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Transferring training to practice: Improving primary school teaching in Bangladesh

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Transferring Training to Practice: Improving Primary School Teaching in Bangladesh

by
Amy L. Moyer

A Dissertation
Presented to the Graduate and Research Committee
of Lehigh University
in Candidacy for the Degree of
Doctor of Education
in
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This thesis is accepted and approved in partial fulfillment of the requirements for the
CERTIFICATE OF APPROVAL

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requirements for the degree of Doctor of Philosophy/Education for Amy Moyer.

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Acronyms

AUEO	Assistant Upazila Education Officer
EFA	Education for All
DPE	Department of Primary Education
GPS	Government Primary School
MDG	Millennium Development Goals
MOE	Ministry of Education
NAPE	National Academy for Primary Education
NCTB	National Curriculum & Textbook Board
NDP	National Development Plan
PEDP	Primary Education Development Plan (I, II, and 3)
PTI	Primary Teaching Institute
SMC	School Management Committee
URC	Upazila Resource Center

Abstract

Current educational reform initiatives in Bangladesh focus on classroom teaching as a direct path to improving student learning outcomes and indicate a shift away from the teacher-centered, authoritarian education model of the past with a preference for a more constructivist pedagogy. This research used qualitative data collected from interviews, classroom observations, and document reviews to examine teacher training and teaching methods used in government training centers and primary schools in Bangladesh. The purpose of the study was to examine whether the teaching methods taught during teacher training were transferred into classroom practice and what factors influenced the transfer of training to practice for teachers within their first years of teaching. The research consisted of three case studies of new teachers that completed their 12-month Certificate of Education training within the past three years.

The findings of the cross-case analysis clarify how the transfer of teacher training is supported or challenged at the person, program, and system levels. At the person level, the teachers' professional identity influenced their approach to teaching and student learning. At the program level, the school leader and the culture of learning established at the school affected teacher behaviors in the classroom. At the system level, the norms and practices regarding examinations in public education in Bangladesh conflicted with the innovative teaching practices suggested in the education reform initiatives. Additionally, insufficient educational resources, corruption within the education sector, and the low pay of government primary school teachers were also found to adversely affect teacher behavior and motivation in the classroom. Recommendations advocate for a realignment

of resources and objectives in the teacher-training program and government schools in order to mitigate the challenges new teachers currently face during their first years.

Keywords: teacher training, transfer of learning, pedagogy, Bangladesh education, education reform

Chapter 1

Introduction

The most significant impact on student learning results from well-trained teachers who employ high-quality ‘best practice’ methods (Darling-Hammond, 1999; Harris & Sass, 2011; Jalal et al., 2009; Opal, Zaman, Khanom, & Aboud, 2011). Over the past two decades, best practice teaching methods have been the subject of education reform around the world. Best practice teaching methods are identified as those that (a) support student participation through a child-centered classroom environment, (b) encourage student engagement in critical thinking and problem solving activities and (c) result in improved student learning outcomes (Cornelius-White, 2007; Harris & Sass, 2011; Opal et al., 2011). Developing nations that are committed to improving their education systems are channeling resources into improved teacher training on identified best practice methods and strategies (Ahmed, 2011; Arua, Moanakwena, Rogers, Tierney, & Lenters, 2005; Hutaserani, 2008; UNICEF, 2009). However, research (Ardt et al., 2005; Nath & Mahub, 2008; Serbessa, 2006) has shown that teachers often fail to use the methods that they have been taught during pre-service teacher training after they have become classroom teachers.

Major funding initiatives resulting from the United Nations’ Education for All (EFA) and the Millennium Development Goals (MDG) have been directed toward improving the education system in Bangladesh. Interim evaluation reports from development partners have acknowledged success in universal primary school enrollment. However, despite this success, the quality of education remains a major dilemma in Bangladesh (Ahmed, 2009; Hutaserani, 2008; Mullick & Sheesh, 2008;

UNICEF, 2009). Educational researchers (Ahmed, 2009; Ardt et al., 2005; Haq, 2004) have characterized primary schools teachers as “passive”, “mechanical”, and lacking enthusiasm in their interactions with students. The dominant pedagogical approach has been described as primarily “lecture based and teacher centered” (Haq, 2004; p. 42). While several explanations of this behavior have been suggested—large class size, over worked teachers, lack of basic resources and the expectations of school administrators, students and parents—little research has been undertaken to identify the cause of teacher behaviors and pedagogical choices in the classroom.

Context: Primary Education in Bangladesh

Bangladesh is located in South Asia and is bordered by India and Myanmar, with the Bay of Bengal to the south. At 50,258 square miles, it is slightly smaller than the state of Iowa. The projected population for 2013 is 163,654,860 with 28% of the populace living in the major cities (U.S. Central Intelligence Agency, 2013). Bangladesh has one of the world’s largest primary education systems with over 82,218 primary schools, which employ approximately 365,925 teachers (Ahmed, 2011; UNICEF, 2009). In 2009, government spending on education was approximately 2.2% of the GDP. The school life expectancy for boys and girls is 8 years and 58% of the population over the age of 15 can read and write (Central Intelligence Agency, 2013).

Education management in Bangladesh. The management of primary education in Bangladesh is highly centralized. Shortly after independence, the *Primary Education Taking Over Act* (1973) nationalized 36,165 primary schools and designated the 157,724 teachers in those schools government employees. Until 1981, primary schools were managed through the Ministry of Primary and Mass Education (MoPME) at which time

the ministry was restructured, giving primary education its own separate administrative sector entitled the Directorate of Primary Education, or DPE. The creation of the new DPE was intended to streamline universal primary education and strengthen the primary education infrastructure.

The DPE is responsible for all aspects of educational management, including resources (financial, human, and information), curriculum, budgets, training and professional development, policies, textbook creation and distribution, and infrastructure. For a breakdown of division and division responsibilities in the DPE, see Appendix A. In addition to the listed management duties, the DPE monitors and inspects all government primary schools (GPS) and the training facilities for GPS teachers, Primary Training Institutes (PTI). Inspectors collect data such as examination attendance and grades, daily attendance of students and teachers, and student dropout rates. The figure (1) below delineates the organizational infrastructure of the DPE. Each administrative division under the DPE has the number of offices or institutions in that division.

The DPE also encourages community involvement in primary education with the creation of School Management Committees (SMC) and Parent-Teacher Associations (PTA) at each school. These are voluntary, community-based organizations that work together to strengthen and involve citizens in the local management of GPSs. The SMC has 12 members and typically include local political leaders, teachers, parents, and landowners. The committee serves as a link between the local community and school. They often help raise money for additional expenses not covered by the DPE.

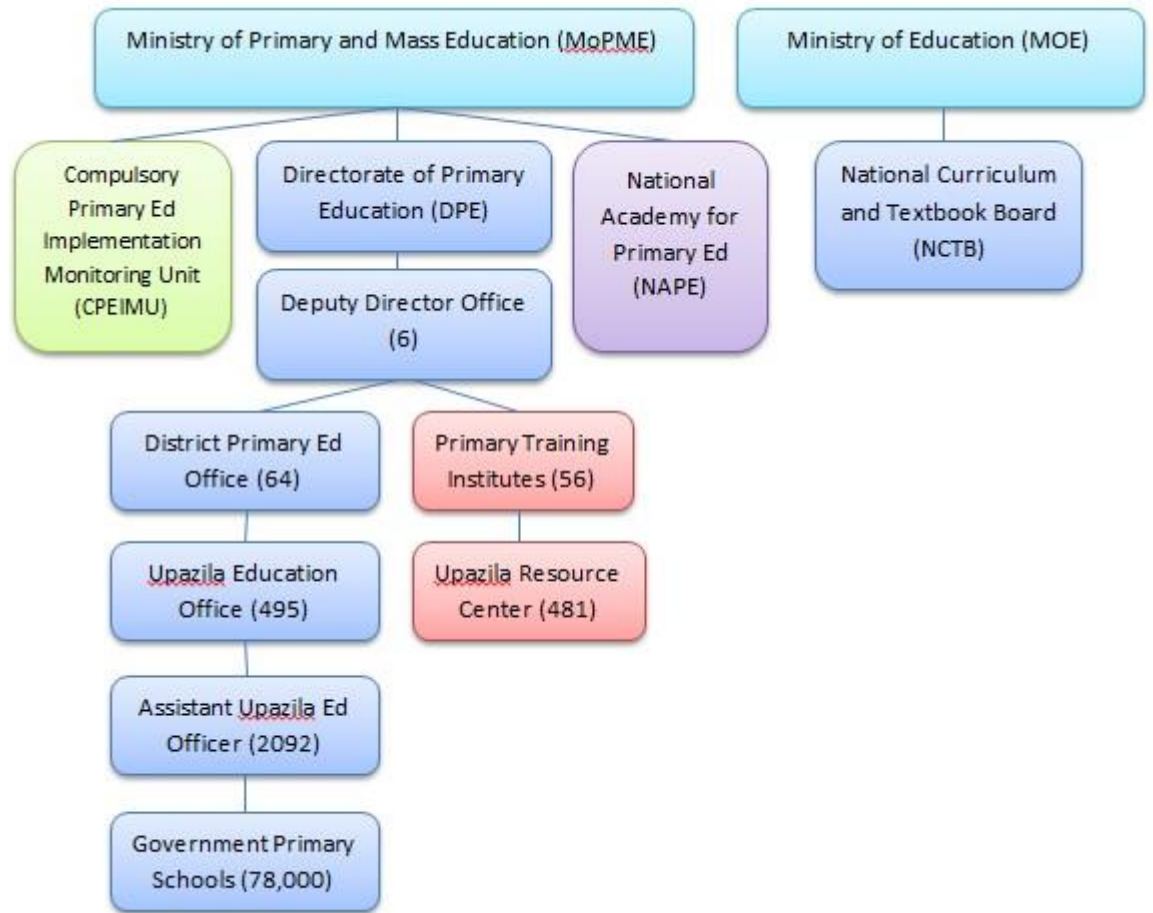


Figure 1: Education management flowchart for the government primary education sector in Bangladesh.

