number of extended questions is limited, a particular choice of questions might suit some candidates and not others. The smaller the sample, the less confidence one can have that the result for any one candidate would be the same as that which would be given on another sample composed in the same way.

Riad (2010) proposed increasing the testing times to offset some of these issues, which might not be feasible because of concerns like tiring of students and administrative disruption (e.g. too many working hours spent on testing-related activities, difficulty in constructing, administering, and marking tests). However, these problems can be tackled by both purging the current school-based assessment (SBA) of its problems and using scores collected by teachers through SBA in SSC examination (as was the initial plan) (National Curriculum and Textbook Board [NCTB], 2005). Black and Wiliam (2012) also suggest that the use of information collected by teachers as a routine part of their classroom activities can be helpful in increasing the effective length of a test without increasing the actual testing time.

The lack of consistency among examiners has been repeatedly identified as a major drawback of the SSC examination by researchers (e.g. Haider, 2008; Holbrook, 2007; Roy, 2009). Haider (2008), for example, observed that the

guidelines provided to the markers for the constructed response items are very general and vague and can be subject to different interpretations depending on the examiner. No marking scheme or moderation is provided to the examiners, and, as a result, the assessment becomes less reliable, individually controlled by each examiner, rather than by the examination boards guiding the marking procedures (Holbrook).

Indeed this situation is acknowledged in government documents as well (e.g. National Curriculum and Textbook Board [NCTB], 2008). As discussed earlier, Black and Wiliam (2012) consider this type of marker error or rater error as a major source of threat to reliability. The lack of intra-rater or inter-rater consistency is considered to also decrease the *validity* of an assessment according to Crooks et al. (1996). They suggest that if scorers are not consistent with themselves or each other in the performance aspects they consider, the standards they set, or the marks they award, the validity of assessment interpretations or decisions are threatened. Initiatives like carefully designing and evaluating the rubrics that examiners use to score students' work and monitoring the scoring process to identify and correct problems (e.g. by conducting a second 'read-behind' rating of a random sample of papers) may be useful to resolve these issues (Koretz, 2008).

Issues Related to Grading, Comparability, and Standards in the SSC Examination

Letter grading was first introduced in the SSC examination in 2001. At present, there are seven letter grades in the SSC examination (see Table 12.2). These grade boundaries are fixed, and the mark intervals are quite large for each grade (e.g. scoring 80–100 gets a student an A+; 70–79 gets an A). Such coarseness of the grading means that information about differences among students within any one of those ranges does not quite register – these differences can be quite large. Therefore, significant improvements can go unnoticed, while trivially small gains can seem huge. In accountability systems where emphasis is on the results of pupils, this may

Table 12.2 Grading system for SSC examination: letter grades for individual subjects

Marks' interval	Letter grade	Grade point
80–100	A+	5
70–79	A	4
60–69	A–	3.5
50–59	B	3
40–49	C	2
33–39	D	1
0–32	F	0

Source: Ministry of Education (2012)

encourage teachers to focus their efforts more on 'bubble kids' (i.e. students who are close to but not yet passing) (Koretz, 2008, p. 195). No explanation is offered in any government document about why the grade boundaries are fixed at the intervals they are now.

Nevertheless, an alternative could be proposed to make the grade boundaries flexible, i.e. instead of 80+ marks getting a student A+ every year, the numerical value of A+ would be decided on a year-to-year basis depending on the difficulty of the examination. A suitable way to set the grades for each test will involve determining marks for the judgemental grades first by reviewing a variety of qualitative and quantitative evidence and using professional judgements and then by setting the remaining grade boundaries mathematically from the judgemental recommendations (AQA, 2008; Ofqual, 2011). Although this might seem to be too difficult in the context of Bangladesh, there is local expertise within the BISEs who can get this started, and further expertise can be developed through professional development opportunities.

Currently, no margin of error data is provided with the SSC results. This makes the information available unacceptably constricted. Reporting margins of error for test scores can lead to more informed use of these scores by key stakeholders, especially as the scores are reported in terms of grades (Black & Wiliam, 2012).

Assessment decisions are used worldwide to make judgements about progression, selection, and employment of students. Fundamentally, comparability makes sure that different students, with different educational profiles and from different years, are treated as equally as possible (Isaacs, 2013). Researchers suggest that the current SSC examination does not attempt to equate the tests in difficulty across subjects, across education boards, or over time (Holbrook, 2007; Hossain, 2009). The tests of the SSC examination are constructed by different teachers and are quite unlikely to be of the same level of difficulty.

The fixed grade boundaries further worsen the comparability of these tests. Baird (2007) suggests that when the difficulty of the question papers varies from year to year, setting the grade boundaries at the same mark each year would simply sanction examination difficulty varying between years. Koretz (2008) also argues that assigning a letter grade to a fixed percentage – 90% of credit gets one an A or some such – does not provide the comparability across boards and over time that is important for large-scale assessments.

As the difficulty varies across different contexts (time, subject, board), the grade boundaries must compensate for this to make it equally difficult to be awarded a particular grade (Baird, 2007). Another approach might be placing the raw scores of the tests on a scale. Scales portray the entire distribution of performance and help in maintaining the comparability of results across years. Scaled scores can be statistically linked to make results comparable across forms or years (Koretz, 2008).

A well-established examination standard might have helped the SSC examination to retain its comparability. However, the current situation leaves a lot to desire. Review of examination standards' definitions depicted by Baird (2007) suggests that the current practice of standard setting in SSC examination loosely conforms to the conferred power definition where society empowers certain individuals to make

judgements regarding where the examination standards lie. Baird argues that in this definition, there is no pretence of an objective way in which standards can be set – we simply accept the umpire's decision. No guarantee of *what* the standards are comes from this definition. The power rests with the examiners and head examiners to decide what standards for SSC examination will mean. The status of standards cannot be very much depended upon as they are often instructed to mark more leniently or to inflate results in some other way for political gains (Holbrook, 2007).

Since important decisions regarding selection, progression, and employment of students are based on the SSC result, the Government of Bangladesh may consider taking steps to establish examination standards for SSC and ensure comparability of the tests. In this regard, some of the methods empirically established and used in the UK might provide important insights into this matter. For example, the Qualifications and Curriculum Authority [QCA] of the UK (2006) depicts a rigorous process of evidence gathering and comparing, which makes sure that similar examination standards are followed across years and across different awarding bodies in the same year. This helps in identifying any action needed to safeguard standards and inform future developments in the examination. Although these processes have their limitations, having them in place will be far better than having no mechanism for maintaining standards at all. However, if it is not possible to develop examination standards and comparability for the SSC examination, it is still important to understand the distinctive contribution each context makes and stop trying to equate them. It is necessary to understand what claims can be, and cannot be, made about examination standards.

Issues of Bias in the SSC Examination

The first step in identifying potential bias is to study the content of the test items, looking for content or terminology that might distort the performance of particular groups (Koretz, 2008). A critical inspection of the items included in the SSC tests in various education boards over a number of years (2001–2004) by Mullick and Begum (2005) reveals that more than one-fourth of the test items were biased in terms of gender or urban–rural contexts. Among the biased items, the majority (54%) are gender-biased, within which most were found to be male-connected items (50%). The source of bias is often the textbooks themselves. For example, Haq and Alam (2010) found a number of items in secondary textbooks where male are shown as dominant characters. One item they mention can be roughly translated as: 'Mr. Mainuddin gave 12% of his money to his wife, 20% to his son, and the remaining 816,000 taka to his daughter. How much money did he have in total?' They argue this item to be an example where the male character is shown as the giver and females as receivers. Existence of biased items in the test can cause unfair assessment and unjustified difference in performance. Items set in contexts familiar to students from certain geographical areas also affect performance (Mullick &

Begum, 2005). Tests designed with items set in contexts familiar to one group and not another can undoubtedly be considered to be biased (Goldstein, 1993).

The creative questions were introduced with an intention to solve many of these problems (National Curriculum and Textbook Board [NCTB], 2008). However, to perform well in creative questions, students ought to be given the opportunity to learn about the content from their textbooks as well as from additional study materials (Kabir, 2010). Riad (2010) argues that the current textbooks are not adequate in achieving the cognitive skills necessary in creative questions, and students will need a range of additional study materials to do well. These resources might be hard to acquire for pupils of certain schools, as there is no established mechanism for providing them. For example, Internet connection is available to only a tiny proportion of the students, and libraries are virtually non-existent in the secondary schools of Bangladesh (Islam, 1998). Only a handful of nongovernment schools that are financially sound maintain regularly updated libraries for their students (Munshi, 2009).

As a result, the creative questions might present an unjustifiable advantage to pupils who have access to additional resources or have a *learned* environment at home, such as those from cities and urban areas. In particular, first-generation learners (whose parents are illiterate or did not have any formal education) might suffer direly. How the content of the assessment reflects the experiences of different groups is identified as one of the key areas of fairness within large-scale testing systems (Stobart, 2005), and initiatives like special attention to students from such backgrounds could be taken to close the gap as much as possible. In addition, further research is needed to understand this gap of learning environments that students experience.

Concluding Remarks

The SSC examination is considered to be one of the most vital public examinations in Bangladesh with its results affecting pupils in a number of ways. The SSC results play a pivotal role in higher education placement and also in job recruitments. Considering the worldwide advancement in theory and practice of assessment, it is hard to look away from the limitations this nationwide examination has now. An immediate multifarious initiative of the government is required to address the issues before they get more complicated. It would be helpful if the government learns from previous instances of poor implementation of assessment reform programmes (Begum & Mullick, 2005) and puts efforts to operationalise their assessment reform projects (e.g. creative questions and SBA) sincerely.

Assessment practices in many countries worldwide follow an assessment model which helps in developing and managing evaluation of student performance. It will be useful if such a model is followed for the SSC examination too. A combination of 'banked items' and 'awarding-based assessment' models described by Cambridge Assessment (2009) could be followed, where: items are linked to specific skills,

knowledge and/or understandings, and repeatedly pretested so that data on items can be collected and used to place on an appropriate measurement scale; standards of any assessment sessions are aligned with the standards applied in earlier sessions; and evaluation processes are comprised of independent reviews and dedicated comparability exercises. Urgent measures may be taken to set up new methods of scoring, interpreting the result and future use of the results. Furthermore, guidance should be supplied with SSC results on legitimate uses to which the assessment results can be put, with a strong emphasis on valid inferences and uses.

To ensure a better congruity among the curriculum, pedagogy, and assessment (especially with the creative questions) of SSC examination, an integrated framework of design, development, administration, and evaluation is required. Basic stages in this process will include:

Developing a clear statement of purpose for assessment and teaching, based on the existing national education goals and curricula;

Identifying student population, their characteristics and educational background;

Breaking down the curriculum into constructs that can be taught and learned in the classroom;

Identifying constructs that should be the focus of assessment;

Developing measurement principles (including adequate provisions for standards, comparability, and bias)

Developing and implementing assessment with the help of a consolidated assessment model;

Documenting all development, refinement, administration, and quality assurance processes;

Analysing the measurement characteristics of the assessment (e.g. reliability and bias);

Analysing administration of the assessment, its impact, and how the outcomes are used; and

Refining future iterations of this process based on the data gathered through documentation and analyses of all events.

Reform in education is a complex process, and future reform efforts will more likely succeed if adequate attention is given to some additional factors. Firstly, policy development processes may follow a more ground-up approach with a focus on capacity development of schools and teachers so that the policy can be responsive to student and community needs. Secondly, it is paramount to ensure equity in distribution of educational resources that improve school capacity (including well-qualified teachers and positive school environments). Thirdly, recruiting well-qualified teachers, and strengthening both pre-service teacher education and ongoing professional development programmes for them. Fourthly, ensuring that teachers have the flexibility in allocating adequate time for designing their teaching and assessment strategies. In addition, there need to be opportunities for collegial discourse and inquiry within teachers. Finally, any reform initiative/policy should be built on previous reforms/policies, so that they do not appear as inaccessible when operationalised.

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Part III
Higher Education, Employability and Economic Growth

Chapter 13
Revisioning English Studies in Bangladesh in the Age of Globalisation and ELT

Fakrul Alam

Abstract This chapter begins with the premise that English Studies in Bangladesh is now going through a critical period and is beset by these problems: (a) the suspicion and anxiety created over decades in many Bangladeshi minds about linguistic encroachment and fear of an imperial language marginalising Bengali in public life yet again and the resulting perceived threat to the native language and culture; (b) the commodification of the language, which is the consequence of globalisation and the consequent imposition of pedagogies that have led to the attenuation of the language and the diminished capacity to teach it effectively and creatively; (c) the unplanned expansion of the education system and proliferation of teaching methods that go against effective learning, promote impractical pedagogies and concentrate on results rather than teaching; and (d) the conversion of the universities of Bangladesh in general and English departments of these universities in particular into places for churning out graduates who can meet the job market's demands in the quickest and most facile manner without regard for in-depth knowledge and a pedagogy that is critical and humanistic in orientation. The chapter begins by commenting on the results of the University of Dhaka's Arts Faculty Admission test of 2014 and goes on to link it to the English language teaching situation in our schools and colleges. It then attempts to connect this situation to the condition of English language teaching in our universities after the grammar-translation method was vilified, the British Council sponsored ELT valorised and the use of literary texts denigrated from the 1980s onwards. The chapter concludes by suggesting how a positive paradigm shift can be achieved to improve the condition of English Studies in Bangladesh by combining critical methods derived from literature and insights derived from accumulated experience, language education, recent theory, critical pedagogy and current best practices effectively and sequentially.

Keywords English education · Globalisation · ELT · Commodification of education · Higher education

F. Alam (✉)
Department of English, University of Dhaka, Dhaka, Bangladesh
e-mail: falam1951@hotmail.com

Introduction: The Crises in English Studies in Bangladesh in Our Time

This chapter, which I write in the form of a testimonio, based on my own lifetime experiences, as well as personal and professional values, is premised on the realisation that English Studies (in this chapter referring to both the study of English literature and the study of English language – often, but not always, separately) in Bangladesh is currently undergoing a critical period and is beset by these problems: (a) the suspicion and anxiety created over decades in many Bangladeshi minds about an imperial language's persistent linguistic encroachment, the resulting perceived threat to the native language and culture that has led to English language teaching and learning being cornered for decades since the Liberation War of 1971 that led to the birth of Bangladesh; (b) the increasing commodification of the language in the country under the aegis of the British Council since the 1980s because of neoliberal policies adopted by Britain as well as other Western countries from the time of Margaret Thatcher, the consequent imposition of pedagogies that have led to the attenuation of the language and the diminished capacity to teach it effectively and creatively; (c) the unplanned expansion of the education system and proliferation of teaching methods in Bangladesh that have been going against effective learning and the creation of an assessment system that has focused on results and not on teaching; and (d) the conversion of the universities of Bangladesh in general and English departments of these universities in particular into places for churning out graduates who can meet the job market's demands in the quickest and most facile manner without regard either for in-depth knowledge or for pedagogy that is critical and humanistic in orientation from the 1990s onwards.

I will begin the chapter itself, however, by commenting on the results of the University of Dhaka's fairly recent Arts Faculty Admission test of 2014 and go on to link the results to the unsatisfactory English language teaching situation in our schools and colleges. I will then attempt to connect this atrophied state to the condition of English language teaching in our universities after the marginalisation of English after the country's independence in 1971. Next, I will attempt to show the worsening of the situation after the grammar-translation method was vilified, the British Council sponsored ELT valorised and the use of literary texts denigrated from the 1980 onwards. I will then move on to show how the situation deteriorated even further by the turn of the last century because of quantitative expansion in the education system as well as the failure to implement the ELT-inspired reforms that had effectively replaced the older forms of teaching in the country. I will conclude the paper by suggesting how a positive paradigm shift can be achieved to improve the condition of English Studies in Bangladesh by combining critical methods derived from literature and insights derived from accumulated experience, language education and theoretical developments of recent decades, critical pedagogy and current best practices.

A Tell-Tale Test and the State of English Studies in Bangladesh

The Bdnews24.com lead feature of September 2014 registers the dire state of English language learning in Bangladesh and reveals the failure of the English language pedagogy in place in the country plainly and unambiguously: 'Only Two Eligible for Dhaka University's English Department[1]'. The feature is about how out of the nearly 1700 students who had sat for the Elective English paper admission test only two were able to meet the minimum requirements set by the university's English departmental teachers who had devised the test to ensure that only students with the competence necessary to study English at the tertiary level were admitted to the undergraduate programme. The tests revealed how poorly prepared the students were; 12 years of English education at the primary, secondary, and higher secondary level had apparently not prepared them for the kind of language skills they would require to study in the English department. In the online postings that followed the news feature, one reader draws an obvious sobering conclusion from the episode: 'obviously English is not being taught in the general schools' that supply the University of Dhaka with students for its undergraduate programmes. Another reader of the piece suggests that the dismal state of English language learning revealed by the over 99% failure rate was due to 'the English hating ambience' prevailing in the country and the continuing perception that the language is 'elitist and…anti-Bengali'. Another reader laments the state of things when 'only two students out of the nation of 150 million qualify for Dept. of English at [the] national university of Bangladesh' ('Only Two Eligible…', 2014). Still another reader takes it on himself to defend the teachers who framed the test and set the minimum standard to be achieved for students intending to come to the department, noting that they are in the know as far as the level of competence required to study English at the university level is concerned, being academics with the knowledge and experience required for setting such tests.[2]

Was the admission test too difficult? Not really; they were only a little harder than the 'general English' tests held before and almost equal to the 'Advanced English' tests held in previous years for students whose other tongue is not English and who did not study in schools that follow the curriculum adopted for board examinations. In fact, the test was set by two of the senior-most professors of the department on the basis of questions submitted by five of its other teachers; all these

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[1] Officially, the institution is known as the University of Dhaka, but in Bangladesh it is known popularly as 'Dhaka University'. In other words, both versions of the institute's name are in use.

[2] In the end, it must be noted, only 70 out of 140 places were filled in the department's 1st-year programme that year, after the admission 'elective English bar' was lowered to 12 from the 17 that had been announced as the minimum score required to be admitted to the department. However, 20 or so of these students withdrew, and so the English department of the university ended up with a class of 52. The department is being blamed covertly, and the test has been dropped this year without consulting it, and we have had to revert to the old system of testing in admitting students. It can be pointed out here that the University of Dhaka is not only the oldest and premier university of the nation but the largest. Competition for the seats to this institution is always intense.

teachers had plentiful experience of framing such tests and the desire to admit students good enough to cope with the standards required to carry on undergraduate studies in English.[3]

So why did so many students fail? If the test was not difficult, what caused this debacle? The answers to these questions are manifold and indicate a problematic situation. However one thing is even more obvious in hindsight: the extraordinarily poor performance of the students in the test amounted to an indictment of English language policies adopted by successive governments after the liberation of Bangladesh in 1971, the current English language teaching situation, the curriculum and pedagogic practices adopted by the country's educators with foreign help in the 1980s, the textbooks prescribed and the state of classroom teaching in the country. The rest of the paper is an attempt to account for the dismal state of English education in Bangladesh reflected in the test results and to discuss the possibility of a paradigm shift that may redress the situation.

Linguistic Nationalism and the Decline of English Studies in Bangladesh

Bangladesh was born in 1971 because of events that had their roots in linguistic nationalism. An intense movement in favour of Bengali began in what was East Pakistan in the late 1940s and the early 1950s of the last century. When this language, spoken by almost all East Pakistanis, was relegated to the second position, and Urdu, the language spoken by not so many West Pakistanis and only a few East Pakistanis, was declared to be Pakistan's only state language, there was a violent outburst in the eastern part of Pakistan that lead to the death of a number of East Pakistanis on February 21, 1952. This event was the beginning of the end of East Pakistan, for the Language Movement would subsequently escalate into full-scale opposition to West Pakistan.[4] In other words, it was linguistic nationalism that decisively sparked the independence movement of Bangladesh and that led to the end of the Pakistani state formed from the partition of the Indian subcontinent in 1947.

Not surprisingly, the nascent state of Bangladesh decided to adopt a policy of promoting Bengali wholeheartedly in public life and implementing the use of Bengali vigorously in all spheres. But the animus against Urdu and the angry reaction against the imposition of an alien language system on East Pakistanis in the Pakistan period soon lead to a denigration of English language learning in independent Bangladesh. The righteous indignation that led Bangladeshis to despise those who would make Urdu the only state language of the people of East Pakistan

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[3] I must admit here that I was one of the two academics who 'moderated' the test on the basis of the five tests submitted by other senior colleagues. The other academic was the Dean of Arts. Both of us had many years' experience of setting such tests.

[4] The movement led not merely to the birth of Bangladeshi in 1971 but eventually to the day being adopted as the International Mother Language Day by the United Nations on January 9, 1998.

would propel Bengalis in the eastern province to wage a full-scale war of liberation in 1971. In independent Bangladesh the resentment against Urdu was reincarnated as suspicion of English language education; there was much disapproval and even condemnation at the use of English in officialdom.

No doubt remembering that Bangladesh's recent history was marked by two colonial periods – that of the British rule as well as the Pakistani interregnum – the new leaders of Bangladesh concentrated on steps that would lead increasingly to the marginalisation of English in the country. The language would, as a result, be taught weakly for at least two decades at the secondary as well as the primary levels, and purposively only in a handful of English-medium schools in urban areas. In 1974, the first Bangladesh Education Commission recommended that at most English could be given priority as a foreign language and should be taught from Class 6 (Chowdhury & Kabir, 2014); even the 1988 Bangladesh National Education Commission recommended that Grade 3 be the starting point for English learning. Moreover, English would be taught during this period at the higher secondary level on the basis of a downsized and simplified curriculum. Significantly, at the tertiary level, English would not be used anymore in universities except in the English department, a few of other departments and a handful of institutions of higher education. There was an assumption that was widespread at this time that English was a language that creates class disparity and makes jobs as well as higher education a reserve of the upper class. In short, there were responsible people in Bangladesh who did their best to ensure throughout the 1970s and 1980s and even in the early 1990s of the last century that English education be downgraded and the language made to look responsible for all sorts of discriminatory policies in society and even a source of cultural blight.

In their reforming and nationalistic zeal, no one responsible for the language policy of the newly independent country or even for education reform as a whole in Bangladesh seemed to have noticed that in neighbouring West Bengal, no citizen learned Bengali inadequately, despite having English being taught at all levels and despite the widespread use of English for official purposes as well as in higher education. They did not notice either that literature written in Bengali flourished as always in West Bengal, despite the use of English in tertiary education and in officialdom since the British period. To put this somewhat differently, the animus that had been directed against Urdu in East Pakistan seemed to have been redirected against English at this time in Bangladesh by not a few people in power and those in charge of education policy and reform, even though the archetypal colonisers had departed by 1947 and the Pakistanis by 1971.

Indeed, in the 1970s, heady with a cocktail made out of nationalism and socialism, and oblivious of the dangers of chauvinism, some 'progressive' intellectuals had cried out loudly against English, forgetting that it had nothing to do with the Pakistani interregnum in our part of the world. Things got worse when in the 1980s General Ershad seized power and resorted to linguistic nationalism as another ploy to win over people to his illegal regime. Resorting to populist policies to woo citizens, he declared that English would no longer be taught in degree colleges. His decree would deliver another body blow to English language teaching and learning,

since most primary and secondary school teachers of that period were recruited from such colleges.

In sum, in independent Bangladesh, the 1970s and 1980s saw a reduction of the importance of English in public life and a steep decline in English language teaching and learning standards. Almost all school-going students would now begin acquiring English rather late and would only be able to learn the basics of the language somehow and that too for only a few years. Knowing English was no longer considered essential for higher education or most government jobs; many private companies too were now content to hire graduates who knew little or almost no English since everyone in the marketplace was carrying out transactions almost entirely in Bengali.

It should be stressed here too that a sizable number of competent English language teachers had begun departing the country after partition of the subcontinent, since they were Hindus. The remaining ones who had graduated from universities and were Muslim Bengalis or the Hindus who had stayed behind would be retiring by the 1980s and 1990s. Teachers graduating from degree colleges now had only a little exposure to English learning; consequently, there would be a scarcity of competent English teachers for public schools and colleges from then onwards. In two decades, thus, the curriculum as well as the pedagogy had been affected adversely; less English was being taught to students by teachers who had learned less of it.

A good introduction to the 'sustained friction between English and a nationalistic fervour in favour of Bengali' (Chowdhury & Kabir, 2014, p. 2) that had surfaced thus in Bangladesh in the 1970s and 1980s can be found in 'Language Wars: English Education Policy and Practice in Bangladesh' by Chowdhury and Kabir. Referring to others who had written about the decline in English education and expressed concern that this is at the root of the decline in educational standards in the country, they indicate that for Bangladeshis, for a long time, the 'friction between Bengali and English' had been detrimental to English teaching and learning. They also underscore the uncertainty about the importance of English education at any level and point to doubts about the necessity of teaching it at the expense of Bengali as 'an ongoing' thing. The very useful 'chronological survey' table they provide of English in educational policy in Bangladesh reveals clearly that it was only in 1992 that English was recommended as a compulsory subject in Class I in independent Bangladesh after these anxieties and suspicions were countered by the demand for learning English that were being increasingly articulated at this time. However, they see no coherent and sustained English language policy adopted afterwards for some time afterwards. They stress that any survey of English language policy at the state level in Bangladesh would reveal the lack of well-thought-out national English language policies adopted by the country till well into the new millennium when in 2010, the National Education Policy was formulated and then implemented. The consequence was that English failed to become in effect 'an "institutionalized additional language" [Kachru]' in Bangladesh as it had become in the neighbouring countries of India and Sri Lanka and in India, Malaysia, Singapore and Sri Lanka' (Chowdhury & Kabir, 2014, p. 13).

The British Council and the Advent of Communicative Language Teaching in Bangladesh

By the late 1980s, Bangladeshis had begun to perceive that the steady decline in English language education because of nationalistic language policies was a bad thing for their nation. As a consequence, the demand for English grew exponentially from then on; even General Ershad reportedly sent his son to the American school in Dhaka. Parents who could afford it would be sending their children to the mushrooming English-medium schools of the country then. One reason for this was that the country was increasingly connected to the international business world; also, Bangladeshis were going abroad for jobs in increasing numbers. Moreover, linguistic nationalism was losing steam steadily. By coincidence the major countries of the west were now embracing neoliberal policies as never before. The nature of aid was beginning to change since the idea of giving away a lot for nothing seemed to be unsustainable for donor countries who had converted to the mantra of free markets. The idea that nothing should be free and the desire that the donor should benefit from giving in financially tangible ways now dictated policies of most donor countries ever more than before.

The British Council, geared till then to pursue a policy in Bangladesh, as well as in other commonwealth countries, of promoting British culture in general, now began marketing the English language in particular in a manner that would help it sustain itself without straining the British budget. This was a policy that would prioritise English Language Teaching (ELT) as a global enterprise for the Council. In fact, it transformed itself almost overnight and became primarily a centre for offering English language courses and conducting IELTS tests and not, as it was till then, a place for housing plentiful books on English literature and history and a centre for promoting British culture. Previously, the Council was the conduit through which the best students of the country would be given scholarships to study literature and humanities in Britain; now it became the place for recruiting potential ELT scholars and training them in the country so that they could serve British universities, which were strapped for cash and had been forced to generate their own revenue through courses that would attract overseas students as well as help in the task of exporting the English language. The idea, in other words, was that the British Council would make itself less of a burden on the British economy and more of a self-sustaining, income-generating unit for itself and the nation as a whole.