Primary Training Institutes. In Bangladesh, PTIs are the chief source of training and preparation GPS teachers (Bangladesh Ministry of Primary and Mass Education, 2005). Currently, there are 56 government operated PTIs, all of which are managed by the DPE with the National Academy for Primary Education overseeing curriculum and assessment. The Certificate in Education (C-in-Ed) is a one-year formal course designed to train teachers in general pedagogy and subject based teaching methods. Once teachers have been employed with a GPS, they begin the C-in-Ed training

course at the PTI within their catchment area. Since the PTI's catchment can be quite large with considerable travel time for some teachers, male and female dormitories are available. Teachers in training continue to receive their month salary (approximately 7,000 taka or \$86.50 USD) during the training period, in addition to a training allowance (1,500 taka or \$18.50 USD).

Government Primary Schools. A High School Certificate (HSC) for females and a Bachelor's Degree for males is required for teachers in GPSs¹. Currently, GPSs employ 91,521 female and 90,853 male teachers. To encourage greater participation of women in the teaching profession, the government reserves 60% of new teaching positions for women.

The number of available teaching positions in a school is based on a student-teacher ratio of 1:60. The DPE posts available positions in the daily newspapers. Candidates are screened for positions with tests (oral and written) and interviews. Once a teacher has been accepted for employment at a GPS, they begin teaching immediately. New teachers begin training at the PTI during the next enrollment cycle, either January or June. After training is complete, they return to the hiring GPS.

GPS teachers have a number of other professional responsibilities within the community, which include:

- Keeping vaccination records on all students
- Monitoring voting
- Monitoring local sanitation
- Visiting all homes and recording the census for the catchment area
- Participation in the Parent-Teacher Association
- Participation in the School Management Committee

¹ All teachers, despite university degrees earned, must attend PTIs.

- Mothers' Gathering, a bi-monthly meeting on nutrition and development for new mothers

Most of these responsibilities occur outside of the school day and can be particularly burdensome, especially for female teachers, as they require traveling throughout the community, often at night.

School is compulsory to the 5th grade. Students in the 5th grade take the terminal Primary School Certificate (PSC) examination in November each year. As with all government schools from primary to university level, the examination results are posted in local newspapers. In order to prepare for the PSC, two "model" PSC tests are given during the year to 5th graders. The model tests and PSC are given in each subject area (mathematics, science, social studies, Bangla, and English).

Additional tutoring referred to as "coaching" or tuition is common, and expected, in Bangladesh. Coaching typically occurs outside the school with an independent tutor. Coaching can be held privately or in a small group. The cost of coaching varies on the quality of the tutor; however, this additional out-of-pocket expense is a burden for the poor. Consequently, the government has allowed for an affordable provision in GPSs to prepare students for the PSC examination. Coaching classes are provided from January to November on a daily basis in addition to the normal school day. Each subject has a coaching class and the GPS teachers teach the classes as part of their teaching load. Coaching classes offered at the GPSs cost approximately 200 taka per month.

Professional development for teachers. Short-course professional development is arranged through the Upazila Resource Centers (*upazilas* are small district areas). Each year, the URC is expected to hold a five-day training workshop for all GPS teachers. However, as reported by the schools and teachers in this study, the URC short-course

training was sporadic and unreliable. More frequent one-day training workshops, known as “sub-cluster training”, is expected to be held bi-monthly and is arranged by the AUEOs or PTI instructors. Occasionally, a professional development workshop is funded by an outside donor organization and provides a specialized or focused training for teachers. A smaller representative group attends these workshops from the *upazila*. Members of the group then disseminate the training for teachers at the URC.

Principals are referred to as “Head Teachers” in the Bangladeshi GPS system. Additional certification beyond the C-in-Ed is not required for head teachers in GPSs; furthermore, head teachers do not receive any specific leadership training. The only support they received at the time of this research was a monthly meeting with all of the head teachers in the sub-district at the URC.

Resources in GPSs. The creation of all GPS and PTI educational resources—curricular documents, textbooks, examinations, and classroom aids—is managed and developed by the National Academy for Primary Education (NAPE) and the National Curriculum and Textbook Bureau (NCTB) respectively. Specifically, the NAPE develops the PTI’s C-in-Ed (Certificate in Education) curriculum, organizes teachers training and conducts the C-in-Ed examinations. Additionally, the NAPE conducts educational research, helps with the development of curriculum for GPS, and produces PTI textbooks. Similar to the NAPE, the National Curriculum and Textbook Board (NCTB) develops curriculum and produces textbooks; however it is an autonomous organization under the Ministry of Education (MOE). The NCTB’s chief responsibility is the development and renewal/modification of the primary education curriculum. In addition

to the development of primary school textbooks, the NCTB also produces and distribute textbooks for secondary and higher secondary levels of government run schools.

Education Reform in Bangladesh

The Ministry of Education (2004) has emphasized the importance of reforming the teacher education program in order to improve the quality of education,

There are two main reasons for the lack of quality and the resulting problem of low internal and external efficiency. The first is the difficulty in recruiting, placing, and retaining sufficient numbers of properly trained personnel to manage the system. The second is the low investment in those essential inputs that are absolutely required for qualitative improvements, such as textbooks and other learning materials, improved curricula and, most importantly, teacher education. (p. 26)

Consequently, in 2005 the MOE partnered with 11 aid organizations to introduce the second phase of the Primary Education Development Plan, or PEDP-II² (Ahmed, 2011; Mallick & Sheesh, 2008; UNICEF, 2009). The PEDP-II was a six-year initiative implemented in 61,072 government primary schools within all 64 government districts of Bangladesh. The stated aims of PEDP-II included,

To improve the quality of education, PEDP-II focuses on in-service teacher training. Teachers are trained in interactive teaching approaches and also receive subject-based training... The Diploma of Education for new teachers will be fully revised in 2009 and 2010, focusing on new child-friendly teaching techniques and will include a 6-month teaching practice component. (UNICEF, 2009, p. 3)

Through the PEDP-II initiative, graduates of the PTIs have been trained to use more innovative teaching strategies, which include “child-friendly” and “interactive approaches”. The extended practicum period and subject-based training provided new teachers with a practical knowledge base. In 2011, the third phase of PEDP (known as

² PEDP I, active from 1997 to 2003 consisted of 27 projects which focused on equitable access to school in underserved areas, quality improvements and increased efficiency of the school system.

PEDP3) was enacted to continue “many of the quality improvement[s], institutional, and systemic reforms introduced under PEDP-II with an increased focus on how inputs are used at the school level to improve learning outcomes in the classroom and raise primary school completion rates” (Directorate of Primary Education, 2011, p. vi).

The policy objectives outlined in PEDP-II and PEDP3 are also found in the second phase of the National Development Plan (NDP-II) and the *National Education Plan, 2010*. The NDP-II, which is active until 2015, aims to improve PTIs, establish regular professional development activities, and impart “child-friendly” and participatory teaching approaches. Provisions in the *National Education Policy, 2010* include improvements in teacher recruitment, teacher training, and the discouragement of memorization and rote learning as a teaching strategy. Each of the aforementioned reforms has focused on classroom teaching as a direct path to improving student outcomes and indicates a shift away from the teacher-centered, authoritarian education model of the past, with a preference for a more constructivist pedagogical method. However, this partiality toward “child-friendly” teaching methods poses additional challenges when implemented within the Bangladeshi context.

Statement of Problem

The purpose of this research was to examine how teachers make use of the methods that they were taught during their teacher-training program in PTIs once they are employed as teachers in GPSs in Bangladesh. One evaluative study (Ardt et al., 2005) conducted at the beginning of the PEDP-II reform found that teachers in Bangladesh used teaching methods other than those that they were trained to use in the PTIs,

Rote-learning is the main style of curriculum. Textbooks in government schools often fail to interest students or are not considered relevant to their

lives. Few supplemental materials are provided. ...Children from poor families who do not have the money to hire tutors often fail to complete their [home] work which leads to child and teacher frustration, failure and high drop-out rates... teachers often do not use most of what they learn and there is little supervision and few refresher training sessions after the initial year training. (p. 12)

In a later narrative study, researchers (Mullick & Sheesh, 2008) identified weaknesses in the PTI training program. Personnel shortages, inadequate training facilities and materials all pose challenges to the learning environment. Additionally, Mullick & Sheesh (2008) found that teacher trainees do not receive proper supervision during their practicum due to overburdened PTI supervisors.

Teachers can only be effective if they can apply what they have learned in training to the dynamic context of the classroom. Scheeler (2008) states, “Unfortunately skills and techniques that teachers learn and practice in college classrooms are not always maintained over time, nor do these skills necessarily transfer to actual classrooms with children” (p. 146). Poor quality preparation programs and lack of school-wide support can leave new teachers with little more than their own experience with schooling when they enter the classroom (Hiebert, Morris, & Glass, 2003). Research (Brownell, Ross, Colón, & McCallum, 2003; Darling-Hammond & Baratz-Snowden, 2007; Scheeler, 2008) has found teacher training programs which blend theory and practice, model best practices, promote self-reflection, and use peer collaboration best prepare new teachers for the realities of classroom teaching. Additionally, in schools that offer induction programs, teacher mentors, and professional learning communities new teachers report higher confidence levels (Cullingford, 2006; Darling-Hammond, 1999; Wong, Britton, & Ganser, 2005). What factors contribute or hinder the transfer of teacher training to classroom practice within the Bangladeshi context?

Research Questions

This study examined the problem of transfer of training to practice within the context of government primary schools in Bangladesh. The research questions guiding this study were:

1. What evidence is there of transfer of training to practice for recent Certificate in Education graduates of Primary Training Institutes in Bangladesh?
 - a. What methods are primary school teachers taught to use in PTIs and how do PTI instructors perceive their usefulness in promoting student learning?
 - b. What is the dominant teaching method used by new teachers in the classroom and why is this method chosen?
 - c. What do teachers perceive as influencing their choice of teaching methods in the classroom and why?