In his excellent study of the subject in *Linguistic Imperialism*, Phillipson (1992) quotes from the annual report of the British Council for 1983–1984 on how it could benefit through the English language to promote British interests. Here is a summary offered by the British Council Chairman on the prospects ahead for the Council, as quoted by Phillipson:

> Of course we do not have the power we once had to impose our will but Britain's influence endures, out of all proportion to her economic and military resources. This is partly because the English language is the lingua franca of science, technology, and commerce; the demand for it is insatiable and we respond whether through the education systems of 'host' countries,

or where the market can stand it, on a commercial basis. Our language is our greatest asset, greater than North Sea Oil, and the supply is inexhaustible; furthermore, while we do not have a monopoly, our particular brand remains highly sought after. I am glad to say those who guide the fortunes of this country share my conviction in the need to invest in, and exploit to the full, this invisible, God-given asset. (Phillipson, 1992, pp. 144–145)

The implication of this extract from the British Council's Chairman is clear: the Council would now be adopting a business agenda in which the English language would play a crucial part. And in the coming decades, the Council should be cashing in on the language, as – one can add in passing – were countries such as Australia, either through ELT services or, in the case of the USA, TESOL ones. Phillipson notes in his book on the comprehensive and far-reaching nature of the kind of linguistic imperialism the British Council would be engaging in. As Brown (1994), an American reviewer of Phillipson's book, sums up the neo-imperial venture in its fullness, 'the center provides the teachers, decides what is worthy of being taught… and collects data, which is then analyzed in Center universities, produced as a final product (e.g. a book, journal) and referred back for consumption in the Periphery' (p. 423).

In short, the new strategy for the British Council would involve reducing funding of arts and humanities programmes and more and more aggressive marketing of English through ELT programmes. As I put it (somewhat facetiously) many years ago in a piece that I had contributed to our leading English newspaper, *The Daily Star*, the Council had become the New East India Company of our times in some respects, 'making money any which way' it was able to but mainly through 'selling the English language globally' (Alam, 2003). I went on in my piece to declare that, '…the Council was now more bent on offering exorbitantly-priced language courses' and 'offering' all sorts of examination services, 'trading on its Englishness and cashing in on the dismal state of our educational system set back by the excesses of linguistic nationalism' (ibid).

I wrote the words quoted above in 2003 without carrying out any kind of research on the English language teaching apparatuses being promoted by neoliberal ideologically inflicted institutions, British Council-funded ELT scholarships, teacher training programmes in Bangladesh and curriculum innovations through which communicative language teaching (CLT) would be promoted in the country. However, I had already begun thinking about the subject as I prepared to write a paper for a conference in Japan that I attended in July 2002. The advent of CLT in Bangladesh, it would now became clear to me, was at the expense of the pedagogy in place in Bangladesh at this time, which I discovered on reading the relevant lit-erature, was the Grammar Translation Method (GTM).[5] Within a few years, GTM was all but discredited, and all the ills of English language teaching attributed partly to it and not the language policies adopted by successive governments influenced by linguistic nationalism. In my observation, it was in quick time that whatever English teaching infrastructure remained in postliberation Bangladesh was either downsized

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[5] It needs to be noted, though, that there is considerable variation within each of these language teaching approaches; however, for the sake of simplicity, I will not be referring to these.

or discredited by language experts flown in by the Council and ELT degree-holding graduates of British universities who were given the responsibility of rewriting textbooks and training teachers for schools and colleges throughout the country.

One area that apparently needed urgent attention according to the ELT 'experts' touting CLT was the use of literary pieces in English language primers; apparently, these pieces were neither topical nor easily accessible for learners. As I pointed out in my paper, 'Using Postcolonial Literature in ELT' (2002), nobody ditching these pieces and promoting CLT textbooks paid any attention to the fact that for generations, English language learners of the subcontinent had been learning English competently even in remote school districts through GTM methods.[6] One problem, as I suggested in my paper, was that GTM 'worked at a time when people were using English for public correspondence and were reading English voluntarily and spontaneously' (Alam, 2002, p. 124). The pedagogy had also been attuned to the method; teachers learned to use GTM texts easily enough because they had themselves learned English that way and because it was easy for them to be trained in the method.

In a changed linguistic environment where English was not used in the public sphere and taught only cursorily in schools and colleges, the teaching and learning of English was bound to suffer, no matter what method was introduced to teachers in any quick-fix strategy. This was the main reason that CLT would make things even worse in Bangladesh after the textbooks and pedagogy that were moulded by it began to enter public school classrooms. Not only were these textbooks thin in content and bland in tone, they were being taught almost entirely by teachers who had not been trained in CLT at all or trained superficially through crash courses. Moreover, these teachers would be conducting classes in situations where students had no opportunities to *communicate* verbally outside the classroom and limited opportunities to do so inside it. Class sizes too had swelled by the 1990s, and so how could one use CLT methods to packed classrooms where group work was constrained by the infrastructure as well the number of students?

In my paper on the use of postcolonial literature in ELT (Alam, 2002), I had also focused on the way the ELT 'experts' and their Bangladeshi counterparts with their strident denunciation of GTM had ignored not only the tradition of English teaching and the use of literary pieces in English primers in the Indian subcontinent that had evolved over almost 200 years but also the not insubstantial research that argued for the use of literature texts in the language classroom as important and effective.[7] The new CLT-inspired textbooks were thin in content and unimaginative in their presentation. As I pointed out in my paper, the passages composed for the exercises of the book were also short in length. As a consequence, users of the book could not

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[6] It can be pointed out here that the pedagogy in place in West Bengal in this period did not change overnight; Bengalis there still continued to learn English in ways that did not discredit the use of literary pieces for their students.

[7] See, for instance, the essays collected in C. J. Brumfit and R. A. Carter's collection of essays, *Literature and Language Teaching* (1986), particularly the contributions by the editors, Michael Long, William T. Littlewood, Braj B. Kachru and Sandra McKay.

be introduced to 'structure, transitions, and/or the way an argument is developed fully and certainly not on text types' (Alam, 2002, p. 131). Moreover, the passages, designed to be 'authentic' and not foreign, as was the case with the literary pieces used in the GTM text books, appeared to be 'almost entirely informational in approach and hardly fascinating' (Alam, 2002, p. 131).

In 'Using Postcolonial Literature in ELT', I had argued for the use of postcolonial writing in English – works by authors such as the pioneering Bengali Muslim feminist writer Begum Rokeya Sakhawat Hossain, Bangladeshi creative writer Khademul Islam or the Bangladeshi English language poet Kaiser Haq – if attractive as well as 'authentic' texts were needed, instead of texts that had the kind of agenda that 'development' experts flown in from abroad promote but are in effect insipid, bite-sized and have the feel of plastic. As far as I could see, a textbook like the 2001 *English for Today* produced by Bangladeshi ELT 'experts' who had been chaperoned by British ones represented 'an opportunity wasted' and embodied 'a new kind of linguistic imperialism' (Alam, 2002, p. 135) where British globalising interests were served instead of Bangladeshi ones and educational aid offered, not untypically (and unsurprisingly) of such aid packages, in self-serving ways.

It should be no surprise then that in the years that followed, the imposition of these ELT-inspired textbooks and what I do not think absolutely unfair to label as fly-by-night schemes was the further worsening of the English language learning-teaching situation in Bangladesh. Not only were these books slight in content and unattractive reads, they were also not the kind of matter that could deliver results, especially when in the hands of teachers who had little or no training or knowledge of, or interest in, ELT pedagogy. There were few opportunities for the bulk of teachers to be trained in ELT methods, and the fact that students would concentrate on memorising the bite-sized passages for their terminal examinations would mean that they would graduate with even less knowledge of English than students of the previous generation who had been taught according to GTM pedagogy.

Globalisation and the Commodification of English Studies in Bangladesh

Further complicating the situation were globalisation and the concomitant increase in the commodification of higher education in general, and for the purposes of this paper, of English Studies in particular, from the 1990s onward. As I have suggested above, ELT and its brainchild CLT were products designed primarily for the global marketplace by British language specialists and were exported aggressively everywhere by the British Council to fulfil a particular agenda. As I also indicated, by the 1990s a few universities in other English-speaking places would also be getting into the act. Traditional English studies and the teaching of humanities in general took the backseat in many universities worldwide as their English departments began prioritising revenue-generating modules and packages instead of

nourishing any pedagogy that their administrators felt did not lead to directly employable skills. One remembers Cardinal Newman's great treatise on the idea of a university for being so denigrated scant at this time – globalising and neoliberal economics would mean that 'the idea of a university' from now on would often mean institutions had to make money or at least not lose too much of it. Liberal education was increasingly seen as not viable for the university; technical education was what counted since it was consumable through the worldwide net cast by such policies. Inevitably, English language teaching in Bangladesh became affected even more adversely than it had been by the turn of the last century because of policies adopted by this time to get English studies ready for the marketplace.

Indeed, the pedagogic situation became quite problematic for the humanities all over the world as the commodification of university education began paralleling globalising/neo-colonial schemes in English language teaching. In the new millennium, leading progressive intellectuals such as Chomsky and Eagleton would be drawing the world's attention to the manner in which the idea of a university was becoming seriously compromised everywhere. In a speech given at the University of Toronto, Scarborough, on April 6, 2011, under the rubric, 'Academic Freedom and the Corporatization of Universities', Chomsky pointed out forcefully how in California, a state that once had the best public university system in the world, university education was being 'reduced to technical training or something like that'; 'privatisation', he stressed, was now being offered as the ultimate panacea even in higher education. He insists, however, such privatisation was designed only for 'the rich'. He finds it to be only a 'lower level of technical training for the rest' (Chomsky, 2011).

In his acerbic and acutely written paper titled 'The Slow Death of the University', published in *The Chronicle of Higher Education* on April 6, 2015, Eagleton reinforced Chomsky's point in his own characteristically witty manner with particular reference to English departments. While commenting on 'the destruction of subjects such as English' and the manner in which English teaching was being pushed into a corner by 'the hard-face priorities of global capitalism', he declared facetiously, and not a little pessimistically, that at this rate, 'if English departments survive at all, it may simply be to teach business students the use of the semicolon…' The conclusion he comes to is a sobering and timely one. To quote him, while 'education should indeed be responsive to the needs of society', this was not the same thing 'as regarding yourself as a service station for neo-capitalism' (Eagleton, 2015).

In Bangladesh, too, the demand for university education serving the maws not only of the government but also of the business world as never before found new impetus in the 1990s as the country's economy began to flourish and as multinationals began entering its markets. Also, more and more Bangladeshis were looking for jobs outside then, necessitating English language skills for many of them. The consequences for Bangladeshi tertiary education were manifold. Firstly, the 1990s saw the advent of many new universities in Bangladesh, some private and others public (see Kabir & Webb, Chap. 15, this volume). Quite a few of these hastily created universities, for their part, were bent on offering English language

programmes at lower levels that would mostly service business and computer science graduates. Secondly, a number of the private universities would from now on concentrate on teaching ELT-induced courses to produce teachers who could teach the English language according to the CLT formula and in the quickest possible ways to their students. Thirdly, there would be an exponential rise in demand for public education at lower levels that would lead to 'multiple-choice' admission tests in English in public universities and 'vote-bank'-oriented terminal examinations in the language for school and college students. All of these developments would further affect the teaching and learning of English adversely.

To take the case of the expansion of private and public universities first, because of the government of Bangladesh's decision to expand tertiary education in manifold sites for the expanding economy as well as the international job market, English Studies would soon be offered in far too many colleges and universities that would be springing up overnight. To take the most egregious instance first, although the National University of Bangladesh was founded in 1992, it would soon have thousands and thousands of students graduating from its affiliated colleges with English degree. For example, 196 of its colleges would be offering B.A. (Hons.) degrees and 137 M. A. degrees in English by 2014. In a parallel development, by 2014, around 40 public and 80 private universities would be set up in the country. Most of these had been hastily set up in the 1990s and the first decade of the new century; almost all of them began offering English B. A. (Hons) and M. A. courses immediately.

However, that the affiliated colleges of National University and the bulk of the public and the private universities were churning out poorly taught students through their English departments did not seem to deter either their teachers or the students, let alone their administrators; what mattered most in all cases was satisfying the perceived demand for more and more graduates for Bangladesh's increasingly robust economy as well as the world outside. That the graduates of such institutions would more often than not end up with jobs as teachers in primary and secondary educational institutions would make the English language learning and teaching situation deteriorate sharply by the turn of the millennium; things would only get worse afterwards.

As for the English language pedagogy preferred by private universities, the lead would be given by North South University, the first private university of the country, which initially decided that it could best serve its students by offering them ELT-inspired introductory courses. In 'The Commodification of English Studies in Bangladesh' (Alam, 2011), I point out the way such universities concentrated on downsizing traditional English teaching to prioritise ELT-induced modules. One university thus had an undergraduate programme in which there were 'Four basic writing courses, 10 slightly more advanced courses on reading, speaking and writing skills, one course on the history of English, over 20 ELT courses on subjects such as Stylistics, Morphology, Phonetics, etc. and only 6 literature courses' (Alam, 2011, p. 206). I also cite the example of another university that was offering courses called 'Call-Centre English' and 'Airline English' (ibid). In other words, these private universities were trying to cash in on the perceived need for graduates who would meet the demand for English-speaking graduates in the local and even the global market-

places, although they had a dearth of teachers trained to teach such courses or the infrastructure needed to sustain them.

Ironically, the lack of qualified teachers combined with such narrow range of courses worked to produce students who would be quite restricted in their ability to use the language outside the rudimentary 'communicative' mode emphasised in this kind of pedagogy. As in the case of the National University graduates, those from the private universities would also be entering the job market by the turn of the millennium and in the process would be contributing to the worsening of the overall English language teaching situation across the nation.

By the end of the first decade of the new millennium, it was quite clear to astute observers that the intervention of ELT-induced English language teaching coupled with the expansion of English courses being taught in Bangladeshi universities according to CLT modules had not made things any better and that the deterioration in English learning-teaching that had begun with linguistic nationalism was continuing. In 'Will CLT Bail out the Bogged Down ELT in Bangladesh', Hamid and Baldauf (2008) face the question empirically. Reviewing government policies, the English Language Teaching Improvement Project (ELTIP Bangladesh) that was the result of a DFID-funded scheme and the ensuing textbooks introduced in schools, they conclude that the introduction of CLT did not make a difference; classroom teaching remained the same in rural areas they had chosen for their project because the teachers there had received little or no training in teaching in ELT ways. Although the authors do not take into consideration either the quality of the ELT modules offered in universities or the quantitative expansion in English Studies programmes at the National University's affiliated colleges and in private universities offering degrees for men and women who would become school and college teachers throughout the country, their observations suggest that nothing had changed in the English language teaching situation because of such developments. To quote them, 'no studies in the last decade have reported any improvement in the standard of teaching and learning in Bangladesh, as might have been anticipated by the 1990s policy interventions' (Hamid & Baldauf, 2008, p. 20). They even go on to conclude: 'the mission assigned to CLT in the context of ELTIP Bangladesh was both unreasonable and unattainable' (p. 22).

'Between the Idea and Reality… Falls the Shadow': CLT in Theory and Practice in Bangladesh

CLT, then, has not helped in any perceivable way in improving the English language teaching-learning situation in Bangladesh. Indeed, it might have made matters worse by replacing an age-old method that had been working reasonably well till language policies changed in the nascent state. It is quite clear by now that the once dominant language teaching method – much vilified in ELT circles as 'the Grammar Translation Method' – was changed after the birth of Bangladesh too peremptorily

to something which proved to be unsuitable for Bangladesh, given the ground realities of school and college classrooms, the textbook production and the fact that the bulk of students come from rural areas where they have little or no exposure to the English language in its spoken form.

This is not to say CLT innovations in English language and learning have nothing to offer to those wanting to innovate and transform the way people learn English in countries where it is a second or a foreign language; the point being argued here is that its implementation in Bangladesh has been problematic for all kinds of reasons. As the jargon has it, in the context of Bangladesh, the conception and execution of ELT policies have been associated with all the encumbrances of all 'top-down' approaches to fixing urgently a crisis situation; local realities translated into disastrous practice what had seemed ideal in theory to distantly located UK Department for International Development (DFID) officials in charge of programmes such as the English Language Teaching Improvement (ELTIP) introduced in 1997 and British Council strategies to sell Englishness[8] to benefit British language programmes. Not only was the pedagogy almost flown in overnight by 'native-speaking' ELT experts (funded by limited DFID budgets) who had little clue to the difficulties of implementing it and inadequate understanding of the teaching-learning situation in Bangladesh, some 'native' teachers were flown out in batches to study in the UK (also on limited DFID budgets) to become either weak or self-serving local agents – and, in some cases, 'native informants' – of the new pedagogy. Quite often, all the knowledge these teachers obtained was picked up from short courses and diploma programmes that they attended. Attempts might have been made to organise workshops in Bangladesh through these teachers as well as the flown-in 'experts' and local 'consultants', but such efforts were few and quite inadequate, given, on one hand, the funding and the effort put in and the hidden agendas associated with neoliberal policies and, on the other, the extent of the problem. Certainly, only a small percentage of the teachers employed in schools and colleges across the length and breadth of the country who would be teaching the new textbooks had access to such training. And as I have indicated above and elsewhere, the textbooks, at least judging by the one I scrutinised in writing 'Using Postcolonial Literature in ELT' (Alam, 2002), were not up to the mark.

By the first decade of the new millennium, even Bangladeshi ELT 'practitioners' and pedagogues were beginning to realise that what they had learnt and were trying to propagate through their pedagogy and textbooks were simply not working in classroom situations. The evidence was coming to them through empirical surveys that they now began conducting. In the very tellingly titled piece, 'Policy Versus Ground Reality: Secondary English Language Assessment System in Bangladesh', authored by Das et al. in the June 2014 issue of *The Curriculum Journal*, we can find some sobering conclusions drawn from a fairly extensive empirical survey she and her fellow authors had carried out in 38 schools spread out across Bangladesh. They had asked 38 English teachers and 228 students of 8 *upazillas* (sub-districts)

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[8] See Roland Barthes' classic essay 'The Rhetoric of the Image' and the discussion of 'Italianicity' in it.

to respond to their main concern: 'To what extent is the secondary English assessment system in Bangladesh aligned with the curriculum?' (Das, Shaheen, Shrestha, Rahman, & Khan, 2014, p. 7). The answers and the conclusion drawn by the research team make for compelling reading for anyone interested in the future of English language teaching and not merely ELT in Bangladesh.

Das and her fellow authors note quite sensibly at the beginning of their paper that 'any policy reform is most effective when it is planned and implemented "holistically"' (Das et al., 2014, p. 2), implying thereby that this was not the case in Bangladesh. Indeed, their survey reveals that far from 'communicating' in English in classrooms, students were being made to concentrate only on two of the four 'skills', for there was limited or no scope for listening and speaking in the classroom; school space and examinations were being used by almost all teachers and students to primarily test only reading and writing abilities. Also, most teachers had little knowledge of the CLT methodology itself. One may also add that even with the knowledge, large class sizes and examination-oriented academic calendars would have made applying it extremely difficult, if not impossible. As the authors put it on the basis of their own survey as well as other studies that they had consulted, 'ELT reform does not necessarily lead to positive changes in English language assessment or such changes may not be compatible with the intended outcome of the ELT reform' (Das et al., 2014, p. 9).

Khan, one of the five authors of 'Policy Versus Ground Reality: Secondary English Language Assessment System in Bangladesh', had earlier carried out a fairly detailed survey of the way students were being tested in Bangladesh after the advent of the ELT textbooks and the imposition of the CLT methodology by teachers across the country. Khan's survey is based on comments made by some teachers/examiners. She notes that by 2008, the situation had become so problematic that another donor-funded project called the Secondary Education Quality and Access Enhancement Project (SEQAEP) was initiated across 121 *upazillas* since school examinations and Secondary School Certificate Examinations (SSC) and 'had indicated that English Language is one of the weakest subject areas at the secondary level' (Khan, 2010, p. 123). She thus targeted SSC and Higher Secondary (HSC) tests for her study and formulated questions to a select group of teachers/examiners to find out their 'views… regarding the current status of assessment at the secondary and higher secondary level' (p. 130). The results showed what was all too obvious to anyone with any knowledge of these tests: they did not examine speaking and hearing at all and concentrated on reading and writing. Moreover, most of the teachers surveyed revealed that they still prioritised grammar when marking. They also noted that they had not been trained otherwise. A few expressed their concerns about how the tests were contributing to very high pass rates and at times went against the better students. Many noted that the format encouraged rote learning, promoted the practice of memorising stock questions and induced the practice of 'giving suggestions' and relying on the pool of past questions. They observed as well that it was giving rise to a learning culture prioritising guidebooks, private tutors and coaching centres for those fortune-favoured students who could afford these routes out of the problematic situation.

Khan's paper even notes that a teacher pointed to a 'crisis' situation obtaining after the advent of the ELT curriculum' and emphasised that 'ways out' of it had to be found (Khan, 2010, p. 136). It is interesting to note that one teacher suggested that translation be introduced in the curriculum (it had been thrown out as a particularly offensive and retrogressive component of GTM). Khan underscores the point to be observed, 'theoretically these texts reflect a communicative syllabus but in practical terms they are not fully communicative' (p. 143). She reports that some teachers felt that even 'the writing tasks do not appear to be communicative' (p. 147). The net result is what Khan characterises as 'a most common and often repeated complaint from educators, researchers and policy makers': even after 12 years of studying English (I would like to interject here the words 'supposedly under the umbrella of ELT/CLT et al!'), 'Students in Bangladesh cannot speak or write English correctly' (p. 147).[9]

In 'Policy Versus Ground Reality', Das, Khan and their fellow researchers observe how CLT pedagogy had proved to be problematic in countries such as China, Korea and Libya because of the gap between the intentions of those who would want a change to ELT-inspired and ELT-induced English teaching and learning and the ground reality of want of access to the right kind of teacher or the lack of the appropriate learning ambience. They note tellingly that where such pedagogy succeeded, as it appeared to have done in the south Indian state of Tamil Nadu, it did so because the project followed a 'cascade training model in which local contexts and project partners' previous experience' are taken into account (Das et al., 2014, p. 3). This to me is a crucial point since in Bangladesh the imposition of CLT was done without taking into account the more than 200 years of experience accumulated in English language teaching, merely because it seemed to CLT gurus on call then that such experience was based on GTM and did not appear to take advantage of ELT methodology. The authors of the paper also note that local teachers were not consulted when a new 'language assessment policy' was adopted (p. 4). I would like to add that they were not consulted at all in other ways too. Like Khan did in her paper, they note too how speaking and listening were scant in tests, final examinations deemed all-important, memorisation encouraged, cognisance ignored and tuition at home or in coaching centres and guidebooks/notebooks considered crucial for good results by those who could afford them.

Nevertheless, the authors conclude their piece with the hope that creation of a 'favorable classroom environment for implementing a communicative approach to teaching' could still lead to qualitative changes in the English language learning-teaching situation through the application of ELT methodology (Das et al., 2014, p. 16). Such optimum conditions may still be created, but as I will try to suggest in the concluding section of my paper, much more will have to be done than that to

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[9] While Khan's work has been thorough, I feel that because it is restricted to data collected from a limited number of participants who are, moreover, only 'from prestigious schools in Dhaka city', (Khan, p. 130) it does not reflect the far more dismal situation that exists not only in assessment but also the application of CLT-inspired methodology in the rest of the country, especially its rural areas.

reverse the kind of disastrous situation reflected in the dismal performance recorded after the University of Dhaka Admission Test's Advanced English test which I discussed earlier and which I see as the unavoidable outcome of the imposition of an enervated version of CLT in Bangladesh. Not only had these students not mastered speaking and listening after 12 years of ELT-inspired textbooks and application of ELT methods, they had also not been taught to read or write competently in the language, although CLT was supposed to teach them all four skills, unlike the much-criticised GTM approach to English teaching and learning, which had come under fire by the ELT experts for paying scant attention to two of them but which had produced generations of students with competence in reading and writing English before nationalism wreaked havoc on the English language in Bangladesh.

Conclusion: Revisioning English Teaching in Bangladesh

I would like to think, then, that the miserable state of English language and learning is the consequence, first, of years of neglect because of overzealous and excessively nationalistic language policies adopted by successive governments in the first two decades of Bangladesh's history. A by-product of the nationalistic approach to English was that a new generation of teachers would be recruited from the 1980s with skills that were no match for an earlier generation of teachers who had the benefit of generations of accumulated experience in English teaching through grammar-translation methods. The second major reason for the malaise in the English learning-teaching situation was the self-serving nature of British Council-induced 'solutions' to the crisis where ELT was privileged to favour British ELT pedagogy that now had to be imported from Britain or learnt in the country and so proved unaffordable in the end.

The third is linked to the second; the revamped British Council was only the avant-garde, so to speak, of neoliberal policies framed from the Reagan-Thatcher years that would impact on education in the ensuing age of relentless commodification and globalisation. Related to this cause was the unplanned expansion of education at all levels but especially the opening of endless English departments in colleges and universities that offered English courses taught by teachers who had little or no preparation for teaching it. Finally, I have tried to show how CLT, touted as the panacea to all problems by ELT theorists and experts, failed miserably when applied in Bangladesh, since its application was ill-conceived, partial, rushed and imposed by distant powers and their native informants, since neither the classroom teaching situation nor the testing method reflected CLT goals adequately and since it contemptuously discarded traditional ways of teaching English that had been tried and tested in the subcontinent for more than two centuries and that had evolved over time.

Everyone involved in English Studies – whether from what is now dubbed the 'literature stream' or from the language one – must surely be concerned at the malaise evident in the test results discussed earlier. Everyone thinking about improving the English language learning-teaching situation must surely revision the way we

must now deal with English in our part of the world. What, then, can be the way out? I offer below a number of suggestions, based on my decades of teaching experience in the country and learning experience acquired from stints in teaching undergraduates in Canada and the USA as well as my reflections on the issue over the years.[10]

First of all, positive features of the older methods employed in teaching English that teachers have known and enforced successfully for over two centuries must be identified and reinforced. To dismiss or ignore the earlier centuries of English education in the country entirely is too arrogant and irresponsible move. One of these positive features is the use of literary texts for learners. The use of such texts had succeeded noticeably in attracting learners in the past and had been seminal for what historians have labelled as the Bengal Literary Renaissance. As the (West) Bengali literary critic Jasodhara Bagchi (1977) pointed out in a book on Shakespeare's influence on Bengal in the nineteenth century, English literary classics were key to being the 'the harbinger of a secular outlook' (p. 150) as well as a means of freeing 'the colonial psyche from the domination of mere "knowledge"'; indeed, they were what 'gave free range in the sphere of the imagination' (p. 152). For sure, the play of language in literary texts stimulated the thinkers and writers of the Bengali Literary Renaissance so that not only were they instrumental in the efflorescence of Bengali literature, but they also became immensely resourceful in using the English language for, among other things, clamouring for emancipation and claiming freedom from the foreign yoke. The British, as evident from Macaulay's famous Minute, had conceived of English as a way of making good colonial subjects, but the language in India had developed in such a way that it developed a trajectory of its own in the subcontinent and led to the empire writing back, as it were, and using English as a weapon in the campaign for political emancipation.

But of course literary passages should be introduced through a graded scheme so that they start appearing in textbooks in the final years of schooling and in HSC passages.[11] One way in which this can also be done is translation, a feature that was also a key to learning English in India for many generations. Rabindranath Tagore, the great poet and educator of Bengal, certainly felt that translation was an excellent way of developing English language learning skills. This was something he had divined from his own experience. Anyone who has studied any of the major biographies devoted to him knows that whenever traditional forms of teaching failed to attract the child Rabindranath, his tutor would set him tasks of translation. These often intrigued him so that he accomplished his task speedily. In the process he appeared to have embarked on a course that would not merely enable him to be proficient in the English language but also acquaint him with writers and genres that would impact on his imagination in powerful ways. Translation, his example thus suggests, can be a spur to the learner's imagination and a very effective way of

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[10]This part of my paper depends extensively on an earlier one. This paper, titled 'English, the Language of Power, and the Power of Language', was published in *Harvest* (see below).

[11]In fact, this has already happened in the new English HSC course book, for the older English text, developed according to ELT principles and critiqued extensively – see my paper 'Using Postcolonial Literature in ELT' cited above as an example.

learning. No wonder, then, that for the students of the school that Tagore had set up in rural *Shantiniketan* – from which men as outstanding as the Nobel Prize winning economist Amartya Sen and the brilliant film director Satyajit Ray graduated – he made translation a central learning activity. It was for this reason too that he devised translation lessons for students learning the language in his school through primers such as *Anubad Charcha* in Bengali. This was a work that he later translated and reconceived as the English book titled *Selected Passages for Bengali Translation* in 1917.

Two related points can now be made in revisioning the teaching of English in Bangladesh for our time in the wake of the diminished capacity to teach the language effectively that appears to have set in after Bangladesh's independence. The first is that we must learn from best practices – whether it is GTM or CLT. The second is that we must make use of the kind of experience Tagore drew on in conceiving English lessons for his students to revamp the pedagogy instead of aping British ELT pedagogues coming to Bangladesh with quick-fix solutions and then departing the land after leaving a trail of linguistic devastation, so to speak, in their wake.

Here, however, it may be pointed out that there were English educators who, unlike the fly-by-night 'experts' that I castigated earlier, had come to the subcontinent and conducted research for quite a while before coming up with recommendations for language learning. A case in point is Dr. Michael West, an Englishman who had come to Dhaka in the 1920s to become Principal of the city's Teachers' Training College at the end of the decade. The research he did during his stay in Bengal led him to the conclusion that graded readers and wide-ranging reading exercises were the solution. The implication for us is that in a learning environment where students have little opportunity to read the language, they have to be exposed to a lot more reading than was given in the textbooks produced under the ELT dispensation in the 1990s and the first decade of the new millennium. West implied that extensive reading was the key to moulding learners – how else would they learn the words, the idioms, and the unique syntax of a language? For certain, the bite-sized passages of the ELT textbooks I referred to above were never enough, as the test debacle proved to us in the English department a few years ago; and given the issues of the 2002 textbooks also discussed above, the current set of textbooks need to be thoroughly evaluated. To come back to West, it is the kind of work he had done on the subject that we can turn to in revisioning English teaching methods in Bangladesh.[12]

While I have been quite severe on ELT gurus and imported CLT methodology imposed weakly on Bangladeshis since the 1990s, it is time for me to declare that I feel that ELT itself is not to be blamed. As a literature teacher who was trained in teaching composition during his graduate teaching assistant years in two Canadian universities, I have always appreciated what I learnt about reading and writing from English Readers and Writing Handbooks as well as workshops and talks. I have also lamented the way we were taught English without receiving any kind of training in

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[12] See the Richard Smith edited *Teaching English as a Foreign Language 1936–1961: Foundations of ELT* (London: Routledge, 2005) for more on West's pedagogy.

reading and writing skills as undergraduate students of the University of Dhaka. Because ELT researchers have over decades done solid work on teaching methodology and have focused in innumerable ways on classroom teaching, it would be foolish to ignore the many decades of accumulated experience as well as the expertise of ELT practitioners in this respect. The kind of empirical research on language teaching they have carried out diligently has surely a lot to offer anyone thinking about revisioning English Studies in Bangladesh at this time.

However what I am certain is that we need to make use of such research and expertise from our location and with a postcolonial sensibility. After all, we are all involved in teaching a language that has been deeply involved in British imperialism's expansionist mode and that is still very much a conduit of globalisation's imperial encroachments. We need, in other words, to develop a critical pedagogy based on critiques of any package solutions imposed from above or from donors who have their interests more in mind than our own ones. We need, in effect, a postcolonial pedagogy where language education can benefit from critical theory as well as the reading of postcolonial writing, something I feel is sadly lacking in the ELT practitioners I come across regularly in our country. And yet since Edward Said, many teachers of English have felt that they should teach the English language with an awareness and sensitivity derived from their location that would allow them to interrogate structures that may be imposed on them as one more attempt to hegemonise them with apparatuses at the service of capital/power. Our students must be trained, therefore, to do critical discourse analysis and be conscious of discourses of power that affect language acquisition and usage, although of course, logistic realities such as big classes, inadequate resources and poor teacher training will make this task difficult to achieve.

One way of developing an English language pedagogy suited to our needs and avoid overreliance on Western ones is not only to learn from the history of English education in Bengal but also to benefit from the English language policy programmes in a country like India. My frequent visits to some parts of India tell me that the country has done reasonably well in developing and refining GTM methods to suit the needs of the age. Indian graduates from schools using 'traditional' methods and examination systems fare reasonably well in professional life and are able to use the language effectively because of the English language learning culture that has evolved there over time. Unlike India though, Bangladesh is a monolingual country, and despite the shared legacy of colonialism, post-independence experiences and the economic realities of these two countries are certainly different, therefore, as well as cross-country studies, more research is needed at the national level.

There are other ways too that must be explored in revamping English language learning and teaching in Bangladesh. Why do we not also learn from the textbooks and teaching methods deployed by English-medium schools of Dhaka and Chittagong who are graduating students who seem to be doing so well in 'O' level examinations and IELTS and TOEFL tests? Why must we ignore Bengali while teaching English in the classroom and why should we not teach grammar to our students so that they know the differences between Bengali and English grammars that affect their acquisition of English?

Ultimately, we must learn from our past mistakes and from the history of English language teaching in the country; keep track of best practices and the latest research in English language pedagogy, not only in the West but also in our neighbouring countries; and come up with plans for English Studies that will work, given the circumstances in which we learn and teach. We must, of course, revision English for our time and come up with a curriculum suited to our needs. The time to do so, of course, is now. The 2014 University of Dhaka test results tell us that the bell tolls for us English language teachers here and now.

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Chapter 14
Globalisation, Migration and Knowledge Generation: A Study on Higher Education Institutions in Bangladesh

Shahidur Rahman

Abstract There has been a marked transformation in the pattern of international migration since the 1980s, a shift of highly skilled migrants from developed to developing countries leading to brain gain from brain drain for the latter region. While skilled migration is now a well-documented research area, brain gain is still an underrepresented area. In order to understand the culture of brain gain, this research has studied the pattern of return migration of academics in Bangladesh. In this qualitative study, a group of returned academics working in private universities in their home country have been chosen through purposive sampling to participate in semi-structured interviews. The key objective of the study is to explore the factors involved in the return migration of academics to Bangladesh. The paper also examines the desirable outcomes of the academics' return to the home country. The research findings indicate that in recent years, private universities have created opportunities for migrant academics to come back to their home country, and both instrumental and altruistic values were considered in their decisions to return. These academics are eager to make productive contributions and want to become agents in the process of raising the quality of higher education in Bangladesh.

Keywords Brain drain · Employability · Higher education · Migration

Introduction

Globalisation has had an immense impact on every aspect of human life including the flow of people from one country to another. Each year, more than 2.5 million people migrate from Bangladesh (Joarder & Hasanuzzaman, 2008) to other countries in search of opportunities for further study, employment or temporary/permanent domicile. The economic growth and development of Bangladesh is highly influenced by this international migration – the total amount of remittances from Bangladeshis

S. Rahman (✉)
Department of Economics and Social Sciences, BRAC University, Dhaka, Bangladesh
e-mail: shahidur@bracu.ac.bd

abroad was US$15,316.91 million in 2014–2015 (Bangladesh Bank, 2016). In spite of such economic gain, the migration of highly skilled professionals has led to the loss of qualified manpower in countries that export manpower (Teferra, 2000). Unfortunately, there is little data on the economic impact of brain drain on Bangladesh; however, it generally appears that the out-migration of highly skilled professionals can be characterised in terms of decline in overall economic growth rates due to the loss of human capital, as a significantly negative phenomenon retarding the development of the home country (Rahman & Khan, 2007).

However, in more recent times, the phenomenon of brain drain in Bangladesh has been reversed to some extent by the return of academics to their home country (Iredale, 2005; Siddiqui & Abrar, 2002). It is worth mentioning that the terms 'brain drain' and 'brain gain' are relative, and what is brain drain for one is inevitably brain gain for another. This paper studies the return of academics, who bring back their skills, knowledge and resources to their home country. The opening of private universities has raised enthusiasm among Bangladeshi expatriates who can now consider returning home to the prospect of suitable academic positions (Wadood, 2006). These universities have paved the way for highly skilled migrants to return to Bangladesh by introducing a politics-free academic environment and offering lucrative salary packages. Against this background the central questions underlying this paper are: (a) What are the factors for the return migration of academics in Bangladesh? And (b) what impact does the return migration of academics have on the higher education of the country?

Living and working in developed countries as highly skilled migrants have been the norm so far. Whenever a migrant makes the decision to return, people around them are usually surprised because well-wishers around them often do not understand the logic behind their decision to return, since the host country ensures financial security, better living standards and quality education for children. Returning is considered irrational: an act of madness. Since a very limited number of studies have been conducted in this field, it has been difficult to understand the intentions of their return to the home country as well as their impact on the education sector. This study explores this relatively under-explored area in migration literature; to the best of the researcher's knowledge, no comprehensive research has been done in Bangladesh that focuses exclusively on the nature of return migration in a particular profession.

In the following sections, first of all, the concept of 'globalisation' has been discussed from the migration point of view by conceptualising brain drain, brain gain and their impact on the society. The second section provides an overview of Bangladeshis' brain drain in cross-border movement as well as of the return migration of highly skilled professionals. The next section discusses the methodology of this research: how the data have been collected and processed and the demographic and socioeconomic characteristics of the respondents. Finally the findings of this study are presented – reasons for return and their contribution to higher education – followed by the issues that need to be addressed.

Globalisation and the Movement of Brain

Globalisation is now an all-familiar word that has taken the attention of every aspect of life in both the academic and nonacademic world (Koh, 2005; Muqtada, Singh, & Rashid, 2002). It has become a central theme of the media, academia and research, as well as in national and international policy making. There are a number of approaches to studying globalisation. One way of analysing globalisation, from the perspective of migration's role in knowledge generation, is the process of 'brain drain' from poor to rich countries, as argued by Hannerz and Randeria (cited in Scholte, 2004, p. 11). This approach – the impact of globalisation on the movement of skilled academic professionals – is the key concern of this paper. For a better understanding of skilled migration and its impact on society, it is however necessary to first critically consider the concepts 'brain drain' and 'brain gain' or 'return migration'.

Brain drain refers to a geographical exit upon the failure of the state or other institutions to deliver well-being and security (Hirschman, 1970). It can be conceptualised as 'Human Capital Flight' that results in the depletion of the intellectual or professional resources of a nation (Jamal, 2011). The introduction of a skill-intensive immigration system by the developed countries has accelerated the process of brain drain (Gibson & Mckenzie, 2009). By 2000 there were 20 million highly skilled immigrants living in the OECD (Organisation for Economic Co-operation and Development) member countries, a 63.7% increase in 10 years against and only a 14.4% increase for unskilled immigrants (Beine, Docquier, & Rapoport, 2008). Although the migration of skilled professionals has had a generally positive impact in the OECD nations, it has produced a harmful effect in developing countries as they lose out on the relatively greater contributions to total output by high-skilled workers (Miyagiwa, 1991).

Johnson and Patinkin presented their argument on the impact of brain drain using two different approaches (cited in Rahman, 2013). From the internationalist approach, Johnson (1968) argued that the world has benefitted due to the cross-border movement of human capital for two reasons. First, people have the freedom of choice to build up their career, and second, the countries are in competition to attract skilled people. The nationalist approach, as argued by Patinkin (1968), is concerned with the process of blocking brain drain in middle income countries. This could be done by developing a spirit of identification with the native people and setting up 'centres of attraction within them to create critical masses so that those centres are prepared for the international competition for human capital' (Patinkin, 1968, cited in Rahman, p. 2).

A significant change was reported to be occurring in the migration literature since the 1980s, a shift from brain drain to brain gain or reverse movement where people come back to their home countries. However, while skilled migration is now a well-documented research area, return migration is still an underrepresented area. Return migration is often referred to as return to the place of birth (Gmelch, 1986), which can be linked with a planned, short-term movement or alternatively as an

outcome of disappointment (DaVanzo & Morrison, 1981). For a long time, return migration was defined as the last stage of the migration project, in which migrants came back to their home countries with skills and money acquired abroad.

Siddiqui (2005) identifies three types of return migrants: traditional returnees, short- and mid-term returnees and transnational migrants. Traditional returnees come back to their places of origin for good after acquiring skills and knowledge abroad. Short- and mid-term returnees, in Siddiqui's analysis, are those who return for a reasonable period of time but are committed to staying in and retaining their domicile in their host country. During their stay at home, this group of returnees contribute to the development of their home country, using the tangible and intangible resources available to them. The third type of return migrants, transnational migrants, comprises those who work in both the country of origin and their host country and have stakes in both places. They are involved in social or economic activities in two places and work as social agents linking the common interests of these different places.

Return migration has been evaluated in the context of the different approaches of international migration theories – neoclassical economics, the new economics of labour migration, structuralism and transnationalism (Cassarino, 2004). According to the neoclassical approach, return migration occurs as the result of failed migration experiences in the receiving countries; one is expected to return to the sending country when one has failed to take advantage of the opportunity to receive higher wages or earnings abroad. In contrast, the new economics of labour migration views return migration as the outcome of successful migration experiences in the host countries. Whereas in the former two approaches, return migration is determined by the migrant's personal or individual experience; in the structural approach, the key concern is for the returnee to readjust with the changing social context in the home country. According to the transnationalist approach, returnees are in a position to mobilise the resources and facilitate reintegration (Velikonja, 1984) while living in both the host and home countries. With the exception of the neoclassical economics approach, these types of return theories are evident in this research, but the most dominant form is structuralism. Before going on to explore the application of these theories in Bangladesh, it is essential to understand the nature of brain drain and brain gain in the country, which is presented in the next section.

Brain Drain and Return Migration in Bangladesh

Historically, international migration started during the British colonial regime in the eighteenth and early nineteenth centuries in Bangladesh. During this period, British ships carried goods to and from Kolkata (then Calcutta) and different parts of the world. People originating from Sylhet were absorbed in the dockyards of Hooghly near Calcutta, while some joined the British merchant navy (Siddiqui, 2003). They jumped ship at any opportunity, and in this way reached a number of western countries including the present-day USA and UK. This group of people is considered

Table 14.1 Estimated number of long-term Bangladeshi migrants

Destination countries	Number of migrants
UK	500,000
USA	500,000
Italy	70,000
Canada	35,000
Japan	22,000
Australia	15,000
Germany	5000
Spain	7000
France	3500
Netherlands	2500
Switzerland	1400

Source: ILO (2014, n.p.)

to have pioneered international migration to the West. Currently two types of voluntary international migration patterns can be observed. The industrialised West is the destination for one group of migrants, while another group heads for Middle Eastern and Southeast Asian countries. In the industrialised West, most Bangladeshis arrive with a student visa, later secure jobs and become citizens of their host country after successful application for immigration. Some enter as highly skilled migrants, while others settle in the West through family reunification programmes.

Bangladesh's position in the brain drain value rank is 113 (out of 144 countries), and it was rated at 2.8 on the 7-point scale (1 = no, brightest normally leave to pursue opportunities abroad, and 7 = yes, many opportunities are available within the country) (Rahman, 2013). The emigration rate of the tertiary-educated population rose to 4.3%, among which 6.5% were physicians trained in the country (World Bank, 2000). About 510 teachers are on extended or unapproved long-term leave from 34 public universities of the country who are considered as the candidates of brain drain (Manab Jamin, 2014). According to the national agricultural research system, 285 scientists left their profession, and the majority of them went overseas for better opportunities (Parvez, 2011; Ahmad, 2012). There is no data on the number of brain drain migrants; however, one means of calculating this could be to find out how many highly skilled Bangladeshi migrants have been living in developed countries for a long time, because as mentioned above, the developed countries are the main destination for such Bangladeshi migrants.

According to Table 14.1, migrants from Bangladesh are mostly inclined to live permanently in the USA and European countries, in particular in the UK. Similar to the absence of concrete data on brain drain, no systematic database has been developed that provides information on the extent of return migration in Bangladesh. One channel through which we get some information is the Bureau of Manpower Employment and Training (BMET), established in 1976 by the Government of Bangladesh for the purpose of planning and implementation of strategies for the

proper utilisation of manpower in the country. The BMET keeps records of the flow of migration by country of employment, overseas employment by profession, and remittances earned through the wage earners' scheme. Unfortunately, there is no comprehensive information on return migration-year-wise number of returnees, nature of host country of these returnees or any economic impact on the home country. Nor are there alternative sources, such as private or non-government agents, who keep records of return migration.

However, one research institute – Refugee and Migratory Movements Research Unit (RMMRU) – has produced a number of research studies on return migration. RMMRU, the winner of the Migration Sector Development Award 2008, is a useful source for scholars interested in conducting research on return migration in Bangladesh. RMMRU researchers Siddiqui and Abrar (2002), in a project on the contribution of Bangladeshi returnees, applied one strategy to find out the number of returnees. They looked at the total number of Bangladeshi workers deployed abroad collected by the Ministry of Labour in 1999. Although it is difficult to get accurate statistics on the flow of return migrants to Bangladesh, RMMRU presented an estimated number of current deployments in the various receiving countries. According to the study, the total number of deployed workers through the official channel was 2,909,972, and the number of workers working till 1999 was 1,922,200. This means that a total of 987,772 workers had returned home for different reasons including completion of contracts. However, this study does not inform us about the return of professional or highly skilled migrants, let alone those in academic professions.

Methodology

The idea to allow different non-profit philanthropic organisations to establish fully fledged universities was first mooted in the first half of 1981 by the highest-level state functionaries (Alam, Haque, & Siddique, 2007). Due to socio-political upheavals in the 1980s, it took almost a decade for the actors (both state functionaries and potential entrepreneurs) to make this concrete in terms of a parliamentary act. Towards the latter part of 1992, the parliament passed the Private University Act of 1992, and the door was opened for a new system of higher education in Bangladesh. According to the University Grants Commission (UGC), there are 91 private universities in Bangladesh (UGC, 2016). Among them five universities were selected for this study considering quality of education, how old they are, capacity of institution and their position in the country. The chosen universities were BRAC University; North South University; Independent University, Bangladesh; East West University; and American International University of Bangladesh (Table 14.2).

In this qualitative study, two methods – semi-structured interviews and documentary research – were employed for data collection involving a number of private universities in Dhaka. To find returned migrants as subjects for the study, the researcher looked at the resume of faculty staff on the universities' websites. The

Table 14.2 Overview of the returned academics in the study

Main characteristics	Number of respondents
Sex	
Male	23
Female	2
Age (years)	
25–35	3
35–45	10
45–55	7
55–65	5
Family status	
Married with children	21
Married without children	4
Length of stay abroad (years)	
10–20	17
>20	8
Education status	
Doctorate	23
Masters	2
Citizenship status	
Dual citizenship	21
Only Bangladeshi	4
Return status	
Permanent	21
Temporary	4
Occupation status	
Before migration	
Student	11
Academic	9
Development officer	5
After migration	
Academics/researcher	19
Lawyer	1
Engineer	6
As returnee	
Academics	25

researcher then sent letters inviting returned academics to participate in this study. Among them, 25 returnees were selected for interview on the basis of 3 criteria: (a) the length of their stay in their host country was for more than a decade; (b) they were employed as faculty members in their host country as a return migrant; (c) they worked in their current institutions as full-time employees.

The average length of each semi-structured interviews was 1.5 h. I went to each respondent's workplace to conduct the interview with a research assistant who took

notes and in some cases recorded the conversation. The researcher determined the issues discussed, although the discussions followed on to other topics in these semi-structured interviews depending on the answers provided by participants. This allowed flexibility for the researcher and participants, as well as for in-depth discussion. There were no follow-up interviews. The main topics of the interview sessions included reasons for their return, the preparation process for return, immediate problems faced after return, ways to overcome reintegration problems and potential policies to minimise reintegration problems. The entire conversations were recorded on tape, and attention was given to transcribing all information and translating it accurately into English. As part of the study, the researcher also examined publications of national and international institutions working on migration.

This study shows that among the respondents, three groups of people migrated – students, academics and development officers – for the purpose of higher education and training, and that after completing their studies, such migrants started working abroad in various positions (e.g. researcher, university faculty staff member, engineer and lawyer). The majority of these migrants had already attained citizenship in the host country; however, those who did not attain citizenship had also been employed in their expected fields. The returnees were largely married males, with most aged 35–55. They had been back working and living in Bangladesh for less than 10 years. The average duration of their stay in their host country was around 16 years. Another characteristic of the respondents is that these academics returned to Bangladesh from developed countries such as Australia, Canada, China, Japan, Sweden, the UK and the USA. The main purpose of migration for these academics was higher education, and after their studies, some of them had worked abroad, while others had returned to their home country.

Reasons for Return: Pull Factors

It is often believed that every migrant, consciously or unconsciously, wants to live in their place of birth and that such a desire is natural (Yong & Rahman, 2013). The question, 'Will I go back?' is a common topic among members of immigrant communities. If return is not possible, migrants often try to work out justifications for staying, even if they are not happy with the decision. The key factor that had motivated the participants of this study to return to their home country was the advent of the research orientation in private universities, and this section looks at how this had opened up opportunities for them.

Among the respondents, three-fourths of returned academics believed that the most significant reason for return was the inception of private universities – the first private university in Bangladesh was established in 1992 (see Kabir & Webb, this volume, for more on the establishment and provision of higher education through the private sector). The returned academics found that the advancement of knowledge

through research is an essential function for the private universities where they are employed. The World Bank (2000) report states that public universities in Africa and Asia devote up to 80% of their budgets to personnel and student maintenance costs, leaving few resources for the establishment of sustained research activities. In contrast, as per the conversations with the returned academics in this study, the leading private universities allocate a portion of funding to the research, and faculty research is evaluated in terms of publications in peer-reviewed academic journals. All members of the academic community are provided with proper training, resources and support as research is conducted for the benefit of humanity.

This shows that private universities have now offered a workplace where returnees feel comfortable to do their jobs. It has created an opportunity for the returned academics to make a greater contribution to their home country. In this research, greater contribution, as argued by the respondents, refers to meaningful work, intellectual challenge, the desire to do something for students, as well as a sense of belonging or identity. Some returnees who were already well-established in their own fields abroad came back to Bangladesh to make a change, including an academic from Harvard University who came back to Bangladesh to join a private university as pro-vice chancellor. He explained:

> Just taking classes and writing papers is not a contribution to me, maybe a contribution but not challenging work. Can't make any change in the society. What I realised is that working to build up an international standard university in Bangladesh is a much more meaningful contribution.

Another factor with private universities that had motivated returned academics to come back to their home country was the perceived transparency in the education system. Lim (2001) noted that in developed countries, promotion is based on academic merit and conducted in a timely and transparent way, while in developing countries, the procedure is often clumsy, and political factors matter more than academic merit. 'Favoritism and patronage contribute to academic inbreeding that denies universities the benefit of intellectual cross-fertilization' (World Bank, 2000, p. 24). However returned migrants in this study chose to return home when they witnessed that the performance of academics rather than power weighed most in the appointment and promotion decisions.

Academic salaries have always been a contentious issue, especially when persuading talented graduates and postgraduates to opt for a higher education career rather than one in the private sector. Low starting salaries deter people from entering academic careers. The research findings indicate that remuneration packages in private universities are sufficient to ensure that staff members devote their energy in their service, which provides a comfortable standard of living even after retirement. The returned academics might not come back home if faculty pay was low, and pay increases were governed by bureaucratic personnel systems that reward long service rather than dedication. As a result of a standard remuneration package, they came back to devote a significant amount of energy and time working in private universities. According to a returned academic:

> I wanted to settle abroad for financial solvency. In Bangladesh I found my senior teachers struggling to maintain a decent living standard. You can make money as a government employee but not through the proper channels. When I finished my master's degree there was no private university; this is the sector that offers a good salary – if it had existed then, I might not have lived in Australia for a long time. The salary structure is attractive in the private university so that you could lead a decent life.

However, it was not only the salary package but also the politics-free workplace offered by private universities which worked as a pull factor to the returnees. The imposition of the British model in the subcontinent created higher education systems which were characterised by the features of the state supervising model, which limited the power of the government and upheld the autonomy of the higher education system (Vugth, 1994). In public sector higher education, however, this was not the case – according to the report of The Task Force on Higher Education and Society, prepared by the World Bank (2000), 'the tendency of politicians to intervene in higher education left many institutions hostage to factional policies, with decisions on student selection, faculty appointments and promotions, curriculum design, and similar matters being made on political grounds rather than on merit' (p. 63). On the other hand, private sector higher education enjoys a politics-free environment and to a great extent motivated the academics to return to Bangladesh.

The research also revealed that the other reason for their return was the promise of a better social life in the home country. The returnees desired to spend quality time with their relatives, celebrate social and religious festivals and reawaken a sense of belonging. After living overseas for more than two decades, some of them had suffered an 'identity crisis' – despite having gained citizenship of the host country, they did not find themselves 'connected' with the society they were living in. Nor were they interested in the social and cultural life of their host country. Instead, they were eager for news of their home country and excited to participate in discussion of Bangladeshi politics, culture, economy and sports. For example – one returnee said, 'If I do not visit Bangladesh I feel that I have done something terribly wrong which is not forgivable'. Another returnee said: 'The decision to return became easier when I realised myself not as an American after living 28 years, but as a Bangladeshi'. They felt comfortable to identify themselves as a Bangladeshi, and it was this nationalistic sense of belonging that had pushed them to return to their home country, and the new employment opportunities in private universities made it possible.

The research findings, as mentioned above, show that instrumental factors such as the establishment of private universities were important in motivating migrant academics to return. It created spaces for them to fulfil their altruistic desires such as making a visible contribution to the home country, acting on their emotional attachment to family members, supporting their children's adoption of the cultural values and accompanying their parents. For instance, a returnee who worked for Intel Corporation in the USA came back to Bangladesh on leave to take care of his parents temporarily. At one stage, he started working in a private university as a part-time teacher. While working in the university, the returnee enjoyed the

profession and became so involved with the students that he lost interest in returning to Intel in the USA.

The job opportunities at the private university have also opened ways for returnees to fulfil their desires regarding their children's cultural orientation. Usually immigrants expect that their children should be accustomed to the culture of Bangladesh. Some returnees found it unfair to their children, because it is the parents (the returnees) who were brought up in Bangladesh, not the children. To avoid this situation, returnees (even though less than a quarter) argued that jobs at a private university made their life much easier for their children's cultural orientation. One of them said, 'I was scared and worried about my children… if you live there (abroad) you might lose the next generation'. Another returnee said, 'I want my children to speak in Bangla, dress up like Bangladeshi and more importantly be like us'.

Academics' Return to Home Country: Desirable Outcomes

The opening of private universities has raised enthusiasm among Bangladeshi expatriates who now can consider returning home to the prospect of academic positions (Wadood, 2006). The above-mentioned findings indicate that these universities have paved the way for highly skilled migrants to return to Bangladesh by introducing a politics-free academic environment and offering lucrative salary packages. The desirable outcomes for the universities employing returned academics have included research collaboration and the use of effective teaching methods. They are effective in the continuous development of private universities in Bangladesh, as a successful returnee explains:

> Private universities are now a huge factor in attracting the returnees… if you have a PhD, you can get a job here, although it's competitive now in top private universities. It's not fair if anyone abroad says I want to come back but [have] no opportunity here. Definitely if you did your PhD in technical side like higher physics, you don't have scope here but in social sciences, business and even in sciences to some extent you can manage a job. I will say, the new millennium is a golden age for the academics in Bangladesh compared to the professions… just after return you can get a job with a good salary so that you can maintain an upper middle class living standard.

Doing research in Bangladesh is sometimes difficult due to lack of logistical as well as financial support. Aware of such dilemma, the returned academics now conduct research in various fields, sometimes funded by the government or other local agencies as well as international sources. Using their networks, they now work with their former colleagues in the host country to prepare research proposals, apply for grants, exchange ideas and arrange guest lecturers and other research-related work.

Table 14.3 shows how returned academics of BRAC University conducted research in collaboration with development partners who were sometimes former colleagues from their own overseas study or work experience, in the areas of capacity building for good governance, gender-based violence, urban slums and social protection. For example, a returned migrant at BRAC University leads a

Table 14.3 Summary: contributions of the returnees after interview

Workplace of returned academics	Research area	Research partner
Independent University, Bangladesh	Population study	United Nations Population Fund
	Public health	McMaster University, Concordia College
	Water	Department of Natural Resources and Water, Qld., Australia
BRAC University	Capacity building for good governance	Asian Development Bank, Monash University
	Gender-based violence	Department for International Development
	Religion	Georgetown University
North South University	Bilateral trade	University of Wisconsin-Milwaukee
	Public health	Concordia College

research programme funded by UNDP to test out new strategies to address the problems of urban poverty in slums. The study sought to create sustainable livelihood pathways for the poor, provide access to basic services and develop systems of collaboration and governance that could facilitate a more empowering future for slum dwellers in urban Bangladesh. On their recent return, a group of researchers at Independent University, Bangladesh, along with academics at Concordia College, USA, were studying population and public health. These returnees had facilitated the development of a culture of research in their institutions and had attracted funding from abroad.