Design

I examined these questions through the collection of qualitative data—interviews, observations and document review—building three case studies of new teachers. The fieldwork was conducted over a five-month period in the capital city of Dhaka in the fall of 2012.

First, qualitative data—semi-structured interviews with administrators and instructors, review of curriculum and training materials, and observations of teacher training classes—was collected from three PTIs. The PTI staff acted as key informants during the initial stage of the research field work by providing (a) a list recent PTI graduates for recruitment as study participants, and (b) background information that would guide the creation of questions for the pre-observation interviews with the teachers participants.

Once three teacher participants were identified and agree to participate in this research study, an initial school visit was arranged to meet the head teacher and obtain the necessary permission for the observations. Afterward, structured pre-observation

interviews were conducted with each participant. Next, observations were carried out for one school week (six school days) in each of the teacher's classes. I used Danielson's (2007) four-domain framework as an observation instrument. This instrument is comprised of four distinct aspects of a teacher's responsibilities: (1) planning and preparation, (2) classroom environment, (3) instruction, and (4) professional responsibilities. Danielson's framework has been used extensively for research and in practice in the United States, as well as abroad. After the observations were complete, I conducted a post-observation interview to discuss the classroom experience. These research activities provided great insight into pre-service training, the challenges that teachers encounter, and how teachers adapt strategies to meet their needs within the classroom.

In conducting this research study, I assumed that faculty and administrators in the PTIs and the research participants in the GPSs responded honestly to the interview questions. Also, it was assumed that the observations were representative of the normal day-to-day classroom occurrences. This study does not examine the effects of best practice teaching methods in Bangladesh primary schools, nor does it investigate the learning outcomes of students as a result of best practice teaching. While both of these research topics would further enhance our understanding of quality education in Bangladesh, the focus of this study was a greater understanding of teacher training and the transfer of training to classroom practice.

Researcher's Background

In 2012, I received the Junior Research Fellowship from the American Institute of Bangladeshi Studies (AIBS). The AIBS fellowship provided financial support for all

research activities and living expenses during a 5-month period from July through December. As a condition of the fellowship award, I presented the preliminary findings at a professional conference arranged through AIBS in Dhaka on November 21, 2012. In order to prepare for this project, I attended two sessions of the ‘Critical Languages Summer Intensive Language Scholarship’ (CLS) sponsored by the US Department of State, Bureau of Cultural and Educational Affairs, and administered by the Council of American Overseas Research Centers. These sessions were held at the Bangla Language Institute (BLI), a research and teaching center of Independent University, Bangladesh (IUB), the leading private university of Bangladesh. Each nine-week intensive language session offered to CLS recipients is equivalent to one year of formal university-level language training. Additionally, I received funding through CLS Alumni Development Fund for Bangla language textbooks and private tutoring during the summer of 2011 and spring of 2012.

I have been an educator at the secondary and tertiary levels in the United States, and abroad. I earned my Bachelor’s Degree in Secondary Education in 2004 and my Master’s Degree in Education (Teaching English to Speakers of Other Languages) in 2007, from DeSales University. I began my studies in International Educational Leadership at Lehigh University’s College of Education in 2007. My primary interest is in teacher training, curriculum development, and promoting equity through education.

My personal interest in this topic was developed while visiting schools and talking with teachers during my two language study trips to Bangladesh in 2009 and 2010. While in Bangladesh, I took the opportunity to visit eight primary schools in Dhaka city. During these visits, I informally observed classes and talked with teachers and

administrators. I also joined the Bangladesh English Language Teachers Association (BELTA) and attended a weekend conference on engaging students in the classroom through best practice methods. While undertaking these activities, I discussed the challenges of providing quality education in government primary schools with local educators. They discussed some of their frustrations with the current situation. They explained that inadequate funding for public education results in stress for teachers, including long hours, little preparation time, and lack of resources. Emerging research questions from my experience included: How do teachers meet these challenges on a daily basis and employ high quality teaching methods? How can PTIs best prepare new teachers to use and maintain high quality teaching strategies?

Chapter 2

Literature Review

This literature review provided the conceptual framework for this research study on the transfer of teacher training to classroom practice. In this chapter, characteristics of effective teacher preparation programs are identified by examining the relationship between theories of Adult Learning and Learning Transfer situated within the context of teacher training and new teacher support programs. This analysis is placed within the framework of current policy trends in teacher education in Bangladesh to identify practices which promote or hinder the successful transfer of teacher training to classroom practice. Additionally, consideration was given to the appropriateness of policy borrowing from the western conception of a “child-friendly” pedagogical approach into the Bangladeshi primary school context. The larger scope of this research was to examine how pedagogical policy aimed at improving the quality of education has been implemented in Bangladesh.

Adult Learning & Learning Transfer Theories

Theories of adult learning have helped to shape workplace training and professional development activities for decades. In the 1960s, scholars of adult education coined the term ‘andragogy’ in reference to the practice of teaching adults, versus ‘pedagogy’, the practice of teaching of children. This marked an important turning point for addressing the unique needs of adult learners. In Knowles (1980) theoretical work on andragogy adult learners are described as (1) self-directed and independent, (2) having a rich source of knowledge from life experience, (3) having learning needs related to their changing social roles, (4) performance centered, and (5)

motivated by internal factors. Understanding the intricacies of adults learning aids in the creation of effective training programs in all career tracks.

The life experience adults bring with them into training can also pose a challenge to new learning situations. Knowles (1980) contends that adults have deeply ingrained experiences as students, which can affect their learning. Despite their internal motivation and independent nature, once adults return to the classroom they may become passive and expect to be taught. They can also cling to perceptions about their ability to learn a particular subject matter. Accordingly, adult educators must establish a learning environment which differs from the childhood model both in physical space and in process. The physical environment should be organized to focus on the students rather than the teachers and facilitate group learning activities. The process should place more of the responsibility of learning with the student by using tools such as self-evaluations, learning inventories, and reflective writing. Additionally, learning activities should be experiential, emphasizing the practical application of knowledge and utilizing problem-centered activities.

The goal of adult training programs is for learners to apply what they have learned into the work environment. For that reason, it is important to consider the theory of learning transfer and the educational practices that effectively promote transfer. Learning transfer examines how newly acquired knowledge is transferred to new situations (Leberman, McDonald, & Doyle, 2006). It is often thought of as a critical thinking skill and a process of *generalization*. Generalization refers to the ability to learn something in a specific context and later apply that knowledge to another situation. Kirwan (2009) states that to successfully promote learning transfer, teachers should (1) assess learning

needs, (2) create application-oriented goals and objectives, (3) balance theoretical and practical content, and (4) provide opportunities for repeated practice of skills. Other researchers (Engle, 2006; Lobato, 2006) suggest that learning transfer is the extent to which teachers frame transfer activities and promote *intercontextuality*. Specifically, Engle (2006) analyzed how time and participation affected the transfer of learning with a group of 5th grade students. Engle's research analyzed how the teacher promoted intercontextuality during a student project. The students' ability to generalize their knowledge was directly related to the framing of time and the degree of participation in activities which promoted intercontextuality. The teacher made students aware to the time parameters of the content they were studying. Students also had specific roles and responsibilities within the project. Through this study, Engle determined that transfer is aided to the extent that the learning activity is framed as part of "larger ongoing activities in which the students are integral participants" (p. 490).

Masui & De Corte's (1999) empirical study demonstrates how learning transfer can be enhanced through intentional instructional design in a process similar to Engle's concept of intercontextuality. The researchers trained 47 university students over a 7-month period (10 sessions) to use two learning transfer skills, orienting (preparing to learn) and self-judging (self-appraisal of effort required to learn) through a micro-economics course. Students who participated in the intervention classes not only showed an increase in their meta-cognitive ability toward orienting and self-judging tasks, but they were able to successfully transfer those skills to another subject area (statistics). Based on the instructional design of the intervention program, Masui & De Corte assert that transfer of learning is enhanced by (1) embedding the acquisition of learning skills

within the relevant subject context, (2) linking activities of orienting and self-judging to the learners' goals, (3) sequencing learning and teaching so that it becomes progressively self-regulated, (4) using various methods in class, like modeling, individual assignments, pair work, small group work and class discussion, (5) encouraging reflection and articulation of learning and problem-solving processes, and (6) creating opportunities for practice and productive use of newly acquired knowledge and skills.

Adult learning and learning transfer are particularly meaningful when applied to the context of teacher training. Knowles' theory of adult learning has factors at the person level which complement the program level factors found in the theories of learning transfer presented here. Subsequently, learning transfer shares many factors at the program level with practices in teacher training. Person level factors include learning characteristics such as self-directed learning, motivation, changing social roles related to learning, and the role of personal experience in learning. Program level factor in the training program and school that have been shown to strengthen learning transfer include: encouragement of active learning models, self-evaluation and regulation, strong program goals and mission, and practical application of theory with opportunities for repeated practice.

Trends in Teacher Training

Studies have determined that quality teaching is a significant factor in improving educational outcomes for students (Boyd, Goldhaber, Lankford, & Wyckoff, 2007; Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009; Darling-Hammond, 1999; Darling-Hammond, 1997; Palardy & Rumberger, 2008). However, long-held beliefs about learning, teachers' roles, classrooms, and schools can challenge the pre-service teachers'

ability to transfer new concepts in pedagogy to classroom because “people learn to teach, in part, by growing up in a culture—by serving as passive apprentices for 12 years or more when they themselves were students” (Hiebert, Morris, & Glass, 2003, p. 201). Consequently, teacher training programs must take special care to ensure the transfer of learning from the training program to classroom practice. Accordingly, researchers have sought to identify attributes of high quality teacher preparation. Boyd and colleague’s (2009) quantitative study examined 26 colleges and 2 teacher preparation programs³ in New York City to determine program effects on student achievement. While the study cannot clearly establish cause for student learning outcomes based on teacher preparation, the researchers were able to determine particular program aspects which contribute to teacher efficacy. Programs which focused on the classroom and what teachers may encounter during their first year produced teachers who were more effective as measured by student learning outcomes.