While living as migrants, returnees had invariably gained a range of skills as postgraduate students, academics, researchers or employees. One of these skills was in lecture delivery and the use of various teaching methods. Returnees later applied these different methods to their classes in Bangladesh, deviating from 'conventional' modes of teaching and garnering positive student responses to the change. Such returnees released the students from the traditional way of delivering lectures, which is often time- and energy-consuming for teachers and involves paying little attention to students. They introduced technology in the presentation of lectures, combining PowerPoint presentations, documentary films, classroom debate, teamwork, field visits and other techniques and activities. One returnee had shared his working experiences at Intel with students by engaging them in solving the problems he faced there, and in this way, students were able to develop competitive skills. Another returnee claimed that his lecture delivery method was perceived as uncommon in Bangladesh, saying,

> I introduced my own style of teaching in my classes. I treat my students as friends and believe that we are all fellow learners. The class continues by dialogue, discussion, exchanging opinions – an innovative style and a different philosophy of teaching. Teaching is not a job to me; it's a vocation, life-style, choice. It is my desire to share with a group of young learners what I think, read and how I see my life.

Rahman (2013) in his qualitative research on the return of professionals in private universities showed that returnee professionals played a significant role in private universities attaining certain standards of education. One example is a professor and vice-chancellor of a major private university in Dhaka and one of the leading private universities in Bangladesh. After working and studying at Harvard University, he returned and has since been contributing to the development of a competitive private university first as pro-vice chancellor and now as vice chancellor. Another example is an academic who successfully developed a collaborative research relationship with a number of US and UK universities hosting climate change and community-based adaptation centres (Siddiqui & Abrar, 2002).

Returned academics can contribute towards strengthening the university education in their countries of origin. Rahman (2013) argues that returnees can introduce new ideas, techniques and technologies to the students and colleagues in their home countries. The author further stated that returned academics can play the role of career promoters for students in a number of ways such as providing important information about scholarships abroad, training the students to do research and writing reference letters to facilitate acceptance and enrolment at overseas universities and to secure jobs abroad.

In this study the returned migrants are also aware of the course content offered in their universities. How to present updated information to the students is one of their concerns. In a world undergoing rapid changes, there is a perceived need for new visions and paradigms for higher education. To achieve this goal, the returnees have felt it necessary to update the course content, adapting quickly to the changing demands of Bangladeshi society and the global environment.

Conclusion

As we have seen, private universities in various ways have provided a sustainable and convincing launching pad for the return of highly skilled knowledge workers to Bangladesh. It has motivated migrant academics to return, which has fulfilled their instrumental and altruistic desires. On return desirable outcomes have been produced by these returned academics, the extent and significance of which of course will depend on the duration of their stay. In this context, Khadria (2001) argues that the effect would be greater if the returnee spent a reasonable time in the home country. In other words, return should be sustainable since return is the last step of the migration cycle (Black, 2005). To make it happen, the overall conditions of the home country should be organised in a positive rather than negative way so that returnees do not feel the need to leave again.

The Jamaican government, in collaboration with the International Organization for Migration (IOM), established a programme called the return of talent to encourage the return of Jamaican nationals abroad (Arowolo, 2000). If we analyse the reasons of return of Bangladeshi high-skilled professionals comparing them with those of returnees to India, China and Taiwan, we find a number of different

motivating factors. For example, Lehree's (2005) research on IT professionals, who returned to India, argued the return occurred as a result of financial recession in the USA and better policies offered by the Indian government. In another study Iredale (2005) found that the average return rate of Chinese studying overseas was relatively high, at about 33.3%, because of recent government policies. These policies included offers of assistance in setting up a business venture, waivers of business tax in high-tech industries, tax-free importation of materials and other incentives. The Science Park in Taiwan is full of returnees, who have been given cheap airfares, subsidised housing and subsidised education for their children and residences in areas with good facilities (Iredale, 2005). The governments of India, China and Taiwan have introduced development policies that have attracted migrants, and as a result, migrants have returned home to take advantage of offered incentives.

In contrast, the Government of Bangladesh has not launched any programmes yet to encourage and motivate highly skilled migrants to return home, and so far, as discussed in this paper, the contribution has been in the private sector of higher education. The Government of Bangladesh could establish an effective mechanism in support of donor agencies that would work to help potential returnees to reintegrate in their home country. If we were to make such returns sustainable and productive, adequate attention should be given to the needs of highly skilled returnees after their arrival in Bangladesh, particularly in the case of those returnees who desire and are determined to return permanently.

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Chapter 15
Governance of Private Universities in Bangladesh: The Myth of Institutional Autonomy

Ariful Haq Kabir and Susan Webb

Abstract The purpose of this chapter is to explore the expansion of higher education through the growth of private universities in the context of Bangladesh. The study explores these processes through a thematic qualitative analysis of the Private University Acts and Ordinance formulated by successive governments since the 1990s, which have dictated the governance and development of the private university in Bangladesh. This chapter traces the shifts in the governance system in the private universities in Bangladesh over a period of nearly 25 years and argues that the government developed a 'mix private-public' control of governance system in the private universities drawing on New Public Management (NPM) in order to control vested interests and political influences. This chapter further argues that the involvement of the state formally in the governance structure of private universities provides a new model of power sharing which has the potential to ensure that private universities can provide public good and circumscribes how these universities' vested interest groups use the private university as a tool for their private business interests.

Keywords Governance · Autonomy · Higher education · Private university

Introduction

Following the proliferation of neoliberalist ideas in the higher education sector, the development of a private sector in higher education emerged as a policy strategy worldwide (Tilak, 2006). Nowadays, private higher education has become one of the most dynamic and fastest-growing sectors around the globe (Altbach, Reisberg,

A. H. Kabir (✉)
Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh
e-mail: akabir@du.ac.bd

S. Webb
Faculty of Education, Monash University, Melbourne, VIC, Australia
e-mail: Susan.Webb@monash.edu

& Rummbley, 2010). However, private higher education in Bangladesh is not a new phenomenon since private sector provision in the Indian subcontinent in the then Bengal (now Bangladesh) can be traced back more than two centuries. During the medieval period and even in the British colonial period (1757–1947), many philanthropists established higher education institutes in Bangladesh, for example, Jagannath College, Mymensingh Ananda Mohan College and Sylhet Murari Chand College, with a view to serve society rather than to use them as businesses for profit (Kabir, 2013). Once Bangladesh became independent in 1971, most of these private colleges were nationalised in recognition of their contribution to the society. Consequently, most of these early private higher education institutes became leading national institutes in terms of accommodating large numbers of students and benchmarking quality in higher education from the 1970s until the late 1980s.

In the early 1990s, a new form of privatisation emerged following shifts towards the adoption of neoliberalist ideas in the higher education sector in Bangladesh and the enactment of the first Private University Act of 1992 (Kabir, 2010). This move helped in establishing a new kind of private university system in Bangladesh which saw private higher education become the fastest-growing sector in Bangladesh during the 1990s and up until the present. The first private university – North South University – was approved by the government in November 1992, just 3 months after the promulgation of the Private University Act of 1992 (Ahmad, 2004). From 1992 to the present date, permission has been given to 91 private universities, of which 5 were cancelled due to violations of the Private University Act (University Grants Commission, 2015). However, two of these are still conducting academic activities with special permission of the High Court (University Grants Commission, 2015).

Between 1992 and 2014, with view to streamline the administration of private universities and ensure quality in private higher education, the state introduced several changes to the initial Act of 1992 in the form of four legislations – the Private University Act of 1992, the Private University Act of 1998 (amended), the Private University Ordinance of 2008 and the Private University Act of 2010. The effects of these enactments have been twofold. On the one hand, the entire suites of acts have enabled the development of universities in the private sector; but on the other hand, these various legislations have assisted changes in state control over the private universities.

Arguably these shifts in the governance system of private universities in Bangladesh are similar to changes in other countries where neoliberal policies have been widely adopted to ensure the public accountability of the universities (Ranson, 2003). In this guise, a new kind of governance system has emerged within the universities worldwide, which is often referred to as 'new managerialism' or New Public Management (NPM). Within 'new managerialism', an 'output-driven' corporate type of managerial system has taken over the higher education system (Ward, 2012). Against this backdrop the current chapter traces the shift to changes of the governance system in the private universities in Bangladesh through an analysis of policy texts. In particular, this chapter explores how the governance system of private universities have become increasingly circumscribed by the state and external forces drawing on NPM and how external pressures have affected the institutional autonomy of private universities in Bangladesh.

   This chapter begins with a discussion of the literature that conceptualises 'new managerialism' or New Public Management as the predominant governance system in universities worldwide that has been adopted into neoliberalist policies. It then provides a brief account of the methodological choices used in this study. This is followed by an account of the governance system in the private universities in Bangladesh as set out in policy texts. Analysis of these texts (or Acts of Parliament and Ordinances from 1992 to 2010) identifies the shifts and changes in the governance system in the private universities and the implications for these shifts in the roles of the top officials of private universities. Finally, the chapter draws on the conceptualisation of New Public Management to discuss how changes in these governance systems have affected the institutional autonomy of the private universities in Bangladesh.

Conceptualising 'New Managerialism' in Higher Education

The rise of 'new managerialism' or New Public Management (NPM) systems have been marked as one of the most striking trends in the universities' management system around the world since the 1980s (Hood, 1991). Additionally, where universities have often enjoyed considerable autonomy, the growth of New Public Management has shifted the relationship of universities to the state, as well as the internal relationships between leaders, managers, staff and students. Although 'autonomy is contextually and politically defined' (Neave, 1988, p. 31), in general, it refers to 'self-government' (Tapper & Salter, 1995). Commonly this is understood to mean that the most significant concern related to institutional autonomy is ensuring an institution such as a university is free from external interference including the state (Mora, 2001). Consequently, autonomy preserves the right for the university to set up their own academic activities and to control their own standards, decide whom to accept as student, identify what they offer and how they should be taught, set up their own priorities and future plans and appoint their own staff based on professional judgement without external interference from the state (Farrant, 1987, cited in Tapper & Salter, 1995).

   However, the term 'new managerialism' often refers to attempts to impose managerial techniques, which are usually associated with the medium and large 'for-profit' businesses, onto public sector and voluntary organisations, thereby undermining professional judgement and autonomy (Deem, 1998). The central tenet of this change in public management and the voluntary organisation sector is a shift towards corporate accountability and administration rather than professional or occupational accountability (Hood, 1995; Ranson, 2003). The major components of the 'new managerialism' doctrine are as follows: 'hands-on professional management' in the public sector, explicit standards and measures of performance, greater emphasis on output controls, a shift to disaggregation of units in the public sector, a shift to greater competition in the public sector and stress on private sector style of management practice, stress on greater discipline and tight control in the use of

resources (Hood, 1991, pp. 4–5). Subsequently, 'new managerialism' has introduced new strategies not only for improving the efficiency and effectiveness of how public and voluntary institutions are actually managed but also a set of ideological assumptions about how universities should be run for what purposes (Meek, 2003).

The overall aim of NPM reform has been 'to ensure more accountability and efficiency in the management of academic institutions' (Altbach, 2005, p. 26). 'New managerialism' uses certain strategies including the use of internal cost centres, promoting of competition between the employers, marketisation of institutions and the monitoring of efficiency and effectiveness through the measurement of outcomes and individual staff performance (Deem, 1998). As Marginson (2008) also points out:

> The specific techniques, not all of which are included in every NPM reform package, include funding-based economic incentives, user-driven production, product formats, the pricing and sale outputs, entrepreneurial production, output monitoring and measurement, competitive ranking of personnel and institutions, performance management, performance pay, contracts with the incentives to partner with industry and commercialized research motivations and products, and systems of accountability and audit including contracts with the government that implement external controls. (p. 270)

Ward (2012) points out four major changes that have been brought into higher education institutions following the adoption of 'new managerialism'. Firstly, there is an emphasis on the use of private sector management practices with a particular focus on ongoing development in productivity and efficiency. Secondly, market-style incentives are used to reduce layers of administration regarded as government bureaucracy. This process involves high competition between the top officials engaging in entrepreneur environments in the universities. Through entrepreneurial practices, universities not only develop profit-making activities but also become business partners (Levidow, 2007). Thirdly, universities develop student-oriented behaviour where students' choice and satisfaction are put forward as the key principles of the university. Universities use many strategies and techniques to advertise specific programmes as unique and best. In order to appeal to the students, universities develop 'glossy promotional materials and sophisticated websites filled with air brushed photos of happy students, proud parents and distinguished faculty' (Ward, 2012, p. 54). Fourthly, within higher education institutions, a user pays system dominates, and a public responsibility centre management is introduced (Ward, 2012). Thus, different departments within a university are required to become accountable as semi-independent financial entities that self-manage the tasks they are given by the university by paying their own expenditure and costs.

Arguably this discussion shows that new managerialism or NPM is a particular managerialism form derived from *for*-profit organisations, which has come to dominate the governance systems of public, non-profit and voluntary organisations around the world and has weakened institutional autonomy and the role of the professions. In the research discussed in this chapter, the concept of new managerialism or NPM has been employed to understand how different governments of Bangladesh between 1992 and 2010 introduced changes in the governance system of private higher education. By the idea of the private university, the

government of Bangladesh refers to a type of academic institution that is structured as a charitable, trust organisation to provide higher education parallel to the public higher education that has not been established by the government but by an individual or a group of people or a charity organisation, who are education oriented (Government of Bangladesh, 1992, 2010). Such definition indicates that the development of the private university in Bangladesh originated from the idea of not-for-profit organisation, and therefore, it can be argued that the concept of 'new managerialism' or NPM is relevant to our understanding of the shift of changes of governance in the private universities in Bangladesh.

However, Marginson (2007, 2011) discusses the growing complexity of higher education systems, whereby systems can indeed be wholly for 'public good' or wholly for 'private goods' or a mixture of both and that these functions do not neatly match the sources of ownership or funding as public or private. In analysing the policy texts, to understand the effect of increased state control in a deregulated system, we draw on this idea that institutional ownership does not necessarily determine whether the university produces public or private goods.

Methodology

The methodological approach in this chapter is predominantly that of a case study within a broadly qualitative framework in which private universities in Bangladesh since 1990 have been selected as a case (Merriam, 1988). Within this case we looked at the Private University Act of 1992, the Private University Act of 1998 (amended), the Private University Ordinance of 2008 and the Private University Act of 2010 formulated by respective governments in 1992, 1998, 2008 and 2010. We used qualitative thematic content analysis to problematise the policy document analysis (Prior, 2011). The approach enabled a critical exploration of the complex interplay between the internal structures of the private universities as prescribed by the four policy texts and the external relationships between private universities.

In addition, to capture this interplay and the ideological assumptions involved in how private universities should be run, we also identified and thematically analysed two major reports that provided evidence of the debates within the state and civil society that took place during the development of the Act of 2010. We selected and analysed reports published by the non-government agency, Transparency International Bangladesh (TIB),[1] and the government agency, the University Grants

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[1] Transparency International Bangladesh (TIB) is the Bangladesh chapter of the Berlin-based Transparency International. TIB, as a non-government organisation, operates independently with a mission to strengthen participatory social movement in order to combat corruption and to establish transparent system of governance, politics and business in Bangladesh. In doing so, it has undertaken different research and advocacy programmes for policy changes and institutional reformations in Bangladesh (for reference, see TIB, 2012).

Commission (UGC),[2] after the most recent Act of 2010. These reports focused on how the state and non-state agencies perceived the crisis developing in the private university system brought about by the particular form of institutional autonomy created in the 1990s.

In the following two sections, we present the findings from the analysis of the Private University Acts and Ordinance formulated by different governments in Bangladesh between 1992 and 2010 to explore the shifts of changes of governance in the private universities. The analysis of the first section shows that the governance system of the private universities has shifted from one in which entrepreneurs had full control over the direction and activities of the universities to the situation today where private universities operate in a mixed deregulated and state-controlled system. The second section shows that in this mixed regulatory system, the internal management structure in the private universities has shifted towards a corporate-style management structure in line with the NPM approach common across neoliberal university systems (Ball, 2015).

Governance: Shifting from Entrepreneurs' Control to a Mixture of Deregulated and State-Controlled System

The global trends in the governance systems of universities are broadly concerned with the internal mechanisms of the decision-making process and the patterns of authority and hierarchy, for example, which include the relationship between the university as an institution and the perceptions and activities of university academics and the relationship between the university, the government and other external bodies (Marginson & Considine, 2000). In terms of the patterns of authority and hierarchy, in the Act of 1992, the founders, who had established the private universities, enjoyed outright power over the private universities. The founders could make all the significant decisions including recommending the top officials to be recruited in the private universities. As stated in the Act of 1992, 'The Vice-Chancellor [VC], Rector or Principal of any private university will be appointed by the Chancellor at the recommendation of the founders for a period of four years on such terms as will be fixed by the Chancellor' (Government of Bangladesh, 1992, p. 7584). According to the Act of 1992, faculty deans and other officers were to be recruited by the founder(s).

The early Act of 1992 also allowed the founders to construct any kind of administrative body to run a university efficiently. Indeed almost unconditional power

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[2] The University Grants Commission (UGC), which was established under the President's Order (P.O.) No. 10 of 1973, is the apex statutory body of the universities in Bangladesh. The UGC plays the role into coordination between the government and the universities in Bangladesh. The key objectives of the UGC are to promote and coordinate university education, to ensure the government grants for the public universities, and to protect the autonomous character of the universities (for reference, see University Grants Commission, 2009).

over the university was bestowed upon them in the Act of 1992: 'The founder may, with the prior approval of the Chancellor, constitute any other authority as he may deem necessary' (p. 7585) in order to manage and administer the university (Government of Bangladesh, 1992).

The early Act of 1992 also gave the founder(s) the right to set up any form of governance structure to run it how they wanted. For example, the founder(s) of a private university could form any administrative body to operate the university. As part of this, the founder(s) were entitled to form the syndicate, or the board of governor, or the regency council, or the trustee board, and consequently, this type of body became the normative and significant decision-making platform in the private university setting.

Other specific tasks were defined to be carried out by the syndicate or the board of trustees. For example, this body, 'with the approval of the Chancellor, can formulate statutes containing provisions relating to the syllabus, curriculum, study schedule, and administrative or other necessary functions of the university' (Government of Bangladesh, 1992, p. 7586). Moreover, by the Act of 1992, the governing body – the syndicate, or the Board of Governors, or the Regency Council, or the Trustee Board – formed by the founder was authorised to recruit the registrar, departmental heads and controller of examinations of the private universities. Along with the administrative tasks, through the Act of 1992, the governing body formed by the founders also managed and maintained the finances of the university. As stated in the Act of 1992:

> This fund, with the approval of the syndicate, the board of governors, the regency council or the trustee board as it must be deposited with any nationalised bank in the name of that university and money may be withdrawn from the fund in the manner prescribed by the rule. (Government of Bangladesh, 1992, p. 7586)

The analysis of the early Act of 1992 also shows that the head of the state (the President) was invariably included as the Chancellor of all the private universities, although the Chancellor usually did not have any executive power on a day-to-day basis in relation to the staffing, budget or the curriculum. The Chancellor was there more as a figurehead, although this honorary position had the potential to enable the government to check and balance the powers of founder(s) and provide advice if deemed necessary. The Act of 1992 states: 'The president of the people's republic of Bangladesh will remain the Chancellor of all private universities and he or any person authorised by him will preside over the convocation ceremony for awarding academic degrees and honorary degrees' (Government of Bangladesh, 1992, p. 7584). Therefore the private universities were set up with the titular head, a Chancellor, but for all day-to-day executive decisions, the founders could and did still make appointments and control the curriculum and general direction of the university.

Six years after the development of the first Private University Act of 1992, by 1998, the government began to exert its control. In setting out to expand the university system by opening up opportunities for private entrepreneurs, the Bangladeshi government appears not to have foreseen that a market-driven higher

education system would have its own agenda and might not develop in the way the government had hoped. In 1992, the government had regarded opening up to the market as a way of responding to new student demand and harnessing the entrepreneurial skills of some people. However by 1998 the government stepped in to control the activities of entrepreneurs in the private sector.

The findings of the Act of 1998 show that the Ministry of Education and the University Grants Commission (UGC) had their powers extended to include some aspects of the work of the private universities. The UGC, as an autonomous body, was established by the government in 1973 in order to ensure government grants for the public universities. However, when the numbers of the private universities dramatically expanded in the late 1990s, the role of the UGC was correspondingly expanded to include coordinating and promoting higher education and monitoring and maintaining the quality and standard of the overall higher education system (University Grants Commission, 2009). It is noted in the Act of 1998 that 'The government or Grants Commission can arrange to carry out inspections of a private university from time to time by an individual so authorized' (Government of Bangladesh, 1998, p. 5609). Following the inspection the government or the UGC could issue directives to undertake the necessary action within a specified time period. The Act of 1998 also stated that every private university would be mandated to provide reports, statements or information as demanded by the government or the UGC periodically or on request (Government of Bangladesh, 1998).

By 1998 the modifications introduced to the Act of 1992 were showing that private universities were becoming subject to 'new managerialism' and were required to be accountable to the government as well as to their founders. However by 2008, the degree to which the government had become involved in the private universities through the Act of 1998 was not considered enough to improve accountability and transparency of the private universities' activities. Consequently, the government developed the argument that the previous Acts of 1992 and 1998 were ineffective in ensuring the 'proper management' of private universities. As it is stated in the preamble of the Ordinance of 2008:

> As the existing Acts are seemed to be inadequate for, along with its standards, rapid expansion of higher education and increasing multifaceted demands; and … it is necessary to repeal the existing Acts and formulate new act to expansion of standard higher education for establishing private university and for its proper management. (Government of Bangladesh, 2008, p. 17569)

In the Ordinance of 2008, the government restructured the governing bodies and redefined the roles and functions of different authorities and top officials of the private universities. Although the term 'founder(s)' endured in the Private University Ordinance of 2008, it had lost its authority, except with regard to the power to form the 'board of trustees' comprising of at least nine members, which would have authority over the university's decision-making process. In the Ordinance of 2008, the 'board of trustees' and the 'syndicate' were constituted as two separate administrative bodies in the private university. The role of the founder(s) as defined in the pre-1998 Acts shifted to the 'board of trustees'. The Ordinance of 2008 states,

'On the terms as will be fixed by Chancellor [the state's head], the vice chancellor will be recruited at a recommendation of the 'board of trustees' for a four-year period' (Government of Bangladesh, 2008, p. 17576).

Through the Ordinance of 2008, the board of trustees formed by the founder was also authorised to recruit other top officials, for example, the pro-VC and the treasurer would be recruited by the Chancellor on the recommendation of the 'board of trustees' for a 4-year period. In addition, the Ordinance stated that both the VC and pro-VC could be stepped-down by the Chancellor based on 'well-defined and acceptable allegations made by the board of trustees' (Government of Bangladesh, 2008, pp. 17576–17577). Consequently, it can be said that the board of trustees, rather than the founders, became the highest authority in the private university in accordance with powers bestowed upon it by the Ordinance of 2008. These changes, as mentioned above, altered the influence of the founders and increased the influence of government in the running of private universities.

According to the Ordinance of 2008, the responsibilities that were assigned to the 'board of trustees' members could be undertaken operationally in different executive and management bodies including in the syndicate, academic council, finance and teacher recruitment committees. Through the representations in different bodies, the 'board of trustees' rather than the founders would be involved in the entire decision-making processes of the universities. Apart from this, the 'board of trustees' could carry out certain specific tasks. The tasks included approving the university's organisational structure and organogram; approving the university employment policy and sending the university rules to the UGC; reviewing, investigating and reserving the yearly expenditures; approving the university yearly budget and sending it to the Chancellor; organising consultation meetings with the students-guardians, teachers, alumni and other stakeholders at least once a year in order to solve university-related problems; and formulating a plan following the consultation meeting and, finally, implementing it.

In addition, the Ordinance of 2008 specified the role of a syndicate: 'The syndicate as an executive authority will supervise and administer the academic and administrative functions and oversee the general management of the university' (Government of Bangladesh, 2008, p. 17582). Furthermore, the syndicate could formulate the university rules and regulations, appoint the teachers and officers, develop the terms and conditions of the teachers and officers and set the student fee structure. Along with the 'board of trustees' and the syndicate, the finance committee became one of the three powerful authorities within the private university structure because this committee dealt with financial matters. The key responsibilities of the finance committee included 'to prepare the annual budget of the university and send it to the syndicate for granting approval, and played an advisory role in the financial matters of the university' (Government of Bangladesh, 2008, p. 17583).

Although most of the provisions of the Ordinance of 2008 were brought into the latest Act of 2010, some significant issues related to the governance were also changed. Such changes had ensured even greater authority for the 'board of trustees' over the university. The major changes included increasing the numbers of 'board of trustees' members in different bodies, such as the syndicate, academic council,

teacher recruitment committee, and redefining their functions in the private university. Instead of the treasurer, a 'board of trustees' member was also made the chairman of the finance committee. As pointed out in Subsection 2 of Section 25, 'The finance committee will be formed by the following members: a. three members selected by the board of trustees from which someone will be chairman' (Government of Bangladesh, 2010, p. 7435). Along with other activities mentioned in the Ordinance of 2008, the 'board of trustees' would be expected to monitor the VC's activities as well. Additionally, some changes were also brought to the formation of the disciplinary committee in which a member of the board of trustees, instead of the VC, was made the chairman.

What this analysis of policy over time shows is that while government involvement in the private university governance system was minimal in the first Act in 1992, it became more actively involved in the direct governance of private universities through the Act of 1998. A further step change took place in the Ordinance of 2008, which is evident of the increasing concern to promote the interests of the public in the private sector. The latest Private University Act of 2010 reveals the state as heavily involved in both the academic and administrative activities of the private universities and a curtailed role of the founder(s) in the day-to-day activities of the universities.

Between 2008 and 2010, the most significant change has been in determining the composition of the syndicate to ensure representation of the views of the government in the private university setting. Both the Ordinance of 2008 and the latest Act of 2010 mentioned that an educationalist or a person who has an interest in education and a professor from outside of the UGC will be nominated by the Ministry of Education and the UGC, respectively, to be a member of the syndicate to oversee the private university activities (Government of Bangladesh, 2008, 2010).

Although the Ordinance of 2008 and the latest Act of 2010 still go along with the idea that a private university is one that can be initiated by a private individual and that the founder or 'board of trustees' can always have power over the university, a private university is not considered as one running the same type of activity as any other business. Instead, the changes in these policy texts indicate that in Bangladesh private universities are regarded as serving what Marginson (2011) describes as both public and private interests or goods, which need to be managed by the state. To understand how these policy shifts towards a mixed economy of private and public higher education have identified a new role for the national state and its administrative organisations, we return to a discussion of 'new managerialism'.

Arguably, NPM is developed in order to shift responsibility away from direct state control to 'arm's length' bodies and self-regulation (King, 2004, cited in De Boer, Enders, & Schimank, 2007, p. 141). In line with 'new managerialism' or NPM approach, the government in Bangladesh had expected the private universities to adopt purposes and standards that align with those of public higher education and to take management responsibility for reporting to government on the practices and outcomes of their activities, as well as to their own 'boards of trustees' or even founders and shareholders.

Since the early 1990s when policy in Bangladesh first afforded the development of the modern private university to the present situation, there has been a double strategy at work. On the one hand, government policy has enabled the higher education system to expand under the direction and interests of the private sector; but on the other hand, increasingly, the government has set in place arm's length policies to circumscribe the form of this expansion. In the post-1998 period, the government had legislated that the UGC and the Ministry of Education must be included in the governance structure of all private universities. Through the changes introduced over the past almost two decades, the state has required that government representatives and academics from outside of the private universities must be involved in the day-to-day work in the private universities, to ensure these universities act in the interests of and with the advice of the civil society. Arguably, this mixed governance model means that although private universities in Bangladesh are privately owned, they are regarded by the state as bodies that provide what Marginson (2011) calls 'public good' and therefore need to be under the control of the government. Models of NPM that ensure state control through arm's length government bodies and self-regulation have provided a regulatory framework to reduce the drive of private universities to pursue the private interests and private goods of some of the founders.

Shifting Roles: From 'Manager' to 'Chief Executive and Academic Officer'

The change that has taken place in the roles of top officials in the private universities in Bangladesh is also a classic neoliberal move, based on the managerial approach in which the president or the VC of the university is now often called university 'chief executive officer' (CEO) (McClenaghan, 1998). Both the previous and the latest private university Acts and the Ordinance have shaped the roles of the top officials in the universities and its corporate culture. In the first Act of 1992, the VC of a private university was recognised as the chief executive officer, as it is stated in the Private University Act of 1992, '…he [VC] will be the chief executive of the university' (Government of Bangladesh, 1992, p. 7584).

Arguably, the executive leader has become a 'generic rather than localised manager', who mediates the external relations of the university and develops its overall strategy (Marginson & Considine, 2000, p. 9). However, the early Act of 1992 did not define who could be the VC, and the VC was not in a very powerful position to develop university strategy. As explored in the earlier section, rather, the power was with the founder(s) who ran the university how they wished. The VC as a chief executive officer was not included in any executive bodies including the syndicate or trustee board. Although academic officials with specific responsibilities managed the academic operation of the private university, these were operational managers rather than academic decision-makers. For example, the early Act of 1992 stated that the syndicate or trustee board, with the approval of the Chancellor, would for-

mulate statutes containing provisions 'relating to the syllabus, curriculum, study schedule, and for the performance of administrative and other necessary functions of any private university… All the educational certificate, degree and diploma of any private university shall be signed by the Vice-Chancellor' (Government of Bangladesh, 1992, p. 7586).

Alongside the changes introduced to private universities as the government has increasingly specified the university governance structure, in post-1998 period, there has been greater specification of the roles and qualifications of those who lead and manage these institutions. The government recognised the VC as the 'executive and academic officer' of the private university in the Ordinance of 2008 and in the latest Act of 2010. As stated in Subsection 1 of Section 15, '…Following the prescription the appointed VC will be the chief executive and academic officer of that university and she/he will implement the Syndicate's decision' (Government of Bangladesh, 2008, p. 17576). As the VC was made chief executive and academic officer of the university, the Ordinance and the latest Act of 2010 also focused on the academic qualifications and teaching experiences of the VC. Consequently, the VC's status was shaped by new corporate expectations that set out minimum requirements in relation to the academic achievement and teaching experiences. According to the Private University Act of 2010, the VC must have a first class or equivalent honours and postgraduate degrees including a PhD and 20 years of teaching or research or administrative experiences of which there would be 10 years of advanced research or teaching experiences.

In the Ordinance of 2008, the government also made significant changes to mark a division of executive power between the founder(s) and the VC as the chief executive and academic officer of the university. Although the early Act of 1992 allowed the founder(s) to form different bodies to run the university, it did not mention whether the VC could be part of these administrative bodies. To empower the role of the VC in various decision-making bodies, the Ordinance of 2008 directed that the VC should be the chair of the academic decision-making committees including the syndicate, the academic council, the teacher committee, the teacher and staff recruitment committee and the disciplinary committee. The Ordinance also mentioned that the VC should be a member of the 'board of trustees' by virtue of their position as academic leaders of the universities (Government of Bangladesh, 2008).

The Ordinance of 2008 also shaped the positions of senior management and their roles in the private university and emphasised the importance of professional expertise among the senior management staff. The Ordinance identified the role of senior management in implementing the academic strategy effectively. As for the VC, the Ordinance of 2008 specified the academic credentials and the experience required of the senior management. As stated, 'The Pro-VC must have at least a postgraduate degree and at least fifteen years of administrative or teaching experience' (Government of Bangladesh, 2008, p. 17577). However, the latest Act of 2010 placed more emphasis on creating a centralised control mechanism to ensure the accountability of all senior management staff to the VC. The latest Act of 2010 stated that the VC will appoint and control all deans and the departmental heads. In order to ensure the VC's role in financial matters, the latest Act of 2010

also included the VC as a member of the finance committee (Government of Bangladesh, 2010).

De Boer et al. (2007) argue that under the NPM approach, corporate management structures govern through layers of regulation and audit in which the university's top and middle management are expected to be responsive to external government by implementing internal goals that fit with external drivers and taking responsibility for the activities and expenditure of the university. Similar to what De Boer et al. (2007) argue, the analysis of the post-1998 Acts shows the inclusion of the VC in the different executive bodies, for example, in the syndicate, both confirming the new powers of the VC, but also making clear that their power was constrained by their accountability to others. For example, in the Ordinance it was stated that the VC would be responsible for carrying out syndicate decisions (Government of Bangladesh, 2008).

Similarly, the latest Act had brought change into this provision to make the VC responsible for carrying out decisions made by both the 'board of trustees' and the syndicate. Both the Ordinance and latest Act again included another subsection in which it is stated, 'She/he (VC) will be responsible to implement the decision of the Syndicate and the board of trustees' (Government of Bangladesh, 2010, p. 7438). However, compared to the position before 2008, in the latest Act of 2010, the VC has been given a more explicit academic role in the university that will help the VC make day-to-day academic operational decisions and determine the strategic direction of the academic work.

NPM and the Management of Public and Private Interests

In this subsection, drawing on analysis of two recent reports from non-government and government agencies on the current crisis brought about by the ideology of encouraging institutional autonomy for a for-profit private university sector, we first present an overview of the current activities of the private universities. We then explore how NPM has been used to challenge the autonomy of some private universities because conflicts have emerged between the vested interest group of owners of private universities and the public interests of the government.

Vested Interests and Ongoing Concerns About the Autonomy of Private Universities

As argued so far, the introduction of NPM into the governance system in the private university sector has reduced the autonomy of the private universities. Yet, private interests and the influence of the founders were still evident according to a recent report (TIB, 2014), which noted that the majority of the founders in the private

universities command significant social and political influence in the society. For example, the founder(s) of the private universities include around 30% businessmen, 23% academics and 9% politicians. As an illustration of the business practices of private universities, the TIB (2014) reported that the founder(s) or the 'board of trustees' often recommended and selected like-minded people or relatives for the positions of the VC or the pro-VC of the university.

The mere fact that until the latest enactment of 2010 most of the private universities did not have a professional academic as a VC is astounding. In most of the cases, the founder(s) themselves or their relatives were appointed as VC to operate the university (University Grants Commission, 2006). Once the latest enactment came into effect in 2010, specific requirements were made for appointing a professional academic as the top official of a private university. However, until 2014, out of 79 private universities, 27 had no legally appointed VC, 61 no pro-VC and 49 no treasurer, respectively (TIB, 2014).

As many critics have argued, the growing influence of the corporate culture on the universities shapes higher education institutions to be operated like corporate institutions to make a profit (see for reference, Chowdhury & Le Ha, 2014; Giroux, 2002). In the case of Bangladesh, often many founders have used private higher education as a 'business tool' to make a profit (Kabir, 2010; University Grants Commission, 2006). Aware of these concerns, the UGC has often had to initiate investigations of private universities. For example, in 2004, the UGC formed a committee headed by the then UGC Chairman to look into the performance of the private universities. The committee found gross irregularities—low educational standards, temporary campuses, false statements about the students and teachers and violations of the rules and regulations—at 8 out of 52 private universities and recommended the closure of these 8 universities. Following the UGC committee report, in late 2004, the Ministry of Education formed a one-member judicial committee led by a High Court Justice to look into the allegations against eight private universities made by the UGC committee. The judicial body recommended the closure of seven universities because of their failure to meet the criteria to be recognised as a private university, and the government responded by cancelling five universities' charters (University Grants Commission, 2010).

As argued, to streamline the governance system and provide a check on the business-led activities of some of the universities, in the latest Act of 2010, the government proposed that there would be 'government representatives' in the governing body of all private universities. However, the TIB (2014) report identified various types of irregularities occurred by vested interest groups. The main processes that were exploited included the following: to introduce new departments and course curricula without the UGC approval, to open unlawful outer campuses. to transfer the university's fund in the accounts of the board of trustees and use that fund for their own business, to use facilities and services of the universities for personal and own business purposes and to influence the government to appoint their own like-minded people as the VC, pro-VC and treasurer. In addition, a large number of the

private universities formed 'boards of trustees' comprising of family members who shaped the university as a family property (TIB, 2014).

Consequently, since both administrative and financial matters of the private university were fully controlled by the 'board of trustees' in accordance with the Acts, the 'board of trustees' had the power to set the rules regarding the remuneration level for their daily contribution to the university. Such structures are open to the influence of vested interests, and many cases have been found where a university fund has been invested by the 'board of trustees' in their own business farm (TIB, 2014).

The Nexus of Vested Interests and the 'Operational Crisis' in Some Private Universities

Although the chapter has identified that some provisions of the Acts have contributed to the state becoming involved heavily in the governance of the private university setting, through, for example, the appointment of top officials at the recommendation of the 'board of trustees', carrying out inspections, cancelling a private university's charter and approving academic programmes through the UGC, founders have often sought to undermine this state intervention in their business. Frequently founder(s) of private universities have used their political ties to persuade the state administrators and leaders of the ruling political party to permit them to continue their questionable activities, including running the universities as a 'for-profit' education business (TIB, 2014). The recent TIB report (2014) has argued that there is a nexus of influence between various vested interest groups, particularly including many of the founder(s), the 'boards of trustees', businessmen and powerful political leaders which seek to use private universities to serve their own interests. Often such relationships have developed in two particular ways: firstly, incorporating powerful political leaders into the 'board of trustees' and, secondly, seeking to persuade and corrupt those in authority to legitimise irregularities in the private universities (TIB, 2014).

When these vested interest groups have used private universities to serve their own interests, often it has resulted in an operational crisis in the private university. Until 2013, at least six private universities were in crisis as different vested interest groups claimed their ownerships over these universities (University Grants Commission, 2013). In some cases, the 'board of trustees' of some universities divided into various factions, and both parties claimed ownership of these universities. Such ownership conflicts created the space for politicians and influential people in the society to become involved in the management of private universities. During such disputes, factions often search for support from politicians to establish their ownership over the universities.

In fact the key purpose for including an influential political leader is to persuade the state agencies—the Ministry of Education and the UGC—not to take any action against them (TIB, 2014). For example, as Ahmed (2013) has argued, until 2014, at

least ten former student leaders who are aligned with the current ruling party have been involved in six private universities and have tried to persuade the government not to take action against them. In these cases a new 'board of trustees' was constituted by incorporating politicians from the ruling party to run the universities. For example, a new board of trustees of a private university was reformed by a member of parliament (MP) who belonged to the ruling party. At least four former student leaders backed by the ruling party were also included in that 'board of trustees' (Ahmed, 2014).

As argued, often ownership conflicts have been augmented by the involvement of influential vested interest groups, enabling factions backed by influential businessmen and former bureaucrats to take control over the university (TIB, 2014). For example, in 2011, a dispute developed in one private university, when one of the family members of the key founder of this university took control over the university, is backed by some influential businessmen. Two factions formed two separate 'boards of trustees' and offered programmes from two different campuses (Neowas, 2013).

These ownership conflicts have impacted on the decision-making processes and academic operations of these universities. Often faction groups cannot hold any meetings to make decisions about academic and administrative issues. For example, among the six universities, one university could not hold any meeting of the 'board of trustees', syndicate and academic and finance committee, and three universities failed to organise the syndicate meeting in 2013 (University Grants Commission, 2013). In these examples identified by the University Grants Commission (2013), the influential faction groups insisted that the VC and other top officials implemented their decisions in running the universities. In other cases, different factions operated their academic activities illegally by opening branches or separate campuses. For example, the 'board of trustees' of one of the universities among these six universities divided into four groups and ran at least 100 branch campuses across the country (University Grants Commission, 2013).

From the above discussion, we have demonstrated how the introduction of NPM in the context of the private university sector in Bangladesh has restricted the autonomy of universities, particularly the power of the founders through arm's length controls. However unlike the use of NPM in other countries (Ranson, 2003), rather than reducing the power of professional groups, the policy enactments since 1998 have sought to increase the power of academics and those with professional expertise to control the academic decision-making of private universities. Therefore in the context of Bangladesh, there has been recognition at the level of national policy making that private universities can serve the public interest, although since their set-up in 1992, the vested interests of some founders have resulted in corruption and prioritising the private interests of some founders.

This experience suggests that national policy makers acknowledged Marginson's (2011) assessment that under neoliberalism public good can be delivered by private interests as well as the obverse. Nevertheless, if left unchecked private interests may assert themselves; therefore the Bangladesh policy enactments since 1998 can be

understood as a struggle to impose NPM as a force for public good, controlling private interests and reinvesting and reinforcing the need for professional expertise and academic decision-making rather than an instrument to restrict the role of the professional.

Conclusion

In exploring the shifts and changes in the governance system of private universities in Bangladesh, both the Acts of the 1990s and the present Acts have created spaces for the external agencies of the state to be directly involved in the private universities' governance system and decision-making processes. We have seen how, on inception, the Acts establishing the modern private universities in Bangladesh set up a governance system and decision-making process that was centred around either the 'founders' or the 'board of trustees' comprised often of members external to the university. All decisions of the private university were directed through these few people in authority. However, state involvement in the governance system of these institutions increased in the late 1990s and extended significantly in the noughties, so that to date private universities in Bangladesh are significantly different organisations from their original manifestation.

As this chapter has argued, today the mixed model of private and public interests involved in the governance system of private universities in Bangladesh has developed largely premised on the concept of NPM. Since 1998, the shifts and changes in the Private Universities Acts and Ordinances have meant that the VC, as chief executive and academic officer, has enjoyed more freedom than previously to direct the academic activities of the university. However, in this mixed model of governance, top officials of the private universities are still required to pay attention to both the tenets of the market and the discourses of standards, quality and audit. Arguably the chapter shows that in the latest Act of 2010 the control mechanisms imposed by government did not go far enough in curbing the vested interests of the private university founders. Consequently, the latest reports of the government and non-government agencies are evidence that more public accountability and more academic influence in the private universities are desired by government to ensure these non-government seats of private higher education act in the public interest.

The chapter has argued that the governance system of the private university has shifted over the last two decades as a consequence of a power struggle between two powerful agencies – the private university vested interest groups and the state regulatory agencies. Arguably, the present involvement of two powerful state agencies – the UGC and the Ministry of Education – in the governance and operation of private universities has resulted in setting limits on the university's institutional autonomy. Arguably, the involvement of the state formally in the governance structure of private universities provides a new model of power sharing which has the potential to circumscribe how the university's vested interest groups use the private university as a tool for their private business interests. Finally, in the light of this analysis, a new

question has emerged for further research about how far the extension of this mixed model of governance to the private sphere has contributed to developing a democratic sphere in the governance system of private universities in Bangladesh.

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Chapter 16
Role of English-Bangla Code-Switching in Vocabulary Retention: A Case Study at University of Dhaka

Neelima Akhter

Abstract The use of code-switching in second and foreign language teaching has been a contentious issue. It has been mostly regarded as undesirable based on the assumption that it interferes with target language (TL) learning, especially by decreasing the exposure to the TL. In the last two decades, however, there has been a slow bilingual turn in English language teaching (ELT), calling for a judicious use of the first language in language teaching. This chapter reports a mixed-method study conducted at the University of Dhaka on the effects of teacher code-switching on learners' short-term vocabulary retention. Participants for the study were selected from 100 1st-year undergraduate students majoring in Psychology and 65 2nd-year undergraduate students majoring in Zoology. Using Vocabulary Knowledge Scale (VKS) developed by Wesche and Paribakht, 20 target words were made into a test paper. This test was administered as pretest and posttest to experimental groups that received explanations of the target words both in English and Bangla and control groups that received them only in English. A writing task and two focus group discussions were also used. Independent samples *t*-test was run between the scores of the experimental and control groups in order to see if there was any significant difference between the vocabulary retention by the code-switching and the English-only groups. The results show that students who received bilingual definitions outperformed those who received English-only definitions. The statistically significant findings indicate a need for re-evaluating the role of the first language in language pedagogy.

Keywords Code-switching · ELT · Vocabulary retention · Bilingualism

N. Akhter (✉)
Department of English, University of Dhaka, Dhaka, Bangladesh
e-mail: neelima.akhter@du.ac.bd

Introduction

If you are an English language teacher in Bangladesh, how would you explain the word 'heron' to your English as a foreign language (EFL) learners? You could show them an image. You could explain the meaning in English using a monolingual English dictionary and say that it is 'a large bird with a long neck and long legs that lives near water'. You could use many other techniques. Indeed, you could use a combination of techniques. You may also use a simple one-word Bangla or Bengali equivalent, but would you be able to do that without feeling guilty for using the mother tongue in the English class? In this chapter I intend to examine such uses of learners' first language in addition to English in teaching vocabulary in order to see whether code-switching—in other words, alternate use of two or more language varieties—impedes or facilitates the learning of new lexical items. The chapter investigates the effect of using the first language (L1), in this case Bangla, by the teacher on learners' retention of new words.

'Code-switching' (sometimes spelt as 'codeswitching' or 'code switching') is a sociolinguistic term that has been defined as 'the alternative use by bilinguals of two or more languages in the same conversation' (Milroy & Muysken, 1995, p. 7). In the context of classroom interaction, it can be defined as the alternation of more than one linguistic code by any of the classroom participants (Lin, 2008). Lin distinguishes between code-mixing (intra-clausal/sentential) and code-switching (inter-clausal/sentential). In terms of language classroom, other associated terms are use of L1 and translation. In this study, I use the term 'code-switching' as an umbrella term for alternating between the L1 and the second language (L2) in the language class, indicating a bilingual practice, which may or may not involve translation.

Language teaching pedagogy in recent times has endorsed monolingual rather than bilingual or multilingual practices that involve code-switching. Reviewing theoretical and empirical literature on teachers' use of the target language (TL) and the first language in the second and foreign language classroom, Turnbell and Arnett (2002, p. 211) conclude that there is 'near consensus' that teachers should make maximum use of the target language. The main reason for advocating TL-only practices is that for many learners, language classroom is the only context for TL exposure (Littlewood & Yu, 2011). Code-switching in naturalistic language use is bilingual speakers' 'asset' and 'a valuable addition' to their repertoire of communication strategies, but in language classroom discourse, it is not considered to be a valuable resource (Macaro, 2005, p. 63). Rather, Macaro maintains, code-switching is often referred to as 'recourse to L1' (p. 64), which indicates that it is seen as undesirable.

The influence of the monolingual principle in English language teaching in Bangladesh and elsewhere has been so extensive that teachers often do not feel comfortable in exploiting learners' first language while teaching English. Inspired by Krashen's (1981) input hypothesis and acquisition-learning hypothesis, language teaching in many parts of the world has focused on maximising the use of TL. Mixing

codes or using the mother tongue has been believed to interfere with learning. While there are situations where learners come from a variety of linguistic backgrounds and the teacher does not share the L1 with learners, making exclusive use of the TL a practical necessity, classroom situations in Bangladesh are mainly homogenous in terms of L1 since Bangla is the mother tongue of nearly 98% of the population (Bhatt & Mahboob, 2008; Hamid, Jahan, & Islam, 2014).

The current study was conducted at the University of Dhaka where most departments offer foundation English language courses to their undergraduate students from a realisation that most incoming university students had 'poor standards of English proficiency' (Chaudhury, 2013, p. 32). Although explicit medium of instruction policy in higher education in Bangladesh is flexible – it can be either Bangla or/ and English – English dominates in science, medicine, engineering and technology, while Bangla is more common in many humanities and social science departments (Hamid, 2006). A mixture of Bangla and English is common in tertiary-level classroom interactions (Hamid et al., 2014). However, anecdotal evidence and observation suggest that English language courses are mostly English-only medium. The materials are monolingual, so are examinations; however the classroom is the only place the teacher and the students can make *use* of both languages. As Hamid et al. (2014) suggest, code-switching is not uncommon in Bangladeshi university lectures in general; however, whether teachers make *good* (in the sense of being productive) use of L1 in the English language class with confidence and conviction is doubtful, given the consensus in modern ELT discourse that TL use should be maximised (Turnbell & Arnett, 2002).

Unsurprisingly, most students at the University of Dhaka, on the other hand, come from Bangla-medium national education and find it difficult to cope at the university (Akhter, 2008). Research has found that most students come from outside big cities and the majority of them evaluate their English skills as inadequate (Akhter, 2008). There appears to be a mismatch between students' English proficiency and the English language requirements at the university, hence the foundation courses. Studying the effects of English-only policy in Bangladeshi higher education, Sultana (2014) commented that it is creating language-based discriminations and is affecting learners' classroom participation, power negotiation and identity formation. While Sultana's study looked into the advantages and disadvantages that are created by English-only policies and other studies investigate attitudes of learners and teachers on the use of code-switching in the classroom (e.g. Chowdhury, 2012; Islam & Ahsan, 2011), there has been little experimental research in Bangladesh on the direct effects of either English-only or the bilingual classroom mode on learning. Therefore, research on the role of using Bangla in addition to English appears important.

This research, however, is small scale and particularly focuses on vocabulary teaching and learning. It explores the role of English-Bangla code-switching by teachers to explain unfamiliar words on learners' short-term vocabulary retention. More specifically, this study attempts to determine whether there is any significant difference between learning new lexical items through English-only explanations and English-Bangla explanations. A second aim of the study is to explore whether

students prefer English-only or English-Bangla explanations in vocabulary teaching. In order to achieve these objectives, a mixed-method study was conducted at the University of Dhaka, which involved both quantitative and qualitative data analysis.

To Code-Switch or Not: The Great Debate

While approaches and methods of foreign language teaching have waxed and waned, one principle that has remained stable in the several decades is to maximise the use of the TL and minimise the use of L1. In this section I argue that the most common argument in the literature has been in favour of maximising the TL (e.g. Duff & Polio, 1990; Ellis, 1984; Krashen, 1981; Wong-Fillmore, 1985) although recent developments in the field have increasingly supported bilingual teaching-learning (Bhooth, Azman & Ismail, 2014; Celik, 2003; Cook, 2001; Cummins, 2008; Liu, 2008; Macaro, 2005; Macaro & Lee, 2013; Sampson, 2012).

The Monolingual Principle in Language Teaching

The monolingual tenet in foreign language teaching dates back to the Reform Movement of the 1880s and the Direct Method when the Grammar Translation Method (GTM) was found to be deficient for a number of reasons, one of them being the perceived need for exclusive use of L1. Most subsequent methods have followed this principle. The Audiolingual Method went as much as trying to render the L1 'inactive' while a new language is being learnt (Brooks, 1964, p. 142). One may ask whether such a process is possible at all. Later methods often ignored the use of L1 rather than proscribing it. Cook (2001) explained that the only time the proponents of communicative language teaching and task-based teaching mention the L1 is when they advise how to minimise using it. Using L1 even in organising tasks or managing behaviour is believed to deny learners 'valuable input in the L2' (Ellis, 1984, p. 133). Wong-Fillmore (1985) contended that use of translation short-circuits the process of understanding the TL in two ways: TL remains unmodified and learners tend to ignore the TL anticipating the use of translation. Duff and Polio (1990) acknowledged the need for letting low-proficiency learners use L1 as they may face anxiety if forced to use TL all the time; however, they mainly focused on the means to 'reduce the amount of L2-L1 translation' (p. 163) through verbal modification such as repetition, paraphrasing, slowing down pace, simplifying syntax and using high-frequency patterns and non-verbal means such as visuals and gestures. There is little discussion on how to exploit the L1.

Such practices were based on a number of assumptions. One such assumption is that L2 learning should be made similar to children's L1 learning as the latter is found to be the most complete kind of language learning. Krashen (1981), the main

advocate of the Natural Approach, for example, argued that acquisition, as opposed to learning, can happen in the adult L2 classroom if the environment can be created especially through i + 1, i.e. providing L2 input at a level slightly beyond the current level of the learners. Such opinions that adult learners should learn an L2 as directly as children learn their L1 disregard obvious differences between them. For one thing, the adult's mind, social development and memory capacity are obviously different from the child's (Singleton, 1989, as cited in Cook, 2001). Research also shows that the experience of acquiring the L1 works in hardwiring the circuitry of the child's brain (Pinker, 1994), which makes it difficult for the grown-up L2 learner to repeat the L1 experience. Furthermore, there was a generalisation that the aim of L2 learning is approximating the proficiency of the native speaker. From such a point of view, learning of L2 is doomed to be unsuccessful as the L2 learner is unlikely to achieve proficiency like a native speaker on all possible counts (Cook, 2001). Cook (2001) points out that 'whether L2 learners are successful or not has to be measured against the standards of L2 users, not those of native speakers' (p. 406).

While enthusiasm was high in favour of TL-only practices and keeping L1 and L2 separate, a few empirical studies demonstrated that such practices do actually give learners better opportunities for learning a second language (Cummins, 2008). Such policies, nonetheless, became very popular and served the purposes of the native speaker teachers of English with little or no control of learners' L1 and the publishers of the global ELT coursebooks (Butzkamm, 2003). These policies, however, have made bilingual teachers who share the L1 with their students either stop using L1 as a pedagogical resource or at times have resulted in a guilty feeling in them if they use it. Copland and Neokleous (2011) reported such cases where teachers denounced the L1 even though they had used it for learning purposes. Such guilt seems to be a result of the twentieth century ELT discourse where code-switching has become a taboo and use of L1 is often viewed to be associated with the GTM which is seen as a method of bygone times. As the discussion in this section suggests, the monolingual principle was propagated until the 1990s. Since then, and especially since the beginning of the twenty-first century, bilingual practices have been re-debated and re-explored.

Critiquing Code-Switching in L2 Pedagogy

Research in the last two decades has gradually yielded evidence to question policies and practices that forbid L1 in the L2 classroom (Bhooth et al., 2014; Celik, 2003; Knight, 1996; Lee, 2013; Liu, 2008; Macaro, 2005; Sampson, 2012). Cook (2001) argued that L2 meanings in the learner's mind do not exist separately from L1 meanings and that code-switching is a highly skilled activity where two languages are used simultaneously in a compound manner rather than one at a time in a coordinate manner. Sunderman and Kroll (2006) found that L1 is active in L2 lexical processing at both early and advanced stages of L2 learning.

Sampson (2012) in his study of the code-switching patterns of two groups of Spanish-speaking English learners in Colombia found that code-switching in the L2 classroom does not relate to proficiency level and performs useful communicative purposes such as expressing equivalence, metalanguage, floor holding, reiterating and socialising. The findings demonstrated that equivalence – the most common type of L1 use found in the study and used when a particular lexical item is missing in learners' interlanguage – is not only quicker but also allows learners to examine the differences between semantically similar L2 lexical items. While metalanguage in L1 helps with procedural concerns, using L1 expressions to hold floor assists in skills like continuing turns without pause or interruptions. Reiterating, i.e. using L1 for what has been said in L2, helps in clarifying and highlighting L2 input. Switches were also used for socialising, i.e. developing group solidarity and maintaining friendships. Sampson concluded that proscribing L1 is therefore ill-advised and detrimental to classroom communication and learning. He, however, maintained that learners' future language needs should be considered in making *informed* decisions about when to use L1 and when to encourage L2 coping strategies.

Similar findings were reported by Bhooth et al. (2014) who found that their participants at a Yemeni university considered Arabic as a functional strategy in learning English. They concluded that L1 can be used as a *scaffolding* strategy by students and as a pedagogical tool by teachers to enrich the learning experience and to enhance engagement in the L2 classroom. Studying the attitudes of Korean students, both adults and children, Macaro and Lee (2013) reported that neither of the learner groups favoured total exclusion of L1 from the classroom interaction. Knight (1996) found that learners who did a preparatory discussion in L1 performed better in a subsequent L2 writing task than those who did the same preparatory discussion in L2.