Learning that is grounded in the practice of teaching—such as that proxied by the capstone project, studying curricula, and oversight of student teaching—is associated positively with student achievement gains in the 1st year, and content learning—as proxied by disciplinary coursework requirements—is associated positively with learning in the 2nd year. (p. 434)

Palardy and Rumberg’s (2008) large scale quantitative study sought to determine the effect of teacher background qualifications on student achievement using longitudinal data. Controlling for student and school level factors, the research team measured teacher inputs (education level and certification) and processes (attitudes and practices). The researchers determined that first-grade students who were taught by fully certified teachers made greater gains in reading than those who were taught by teachers who are

³ New York City Teaching Fellows and Teach for America.

not fully certified; however, there was no established correlation between teacher certification and student achievement in mathematics. The researchers surmise the difference between fully certified and partially certified teachers is not as great as the difference between fully certified teacher and those entering the profession with no teacher preparation. Furthermore, the study also found that teachers with graduate degrees had no effect on student achievement. Harris and Sass (2011) came to similar conclusions regarding the negligible effect advanced degrees and school based professional development have on student learning outcomes. Their large-scale quantitative study measured reading and mathematics test scores of Florida's public school students in grades 3-10 over a five year period⁴. The researchers determined that "learning by doing" through early career experience "significantly enhances teacher productivity" (p. 810). And more importantly, this positive effect continues beyond the first years of teaching.

In Korthagen and Russell's (1999) theoretical examination of learning transfer in teacher education programs, the researchers compare "application of theory" models in teacher training to new approaches in mathematics education. For example, in mathematics education it was widely accepted that theory of mathematics be taught prior to problem-solving activities. This method has been replaced by the "realistic mathematics education" movement, in which students first practice mathematics in authentic learning situations (hands on problem-solving), then they examine the mathematics theory corresponding to the problem. Likewise, in a teacher training program at Utrecht University, greater learning was demonstrated (as measured by 14

⁴ School years 1999-2000 to 2004-2005.

criteria) for first year teachers when actual classroom practice was directly connected to educational theory rather than theory taught in isolation from practice.

The tenets of adult learning theory and experiential learning are put into practice in an innovative teacher training program called Professional Development School (PDS). In Green and Ballard's (2010) case study the authors describe how a school district and university partnered to implement a PDS in Northeastern Texas. In the PDS program, student-teachers work as teaching interns for a full academic year planning units, lessons, and assessments, as well as working with faculty and administrators in a professional capacity. During their year as teaching interns, student teachers are also learning about educational theory through their university course work. New teachers prepared through this highly experiential program are deemed far more competent than their traditionally trained colleagues. In fact, school principals described graduates of PDS as "more like third to fifth year teachers" (p. 16).

Brownell, Ross, Colón, and McCallum (2003) use a framework based on two large-scale national studies to conduct their meta-analysis of effective practices in special education teacher preparation programs. Their framework consists of seven practices which have been identified as exemplary in 15 teacher education programs in seven different institutions. These are: (1) coherent program vision, (2) blending of theory, disciplinary knowledge, subject specific teaching methodology and practice, (3) carefully constructed field experiences, (4) standards for ensuring quality in teaching, (5) active pedagogy that uses modeling and promotes reflection, (6) focus on meeting the needs of diverse learners, and (7) collaboration as a vehicle for building professional community.

In order to achieve the quality features found in progressive teacher training programs, Korthagen, Loughran, and Russell (2006) suggest a dynamic approach to understanding reform in teacher education. Basing their findings on effective teacher preparation programs in Canada, Australia and the Netherlands, they contend that programs must include seven fundamental principles embedded within three main program components:

Table 1

Reform in Teacher Education Programs (Korthagen, Loughran, and Russell, 2006)

Interconnected Program Components	Learning to teach...
Views of knowledge and learning direct the practices of the teacher educators...	<p>...involves conflicting and competing demands.</p> <p>...requires a view of knowledge as a subject to be created rather than as a created subject.</p> <p>...requires a shift in focus from the curriculum to the learner.</p>
Program structures and specific practices...	<p>...is enhanced through (student) teacher research.</p> <p>...requires an emphasis on those learning to teach working closely with their peers</p>
Quality of the staff and organization...	<p>...requires meaningful relationships between schools, training institutes and student teachers.</p> <p>...is enhanced when the teaching and learning approaches advocated in the program are modeled by teacher educators.</p>

This model shows how training programs can be designed to support change and innovation within the teaching profession through comprehensive training. Program components consider how pre-service teacher educators view the process of learning, how to maximize program effectiveness, and desirable characteristics of the program staff and organization. These three main components are filtered to the trainees through seven principles that shape and guide the training program.

Scheeler's (2008) meta-analysis sought to establish the extent to which teacher preparation programs support the generalization (transfer) of newly acquired behaviors and what techniques have been proven successful in the pre-service teacher programs. Scheeler was not able to identify research reviews that compared teaching behavior during training with teaching behavior in the classroom or identified how teacher training programs provide transfer of the program to their teacher candidates. Scheeler was, however, able to establish how teacher education programs can promote the transfer and maintenance of teaching techniques. The review examined 12 studies spanning from 1977 to 2006 and identified four factors that are most likely to support the transfer and maintenance of teaching skills. This four stage model includes the following factors: (1) immediate feedback to promote successful attainment of skills, (2) training to mastery of specific teaching skills, (3) programs that actively promote generalization of skills, and (4) supervisor feedback on performance in the classroom setting during teaching practicum. Scheeler's model emphasizes the role of a well supervised practicum in the ability of student-teachers to transfer their training into the classroom. Likewise, Darling-Hammond and Baratz-Snowden's (2007) research supports program which include well-supervised practicums held in conjunction with coursework in order to connect theoretical learning with practice.

Creating a culture of learning. Just as teacher preparation is crucial to the success of new teachers, school wide support programs have a positive impact on new teacher efficacy. Schools that have implemented professional learning communities, mentoring programs, and other collaboration efforts have been much more successful than those without support programs in implementing reform and keeping pace with the

current demands of education. Compiling survey data from two large studies in six states, researchers (Johnson, Kardos, Kaufman, Liu, & Donaldson, 2004) measured three sources of support for first- and second-year teachers —hiring practices, mentorships, and curriculum. Specifically, mentors help new teachers meet the challenges of the first years of teaching more effectively. Mentors not only help new teachers with the central components of teaching (instructions, planning, and classroom management), but they also “acculturate them to the particular norms of their schools and the families it serves” (p. 9).

Research (Webster, Silova, Moyer, McAllister, 2011) on a successful teacher educator reform project in post-Soviet Latvia found that building both professional and personal relationships—collegiality and congeniality—created a more productive atmosphere during professional development workshops. Moreover, workshop participants were able to establish a successful professional network that far exceeded the initial reform project goals by becoming a sustainable professional organization focused on reform in teacher education.

Paine, Fang, and Wilson (2003) conducted a single case study that examined a first-year teacher in Shanghai, where new teacher induction has a long, rich history of cultural and governmental support. The induction program included both formal and non-formal mentorship. Through the mentor program, new-teachers were able to observe veteran teachers, work together on lesson/unit planning, and receive feedback from observed lessons. Teachers also encouraged one-another to use innovative teaching methods and would often practice lessons together. This case study suggests that through the induction program, a greater culture of collegial sharing was established school-wide.

Teacher Training in Bangladesh

In Bangladesh, the education sector languished under both British and Pakistani colonial rule (Nath & Mahbub, 2008; Nath, 2009). In fact, the only policy improvement during twenty-four years of Pakistani governance was the increase of primary education from four years to five years⁵ (Nath, 2009). In 1992, a separate ministry, Primary and Mass Education Division⁶ was created to support primary education and literacy activities. During the 1990s, the Bangladeshi government took on the greatest national challenges to education, including: gender parity in primary education; free education and textbooks; competency-based curriculum and textbook modification; parental awareness regarding the importance of education, including the formation of PTAs; special educational programs in rural areas; and infrastructure improvements (Nath, 2009; Nath & Mahbub, 2008). As a result, the primary school net enrollment rate has increased over 25% in 15 years, from an enrollment rate of 60% in 1990 to 87.2% in 2005 (Nath, 2009).

The push for improved quality can be seen throughout the developing world as a result of the UN based initiatives, EFA and MDG. The “quality imperative” is a multi-layered strategy, which among other objectives indicates a need for change in teacher training and pedagogy (Alexander, 2008). Accordingly, the most pressing challenge facing Bangladeshi education today is the improvement in teaching and learning.

Critical analysis of progress in EFA and MDG globally and in Bangladesh has underscored the importance of the idea of “meaningful access” to education—embracing enrollment. This analysis also shows that “silent exclusion”. i.e., being nominally enrolled without being engaged in learning has become the most serious problem affecting the majority of

⁵ Compulsory primary education (five years) was not enacted into a law until the Jomtien Conference in 1990.

⁶ The Primary and Mass Education Division (PMED) was renamed the Ministry of Primary and Mass Education (MoPME) in 2004.

the students in school systems—characterized by extremely poor learning facilities and dysfunctional pedagogy—resulting in serious deficits in learning achievement of students. (Ahmed, 2009, p. 8)

Current and recent policy objectives from the Bangladesh Ministry of Education clearly outline a desired change in classroom pedagogy, which is directly addressed through changes in teacher training (Table 2).

The most dramatic changes to the C-in-E training program offered through the PTIs came under the PEDP-II initiative. The training program has now been extended from 3-months to 12-months. Modifications to the teacher training program included: subject-based training, theory of child development and psychology, classroom management strategies, and a 6-month supervised classroom teaching practicum. Development partners report improvements based on the PEDP-II policy changes (UNICEF, 2009); however, critics say PEDP-II and the current National Education Policy, 2010 still fall short of producing large scale improvements to the quality of educational in government primary schools (Ahmed, 2009; Mullick & Sheesh, 2008). Table 2 outlines the stated goals for improvements to teacher training and pedagogical practice enacted in several national education reforms effective from 2001 to 2021.