Thus, there appears to be a paradigm shift in progress, which advocates a *re*-evaluation of the role of L1 in L2 pedagogy. There is, however, a need for experimental studies to determine the effect of L1 use on L2 learning. Turnbell and Arnett (2002), in their review of recent literature, called for research on 'whether TL input might become intake more readily if teachers use the L1 judiciously to catalyze the intake process in some way' and to determine 'when it is acceptable and/or effective for teachers to draw on students' L1' (p. 211). This research is a response to such call.

Code-Switching in Vocabulary Teaching-Learning

Vocabulary teaching has often been cited as an area where L1 equivalence can be used (Cook, 2001; Liu, 2008; Schmitt, 2008). Even so, classroom practices under communicative language teaching have preferred monolingual strategies rather than bilingual ones. Most research on the subject, however, indicates that *principled* use of L1 can be conducive to learning. Regarding when to use L1, Cook (2001) highlighted four factors that need to be considered:

If there is no over-riding obligation to avoid the L1, each use can be looked at on its merits. One factor to consider is efficiency: Can something be done more effectively through the L1? A second factor is learning: Will L2 learning be helped by using the L1 alongside the L2? The third factor is naturalness: Do the participants feel more comfortable about some functions or topics in the first language rather than the second, as studies in code-switching have shown? The fourth factor is external relevance: Will use of both languages help the students master specific L2 uses they may need in the world beyond the classroom? (Cook, 2001, p. 413)

Citing findings from other research, Cook further argued that using L1 for conveying and checking meaning may be efficient and may help learning and feel natural by making the L2 environment more comfortable for learners, while using L1 for grammatical explanations, organising tasks and maintaining discipline can offer efficiency. Using L1 for personal contact with individual students ensures naturalness, while letting students use L1 and translate in main classroom activities prepare them for bilingual contexts, thus offering external relevance.

Celik (2003) reported that selective use of code-mixing in teaching vocabulary neither slowed acquisition nor decreased fluency. Similarly, reviewing a number of studies on the influence and role of L1 in L2 vocabulary learning, Schmitt (2008) commented that exploiting L1 offers advantage especially in establishing form-meaning linkage while introducing new vocabulary items. Liu (2008) found that adult Chinese learners who received bilingual explanation of new words outperformed those who had received L2 explanations *only*. Zarei and Arasteh (2011), however, found that thematic clustering made a bigger difference in vocabulary production than both code-mixing and contextualisation in L2. This finding suggests that code-switching is only one of the many viable ways of explaining vocabulary items.

Despite the interest and widely felt need, research on the potential role of L1 in L2 teaching is still far from conclusive. While L1 use is humanistic and learner-centred, too much of it may discourage TL practice, and therefore there remains a need for more guidance to teachers from teacher educators as to when mother tongue use might be beneficial (Carless, 2008). This also means that there is a need for classroom-based experimental studies examining the actual effects of using L1 on L2 learning.

Methodology

A mixed-method research design was adopted for this study. The study was conducted in two parts. There was an experiment involving two experimental groups and two control groups of students with whom a vocabulary test and a writing test were conducted. This experiment was substantiated by two focus group discussions (FGDs) in order to investigate learner views on the use of L1.

Experimental Design

Participants for the study were selected from 100 1st-year undergraduate students majoring in Psychology and 65 2nd-year undergraduate students majoring in Zoology. The researcher had been teaching an English language course in both the classes. All the students shared Bangla as their mother tongue, and all of them, except three, came from a Bangla-medium mainstream education based on the national curriculum of Bangladesh. From a reading passage called 'Home of the Royal Bengal Tiger', 20 target words were selected. This reading passage was a part of a unit in an English language textbook called *Endeavour: An Introductory Language Coursebook* by Sinha, Mahboob, Bashir, Basu, & Akhter (2014) designed for university students by the Department of English, University of Dhaka. The number of words might appear arbitrary, but it was selected considering the class duration which was 1 h. Selecting more words would have definitely yielded better results; however, this study was done in classroom situations which had time constraints.

The selected words were made into a test paper using the Vocabulary Knowledge Scale (VKS) developed by Wesche and Paribakht (1996) in which knowledge of each lexical item can be scored from 1 to 5 in the following way:

1. I don't remember having seen this word before.
2. I have seen this word before, but I don't know what it means.
3. I have seen this word before, and I think it means…(synonym or translation)
4. I know this word, and it means… (synonym or translation)
5. I can use this word in a sentence: … If you do this item, please do the previous item too on the list (number 4).

There are a number of advantages of this scale. First, it is easily quantifiable as each of the responses has a numerical value assigned to it. Also, it tests both the receptive and productive knowledge of words. Most importantly, combining self-report and elicitation of responses that can be verified (Read, 1993), this scale can measure the *breadth* of vocabulary, i.e. how many words a learner knows, as well as the *depth*, i.e. how well does he/she know these words. The VKS-based vocabulary test was conducted twice with both groups of participants – once as pretest and later on as posttest. The purpose of the pretest was to select participants who did not know the target words well. The pretest was conducted in classroom settings where students were asked to indicate their knowledge of each target word by selecting one of the five options on the VKS. As the pretest contained 20 vocabulary items, each with a score ranging between 1 and 5, 100 was the maximum, and 20 was the minimum possible score for each student.

The test papers were scored, and a low-scoring group (scoring less than 60 out of 100) from each class was primarily selected for the study to ensure valid posttest

score. Each class was then randomly assigned to an experimental and a control group. There were, therefore, two experimental and two control groups. The experimental group from Psychology would be referred to as CS1, and the control group from this department would be referred to as EO1, while the two groups from Zoology would be referred to as CS2 and EO2.

One week after the pretest, all groups were separately offered a lesson in which they were given a copy of the reading passage 'Home of the Royal Bengal Tigers' which contained a description of the Sundarbans, a mangrove forest situated on the south coast of Bangladesh. Students were asked to read the text once or twice so that they could understand the context in which the target words were used and get information on the forest on which they would be asked to write a paragraph in the posttest. The students then received explanation of the unfamiliar words from the teacher. However, the experimental groups received explanations both in English and Bangla, while the control groups received them only in English. Word meanings were given orally and shown using a multimedia projector. English definitions of the words were taken from three online dictionaries—*Oxford Learner's Dictionary*, *Merriam-Webster's Dictionary* and *Collins Dictionary*—whichever seemed easier for the students. Bangla definitions were taken mainly from *Bangla Academy English to Bangla Dictionary*, the most commonly used and accepted English-Bangla dictionary in Bangladesh. Students were not told that they would be given tests after the lessons so that they were not extra careful in learning the words.

Two posttests, one involving the same test used as pretest and the other involving a writing test (which was given only as posttest), were administered after 2 weeks to see if there was any significant difference between the vocabulary retention by the code-switching group and the English-only group of each class. This time frame was considered enough as the aim was to check short-term retention. The writing test was given first in which students were asked to write a description of the Sundarbans. The main purpose of this test was to see whether there was a significant difference in the productive vocabulary knowledge of the experimental and the control groups of both classes.

Two FGDs were carried out after the tests to check learner attitudes to the use of L1. Each of them consisted of six students with one group from Psychology and the other from Zoology.

Data Analysis

Quantitative analysis was done for both the VKS-based posttest and the writing test. A number of steps were followed to prepare the data for statistical analysis. It was found that some students responded in option 4: 'I know this word, and it means … (synonym or translation)'; however, the meaning they wrote was either completely wrong or only partially correct. If the meaning was wrong, the response was regarded as 2: 'I have seen this word before, but I don't know what it means'. If the answer was partially correct, the response was regarded as 3: 'I have seen this word

before, and I think it means … (synonym or translation)'. If they wrote a sentence in 5 but the use was not appropriate, the response was considered either 3 or 4, depending on how correct the meaning was. Also, some students did not give response against some words; these responses were considered 2, as the students saw the words at least twice in pretest and in the lesson itself.

As mentioned earlier, students were not told beforehand of the lesson and post-tests. To ensure validity of data, no extra importance was put on the sessions from which data was collected. As a result, some students missed some of the sessions. Also, students who performed well in the pretest were randomly assigned to groups to ensure a "normal" classroom setting; however, data from students who scored 60 or above in the pretest was excluded in the analysis. Also, students who missed any of the three sessions were excluded from statistical analysis altogether. In accordance with these conditions, the final number of participants was 106–24 students in CS1, 30 in EO1, 28 in CS2 and 24 in EO2.

The posttest papers of the VKS-based test were scored by the researcher, and each student's score was calculated out of 100. Scripts of the writing test in which students were asked to write a description of the Sundarbans were checked by the researcher for the number of target words each student used. As there was 20 target words, the highest possible score in this case was 20, the lowest being 0, indicating no use of the target words. In counting the words used, minor spelling and usage mistakes were disregarded.

Independent samples *t*-tests were run between the scores gained by the code-switching group and the English-only group of each class in the pre- and posttests in order to determine if vocabulary retention by the code-switching groups and the English-only groups was different in a statistically significant way. As the purpose of the writing test was to examine productive use of the target words, student scripts were checked for the number of these words used. Independent samples *t*-tests were then run between the scores of experimental and control groups of each class. FGDs were analysed qualitatively to gain an in-depth insight into the learner perceptions about use of L1 in L2 vocabulary teaching.

Results

As already mentioned, two posttests were conducted after 2 weeks of offering the lessons. One test involved a VKS-based vocabulary test in which each student scored a mark out of 100. The other involved a writing test in which students wrote a description of the Sundarbans, and a score out of 20 was given to each student for the productive use of the 20 target words. Two FGDs were conducted after the tests.

Table 16.1 Group statistics for Psychology participants in VKS-based pretest and posttest

Group	Pretest					Posttest				
	N	Mean	Std. Dev.	*t*	*p*	*N*	Mean	Std. Dev.	*t*	*p*
CS1	24	39.29	6.040	−.69	.49	24	83.92	10.325	3.83	.000
EO1	30	40.43	5.958			30	72.57	11.169		

Table 16.2 Group statistics for Zoology participants in VKS-based pretest and posttest

Group	Pretest					Posttest				
	N	Mean	Std. Dev.	*t*	*p*	*N*	Mean	Std. Dev.	*t*	*p*
CS2	28	42.93	6.616	−.22	.82	28	85.04	9.841	2.24	.03
EO2	24	43.33	6.552			24	78.58	10.966		

Table 16.3 Group statistics for Psychology participants in writing test

Group	N	Test	Mean	Std. Dev.	*t*	*p*
CS1	24	Target words in writing	5.38	5.097	2.29	.026
EO1	30		2.90	2.695		

Findings of Pretests and Posttests

The results show that both groups of each class were similar in vocabulary size in the pretest. As shown in Table 16.1, the two groups of Psychology, CS1 and EO1, had means of 39.29 and 40.43, respectively, which shows that EO1 had a little higher mean, although the difference was not significant ($t = -.69$, $p = .49$). The two groups from Zoology, CS2 and EO2, had means of 42.93 and 43.33, respectively, which again did not exhibit any significant difference ($t = -.22$, $p = .82$). It is to be noted that participants from Zoology, who were in the 2nd year at the university, had a slightly higher vocabulary size before the experiment, as is evident in the pretest means of both the classes.

Table 16.1 also shows the posttest results of CS1 and EO1. Mean and standard deviation (SD) were 83.92 and 10.325, respectively, for CS1 while 72.57 and 11.169 for EO1. The results show that students who received explanation of unknown words in both English and Bangla outperformed the students who received explanations only in English ($t = 3.83$, $p = .000$).

Table 16.2 shows the pretest and posttest results of CS2 and EO2. In posttest, mean and SD were 85.04 and 9.841 for CS2 while 78.58 and 10.966 for EO2. The *t*-test results show significant difference in posttest performance of the two groups: $t = 2.24$, $p = .03$. That is, the code-switching group from Zoology (CS2) did significantly better than the English-only group (EO2).

The *t*-test scores of the experimental and control groups of both departments demonstrated differences in the writing test, too. As shown in Table 16.3, the experimental and control groups of Psychology had a statistically significant difference in

Table 16.4 Group statistics for Zoology participants in writing test

Group	N	Test	Mean	Std. Deviation	t	p
CS2	28	Target words in writing	3.93	2.210	.81	.422
EO2	24		3.38	2.716		

the use of the 20 target words in their writing test. In this case, mean and SD were 5.38 and 5.097 for CS1 and 2.90 and 2.695 for EO1, while t was 2.29 and p was .026.

The two groups from Zoology showed difference in their use of the target words. As illustrated in Table 16.4, in this case mean and SD were 3.93 and 2.210 for CS2 and 3.38 and 2.716 for EO2. This difference, however, was not statistically significant: $t = .81$, $p = .422$.

Findings from FGDs: Finding the Meaning of Meanings

Two focus group discussions, one with Psychology students and the other with Zoology students, were conducted after the posttests. There were six students in each FGD, of whom three were boys and three girls. They were mainly from Bangla-medium education except for one student in each group from English-medium education. The FGDs revealed student perspectives on the use of L1 in English classroom.

Not surprisingly, all students except the two from an English-medium educational background overwhelmingly supported the use of Bangla in explaining new words. Most of them pointed out that using English-only teaching hinders understanding whereas a quick Bangla explanation may accelerate the learning process. One student gave the example of the word 'herd' which was included in the list of words in this experiment. He said that the meaning of the word was far from clear when the English definition was used; however, it turned out to be very easy when the Bangla equivalent was used. One student said:

> If English definition is easy, I face no problem, but sometimes I do not understand words that are used in the definition. That's why I have to look for "meaning of meaning".

Three students remarked that it is better for them to learn by understanding in L1 rather than memorising L2 definitions without understanding. One of them went further, saying using too much of English boils down to nothing if students do not understand the concepts. One student explained that sometimes they were indeed familiar with the concept in their mother tongue, only that they did not know the equivalent English word. A quick use of L1 equivalent in these cases enhanced the vocabulary learning process.

While commenting, many of the students referred to their proficiency levels, which according to them was not suitable for English-only teaching-learning. However, most students were in favour of using *mostly* English in the English

classroom while occasionally using Bangla where students failed to understand or communicate. Both of the two students with an English-medium background expressed preference for English-only explanations, one of whom commented that sometimes L1 definitions did not indicate the right use. The other argued that using Bangla killed curiosity and discouraged taking risks in using L2.

To sum up, most of the 12 students in the two FGDs supported the use of the mother tongue when necessary, especially when students failed to understand and when monolingual meanings made learning of new words more difficult than the target words themselves.

Discussion

This research explored the role of L1 in L2 vocabulary learning in a tertiary-level setting in Bangladesh. In this study the use of code-switching in vocabulary teaching was examined through an experimental research design. Two classes of learners were selected to ensure a reasonable number of participants in the study. Students' retention of new words was investigated at both the receptive and productive levels by using the Vocabulary Knowledge Scale (VKS) developed by Wesche and Paribakht (1996). As shown in the previous section, in all posttests, the students who received both English and Bangla explanations from the teacher outperformed the students who had received English-only explanations. In the VKS-based posttests, the experimental groups from both Zoology and Psychology had a clear edge over the control groups in recognising and producing the target words. Similarly, in the writing test, the experimental and the control groups exhibited difference in using the target words. Except for one test, the differences were statistically significant. The findings are congruent with the findings of other studies (Baleghizadeh & Mirzaei, 2011; Celik, 2003; Liu, 2008) in which the use of L1 was found to be a boon rather than bane.

The experimental and the control groups of both classes started at a similar vocabulary level and the grouping was randomly done. It could, therefore, be argued that the L1 was a resource rather than a hindrance for the participants in this study. L1, as pointed by participants of FGDs, may help students to link new words with concepts which they already knew. While a monolingual explanation exposes learners to additional input, it may however delay the learning of the target words. As a result, even though the quantity of input might be increased, the quality of retention might not.

The findings in this study speak in favour of exploiting L1 in explaining new vocabulary items. As Cook (2001) points out, L2 meanings do not necessarily exist independent of L1 meanings. Vocabulary teaching, therefore, should involve an effort to enhance the connection of concepts learned in L1 and L2. The findings can also be analysed in terms of Cook's four factors for using L1: efficiency, learning, naturalness and external relevance. Using both L1 and L2 was viewed by learners to be more efficient than using L2 only, while posttest results indicate that learning of

words, though short-term, was better in the bilingual mode. Use of L1 in explaining meaning also appears to be natural, as cited in the case of the word 'heron'. Words like this can be quickly translated into Bangla because the one-morpheme Bangla word *bok* seems to be much easier than the definitions in the monolingual dictionaries. Moreover, code-switching does have an external relevance in Bangladeshi society as it has uses for both English and Bangla outside the classroom.

The results are also congruent with Sampson's (2012) findings that L1 use serves communicative and learning purposes. He found that L1 expressions are used among other reasons for equivalence and clarification. In this study, L1 was used in a similar way which appeared to have contributed to learning. The use of L1 in this study can also be called a 'scaffolding strategy' that enhances learning as reported by Bhooth et al. (2014).

'Principled' or 'judicious' use of L1 has been discussed in scholarly literature. As research in the area is still far from conclusive, interpretation of these terms has been more intuitive than evidence-based. This research indicates one particular area – namely, explaining new words – where L1 might be beneficially used, although it is acknowledged that generalising based on a small-scale research like this may be insufficient. Further research may be able to cast light on the best uses of L1 in L2 pedagogy in similar sociolinguistic contexts.

The study had a few other limitations, too. Attempts were made to control extraneous variables. For example, students were randomly assigned to groups, high scorers were excluded from the test, and students missing any of the three sessions were excluded. There might still have been other variables which could not be controlled, such as motivation or the actual time individual students employed in learning the new words after the pretest and the lesson. The higher standard deviations in the posttests than pretests suggest that some unidentified variables might have been present, although they did not affect the results in a major way since the results were statistically significant and consistent in all cases. Another limitation of the study was that it examined only short-term retention of words. Future research might be necessary to determine if code-switching helps in long-term retention of new lexical items.

Conclusion

The use of code-switching in L2 teaching-learning was proscribed throughout most part of the twentieth century and is still viewed undesirable by many. In recent years, however, there appears to be a more critical appraisal and evaluation of the role of L1 in L2 pedagogy. Recent literature shows that in L2 teaching, especially in vocabulary teaching, L1 may serve as a productive resource which is readily available, easy and quick. L1 may serve as an aid or scaffolding tool for the learners. This small-scale case study attempted to examine the role of English-Bangla code-switching in learning new words in a Bangladeshi university setting. The findings of the study showed that L1 worked as a resource for the learners in the study. Learners

who received explanation of new English words in both English and Bangla performed better than those who received explanations only in English. Further research is necessary to ascertain conclusively the role of L1 in L2 vocabulary teaching and learning. This study, nevertheless, offers an experimental investigation into the effect of L1 use in L2 vocabulary pedagogy. Research of this nature has not been very common, especially in Bangladeshi context. The study has been able to indicate that L1 can be exploited to learners' benefit in explaining new words.

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Chapter 17
English, Empowerment and Economic Development: A Study in an International Business

M Moninoor Roshid

Abstract The phrase 'English for development' is frequently uttered in policy discourse in many non-English-speaking developing countries. This discourse has been further intensified when English is used as a global business lingua franca – a common language for global communication among business personnel who speak different first languages. However, how English language plays an influential role in empowering business personnel whose mother tongue is not English and how English as a language continues to promote their businesses to warrant economic development have been relatively under-researched in language enquiry. Applying a qualitative study approach, this chapter attempts to understand the role of English as a means of empowerment for international business and business personnel in Bangladesh and how it contributes to economic development. Data have been gathered through in-depth interviews from three cohorts of business personnel engaged in three tiers of communication in the ready-made garments (RMG) business sector in Bangladesh. Findings reveal that English language skills empower business individuals and organisations and create opportunities of achieving material gains in the form of suitable jobs, position, salary and status, which in turn contribute to the country's economic growth, poverty reduction and overall sustainable development.

Keywords English · Empowerment · Linguistic capital · International business communication

Introduction

In acknowledgement of and response to the role of English in the world, 'English for development' has become a growing rhetoric in policy discourse in recent years in developing countries (e.g. see Coleman, 2010; Erling, Seargeant, Solly,

M. M. Roshid (✉)
Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh
e-mail: moninoor@du.ac.bd

Chowdhury, & Rahman, 2015; Shamim, 2011), especially in discussions related to achieving quality in English language education. This discourse has been further intensified with an emphasis on the use of English as a lingua franca – a common language of choice (Jenkins, 2009) for global communication among people from different languages and cultural boundaries. In this ever-growing globalised world, the needs for communicating among people of varied and diverse language and cultural (linguacultural) backgrounds have gained growing importance. Globalisation of the business world has added momentum to this trend more than ever before. Language is a powerful medium of effective communication (Stevens, 2005) among people, and English language is used as a recognised business lingua franca (BLF) (Ehrenreich, 2010; Kankaanranta & Lu, 2013; Seidlhofer, 2005).

In view of this, acquiring competence in English empowers people in the developing world (Hussain, Ahmed & Zafar, 2009) and brings economic promises, which are seen as attributes of development (Coleman, 2010). Skills in English can be considered as invaluable soft skills – a resource of empowerment, a form of capital and a means of development. Learning one or more languages for communication can be seen as an investment in human capital that can bring about economic and social benefits in different ways to its users (Grin, 2003; Zhang & Grenier, 2013). However, issues such as how exactly English language empowers people and carries economic promises to a global business and its business community and, eventually, contributes to economic development have remained under-researched, especially in the context of Bangladesh. This chapter answers to these queries considering English language as a doorway to empowerment and opportunity in the ready-made garments (RMG) business in Bangladesh.

The chapter begins with critically reviewing existing scholarly literature on how language is connected with empowerment and development. In particular, this discussion focuses on how empowerment, economic value of language and development have been conceptualised in global literature. This discussion facilitates the development of a framework for analysing the findings of this study. The chapter then discusses the context – the RMG industry – where the nexus between English language skills, empowerment and development is contextualised. Afterwards, the research methodology is described which is followed by the findings.

Language, Empowerment and Development

'Empowerment', 'value of a language' and 'development' are contested concepts used in a wide range of disciplines, and these are defined and interpreted differently in different disciplines and contexts. Dictionary defines the term 'empowerment' as 'the process of becoming stronger and more confident, especially in controlling one's life and claiming one's rights' (Oxford Dictionaries online). The World Bank defines the term on its official website as 'the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes'. Lincoln and his colleagues (2002) argued that

'empowerment is not "power itself", but a process by which the latter is only bestowed to an end or for a purpose' (p. 273). West (1990, cited in Lincoln et al., 2002) considered empowerment as an enabler that gives access to the whole population to enter a free and fair world. While making a link between empowerment, gender and development, among others, Parpart, Rai and Staudt (2002) viewed empowerment as both process and outcome – they argued that it is 'a process in that it is fluid, often unpredictable, and requires attention to the specificities of struggles over time and place. Empowerment can also be seen as an outcome that can be measured against expected accomplishments' (p. 4).

Empowerment is inextricably linked to education, and it is conceptualised as a change that may take place at both individual and societal levels (Lincoln et al., 2002). Yagnik (2012, p. 43) observes 'English as [an] empowered tool for empowerment'. In explaining how English plays role in empowering people in the developing world, Hussain et al. (2009) contend that providing knowledge of English may play a role to maintain balance in some of the social inequalities in the job market. Learning a second language, hence, can be seen as crucial in developing a sense of self-worth and empowerment (Lincoln et al., 2002).

Academic literature has described the economic values of a language (or the 'economics of language') as 'linguistic capital' and 'human capital'. If we look at the role of a language from different theoretical viewpoints, we can see that language can be an important factor in a country for a wide range of socio-political and educational reasons. The exchange of language is associated with value in certain markets; English language competence is connected with economic development for individuals, organisations and society. Having proficiency in a necessary language is seen as 'linguistic capital' (Bourdieu, 1986, 1991). Bourdieu presents the forms of capital in three fundamental categories: *economic capital* (immediately and directly convertible capital into money or material wealth), *cultural capital* (the accumulated knowledge, skills and other cultural acquisitions which are not directly convertible into economic capital but convertible on certain conditions) and, finally, *social capital* (social obligations). Bourdieu further remarks on *symbolic capital* which indicates accumulated prestige or honour. Drawing on Bourdieu's work, Silver (2005) contends that English 'has a gatekeeping function which allows, or prevents, continued education and, thus, future job opportunities (for the individual) and fulfilment of labour market needs (for the society)' (p. 59). Dhir and Savage's (2002) studies on working language demonstrate that a working language is an asset as valuable as money itself – in other words, when language is used, it becomes capital.

In the emerging interdisciplinary area of the theory of economics of language, which analyses the effect of language use and skills from the perspective of economics, the value of a language has been critically analysed. In defining this area of knowledge, Grin (1996, p. 6) states:

> The economics of language refers to the paradigm of theoretical economics and uses the concepts and tools of economics in the study of relationships featuring linguistic variables; it focuses principally, but not exclusively, on those relationships in which economic variables also play a part.

The issues addressed in this area of knowledge are the effects of language on income, language learning by immigrants, patterns of language maintenance and the spread of multilingual politics or between trading partners, minority language protection and promotion, the selection and design of language policies, language use in the workplace and market equilibrium for language-specific goods and services. Therefore, one of the vital areas of research in economics of language is to see how a language affects economic variables – for instance, relationship between language skills and earning of its speakers, the relevance of language as a defining element of economic process, language-based income as well as language-related work.

Literature further suggests that while discussing the economics of language, most of the research focus on microeconomics – the behaviour of individuals – and in this approach, language skills are seen as a form of human capital (Chiswick, 2008; Chiswick & Miller, 2007). In explaining language skills as a form of human capital, Chiswick and Miller (2007) describe three overarching points: firstly, it is productive because it enhances the efficiency of a person to be employed, to do well in workplace and to increase earnings. At the same time, it also decreases costs of consumption (prices) by dropping the costs of communication with others. Secondly, the acquisition of language skills is related to costs of money and efforts, and thirdly, it is a human capital because it is embedded in a person who cannot be separated from his or her acquired language skills. It is in this sense that language skills fulfil the requirements of human capital and the investment of language skills brings economic promises.

Literature also suggests that the economic promises of English language can play significant role in a country's socio-economic development (see, e.g., Arcand & Grin, 2013; Bamgbose, 2014; Bruthiaux, 2002; Seargeant & Erling, 2011). The meaning and goal of 'development', however, vary from country to country, in particular, in the global North and the global South, especially in recent times. In general, development is currently seen as a change or progress, which is not circumscribed to economic growth which is usually measured through gross domestic product (GDP), gross national product (GNP) or per capita income. Instead, development is much broader in scope which includes the well-being of citizens (Bamgbose, 2014) and the overall quality of people's life. Importantly, the notion of development includes the enhancement of human rights and welfare where self-esteem, self-respect and improving entitlements are major concerns (Desai & Potter, 2008). Such concepts of development indicate the notion of human development, which is not confined to economic growth alone (Yunus, 1998).

Although human development is multidimensional (Alkire, 2002), recently the United Nations Development Programme views it as the process of enlarging people's choices 'by enhancing human rights, freedom, capabilities and opportunities and by enabling people to lead long, healthy and creative lives' (Jahan & Jespersen, 2015, p. 29). According to Anand and Sen (2000a), 'human beings are the primary ends as well as the principal means of development' (p. 83). Human development is usually measured by life expectancy, adult literacy, people's average income, freedom of choice and so forth (Soubbotina, 2004). The Human Development Report of 1996 states that 'human development is the end – economic growth a means' (Haq

& Jolly, 1996, p. 1). The purpose of economic growth in essence is a search for means to reduce poverty (Bruthiaux, 2002) and to enrich people's lives (Haq & Jolly, 1996). The ultimate goal of development is *sustainable* development 'that meets the needs of the present, without compromising the ability of future generations to meet their own needs' (WCED, 1987, p. 43). In the end, development is about 'intergeneration equity' (Anand & Sen, 2000b, p. 2034) and can be defined as the equality of opportunities of well-being.

Grounded on the above theoretical understanding of empowerment, and the economic value of language and development, this study explores and discusses how English language as a skill empowers a global business and non-native English-speaking business community and facilitates the production of material wealth that eventually contributes to economic growth, poverty reduction and overall sustainable development of a country. In order to get answers to these queries, this chapter draws upon the perceptions of the Bangladeshi ready-made garments (RMG) business professionals, who were involved in communication in English as a lingua franca in cross-border business interactions in Bangladesh, one of the leading garment goods exporters in the global supply chain.

An Overview of RMG Business in Bangladesh and the Use of English in Business

Against the backdrop of globalisation and trade liberalisation, the RMG business of Bangladesh has emerged as a huge industry in the global market. Being interconnected with other portions of the globe through the flow of capital, goods and movement of people, ready-made garments have become the main export merchandise of Bangladesh (Ahmed, 2009; Murshedy, 2010), and the industry has experienced incredible growth over the last three decades. Over the course of time, the RMG industry in Bangladesh has gradually become the largest national industry and the top export-oriented business sector in the global supply chain. The growth rate of RMG export has been more than 20% per annum over the last two decades. The expansion of the garment industry helps the country earn worldwide recognition in the global business market. The spread of Bangladeshi garments in the world market is seen as an industrial renaissance in Bangladesh (Islam, 2010), and exports are still rising sharply (see Table 17.1).

Unsurprisingly, the RMG business communication of Bangladesh with other countries is mostly in English (Roshid & Webb, 2013). RMG business professionals of Bangladesh use English as a communication tool with people from all over the world, regardless of their language background. These global business partners have a variety of language backgrounds that include people who speak English as a mother tongue, as a second language or as a foreign language (Roshid, 2014). As often the only common language, English is thus used as a business lingua franca (Ehrenreich, 2010; Evans, 2013; Kankaanranta & Lu, 2013).

Table 17.1 Bangladesh RMG at a glance, from BGMEA website (http://www.bgmea.com.bd/)

Commencement of RMG business	Late 1970s
First RMG export	1978, worth US$12,000
Experience in garment manufacturing	About 30 years
Rank of Bangladesh RMG in the world	2nd
Total number of factories (in 2016–17)	4482
Number of countries exported to	More than 50 countries
RMG's proportion of export earning sector	Nearly 80%
Economic contribution to GDP	More than 10%
Main type of garments exported	Woven garments, knitwear, sweaters
Number of people employed	Around 4.4 million
Main workers	Women total 3.20 million (80%)
Main importers of garment goods	EU and USA
Major appeal items	Shirts, trousers, jackets, T-shirts, sweaters
Number of people dependent on industry	40 million
Controlling authority of garments businesses	Bangladesh Garment Manufacturers and Exporters Association (BGMEA)
Total value of RMG export in 2016–17	28149.84 million (in US$)

The Study

This study was conducted using a qualitative case study approach. Data were collected from three groups of participants ($n = 43$), who carried positional titles of marketing (15), merchandising (17) and commercial personnel (11) and were involved in different professional roles and positions in the RMG businesses. The classification of these three groups is generic and well-established in the RMG sector in Bangladesh. Although they are involved in regular interactions and communication in English with international buyers and suppliers, the nature of communication and their involvement is different in roles and functions from each other, which necessitate the relative need for English communication skills. For instance, some are more involved in written than verbal communication, while some are engaged in local communication rather than communication in international settings.

Figure 17.1 summarises the roles of these three groups of professionals who took part in this research. The overall work experience of participants ranged from less than 5 years to 30 years. The age of participants ranged from 25 to more than 50 years, and most of them belonged to the 31–35 age group. Interestingly, in this study, the sampling method resulted in only one female participant because of women's marginal presence as professionals in the industry during the period of study.

Data were collected through in-depth interviews, which were conducted both in Bangla and English. Most participants used Bangla, which was their mother tongue. Participants were reassured of the confidentiality of their views and their anonymity. The entire audio-recorded interviews were directly transcribed into English in order

Fig. 17.1 The role of RMG business professionals

to get the full sense and meaning of the data. The responses were then analysed following a thematic approach, based on identifying key issues in their narratives, where the focus was on themes that emerged from the data rather than a predefined set of concepts.

Connections between individual themes are summarised and presented in this chapter through the heuristic of two major subthemes. The first subtheme discusses the more personal aspects of the role of English in empowering a business individual that contributes to one's career development, while the second subtheme focuses on how English empowers a business organisation to sustain in the business market that eventually contributes to poverty reduction, enriching people choices and overall human development.

English for Individual Empowerment and Career Opportunity

Analysis of data reveals that English language was clearly considered as a means of empowerment and material opportunity, as well as a capital for its importance in advancing one's career trajectory. Over the last two decades, increasingly the tendency has been for prominent business organisations to conduct interviews in English in recruiting prospective employees. Participants of this study explained that English language proficiency had played an important role in their lives in getting a job and/or better position. To them, people who had a sound level of English language skill were empowered to getting a good job. Among the participants, the marketing personnel explained the role of English in employment from employers' perspectives as they were engaged in recruiting employees. For instance, a director in a woven textile industry with more than 15 years' experience in this industry described how English language had played an important role for a job seeker in getting a job and functioned as a capital and as a means of opportunity and empowerment. He presented a scenario of two 'job chasers' and noted – 'Among two job seekers, for example, one can explain a matter in English but another one cannot. Isn't language a capital for the first one?'

The view expressed by this director indicates that English language proficiency greatly empowers a job seeker at the individual level (Lincoln et al., 2002) to face the challenges in a job interview, respond to questions of interviewers and self-manage their career to obtain a good job in competitive situations. In fact, the power and ability to effectively communicate in English with interviewers in an interview is seen as a key employability skill in winning a job, regardless of a candidate's academic background and, often, prior job experience. This finding reflects that English language is a capital that plays a gatekeeping role in allowing or restricting job opportunities, as discussed earlier (see Silver, 2005). This finding corroborates a plethora of previous works over the last two decades in the field of English and employment in different country contexts (see Dustmann & Fabbr, 2003; Erling, Seargeant, Solly, Chowdhury, & Rahman, 2012; Kossoudji, 1988; Roshid & Chowdhury, 2013; Tainer, 1988).

In addition to getting a suitable job, analysis further reveals that English language also played a clear role in securing a good salary in the employment market in the RMG sector. This was also another reason why participants regarded English language as a capital and as a means of opportunity and empowerment. Three participants argued that one of the most important factors in getting a high salary package was competency in English language. One contended that 'people, who know English, get a handsome salary'. People who were efficient in 'table talk' with the power of English, they thought, were able to manage their counterparts well in business dealings. Consequently they had a higher demand in the industry and, therefore, were paid well too. Earlier research also corroborates this finding and shows that a sound knowledge and skills in English helped in getting a higher salary or earnings (see, e.g., Casale & Posel, 2011; Chiswick & Miller, 1995, 2010; Shields & Price, 2002). Considering the instrumental outcomes of English in professions, Kankaanranta and Planken (2010) consider English itself as no less than a direct career development tool.

On the downside, the study reveals that the lack of required English language skills works as a barrier to and de-empowers career advancement. The research literature also suggests there are costs to English language deficiency in jobs and occupations (see Kossoudji, 1988). One of the participants, who was a director in a woven textile industry and had more than a decade of RMG business experience, described his despair at not being able to promote one of his employees, who was highly skilled and experienced in the garment's workplace, but was not equally skilled in English, which acted as a main hindrance to his promotion. He noted:

> We didn't give promotion to one of our vital employees, the only reason was that, although he had long experience in production, he was not good in English. We knew that he was not able to speak with business counterparts in English. If we sent him to Hong Kong to talk to our business counterparts, we had to send interpreters along with him to meet buyers. If a buyer understands that the person he is talking cannot speak English well, needs an interpreter, it is waste of time and money and we can't do it.

The above comment may have several possible explanations. One explanation could be the indication of both the economic and social values of English language. Regarding economic value, it can be said that if the owner sends an employee,

incompetent in English, along with an interpreter to support an English-poor colleague to engage in a business meeting with a Hong Kong counterpart, it has economic costs – to pay for an interpreter. On the other hand, there is also the value of the business relationship, which is a form of social capital (Bourdieu, 1986, 1991) because of which the owner is understandably reluctant to do anything that would thwart business rapport by providing quality of compromised nature.

However, in this case the owner was concerned more about the quality of relationships rather than economic costs. He considered the social value of English as a form of bond between business counterparts. In addition, it was also a matter of 'image' and prestige for a company that is arguably aware of Bourdieu's notion of symbolic capital. From the relational perspective (e.g. Fukuyama, 1995; Putnam, 1993), social capital is potentially beneficial for social actors, whereas relational benefits rely on the nature of social ties demonstrated through belief and attitudes that include trust, norms, identity and identification, among other attributes (Kostova & Roth, 2003). Social relationships can drive positive and cooperative behaviour and create a psychological environment conducive to collaboration and mutual support (Kostova & Roth, 2003).

The economic promise of English was also viewed from the perspective of human capital theory. One of the most experienced commercial participants, who worked in a mid-career position in the industry and who had switched experience in jobs, stated, 'English language skill is an asset in a business, and this asset is embedded and set in a person, and it helps a person to work and communicate anywhere'. To him, if a person with good proficiency in English switches to a new job, he will get support from his language proficiency in his new job as well. He indicated that English language proficiency is very much a transferable skill; it builds up confidence and ability/power in a person, and so a person does not face many challenges in switching to a new job because of his acquired and 'built-in' skills. The comments of this participant relate to the notion of human capital. Language skill is not just a form of human capital (Cameron, 2005; Chiswick & Miller, 2007) but also a *mobile* and transferable capital embedded in individuals. Unlike material position or physical infrastructure, the mobility or portability of English as capital therefore makes it even more versatile in the workplace.

Findings further show that English is a capital also because it has the power to save money and time. One of the merchandisers who worked in a senior-level position in a knitwear industry said: 'If somebody knows English well, he can do everything by himself. It saves his time and money'. Here the participant indicated the increased productivity of an individual as a result of their competence in English. As seen earlier, human capital theory (see Chiswick & Miller, 2007) considers language skills as a form of capital because it enhances/empowers productivity of a person to do well in the workplace. As also seen in the comment, the participant believed that English language could save time and money in the sense that hiring a new employee is time-consuming and involves costs. To recruit an employee, a company needs to go through a formal recruiting process by placing an advertisement, conducting interviews, appointing an employee, explaining tasks and providing training and so forth. Self-service with proficiency in English may empower an

employee that helps in avoiding time and money spent on the process of hiring an employee and is considered as a capital from the view of Chiswick and Miller (2007), who pointed out that language skill reduces the cost of consumption by dropping the cost of communication with others as discussed earlier.

While participants were describing the economic promises of English language, one marketing professional, however, reported rather surprisingly a 'negative' impact of English language skills that he had observed in the RMG setting in Bangladesh. He reported that an employee who knew English well could sometimes be harmful for the RMG industry, particularly for the owner of an industry. He pointed out that occasionally a 'smart employee' with sound communication skills in English would himself/herself establish a self-owned, new RMG industry, 'snatching away' some customers from the industry where he was an employee. Such practice was considered a negative consequence of having good English language skills of an employee from an employer perspective. Consequently, he further reported that some industries did not recruit 'over smart' employees with good English language skills. In this respect, it is worthwhile to note that among the participating directors/owners of this study, some indeed emerged as owners from previously working as employees in other companies – by first gaining experience and then establishing their own industry. However, it is not certain whether any of the participating directors/owners in this study had started business 'snatching' away customers from the previous industry.

Despite such occasional negative views about the deleterious use of English language skills, from the views of the participants, it seemed that English language skills had a highly positive correlation with employment, better salary and saving time and money. English language proficiency works as a means of opportunity and empowerment, and participants considered English language skills as the most conspicuous and persistent of their investments. The next section of this chapter discusses how participants considered English language a means of opportunity that is associated with organisational empowerment and advancement.

English for Organisational Empowerment and Promotion

As English is the main medium of communication in the RMG international business, it is seen as a capital and a means of empowerment by most of the participants across all three groups of professionals with different levels of experience. Participants, particularly marketing professionals, argued that communication in English was vital in the RMG sector because without communication and correspondence in English with international counterparts, their international businesses could not operate even for a single day. As one of the marketing participants explained, 'it is not possible to work with the help of interpreter because it is a big industry, it needs own employees with proficiency in English for international communication', indicating the unique value of a common working language in an international business organisation. As seen earlier in the literature, working

language is one kind of capital 'that offers the most effective economic means of knowledge creation and management within the context of the strategic environment in which they exist and operate' (Dhir & Savage, 2002, p. 1). In the RMG industry, English is not only a shared contact language that empowers a shared business interest but also the language of all sorts of interactions, negotiations, paperwork, documentation and the technical terms and jargon used in international business communication.

Participants further argued that the empowerment and de-empowerment of a business largely depended on the company's overall communication skills in English. This finding indicates that if a business company has a sound workforce with sound English language skills, it may strongly support the advancement of this business by exploring newer markets, negotiating with customers, convincing buyers and getting orders from them which eventually brought money from abroad as remittance. Participants further treated English language as a commodity in the sense that by exporting commodities Bangladesh received remittance. Similarly, by exporting garment goods by convincing buyers in English, Bangladesh earns much-needed foreign currency. In this sense, they considered English language a commodity in the RMG business, similar to Cameron's (2005) observation about English as a commodity in Indian call centres. Deficiency in English, nonetheless, may hamper the development of the business by not being able to cope with the needs of the market. Consequently, English language works both as a means of opportunity for and a barrier to the advancement of a business. A young merchandiser viewed English as a means of opportunity for presenting business products in an international market. He explained:

> The world of business is running on English. If you have good language skills, you can present your product in the market well; can draw the attention of customers… The whole process is proactive where language plays an important role.

Further, one unanticipated finding was to see English as a means of the relative sustainability/longevity of a business. A general manager, who had the most experience in a single RMG company, exemplified how English language had played a role in the survival of an organisation. He described past dealings in the garment sector in Bangladesh: "In the past, many owners of garments' industries did not know English well. In such circumstances, international buyers themselves used to come to this country and purchase garment goods, preparing all the paperworks themselves". He observed that many of those older companies were no longer in business in the industry due to their lack of English communication skills. Referring to such history, he indicated that without English people might still be able to run an international business, but perhaps not in a sustainable way or for too long.

Not only English – any language which has demand in the market is capital and empowers people, as argued by some participants from merchandising. They contended that in addition to English, some of the business organisations encouraged their employees to learn *other* languages, especially French and Mandarin, because these two languages were relatively more in *demand* than other foreign languages in RMG business communication. For example, some French buyers did not know

English well and communicated in French. Consequently, they reported that quite a few buying houses recruited several people who knew French. They observed that in communication with a counterpart, the language of the counterpart was more effective in building rapport. For example, if a Bangladeshi counterpart communicates with a French counterpart in French, it will be more effective in bridging a bond with the French customer than speaking in English or in a third language. This does not mean that English is not used with the French in RMG business; rather English is also used along *with* French.

Similarly, it was reported that employees who knew Mandarin in addition to English were in 'extra' demand in a corporation that had dealings with China. In this regard, some of the participants expressed their interest in learning Mandarin. They believed that not only English but also any 'demandable' foreign language was capital or even that 'more languages, more capital'. This finding is in agreement with the study of Ehrenreich (2010), who observed how additional foreign languages were an asset, particularly empowering in customer relationships in a country like China or Japan or Russia, where a national or local language rather than English is expected by business counterparts.

From Economic Promises to Economic Development

In light of the above findings, the rest of this chapter discusses how the economic promises of English language can contribute to economic, social and environmental development that eventually facilitate human development and sustainable development for the nation.

As seen earlier in the literature, economic growth and poverty reduction are the goals of development where creating a job opportunity is one of the vital means of achieving that goal. When people are engaged in the labour force with their skills (in this case, language skills), they can contribute to production that facilitates poverty alleviation regardless of their status as citizens of developed or developing countries. Also, language skills help to bring remittance to the country, increase production and develop GDP, GNP and per capita income, which generally indicates economic growth – a means of human development through expanding people's employment opportunities and meeting people's aspirations (Haq & Jolly, 1996).

Like economic development, language skills indirectly contribute to social development by creating opportunities for education, respect, participation and the maintenance of social equity. However, the question comes up in mind as to *how* this is achievable. As discussed, English language is a form of human capital from the perspective of human capital theory and is a means of human development through the exercise of this skill and individual motivations. It helps to continue education and enhances literacy that supports to bring self-esteem and respect (Streeten, 1994). As language skill influences career advancement, this in turn makes people feel more self-respect in their professions as well as in the society in general. Also, recent literature has shown that language skills develop the scope of

access to and participation in local and global economic systems, whereas inefficiency in a desired language works as a barrier to taking part in this system. Findings show that as a form of human capital, language skills empower the RMG professionals to work not only in the local economy but also in the global economy. Language skills empower individuals in taking part in international businesses and interacting with people from different languages and cultures. Without the participation of all in this large-scale and intricately networked setting, development cannot be achieved, and what can make it happen is the development of necessary language skills (Bamgbose, 2014).

In addition, development is not confined to socio-economic improvement only – it extends to environmental development too. As seen in the findings, language skills increase incomes and enhance the buying ability and power of people. It is natural that increased income is likely to extend opportunities and enhance the power of purchasing a range of goods and services necessary to ensure a decent standard of living (Haq & Jolly, 1996; Sen, 1999) for all. Increased income also increases life expectancy through taking nutritious food and living in a good environment.

One of the true indicators of development is sustainability or sustainable development. As mentioned earlier, language skill is one of the most important factors in drawing the attention of foreign investors in the RMG industry that truly underpins the existence and sustainability of this industry. In due course, it (English language) contributes to development not only for the present generation but also for the next ones by transmitting development both within the same generation and among generations. Overall, from the theoretical perspectives of the economics of language, linguistic capital and human capital, language skills contribute simultaneously to the three major interrelated areas of development – economic, social and environmental (Anonymous, 2004) – which play a great role as incentive to take part in desired language learning.

Conclusion

This chapter explored how English language skills empower non-native speakers and provide various instrumental benefits to its users in business settings, often involving communication with overseas businesses where the only common language between both parties is English. Besides demonstrating the significance of English in increasing employability and career advancement for individuals, this study showed how English has a determining role in the creation of opportunities for empowering individuals and organisations which eventually contribute to the country's economic growth, poverty reduction and sustainable development. Hence, the learning of and developing skills in English are real investments for any business.

The study has policy implications. Evidence suggests that the government of Bangladesh lacks proper national human resource planning (see *The Economist*, 2014). Consequently, university education in Bangladesh cannot keep pace with

local and global demands for graduates with English communication skills. In this circumstance, the government needs to reconsider its human resource planning, looking at the demands of the market – both local and global – at the same time, present and future, considering that the employment market is dynamic and constantly changing and take steps in introducing sustainable manpower planning and providing guidance to prepare job-ready graduates at a university with the necessary English communication skills. In this case, a university may build a collaborative partnership with industries to understand language necessities at workplaces and develop a suitable pedagogical framework to teach students the theoretical aspects of language skills as well as place them in workplaces to gain practical experience of language use (see also Roshid & Webb, 2013). Such pedagogical framework may facilitate graduates to become work-ready human resources.

Another policy implication could be that, in order to develop human resources with the necessary language skills alongside English, the government may emphasise the importance of other foreign languages in demand in the global labour market. Meanwhile, it has been observed that many developed countries like Australia has adopted multilingual policy for teaching and learning in schools, considering its values in the global business market. As the global importance of communication is increasing day by day, it is time for Bangladesh to revise its language teaching policy along with the curriculum to adopt an additional foreign language in school curriculum.

As the RMG business grows gradually, it is difficult to run such a big industry on interpreters; rather it needs to prepare a professional pool of its own professionals with skills in more languages in demand in today's world of business. Also global socio-economic transformation has led to the imposition of 'competitiveness' as a core value (Piller & Cho, 2013, p. 23), and the RMG business is getting more competitive at all three levels – local, regional and global. As such, this industry should develop professionals with all the necessary skills including expertise in multi-languages because 'more languages, more capital', more means of empowerment and poverty reduction and finally more means of achieving sustainable development goals.

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Part IV
Conclusion

Chapter 18
Lessons Learned: From Emerging Realities to Implications for the Future of Education in Bangladesh

Foez Mojumder and M Moninoor Roshid

Abstract The twenty-first century places demands on every country to build a high-quality, inclusive and equitable education system to educate a young generation with adequate knowledge, twenty-first century skills and social values to live, work and contribute responsibly to the society as well as to the local and global economy. Most of the developing countries including Bangladesh, therefore, have committed to reform their education system in order to achieve the Sustainable Development Goals (SDGs) by 2030, since education is arguably considered the best investment for a country to become developed. As it is widely recognised, a reform action requires policy makers to review evidence-based education practices to undertake informed decisions. This book, therefore, is an attempt to present recent studies being conducted by a group of dedicated researchers working at home and abroad, addressing emerging issues in education in Bangladesh to facilitate policy makers to undertake evidence-based and informed reform action plans. Based on the studies presented in the book, this concluding chapter draws together common threads and discusses learning points that may offer insightful directions for the future of education in the country. The insights and guidelines, therefore, could assist the government of Bangladesh and relevant stakeholders in developing effective action plans to improve current practices at all levels of education.

Introduction

The twenty-first century places demands on every country to build a high-quality, inclusive and equitable education system to educate a young generation with adequate knowledge, twenty-first century skills and social values to live, work and

F. Mojumder (✉)
Faculty of Education, Monash University, Melbourne, VIC, Australia
e-mail: foez.mojumder@monash.edu

M. M. Roshid
Institute of Education and Research, University of Dhaka, Dhaka, Bangladesh
e-mail: moninoor@du.ac.bd

contribute responsibly to the society as well as to the local and global economy (World Education Forum, 2015). Most of the developing countries including Bangladesh, therefore, have committed to reform their education system in order to achieve the Sustainable Development Goals (SDGs) by 2030, since education is arguably considered the best investment for a country to become developed (Ban Ki-moon, 2016). As it is widely recognised, a reform action requires policy makers to review evidence-based education practices to undertake informed decisions. This book, as noted in Chap. 1, is an attempt to present recent studies being conducted by a group of dedicated researchers working at home and abroad, addressing emerging issues in education in Bangladesh to facilitate policy makers to undertake evidence-based and informed reform action plans. Based on the studies presented in this book, this concluding chapter will draw together common threads and discuss learning points that may offer insightful directions for the future of education in the country.

Several important aspects that have been studied in recent years have been covered by the book to provide a drone view of the current status of education in Bangladesh. Specifically, the book has included chapters on different levels of education, at the same time covering different components and practices in education such as science education, language education, assessment, equity and quality, inclusion, policy, privatisation, institutional autonomy, employability, teacher leadership and the professional development of teachers. In this volume, the contributors have not only examined the current practices, issues and challenges with regard to respective areas of education but have also recommended specific policy guidelines for the improvement of the system.

In this concluding chapter, we have identified several issues that require the immediate attention of policy makers in order to achieve the Sustainable Development Goals (SDGs) by 2030. To understand the relationship among the chapters and the ideas being broached, we will summarise our learnings gained throughout the book under three overarching themes: (a) access, equity and quality in education; (b) reformation of curriculum, assessment and teacher development; and (c) higher education, employability and economic growth. We acknowledge that some chapters, of course, may overlap across these themes. Based on the summaries, we will then discuss the policy implications of the research showcased in this book.

Access, Equity and Quality in Education

Several chapters (Ahmed; Banu, Roy & Shafiq; Chowdhury; Habib & Hossain; Islam; Malak & Tasnuba; Rahman & Missingham; and Salahuddin, Greenwood & Conner) presented research on issues related to *access*, *equity and quality* which appear to be a major concern for the country. Although the government achieved much success in relation to enrolment in primary education, the country is still struggling to bring children from minority groups to schools, retain children from

low socio-economic backgrounds in schools and deliver quality education for all children regardless of their economic status. This section, therefore, draws conclusions based on the following chapters and suggests policy recommendations with regard to issues and challenges around equity, socio-economic imbalance in society and quality of education.

Over the last three decades, primary education has been the constitutional right for all children. After enormous efforts for more than three decades, questions still arise – do all children have equal access to primary education? Do schools accommodate all types of children, including children with disabilities? How far has the country advanced towards achieving a 100% enrolment and retention rate? What achievements have been made regarding equity and quality? What are the initiatives that the government should undertake? Having all these questions in the background, Ahmed, in Chap. 2, reported the findings of the CREATE project that had guided the Education Policy 2010 with respect to access, equity and quality in primary education. Findings depicting the reality of primary education in Bangladesh suggest that many children do not complete the primary education cycle, and the children completing the cycle come out with poor levels of competencies. Such findings raise questions about the efficiency and effectiveness of the education that has been provided by the state for decades. Household poverty, food insecurity, noninteractive pedagogy, impoverished classrooms with few facilities, high teacher-student ratios, low contact hours and schools located too far away – all of these have contributed to students' poor performance and dropout tendency. Ahmed connected such outcomes to the low allocation of budget for primary education – which is less than 1% of national GDP and one of the lowest in the world.

There is no doubt that the allocation for the education budget has to be raised in order to improve the scenario. Added to this, the CREATE project recommended that several measures be taken, most of which are already reflected in the National Education Policy 2010. For instance, reformation of teaching-learning strategies, common quality standards across all types of schools, second chance education for dropouts, flexible structure of delivery modes for disadvantaged children, formative assessment throughout the school years, restructuring of public examinations aiming at genuine assessment of basic competencies and discouraging rote learning, greater NGO involvement and provision of support for these are presented as the top priorities. Although the CREATE project suggested discontinuing, due to low impact, several programmes such as stipends for children from poor families, the government appears to be continuing them. Banu et al. (Chap. 3), based on their recent investigation, reported that the stipend programme is still in place and mostly ineffective, failing to reduce the financial stress of poor families. It is, therefore, necessary for the government to reconsider the recommendations that have emerged from a large-scale research and use the funds for quality improvement.

Banu et al. further reported that the government has introduced a number of programmes to address the issues on access, equity and quality, for instance, the *Each Child Learns* programme seeking to give children a fair chance to learn through active participation; the *Second Chance Education* offering an alternative route for children who missed formal education; the *Reaching Out-of-School Children* pro-

gramme aiming to support financially disadvantaged children; the *Mainstreaming of Inclusive Education* hoping to address the needs of specific groups of disadvantaged children; the *Targeted Stipend Programme* providing cash payments to children from poor families to ease school-related costs; and the *Need-Based Infrastructure Development Scheme* to support backward people facing acute problems. Although the *Each Child Learns* intervention has been designed to improve basic learning competencies, positive impacts are barely discernible, since the National Student Assessment 2013 (Directorate of Primary Education, 2014) suggests that 65% of Grade 3 students do not have the minimum ability in reading Bangla; they are not able to understand familiar words used in new contexts. Added to this, only 25% of Grade 5 students have achieved the desired ability in reading Bangla. In terms of mathematical literacy, most students are unable to demonstrate the competencies set by the curriculum. After completion of Grade 5, most children are unable to solve mathematical problems involving money transactions and cannot perform simple operations of addition and subtraction (Directorate of Primary Education, 2014). Although the National Student Assessment 2015 has already been enacted, the outcomes are yet to be published.

Overarching concerns that persist are not confined to quality issues; access and equity in education are still major challenges. Banu and her colleagues reported on the current scenario of inequality in education from the perspectives of age, gender, ability/disability, ethnicity, geographical location and socio-economic background. Several of these variables have been reported elsewhere in a number of other chapters of this volume.

With regard to socio-economic background, Islam's empirical study (Chap. 6) reported on how socio-economic gaps existing in the society affected the success of communicative language teaching (CLT) and learning outcomes of students and how the gaps have widened since its adoption. As most of the secondary schools are administered by private enterprise and investment, their successes still depend mostly on financial investment. Islam's study revealed that high-ranked schools are mostly administered by social and government elites; these schools hire highly qualified teachers who are capable of teaching English following broadly the CLT approaches. These schools also ensure professional development of their teachers. However, since only students from high socio-economic class have access to these qualified teachers, high academic achievement is a privilege confined to this group. On the other hand, students from low socio-economic status do not have access to these high-ranked schools as they cannot afford the cost, and consequently are being left out and marginalised, not having qualified teachers with access to required professional development programmes.