The Bangladeshi government has relied heavily on NGO sponsored activities in the education sector since independence. The Bangladesh Rural Advancement Committee (BRAC) was created in 1972 to aid social recovery after the war for independence. Currently, BRAC is the largest and most comprehensive development organization operating in Bangladesh. They have been providing non-formal primary education programs in Bangladesh since 1979 and educate approximately 20% of the total primary school students (Lewis & Lockheed, 2006). In addition, BRAC also provides innovative

teacher training programs in conjunction with government initiatives. Plan Bangladesh, a division of Plan International, is a child advocacy organization which has been working in Bangladesh since 1994. They focus on four key areas—child protection, community learning, community managed health, economic security—to improve the quality of life for children throughout the country.

One study by Opel, Zaman, Khanom, and Aboud (2011) examined an innovative pre-primary mathematics program developed by BRAC University's Institute of Educational Development and funded by Plan Bangladesh. The program targeted primary school children in rural Bangladesh during the course of one school year. Six schools were randomly selected—three received the intervention plan, while the other three (control group) used the traditional program. The intervention consisted of 96-hours of teacher training, in-class supervision, resources, and lesson plans. Students in the intervention group (100) and control group (104) were given pre- and post-tests for each of the six units studied. Pre-test scores for both groups were similar throughout the program. However, at the conclusion of the mathematics program, students in the intervention group had retained the skills they learned with the average score of 82.7% on the final cumulative test, compared with an average score of 46.6% by the students in the control group (regular mathematics program). The findings indicated that the regular mathematics program was “not sufficiently comprehensive, stimulating or challenging” enough for the school children. Additionally, the instruction in the regular mathematics program relied upon repetition (counting out loud) and repeating facts after the teacher.

Table 2

Current Educational Policies in Bangladesh

Education Plan	National Education Policy, 2010	National Development Plan-II	Primary Education Development Plan- Second and Third Phases
Operational Years	2010-2021	2003-2015	2005-2016
Stated goals and aims for teacher training	“Teachers’ recruitment, training, professional support and remuneration should be important elements of the strategy for improving quality in education. A Teacher Recruitment and Development Commission should be established to recruit teachers in government assisted institutions and support their professional development.”	“Initiate program to significantly upgrade PTI performance with particular attention to library and infrastructural facilities, recruitment of quality instructors with experience of teaching in primary education... introducing three-month refresher courses for teachers once every three years.”	“Teacher preparation program includes training in the following areas: subject-based, pedagogy and child development, classroom management, personal hygiene and health, civics and national development, and religious studies.... Six-month supervised teaching practicum... Development of Upazila Resource Centers for teachers and the requirement of regular professional development courses.” “Teachers are trained to use interactive teaching approaches...”
Stated goals and aims for pedagogical practice	“Assessment of learners’ achievement should be based on public examinations and continuous evaluation by teachers, which should aim at assessing cognitive, affective and reasoning domains. All examinations should be aimed at discouraging rote learning.”	“Child-friendly pedagogic approaches with emphasis on life-skills, awareness of social environments and appreciation of global knowledge resources prioritized in the development of curriculum and textbooks.... “Improve the school and classroom environment by using child-friendly and participatory approach, making the learning a joyful experience, involving children in school improvement and maintenance activities through group projects.”	Teachers are discouraged to use memorization or rote teaching techniques.”

The intervention program required students to solve problems, check their answers, generalize from one problem to another, and explain how they came to their answer. As a result, the newly acquired reasoning skills helped them to solve mathematics equations they had not previously seen. Through intensive teacher training and supervision, students' mathematics outcomes were improved dramatically.

Conversely, a BRAC and Plan Bangladesh project found greater difficulty in implementing changes to school culture (Nath & Mahbub, 2008). The researchers discovered the culture of schools and learning requires continuous training and greater supervision. Even after training, teacher-centered classrooms and rote memorization were typical in three of the schools and teachers did not use any of the new interactive approaches they were taught during training:

BRAC also supplied some materials in their intervention school. It was surprising to see all of them under dust and having no use. When the issue was discussed with the teachers we found that they knew the importance of using teaching aids through various trainings, none of them were found to really feel it. Most of them believed that the way they followed during their childhood was the best way of learning, thus they followed the same. In a sense, teachers' belief and practices challenged teacher training curriculum. It was surprising to learn that none of the teachers made any experiments with the new techniques they learned from the training. (p. 133)

This study demonstrates the critical role of training, practice and supervision. Teaching and learning, as well as the role of schools, is bound by the larger school culture and requires a dynamic approach to be successful. Furthermore, administrative and collegial support can help teachers make the leap to more innovative teaching strategies.

Policy Borrowing and Lending

Policy borrowing and lending is the international transfer of policy goals and objectives from one nation to another. In the age of technology and globalization, such phenomena are ubiquitous and cross-disciplinary. In the education sector, policy reform is a perennial theme. This context is internationalized through global education reform initiatives such as United Nations' EFA and MDG. The assumption that an education policy which works in one cultural context is appropriate and feasible in another deserves careful examination. The ideas of policy borrowing "implies a de-contextualization process in which a model, practice, or discourse is transplanted from its original context and applied to a new one" (Steiner-Khamsi & Quist, 2000, p. 275).

Around the world, forces of globalization have influenced government policies regarding educational quality and the imperative to "deliver education programs for both students and teachers that are efficient, effective and economical" (Day & Sachs, 2004, p. 4). Alexander (2008) asserts that pedagogy inextricably embodies cultural values, "Out of such primordial values come contrasting valuations placed on individual, communal and collective action in society, and on individualized learning, group work and whole class activity as the proper foundations of effective teaching" (p. 19). Tabulawa's (2003) assessment is far more insidious. He asserts since the 1980s western based aid agencies have aggressively advocated a more constructivist pedagogy in a deliberate attempt to democratize developing countries in order to liberalize their economies. Despite the overt or covert agenda of policy borrowing in education, it faces many challenges.

First, language can be problematic when transplanting policies. Alexander (2008) addresses this problem with the use of the term 'quality' in education reform under the EFA initiative. He argues that the term 'quality' is used in an aspirational way without

proper indicators of the desired standard. He accuses policy makers of ambiguity in pedagogical reform by using, “problematic sound bites like ‘child-friendly teaching’ and *tautologous minima* like effective teaching styles” (p. 11). Additionally, vague terms often lead to “hybrid practices” which can be found where policy has been transplanted (Wells, 2005). Hybrid practices pose both solutions and challenges to cross-cultural policy borrowing. Burde (2004) explains how policy can change locally when transplanted into a different cultural context, “After INGOs [International Non-Governmental Organizations] complete their missions and move on, local actors may recycle this discourse, using the same old labels for new purposes, or new labels for old purposes, depending on the context and perspective” For example, in a study of educational policy borrowing by Steiner-Khamsi (2006), the researcher identified how ‘student-centered’ policy reform was interpreted in Mongolian schools:

In other words, group work—one of the new practices introduced as part of student-centered learning—did not enhance direct communication between teachers and students in the classroom, but it did increase student-student interaction. Teachers communicated with students via the group monitors and vice-versa: students remained at the same place in the hierarchy, but now relied upon group monitors to respond on their behalf... In classes that were committed to student-centered learning, the presentations, discussions, and other activities remained teacher-led, and group work, in turn, was still led by the monitors. At no time during the lesson was there room for student- or group-initiatives, or student-led activities. (p. 119)

Findings such as this illustrate the problems inherent in education policy borrowing. Namely, that the prescribed education reform faces a cultural-linguistic barrier to effective implementation. Policy borrowing has a complex, and often controversial, role in education. Naturally questions regarding the appropriateness and feasibility of a transplanted policy reform arise.

Summary

Bangladesh's educational policies over the last seven years have focused on changing the nature of classroom teaching in an effort to improve the quality of education and raise student learning outcomes. Teachers are now expected to use "participatory", "interactive", and "student-centered" teaching approaches. Teacher training in the PTIs is now charged with training pre-service teachers in these pedagogical methods. In order for new teachers to break from the traditional teacher-centered model that has dominated educational practices in Bangladesh, it is essential for teacher preparation programs to use innovative techniques based on research so new teachers may become the effective teachers of tomorrow. Common themes emerge across theories of adult learning, learning transfer and teacher training. First, research on adult learning and transfer of learning state effective training requires performance centered learning which is oriented toward the practical application of job skills. In teacher training, this is achieved through well supervised practicum experiences where new teachers have repeated opportunities to practice and receive relevant, timely feedback. Also, teacher educators can model innovative teaching strategies so that pre-service teachers can see new techniques in an authentic setting. Second, teacher training programs need not isolate theory and practice, but rather teach them in conjunction with one another. Pre-service teachers can draw on their own experiences as school students as well as their practicum to examine learning theory in practice. Third, given the independent and motivated nature of adult learners, the practice of reflection, self-assessment, and collaboration are tools which can further promote the transfer of training. Schools also contribute to the transfer of training by

encouraging continued professional learning through collegial sharing and mentorship programs.

The factors which support or challenge the transfer of teacher training can also be categorized into three nested levels—person level factors, program level factors and system level factors (figure 2). Person level factors are characteristics based on the theory of adult learning and learning transfer that deal directly with the personal attributes of the learner (Knowles, 1980; Scheeler, 2008). Program level factors include training program elements that contribute to successful transfer of learning (Boyd et al., 2009; Brownell et al., 2003; Green & Ballard, 2010). System level factors are characteristics found in the larger system—the school policies, school administration, ministry policies, and cultural context—which affect teachers, teaching, and teacher training (Phillips & Ochs, 2003; Steiner-Khamsi, 2006). Transplanted policies face cultural and linguistic challenges to successful implementation. These three factors do not operate independent of one another and elements are often interdependent. Put simply, a person is functioning within a program, which is part of a larger system.

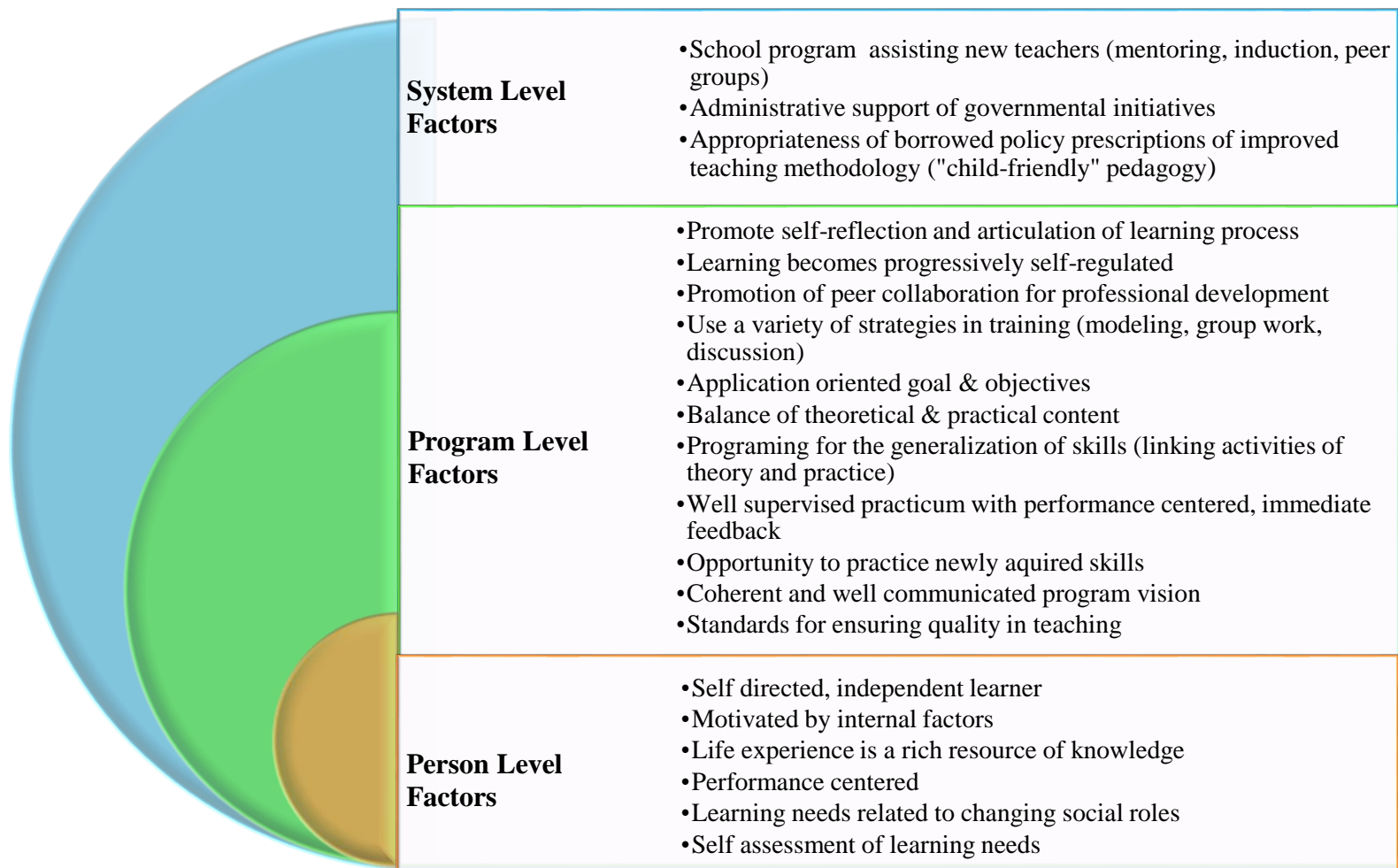


Figure 2: Nested factors that influence teacher training to practice in Bangladeshi primary schools.

Chapter 3

Methods

I adopted a qualitative case study design for this study, an approach that allowed for a comprehensive examination of contextually bound cases. Using qualitative data collection—interviews, document analysis and observations—I explored three specific cases of recently graduated GPS teachers within their first years of classroom teaching. Quantitative data is often used by donor agencies to measure the success of policy initiatives, but examining test scores and absentee rates provides only a narrow understanding educational quality, teacher training, and classroom practice. In-depth case study analysis provided a more profound understanding of the teacher training process and its impact on teaching methods used by teachers in the classroom. Because case study research is intensive, particular aspects of the group or organization studied can account for a large number of variables and conditions (Isaac & Michael, 1995; Yin, 2009). This made the choice of case study research within the contextual phenomena explored here particularly valuable.

The purpose of this study was to establish whether the teaching methods taught during teacher training were transferred into practice in the classroom and what factors influenced or challenged the transfer of training to practice. This descriptive study provides answers about teacher training and classroom practice within Bangladesh government primary schools. The research questions that guided this study were:

1. What evidence is there of transfer of training to practice for recent Certificate in Education graduates of Primary Training Institutes in Bangladesh?
 - a. What methods are primary school teachers taught to use in PTIs and how do PTI instructors perceive their usefulness in promoting student learning?

- b. What is the dominant teaching method used by new teachers in the classroom and why is this method chosen?
- c. What do teachers perceive as influencing their choice of teaching methods in the classroom and why?
- d.

The research region was narrowed to Dhaka District because teachers in this region have greater exposure to education, additional training, and access to resources than teachers in rural areas.

After I arrived in Dhaka, I visited the Directorate of Primary and Mass Education in Mirpur. There I met with several officials and explained my research project. They were extremely helpful, and provided a letters of permission to visit and observe classes at the three PTIs located in within the Dhaka city catchment area. The letters specified that I could visit, conduct interviews, and observe training classes. Each letter was written in Bangla and addressed to the PTI Superintendent. I also spoke informally with several members of the DPE staff, gaining an understanding of how the directorate is managed and other background information. They also provided me with the annual training schedule. With Ramamdan and Eid-al-Fatr holidays occurring during my research period, I also inquired about PTI and GPS school closings. This information helped me to create an achievable calendar for my 5-month research period (Appendix B). I submitted the permission letters with my proposal revisions to Lehigh University's Human Subjects Board. I received approval for my proposed research project in early August.

The Case Studies

The goal of this multi-case study was to examine cases that are critical to understanding how teachers transfer training to the classroom. Originally, I wanted to include only first year teachers as participants in the study; however, this population parameter proved unattainable. Despite my attempts to recruit first year teachers, many

were not willing to participate in the study. Those teachers who declined gave reasons such as graduate school, upcoming marriage, and pregnancy. In the first and second case studies, the teachers had two years of classroom teaching experience; in the third case study the participant had been teaching for eight months and was also the Head Teacher of the school.

Participants. All three participants were recommended by the PTI administrators and instructors. They were all currently working in a GPS in Dhaka after earning their C-in-Ed from the PTI. The names of all teachers and institutions are pseudonyms. Pori, the participant in the first case study, completed her training at Kanpur PTI. She also held a Master's Degree in English Literature. In the second case study, Bilkis graduated from Nodipur PTI. Rashid, the teacher in the third case study, began as Head Teacher at Nakoli GPS ten months prior to this study. Unlike the other head teachers I had contact with in this study, Rashid teaches every day.

Participant recruitment. Participants were recruited based on referrals from the PTIs staff and administrators. I requested three to five exceptional student teachers who had recently graduated. This proved to be a difficult undertaking as PTIs do not keep information on past graduates; however, administrators and instructors were extremely helpful in identifying possible participants and obtaining contact information. Participants were contacted first via phone. If they were interested in being a participant in the research, I met with the teacher, obtained consent for participation in the research study (Appendix C), and visited the school to talk with the head teacher. Only one potential participant opted out after an initial meeting at the school. Interestingly, her Head

Teacher was very eager for her to participate, but she felt the pressure would be too much with her additional responsibilities of graduate school at night.

Sampling method. Study participants were selected using a purposive sampling method. Using a non-probability sampling method is more appropriate for a small multi-case study since the goal was not population representation. The population parameters discussed in the previous section—recent graduates, who graduated the C-in-Ed program in good standing—presented a best case scenario, which is known in qualitative research as “extreme case sampling”. Maxwell (2005) states, “Extreme cases often provide a crucial test of these theories, and can illuminate what is going on in a way that representative cases cannot” (p. 90). Isaac and Michael (1995) contend that extreme case sampling provides the opportunity to learn the most from cases performing unusually well, “The strategy, when it is economical in the instance of limited resources and time, aims straight at the most promising sources of useful information” (p. 223). While the goal of the sampling was to have participants who represented the best case scenario for transfer of training, after the three case studies were complete, it was clear that three very different teachers were represented in this study. The case studies in the Chapter 5 findings illustrate how differences in professional identity and motivation, school environment, and school leadership impact the transfer of training.

Data sources. Three sources of data were collected: interviews, documents, and observations. Patton (2002) considers these three data sources the cornerstone of a qualitative study. The following sub-sections explain how each data source was used in the study.

Interviews. Patton (2002) asserts open-ended interviews are designed to “add depth, detail and meaning at a very personal level of experience” (p. 17). The PTI personnel acted as key informants for the study (Marshall, 1996). Through the interviews, I was able to (a) gain a greater understanding of the teacher training process, (b) identify goals of the teacher training program, (c) identify teacher training techniques used in the PTI, and (d) identify research participants. Two distinct sets of interviews were carried out—interviews at the PTIs and interviews with the teacher participants.

During my PTI visits, I interviewed PTI administrators and faculty and observed several classes. At each PTI visit I was able to obtain a list of prospective research participants. After my visits, I contacted prospective research participants to explain the project, participant profile, and determined interest in participation. Not all teachers who were contacted fit the sample requirements, nor were all interested in participating. Once an interested teacher was found, we set an appointment to discuss the parameters of the research, obtain official consent, make a visit to the school and speak with the head teacher (in two of the three cases, the meeting took place at the school), and established the week classroom observations would take place.