Islam argues that this, in turn, has accelerated social gaps and the rise of social elites in the same society, suppressing democratic practices and blocking access to equitable education for a large part of the population. He has also noted that lack of public budget in underprivileged schools will expedite the social class system. In addition to budget allocation, equal management and administration across all schools by the government authority are obligatory. Moreover, a reasonable salary scale may attract young and high achievers to choose the teaching profession, which

may increase the number of qualified teachers across all types of schools to enable students from low socio-economic backgrounds to access quality teaching. Finally, there is no alternative other than pre-service and in-service professional development programmes for leveraging teachers' capacity.

Rigorous professional development programmes are also recommended by Malak and Tasnuba (Chap. 7) to combat the challenges of implementing inclusive pedagogies. Considering child rights and Disability Acts along with financial constraints and social stigma regarding disabilities, the government has taken a prudent and timely decision to include all the disadvantaged children in regular (inclusive) classrooms. Malak and Tasnuba argued that practising inclusive education to its fullest requires a change in the mindset and culture of people, through enormous awareness-raising programmes, along with an inclusive curriculum, substantial professional development programmes and infrastructure development. The existing training and awareness-building programmes have been found to be impacting very little; therefore, the researchers initiated their research to reveal teachers' understandings of inclusive education and its practice. Their study revealed that secondary teachers were familiar with the term; however, their understandings of inclusion did not appear to encompass students with special needs. When the idea of inclusive education is not clear, it would be unfair to expect the spirit of access and equity in teachers' actions. Since the practice of inclusive education in classrooms depends mostly on teachers, the researchers suggest teachers need to improve their pedagogical knowledge as well as their attitudes towards combatting social discrimination regarding disability. In addition, introducing a flexible assessment system, suitable instructional materials and logistics for all types of students and relatively smaller classes with a low teacher-student ratio are timely demands requiring immediate attention from the government.

Another recommendation by Malak and Tasnuba is that the control of the Ministry of Social Welfare over education for students with special needs to be shifted to the Ministry of Education, so that uniform approaches to inclusive education can be taken by a single body as opposed to dispersed decisions and arrangements by separate authorities. As suggested by these authors, substantial reform effort is required to establish the philosophy of inclusive education in the beliefs, values and attitudes of people at all levels, including teachers and policy makers. At present, the government seems to have the commitment for initiating the change. At the same time, the government needs to come up with realistic action plans based on research to reform the entire system. This will then be a step towards equity and social justice.

Reform actions should also focus on children's psychosocial and psycho-emotional health, since a number of programmes have been undertaken to improve the statistics and bring about discernible exterior changes but have impacted little on student retention rates. Habib and Hossain's chapter (Chap. 5) has broached a newly identified concern – lack of school belongingness – as responsible for high dropout rates and poor academic achievements, given that other research mostly pointed at poverty and child labour as reasons for these phenomena (see Ahmed). Authors' empirical research uncovered that a large proportion of children attended school

physically but were disconnected psychologically and/or intellectually. These children did not engage themselves in learning processes and appeared to have a tendency to drop out of school at a later stage. Students' sense of belonging can be seen as an issue related to *access*, as it can affect psychosocial adjustment at school, engagement in learning, school attendance and self-efficacy. Students, who were exposed to a joyful learning experience and not always pushed for excellent academic performance, appeared to have a higher sense of belonging in schools. Their level of motivation, engagement and participation was found to be higher than that of their counterparts with a lower sense of belonging. Moreover, teachers' positive interactions with students played a vital role in promoting the sense of belongingness among students.

It now appears that school-level interventions are urgently required to improve students' sense of belongingness. Habib and Hossain, therefore, advise schools to develop a culture of positive interaction and interdependence within the community. For this culture to grow, every student needs to be acknowledged as a valued member of the school community, and be offered tailored individual attention and an increased warmth and care. Schools should emphasise on cooperative approaches instead of promoting a culture of competition. Teachers should use a wide range of pedagogical approaches such as cooperative group work to foster social cohesion among peers. To enact these recommendations, rigorous professional development programmes for teachers and principals, based on research, need to be integrated into the system.

Based on Habib and Hossain's chapter, we suggest that students' socio-emotional needs are as important as their academic needs. The government forces parents to send their children to school in order to increase the enrolment rates, but if it cannot ensure that children feel attached to schools, retention rates will not improve. In consequence, if the matter of attachment is not attended to, the government's investments for quality education will result in a poor return. It is, therefore, time for the government to focus on subjective variables such as belongingness, in order to improve retention rates and academic performance as part of its quality improvement efforts. In addition, the government may consider the infrastructural improvement of schools since the quality of school infrastructure has a significant effect on school attendance and dropout rates; students are less likely to attend schools that make school infrastructure and facilities a second priority (Branham, 2004).

In addition to professional development programmes and infrastructure development, school leadership also plays a significant role in change (see, Leithwood, Louis, Anderson, & Wahlstrom, 2004). Through a qualitative case study, Salahuddin, Greenwood and Conner (Chap. 8) have evidenced this in their chapter. The chapter has reported how one single creative principal developed leadership capacities in his teachers to offer students an enriched learning experience. When the authoritarian model of leadership exists across all schools in a country where colonial effects endure, this principal came up with a model of shared responsibility for engagement with students and community.

This exceptional model may be scalable across the country, where current practice encourages principals to focus only on administrative chores rather than allow-

ing them to explore innovative ideas of leadership and options for capacity building. These included eliminating discriminatory grouping approaches based on students' academic achievements; engaging students more in group activities to facilitate teachers' management of large classes; decentralising leadership roles and enhancing collaboration among teachers to increase productivity; allowing communication and exchange of views to support each other; offering democratic practice and building high levels of trust; involving parents in children's education to empower them; and involving the school in global programmes to take advantage of capacity-building opportunities. Taken together, these strategies resulted in enhanced student learning, high-quality teaching, high academic achievement, development of life skills and trustworthy relationships among teachers, students, parents and community. Although Islam demonstrated in his chapter that high academic achievement was possible only for students in wealthy schools, Salahuddin et al.'s chapter has reported adequate evidence of how school leadership can alter the typical practice and ensure high academic achievement in students coming from the low socio-economic group.

However, a combined effort from all the teachers at Shanjeebon School was required to break the tradition of practice and bring about success. The teachers appeared to have experienced a number of problems to which they struggled to find solutions. Although the teachers involved themselves in informal research to find the solutions, Chowdhury (Chap. 9) came up with a call for institutionalising action research to solve problems that teachers frequently encounter in schools. In harmony with Salahuddin and his colleagues, Chowdhury suggested schools break the traditions of being isolated in classrooms and that they rather take part in ongoing dialogue within the greater research community. He suggested teachers themselves undertake research projects and disseminate the results among other teachers to help them solve their problems. The results of research can also be disseminated to other stakeholders, including school leaders, parents, the community, the government, and the people involved in professional development programmes. In this way a professional community may form, and many problems in schools may be resolved with minimum effort and at low or, often, no cost. Contributions from every member within school community may provide new learning opportunities. For this to happen, Chowdhury encourages schools to make partnerships with universities. This would not be easy, yet it is not impossible. It certainly requires a change in culture, and the mindset of teachers and relevant professionals, as was required for the Shanjeebon School leader to bring about changes in the long-practised culture.

Based on the example of effective leadership, Salahuddin et al. offers a potential framework for building teacher leadership in the Bangladesh context. The home-grown model confirms how a strong creative leadership can overcome obstacles limiting teachers' capacities to facilitate students' learning. Through the participatory actions of all stakeholders and professional dialogue of teachers, educational changes can be made possible. The model, therefore, seems to be pertinent in the context of Bangladesh where most people cannot afford costly education. We suggest that our education professionals consider integrating this framework into professional development programmes to enable principals and teachers deal with

challenges in schools while at the same time fostering the work ethic to ensure positive outcomes.

So far we have discussed chapters related to quality, access and equity at the primary and secondary levels of education in the country, without taking the emergency situation into consideration. Many parts of the country regularly go through emergencies every year, due to which the CREATE project broached the idea of education in emergencies. This project recommended tailored and flexible education approaches that meet the needs (including the needs in emergencies) of children in different geographical locations, in order to reduce the dropout tendency. An example of such a programme is detailed in Chap. 4. The *Anondo Biddaloy* (school) used flexible approaches promising to return children back to their normal life after they had been affected by a devastating cyclone. When one million households lost their dwellings and 10,000 schools were shattered, food, water, shelter and medical treatment were unable to restore children's emotional wellbeing. Initiation of an accessible, child-friendly, non-formal school to educate children in crisis to recover their self-esteem and self-reliance and to return them to a trauma-free life was not only altruistic but also pragmatic for a country like Bangladesh affected frequently by natural disasters. An activity-based curriculum, flexible class routines, children's participation in school management, physical and psychological healthcare support, livelihood skills development, life skills education and recreation, each of these made the school unique and exemplary and expedited the return to normal life and formal schooling. Rahman and Missingham (Chap. 4) demonstrated how effectively the school facilitated children's psychosocial wellbeing along with that of their families and assisted them to continue their education using an alternative pathway and to keep the window open to return to formal education.

Such innovative model of education in emergencies was more than a regular education programme, as it assisted children in satisfying their psychosocial needs, protected them against any further mishaps, facilitated transmission of health and survival messages to the community and assisted in the reconstruction of the economic basis of households. We, therefore, suggest replicating this model of flexible and life-oriented approaches in a number of underprivileged areas of Bangladesh, including flood-affected areas, *char* (islands), *haor* (bowl or saucer-shaped shallow depressions, also known as back swamps), hill tracts and slums. In return, this would assist in reducing the number of dropouts significantly, given the fact that the future disaster trends of the country are assumed to become more extreme.

The discussion so far on several chapters indicates that issues related to quality, access and equity in education remain a challenge for the state, given that these issues are to be resolved by 2030 since one of the targets set by the SDGs is to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' (World Education Forum, 2015). Lack of research-based evidence in past decades may have restricted the government from taking informed decisions to achieve their targets in the desired time. It is hoped that the practice of research along with the featured findings in this book may assist the government to understand the current status and help make informed decisions in order to improve the scenario. We also suggest that the government take the recommendations into

serious consideration to eradicate discrimination in the education sector, which would help this sector achieve the targets of Sustainable Development Goals (SDGs). In addition to this, the following section discusses chapters that provide insights into ways of reforming education to catch up with the momentum of changing education practices worldwide. In particular, the section focuses on the reformation of curriculum, assessment and teacher development, apparently one of the most neglected areas of research in Bangladesh at the current moment.

Reformation of Curriculum, Assessment and Teacher Development

This theme emerged from the chapters by Sarkar (Chap. 10), Mojumder and Keast (Chap. 11), and Azim (Chap. 12). Their chapters reported evidence-based practices regarding the core components of education such as curriculum, pedagogy, assessment and professional development of teachers, with particular focus on the secondary level. Based on these studies, we call for a reformation initiative in relation to curriculum, pedagogy, assessment and the professional development of teachers. This section, therefore, draws conclusions based on the findings of the above studies and suggests policy recommendations with regard to reformation of secondary education, with a focus on building a generation equipped with twenty-first century skills.

Despite twenty-first century skills such as critical thinking and ICT literacy being widely accepted (Binkley et al., 2012) as desirable, they are yet to be acquired among the masses. Indeed, people in Bangladesh still nurture and are guided by superstitious beliefs hindering the growth of scientific thought and values. Although the national curriculum has always prioritised the promotion of science values such as curiosity and rational thinking, in reality, teachers are not trained sufficiently to be able to promote these values. Sarkar attempted to explore teachers' views and practices in the promotion of science values in real classrooms. The findings of his study suggested that teachers considered curiosity and rational thinking important for developing scientific literacy in students; however, very few of them were able to articulate and practise teaching approaches that are helpful for the promotion of such values. Sarkar also reported science teaching mostly being exam-focused and following a content-dominated, transmissive approach; in consequence, teachers put limited effort into the promotion of science values. Teachers have very few options, since their performance is still measured based on students' performance in national assessments.

While the curriculum aims at promoting scientific literacy through students' engagement in scientific processes, high stake assessment and teachers' reliance on textbooks encourage students to memorise facts to respond to examinations and achieve good grades. Lack of hands-on science lessons resulted in students' inability to make connections between school science and their real lives, as Mojumder

and Keast report. Although students evaluated school science as often unengaging and irrelevant to their personal needs, they are still highly motivated to take up science courses and pursue careers in science. They reported a high socio-economic pressure for science-related careers since doctors and engineers are well-paid and highly respected in the society. Moreover, students who missed the opportunity to study science were found to still have a strong desire to take up science in further education. Similar motivation for studying science is unusual in the developed world, where students do not choose science courses if they are unengaging and unappealing. Bangladeshi students' enthusiasm for studying science should be deemed an asset and so utilised.

The country has already taken a number of initiatives to reform the assessment practices. To discourage the practice of memorisation, the government has introduced the creative question (CQ) system as part of its reform actions. This system was introduced to assess Bloom's higher-order skills such as application, analysis and synthesis, with the expectation that teachers will gradually develop these skills in students. Azim's study revealed that despite the government's best intentions, the creative questions lack validity and reliability and the grading may not be standardised and comparable. Test items are not bias-free and not familiar to students with variable backgrounds. Azim's study also suggested that the textbooks are not adequate to develop the skills required for new assessment, in consequence, students with sound economic background, who have access to guidebooks, tutors and coaching, are benefitted, although the intention of introducing creative question was to reduce the gaps between students from various socio-economic backgrounds.

Azim recommended a standardised and comparable assessment system rather than using raw scores to demonstrate an improvement in terms of quality to gain political advantage. In the same country, students studying in English medium schools following international curricula enjoyed the advantage of international standards and recognition; why would students studying the local curriculum be unable to receive recognition of their study due to a nonstandardised structure in the national assessment system? Since the Secondary School Certificate (SSC) examination carries a significant value in students' academic life, it has to be standardised so that the results can be used internationally. A new assessment system may encounter difficulty when being implemented. Nevertheless, its need has to be acknowledged, and actions need to be taken for continuous improvement. It appears that the necessity for standardised tests and scores has long been ignored. It is now time for the policy makers to consider Azim's recommendations and to introduce a nationwide standardised assessment system and work towards effective operation of assessment reforms.

In addition to assessment reform, the country needs to restructure the form of science and technology education to ensure sturdy economic advancement through industrial growth, which requires a workforce leveraged by sound knowledge and skills in science, engineering and technology. At the same time, high school and college students should graduate with a sound understanding of science and technology and have skills that are necessary to make themselves compatible for the

rapidly growing technological advances in the twenty-first century society. The government has already realised this but taken only a few steps such as introducing an inquiry-based science curriculum recently to facilitate the development of science process skills. However, such a reform is not adequate. Instead, science and technology education requires an extensive reform to align with international trends. In the past decade, STEM Education, a combination of science, technology, engineering and mathematics (STEM), has already been introduced in school science curricula worldwide to prepare school graduates to meet the upcoming challenges of technology-driven twenty-first century. Along with science, technology and mathematics already existing in the school curriculum, educators worldwide have recognised the importance of engineering in school education to nurture the twenty-first century skills in students. In order for science education reform to take place, it is mandatory to introduce a brand new curriculum introducing STEM Education, a compatible assessment system, a new generation of STEM teachers, ongoing professional development programmes for teachers and STEM schools equipped with all necessary teaching-learning materials.

In relation to the question of *access*, each child should have an equal opportunity to study any subject they want to. As reported by Mojumder and Keast, school authorities use an 'ability-streaming filter' when recruiting students for science stream at Year 9, regardless of their interests and aspirations for studying science. Such streaming is too early. Restriction on students aspiring to pursue science study should be lifted, given that many countries such as Australia (Lyons & Quinn, 2015), the UK (De Lepe, Olmstead, Russell, Cazarez, & Lloyd, 2015) and the USA (Augustine et al., 2010; Roberts, 2012) have a huge shortage of science graduates due to students' lack of interest in science. Students in Bangladesh have shown overwhelming enthusiasm for science and technology in recent years. If the country can afford this interest and educate them with modern STEM Education approaches, it will be able to supply the demand of STEM graduates worldwide. This will, in return, boost the economy when these graduates will bring home money along with cutting-edge science and technologies.

Higher Education, Employability and Economic Growth

Akhter (Chap. 16), Alam (Chap. 13), Kabir and Webb (Chap. 15), Roshid (Chap. 17) and Shahidur Rahman (Chap. 14) discussed several crucial intertwined factors around higher education, employment and economic development. It appears from these studies that the government lacks control over the higher education sector, and a clear vision and plan on how to utilise the graduates from universities to maximise the economic benefits is not observed. This section draws on conclusions based on the findings of the following research studies and suggests policy recommendations with regard to improvements in the higher education sector, with a focus on preparing job-ready graduates to ensure sustainable economic growth.

No doubt education is a means for upgrading socio-economic status; however, many people in developing countries such as Bangladesh cannot afford the cost of it or the opportunity cost of sending children schools despite their best efforts. We have seen students' high level of interest in pursuing science study regardless of their ability in science and mathematics (Mojumder & Keast, this volume). Vocational education seems to remain unpopular, since it has so far failed to demonstrate its potential in employing graduates in the current job market. The current job market seems to be reluctant to hire employees who do not have undergraduate or postgraduate qualifications, since the supply of qualified graduates is higher than the demands of the labour market. Added to this, entrance into public universities is very competitive as the places are very limited.

In such circumstances, private universities have mushroomed across the nation offering lucrative degrees in science, engineering, medicine and business. Since the public demand is that parents want their children to study engineering, business and/or other lucrative science subjects such as pharmaceutical science, private universities have expanded by taking the advantage of the paucity of places in public universities, the demand of the job market and people's purchase capacity. Kabir and Webb, using a neoliberalist perspective, have reported how private universities have expanded in the past few decades and have exploited the demands of the public. With their rapid expansion, one may ask whether they are providing education or making money.

Although past history informs us that the initial purpose of the establishment of these institutions was to provide education as a service rather than intending to do 'business', private universities, over the time, have been observed to have shifted their altruistic objectives in favour of an intention to make profit on a large scale. The people engaged with these universities are mostly businessmen, with some academics and politicians; hence, they have been able to influence the government easily to nullify the debate on the quality of education and the intention to business (Kabir & Webb, this volume). In order to tackle this, the government has been trying to regulate private universities by introducing a mixed model of a private and public governance system. Still, the impact has been insignificant. Kabir and Webb, for instance, have presented several anomalies in terms of the management, finance, infrastructure development, appointment of executive members and above all the standard of education being provided. Moreover, the regulatory body – the University Grants Commission – is not empowered with sufficient staff and legal authority to monitor universities and take action. The current practice still remains volatile and creates a serious dilemma, particularly when it comes to the question as to who actually possesses control and monitoring authority over the private universities. As there is not adequate data to draw on specific recommendations for government, one can only anticipate that universities should be encouraged to offer a system that will deliver the best education with quality management, in return for people's private investment on education.

On the positive side, however, private universities are helping somewhat in transforming the brain drain into a brain gain by hiring academics with qualifications gained abroad. These academics would otherwise have stayed in other countries

since no other employment sector still welcomes them with a satisfying salary package. Rather we have observed a remarkable volume of skilled migration taking place in past decades. Shahidur Rahman's chapter, as an emerging research area, demonstrated how private universities are facilitating brain gain. Shahidur Rahman identified a relatively new pattern of flow of intellectual labour from developed country to developing country, while the trend has been the reverse in the past. The participants of Shahidur Rahman's study offered interesting perspectives on socio-economic and philanthropic reasons for such a positive pattern of behaviour among expatriate Bangladeshi academics. This pattern of return has the potential to introduce advanced knowledge and cutting-edge technology in their home country. However, one of the overarching challenges is to hold them by allowing returnees to work independently and making more scope for them to work. While China, India, Brunei, Malaysia, Taiwan, Jamaica and some other countries have adopted policies to bring their intellectuals back to their home country with lucrative offers and opportunities, the Bangladesh Government is yet to undertake a move in this regard. There is no doubt both parties have to complement each other; otherwise philanthropic reasons alone may not suffice in bringing back Bangladeshi academics from their overseas domiciles. There is no doubt either that the return for the investment of private universities will be high. In recognition of this, the chapter offers insights for policy makers to consider developing a policy framework to facilitate the offer of increased benefits so that high-skilled academics become motivated to return to Bangladesh, stay and contribute in a sustainable manner and ensure economic prosperity.

Socio-economic advancement, to a great extent, depends on the utilisation of university graduates, rather than allowing them to look for a way out of the country. On the other hand, one of the overarching objectives of higher education is to create job-ready graduates with the necessary knowledge and skills suitable for the socio-economic demands of the country. As a developing country shifting to a middle-income identity, Bangladesh is encountering many challenges, one of which is the unemployment of university graduates. This crucial issue has also been highlighted in one of the SDGs – SDG 8 – where youth employment a with decent job is concerned. Without the active engagement of youth in relevant education and decent work, an inclusive and sustainable socio-economic growth of a country may be impossible. Over the past decade, enrolment rates in universities have increased by around 50%; however 47% of graduates are still unemployed in the country, due to the fact that higher education being delivered by universities lacks uniformity, quality, updated curriculum and applied skills that are required by workplaces (The Economist, 2014).

With a focus on the instrumental value of English language education and communication skills, Roshid's empirical study reported how these skills helped graduates obtain suitable positions along with expected salary and status in the ready-made garments (RMG) industry. Being grounded on the economic value of language and development, the study revealed that people who have English language skills can ensure their sustainability in the job market and are more capable of bringing external investment in their own land, which in turn contributes immensely to the country's economic growth and sustainable development. Findings of the study suggest that

language skills have been viewed as a form of capital of a candidate regardless of their academic background: better language skills ensure better position, higher economic and organisational status and empowerment. Advanced language skills have also been found to contribute to social development, social equity and social justice.

In order to maintain the trajectory of economic growth upwards, more job opportunities are to be created for university graduates. Since English language skills increase the chance of securing employment and can bring remittance to the country, improving graduates' language skills has to be an overarching focus of tertiary education. Evidence suggests that the government of Bangladesh lacks conscientious planning for national human resources, and at the same time, university education is not aligned with global demands in terms of communication skills in English. In these circumstances, it is suggested that the government prepare a vision and relevant policy with regard to human resources based on research on the demands of the market – both local and the global. A country should have a vision for using its large unskilled population as well as the skilled ones. It is also necessary for the government to keep in mind that the employment market is dynamic and shifting its focus frequently. Roshid recommends that universities build a collaborative partnership with industries to regularly understand the demands in the workplace in terms of language use and develop a suitable pedagogical framework (see also Akhter's chapter for a pedagogical method used for teaching English; Roshid & Webb, 2013) not only to teach students theoretical aspects but also to place them in industry to earn practical experience.

Language skills take a substantive amount of time to master. Roshid's suggestion is to emphasise the English language from the school level and make English language teaching at school more communicative so that students develop communication skills. Although the government has introduced communicative English in school education, teachers' skills in teaching a communicative style of English are not aligned with the shift in the curriculum. In order to prepare school graduates equipped with necessary English language skills, particularly in communication components, English teachers are required to undergo extensive professional development programmes. Looking at the future, Roshid also suggests introducing other international languages such as French or Chinese in the school curriculum so that the chance of employment will increase along with more international buyers being interested in investment; more language means more capital, more employment, less poverty, more empowerment and hence one further step ahead towards the achievement of SDGs.

In critically examining the learning of foreign language and skills, we should not forget to nourish our own language. To understand the importance and necessity of the mother tongue in learning foreign languages, Akhter's experiment shows how Bangla language was crucial in helping learners understand concepts presented in English. While there is ongoing scholarly debate on which pedagogical approach to follow – between using the target language exclusively, and switching between the target language and the learners' own language – evidence from Akhter's experiment suggests that the latter approach is more effective in retaining vocabulary in learners' memory. Her study shows that students who had received bilingual defini-

tions of terms in the English classroom outperformed students who received English-only definitions of the same terms. However, Akhter recommends academics in higher education institutions conducting more research on this issue to re-evaluate the role of the first language in foreign language pedagogy.

Alam again reminds us of the importance of own language, in light of his long experience of teaching English in Bangladesh, India and the USA. Basing his observations on post-colonial philosophy, Alam noted how the Bengali language has been marginalised in past decades, while the subject of English literature has been replaced by the wide adoption of CLT. He is sceptical about the quality of language education due to a lack of assessment mechanisms for speaking and listening skills and a devaluing of literature and the grammar translation method (GTM) in CLT. Therefore, he suggests reintroducing GTM and literary aspects in English language teaching and reducing the amount of CLT, contrary to Roshid's study, which favours the importance of communication skills, especially in the English language, in relation to business growth and economic benefit. The inevitable existence of the current market economy and its demand on language and communication skills cannot always be ignored, especially by a developing country similar to Bangladesh whose economy depends, to a great extent, on foreign remittance and investment. As an example, India has been building its nation with a focus on communication and English language skills, due to which they are now able to earn revenue by exporting their services overseas such as through call centre services. In contrast, Bangladesh is failing to catch this business due to the poor English language and communication skills of graduates, despite the fact that labour is relatively cheaper in Bangladesh. While Alam's strong recommendations come from his lifetime experience, we recommend empirical research on which form of English language education should be adopted to suit the needs of Bangladesh, considering the current demands of the global economy.

Concluding Remarks

The preparation of this book was undertaken with the purpose of presenting an evidence-based scenario of the policies and the practices in relation to the overall education system in Bangladesh and recommending the best practices for improvement. Since the education system in the country is multifaceted, as discussed in Chap. 1, we acknowledge that it is impractical for a book of this nature to cover all the areas of the system. However, the book may offer opportunities for readers to construct a comprehensive idea, based mostly on empirical research, about the most common issues that this and many developing countries encounter.

Not unlike other developing countries, the society in Bangladesh appears to be imbalanced by unequal participation of its members. Insufficient plans of action, budget, expertise, efficiency and effectiveness of programmes may have resulted in the rise of unequal participation, the tendency of dropping out of schooling and the poor academic achievements of students. Traditional teaching approaches and

assessment strategies along with lack of professional development programmes for teachers may still cause the drop in quality, resulting in passing students out without preparing them for the job market and the world outside.

We have drawn conclusions in relation to the challenges around the issues of equity, socio-economic imbalance and the quality of education. We have also discussed and recommended reformation actions to be undertaken, particularly for the school curriculum and the assessment system. Several chapters came up with extensive models that can be used to reform the system. Moreover, we have discussed the challenges that the higher education sector is currently facing, have made suggestions based on the findings that the chapters revealed and proposed guidelines to maximise the utilisation of university graduates as human capital towards the economic development of the country.

We would also recall the fact, noted in Chap. 1, that most of the commission reports prepared after independence had not been followed adequately in the past four decades. Nonetheless, the progress that the country has made so far is remarkable, which has attracted considerable attention from international agencies. We value the government's commitment to achieving the SDGs, which have sought to address the issues of access, equity, quality and reformation. The government's enunciation of the developmental focus on education, training and skills development as a means of increasing human capital, and eliminating poverty and inequality in the society, is also significant. The latest National Education Policy has also demonstrated commitment to addressing issues related to quality, access, equity, curriculum, assessment, language skills, computer literacy and employability. Now the commitments need to be translated into practice. We, therefore, suggest the government execute the policy statements to ensure that every citizen receives quality education at all levels of education and develops skills that meet the demands of both the local and the global markets.

Developing national standards for education and undertaking organised action plans are very important. We would, therefore, suggest that the government initiate and fund more research to gather evidence from real practices and that the recommendations emerging from the studies be followed. We also suggest allocating more resources including financial and intellectual ones. In addition, a change in the culture of practice requires changes in the mindset of all levels of the population. The government has to take the first initiative in this regard.

Finally, we argue that this book provides insights and guidelines that could assist the government of Bangladesh and relevant stakeholders in developing effective action plans to improve the current practices at all levels of education.

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