Each participant was scheduled in the following way. First, a pre-observation interview was conducted. Second, the teacher was observed each day for one 6-day school week. After that, a post-observations interview was conducted. Third, I would type all the transcripts from the interviews and class observation notes. Several weeks later, a follow-up interview was conducted where the participant had the opportunity to review the interview transcripts to ensure the accuracy of the data.

The second interview with research participants, were semi-structured pre- and post- observation interviews with each research participants. Semi-structured interviews allowed the participants to include information they believe is pertinent, while delving into the questions guiding the research (Maxwell, 2005). The goals of the teacher interviews were to (a) have teachers reflect on how the teacher training program prepared them for classroom teaching, (b) ascertain what teaching methods they use or would like to use, and (c) identify challenges to particular teaching methods.

All interviews were conducted with the help of my research assistant, a Bangla native speaker. Pre- and post-observation interviews were semi-structured using a set of initial questions as a base. All interviews were recorded and transcribed (Appendix D). Several weeks after the observation complete, I met with each participant to review interview transcripts as a method of member checking. Any further clarification or comments were added to the interview data.

Document review. Content analysis is a process of classifying text into relevant categories for useful analysis (Weber, 1990). Content analysis was conducted on documents used by the PTIs for training and resources used in the GPSs that specifically related to teaching methodology. Documents include PTI curriculum, PTI training textbooks, GPS textbooks (student and teacher editions), and posters/murals regarding teaching at both the PTIs and GPSs. I also made two site visits to the National Curriculum and Textbook Board (NCTB) to gain background knowledge about teaching and learning resources provided by the government. I informally discussed textbook creation, curriculum guidelines, and upcoming reforms.

Site observations. Patton (2002) asserts observational data, “allows an inquirer to be open, discovery oriented, and inductive because, by being on-site, the observer has less need to rely on prior conceptualizations of the setting” (p. 262). Classroom observations were carried out in all three PTIs and included descriptions of training activities, the training environment, and the teaching methods used by PTI instructors. In the GPSs, structured observations were conducted in the classrooms of the teachers (Instrument, Appendix E). After the site visits at the PTIs and the first classroom observation in case study one, I noticed the Q & A technique in use for the majority of the class period. On the second day, and with all subsequent observations, I recorded (1) the location in the room of the students called on, (2) if the question was directed to the whole class or an individual student, and (3) the type of question asked—rote, comprehension, or critical thinking. The forms used to collect the questioning data can be found in Appendix F. I observed the teacher over six days in all of her classes. In case study three, I observed the teacher over seven days in the one class he regularly taught, in addition to three supplementary classes. This totaled 19 days of classroom observations for all three cases during the research period. I gathered information on the teaching methods used, how classroom processes and structures support or challenge the teaching methods, and the classroom learning environment. All fieldwork notes were written up into one case study synopsis using Danielson’s (2007) Framework for Teaching.

Danielson’s (2007) Framework has been used extensively in U.S. schools. It includes four comprehensive domains that categorized the responsibilities of educators. The four domains identify “aspects of a teacher’s responsibility that have been documented through empirical studies and theoretical research as promoting improved

student learning” (p. 1). This framework was chosen for its extensive treatment of teaching as a profession. Through the use of this framework, I was able to analyze the complexity of teaching within the 22 components that classify the multitude of thought processes, decisions, and actions required of teachers on a daily basis.

The first domain, planning and preparation, characterizes the teacher’s process of coordinating and designing the content that will be taught. It encompasses all aspects of instructional planning, from understanding of content and pedagogy to assessing student learning. The second domain, classroom environment, encompasses all of the interactions that occur in the classroom. While the interactions and relationships are non-instructional, they affect instruction. Classroom environment includes managing student behavior and establishing a culture of learning. The third component, instruction, deals directly with the methods and strategies the teacher employs in order to deliver the instructional content that best supports student learning. The fourth domain, professional responsibilities, includes all of the additional duties required by teachers, from communicating with families to maintaining academic and attendance records. Table 3 shows all 22 components within their respective domain.

After pre-observation interviews, classroom observations, and post-observation interviews for each case study were complete, I categorized and compiled the data into the framework model, identifying teacher attitudes, actions, and behaviors with each of the domains and components. Accordingly, each of the following case studies is presented with the Danielson Framework in Chapter 5.

Table 3

Danielson's Framework for Teaching (2007)

Domain	Components
1. Planning and preparation	<ul style="list-style-type: none"> • Demonstrating knowledge of content and pedagogy • Demonstrating knowledge of students • Selecting instructional goals • Demonstrating knowledge of resources • Designing coherent instruction • Assessing student learning
2. Classroom environment	<ul style="list-style-type: none"> • Creating an environment of respect and rapport • Establishing a culture of learning • Managing classroom procedures • Managing student behavior • Organizing physical space
3. Instruction	<ul style="list-style-type: none"> • Communicating clearly and accurately • Using questioning and discussion techniques • Engaging students in learning • Providing feedback to students • Demonstrating flexibility and responsiveness
4. Professional responsibilities	<ul style="list-style-type: none"> • Reflecting on teaching • Maintaining accurate records • Communicating with families • Contributing to the school and district • Growing and developing professionally • Showing professionalism

Data analysis procedure. A “deductive” or “framework approach” (Pope, Ziebland, & Mays, 2000) was used to analyze the data. The five stages of analysis used in the framework approach (Pope et al., 2000) included familiarization of the raw data, identification of a thematic framework, indexing through coding procedures, charting and visual representations of the data, and interpretation of concepts and associations between themes. To aid this process, I used the qualitative software program ATLAS.ti. All interview and field work notes were typed and entered into the software program for coding manageability. After the initial coding stage, I conducted second level coding by

condensing or renaming codes as necessary for comparison across all three cases (Appendix K). The final number of codes for each case study total 51 for case study one, 48 for case study two, and 54 for case study three. Next codes were sorted into three code families—person level factors, program level factors, and system level factors—represented in the conceptual framework established in chapter 2. Below is a summary of the codes in each study and the categorization within code families (factor levels established in Chapter 3). It should be noted that some codes are present in more than one code family, or factor level.

Table 4

Codes Identified in Each Case Study

Case Study	One	Two	Three
Total number of codes	51	48	54
Person level	8	9	9
Program level	41	35	23
System level	21	14	11

Codes were analyzed based on occurrence within each case. Additionally, codes were then compared across each case study to identify overlapping and isolated themes. Codes that were present in all three studies were separated from those that were present in one study, or in some instances, absent from one study.

Validity

I used four strategies to validate the research findings. First, three sources of data—interviews, observations, and documentation—were collected and analyzed to cross reference thematic findings. I visited each research participants’ sending PTI, conducted pre- and post-observation interviews, and one week of classroom observations.

In addition to the interviews and observations at PTIs and GPSs, I also analyzed text sources, including training textbooks, primary school teacher textbooks, training curriculum, and murals. Additionally, I also made site visits to the DPE and NCTB to gain a greater understanding of training and teaching in the government primary school system.

Second, I conducted respondent validation interviews with each research participant to confirm that the information gathered during the interviews was accurate. Not only did this confirm interview data, but it also provided the teacher and I another opportunity to discuss and reflect on training and classroom teaching several weeks after the data collection period.

Third, I worked closely with my research assistant, a local university student at Dhaka University's Institute of Educational Research, throughout the data collection phase. She provided valuable insight into the culture and education system of Bangladesh. She has lived and studied in Dhaka her entire life and provided a greater contextual understanding.

Fourth, after the initial data examination, I consulted with a panel of seven expert educators who reviewed preliminary findings and provided feedback regarding the significant themes in this study. The panel of experts included three Ph.Ds. who specialize in education, a community college teacher with over 25 years of experience, one doctoral student specializing in comparative education, and two public school teachers that hold a M.Ed. in school administration. Of the seven experts, five have considerable experience in international education and are sensitive to cultural differences with educational systems. Feedback was provided in a focus group or

individually depending on the panel member's availability. The goal of consulting experienced educators was to determine and corroborate key themes. A brief biography of each of the panel members is provided in Appendix G.

Chapter 4

Primary Training Institutes Findings

The greater Dhaka city region is served by three PTIs—Nodipur, Kanpur, and Rajhimati (pseudonyms)—each responsible for a specific catchment area within the city and immediate suburbs. The teacher from the first case study attended Nodipur, the teacher from the second case study attended Kanpur, and the teacher from the third case study attended Rajhimati. The information reported in this section is based on site visits, informal interviews, and classroom observations at Dhaka’s three PTIs with the aim of answering the following research question, “What methods are primary school teachers taught to use in PTIs and how do PTI instructors perceive the usefulness of these methods in promoting student learning?”

The PTI training period is 12-months long, with classes beginning in January and June. The PTI day is divided into two shifts—morning and afternoon. The total enrollment for each of the three PTIs at the time of this study, including shift times, is listed in the table below:

Table 5

PTI Shift Schedule and Number of Enrolled Teachers per Shift

Shift	Kanpur (CS 1)	Nodipur (CS 2)	Rajhimati (CS 3)
1 st —6:30 am – 12:00 pm	190	151	173
2 nd —12:30 pm – 6:00 pm	196	190	192
Total teacher enrollment	386	341	365

In addition to subject-based courses, the trainees have daily assembly, physical education class, and extracurricular clubs. A representative at the DPE explained that the training program is due to expand into an 18-month long program. This new training schedule

was piloted in seven PTIs during the 2011-2012 school year and is expected to be implemented in all PTIs by 2013.

PTI instructors. Generally, PTI instructors do not have experience as primary school teachers in government schools or elsewhere. The majority of instructors at the three PTIs in this study have Master’s Degrees. The remaining instructors have either a Bachelors’ Degree or are “professionally attached.” Professionally attached instructors have been recruited from the local area. Professional attachment at the PTI is akin to the adjunct system in the United States higher education; they are not eligible for promotion. Typically they teach subjects such as agriculture. The table below shows instructor qualifications at each PTI location:

Table 6

Education Level of PTI Instructors

Qualifications	Kanpur (CS 1)	Nodipur (CS 2)	Rajhimati (CS 3)
Bachelor’s Degree	2	0	2
Master’s Degree	7	8	10
Professionally attached	5	6	4
Total instructors	14	14	16

Training resources. Textbooks for PTIs are supplied by the government (NAPE) and free of cost for the PTI students. As with the GPS, the textbook also serves as the course curriculum. The final examination for the C-in-Ed course is directly based on the textbook content. Since there are few resources provided by the government, they often use student projects, such as replicas, models, and posters, as teaching aides. Some instructors also used self-created teaching aids—information cards and posters—to aid their lecture.

Each PTI has an “experimental school” on the premises. Akin to the model schools in the *upazila*, the experimental school is a fully functioning GPS serving local students from pre-primary to grade 5. The intention is for PTI instructors to model teaching techniques with the experimental school classes. I asked one superintendent how often instructors conduct model classes with the experimental school students, he responded, “Not often, they have model teaching sessions two times per year.” At another PTI, the superintendent reported that PTI instructors model teaching with the experimental school students almost daily. During one visit, I observed a PTI instructor model teaching a science class with a small group of students from the experimental school. Another instructor told me that if the PTI has a good reputation in the local area, admission into the experimental primary school can be competitive and is based on examination scores.

At two of the PTIs, I observed classes where a laptop and projector were used; however, at the present time only model schools (1 per *upazila*) have this technology available. The superintendent at one PTI reported that the following day they will host a training workshop on using technology in the classroom. Nine PTIs in the region are sending 25 participants to learn how to use technology in the training classroom. They will retrain other instructors at their home PTIs.

Evaluation of trainees. All teacher-trainees are required to complete a practicum experience in a local school, for approximately 50 school days over a three-month period. Based on the C-in-Ed curriculum document provided by one of the PTIs, the practicum experience is valued at 200 points out of a total of 1200 points for the entire program (Appendix H). During the practicum teaching experience, PTI instructors visit the

schools to observe teachers twice per week. Instructors record their observations in a journal called the Record of Professional Development (RPD), which is kept at the school. Instructors share this with the teachers when they meet in class, at which time they can discuss any issues that may have arisen during the observations.

The final examination for the C-in-Ed training program is a paper-based assessment, which includes questions on the curriculum, including 13 subject based courses and two pedagogy courses (teaching methodology; teaching and instruction process). If necessary, trainees may retake the examination up to three times. Consequently, the pass rate for the examination was reported at 100%. PTI instructors and administrators characterized the examination as “very easy”.

Monitoring PTIs. Instructors are evaluated through the Annual Confidential Report (ACR) conducted by the administrative team of the PTI. Also, PTI Superintendents are free to observe classes at any time they deem necessary. PTIs do not undergo a formal monitoring schedule; however, the Directorate General occasionally plans visits. These visits follow a customary protocol and typically last 30 minutes.

Training in the PTIs. I came unannounced to each of the PTIs to get an authentic look at the training environment and classes. I made one trip to Kanpur PTI, two trips to Rajhimati, and two trips to Nodipur PTIs. During my visits to the PTIs, I talked with administrators and instructors. In addition to learning general information about the training, I also asked specific questions about the teaching methods used in the PTIs. The instructors at all the PTIs stated that they use various teaching methods, such as Q & A, discussion, activities, projects, multiple choice questions, and concentrated language teaching. One instructor explained that projects were very useful because they (1) utilize

the curricular content, (2) bring a greater understanding to the arts & crafts curriculum, and (3) help the trainees make visual resources for classroom use. The superintendent at one PTI said he encouraged teachers to use an “objective process” depending on the subject matter.

Another commonly taught method observed in the PTIs and GPS was the *three-step method* of instruction. The three-step method shown below (Table 7) is a basic framework that divides the class period into three stages—input, practice, and task. The three-step method is used as a way to structure lessons and manage class activities.

Table 7

Details of the Three-step Method of Class Structure

Step	Input	Practice	Task
Approx. time	5 min	15-25 min	10-15 min
Recommended procedures based on PTI training and teacher’s guides	<ul style="list-style-type: none"> -Teacher models how to complete problem on board. -Teacher reads passage or recites poem/rhyme -Teacher demonstrations (experiment) 	<ul style="list-style-type: none"> -Students answer teacher directed questions (whole class or individual) -Students read passage aloud (whole class or individually) -Students practice working in pairs or groups 	<ul style="list-style-type: none"> -Student writes information in notebook from memory -Students work in pairs or groups to review process of problem solving -Students answer comprehension questions

When asked about teaching methods and strategies used by instructors at one PTI, the superintendent responded that it depends on the subject, content, and lesson.

Moreover, the superintendent asserted that the techniques—group/pair work, discussion, etc—cannot be incorporated into all subject areas, meaning that particular teaching areas are more conducive to certain subjects. This was also repeated later in the same interview when the question was posed a different way. He said they use various methods

(objective process, discussion, feedback, visual aids, multi-media, end of class summary), but it depends on the subject and content as they cannot be used for all lessons.

Teachers in training do not observe practicing GPS teachers or other trainees during their training experience, only instructors teaching model lessons with experimental school classes. There are no follow up observations or contact by PTI faculty once teachers return to their teaching duties.

Class observations at Kanpur PTI. I observed four classes at Kanpur PTI—mathematics, English, art, and physical education. All classes had approximately 50-60 trainees, of which approximately 90% were female. In the mathematics class the instructor begins the class with an anticipatory set prompt, “What’s the practical purpose for mathematics?” An anticipatory set prompt is a technique used at the beginning of a lesson to focus student attention and engage the students’ critical thinking process by posing a question or problem. Trainees worked together in groups of 4-5 to create a list, while the instructor circulated around the room and talked with the groups. After a time warning, the instructor has three of the groups share their thoughts on how mathematics is used in everyday life which resulted in a lively whole class discussion.

In the English class, the instructor modeled a “supplementary activity” for 1st and 2nd grades called “Animal Bingo”. The activity used all four language skill—reading, writing, speaking and listening—and, as the instructor explained, “provided an enjoyable break from the textbook curriculum.” The game used minimal resources (black board and students’ notebooks) and was adaptable for different word groups (colors, flowers, etc.). The instructor first modeled the process with the trainees, and then she allowed two students to practice the game with the class. The instructor added practical suggestions

during the exercise. At the conclusion of the activity, the instructor had the students work together in groups to discuss other possible ways the game could be used for their classes.

The physical education class was a multi-media class where the teacher used a laptop, projector and PowerPoint. The instructor presented different swim strokes. He used text, pictures, diagrams, and video clips in the presentation. It was difficult to hear the instructor in the large room with four noisy fans overhead. Despite the large space, the instructor stayed at the front of the room. He used whole class Q & A techniques based on the information presented in the PowerPoint and provided in the textbook.

In art class, the instructor demonstrated how to use a basic oval shape as a base for many drawings. Once modified the oval could be made into many other shapes. The instructors led the class through the process of drawing eight different fruits and vegetables. Trainees drew the images in their notebooks and seemed very pleased with the results. The instructor asked several students to share their work with the class by holding up their drawing for the others to see. All of the students were following along in the drawing process, as well as discussing and comparing their work. Every student was engaged in the lesson. The class seemed to enjoy the exercise and there was a comfortable rapport between the instructor and trainees.

Class observations at Nodipur PTI. On my two visits to Nodipur PTI, I observed four classes—science, physical education, child development, and teaching method—and a whole school assembly for extracurricular activities. Three of these classes were held in large lecture halls with low light and noisy overhead fans. In each of the classrooms, I sat in the back and I could not hear the lecture or read the board. There were 75-80 teacher-trainees in attendance in each of the classes.

In both the science and physical education classes, the instructors used a laptop and projector. In science, there were approximately 15 experimental school students (approximately grade 3) seated at the front of the room. The instructor showed a PowerPoint presentation with pictures and video clips. He showed four embedded video clips. After each clip he discussed with the young students and asks them to answer questions or recite facts. Students were also called on to read the PowerPoint slides aloud. I sat in the back of this class and I could not hear his instruction. The students sitting around me were talking quietly with each other and not paying attention to the model lesson. The lesson ended approximately 10 minutes early, and he shows music videos of popular Bengali songs.

During physical education class, the instructor used a PowerPoint presentation to show technique in different Olympic sports. The instructor uses whole class and individual Q & A to elicit participation. On the black board he spells out “gymnastics, athletics” and uses rote repetition to practice the English pronunciation. The instructor keeps strict control of the group, repeating “Attention, please!” continuously throughout the lesson.

Child Development was taught in another large class with noisy overhead fans. A rain storm outside darkens the room. Only one fluorescent light hung above making it impossible to read the white board or flash cards the instructors used on a felt tack board. The instructor gave a lecture about theories of personality factor and principles of child development based on the work of Cattell and Allport. The instructor used individual and whole class questioning to discuss environmental, cultural, religious and individual

effects on personality development. She circulates around front of room and front of aisles.

In contrast to the previous classes, Teaching Methods is taught in a regular size classroom with brightly colored murals on the walls. The instructor could be clearly heard from the back of the class where I was sitting. She was lecturing on the use of various teaching strategies, like micro-teaching and team teaching. She showed a hand drawn diagram on improving teaching through continued practice and reflection. She used a diagram with the following continuous process: plan, teach, observe, and critique; re-plan, re-teach, re-observe, and critique. Next, the instructor elicited the help of a teacher trainee to model how she would conduct her morning routine to build teacher/student rapport. The teacher walked through the aisles standing close to the students and asks one to lead the class in a song. After the demonstration, the instructor complimented the teacher and made a recommendation that the teacher ask the student to the front of the room to lead the class in a song. At the end of the lesson, the instructor told the new teachers they need to “love their profession.” She also suggested that they observe teachers at reputable schools to learn more about the profession.

Class observations at Rajhimati PTI. I observed three classes at Rajhimati PTI—general science, Bangla, and social science. General Science class is held in a large room with approximately 80-90 student teachers, who are dressed in the school uniform (women wear a sari, men wear a white button down shirt and dark slacks). When I entered the room, the instructor immediately informs me that the syllabus has been completed and this is a “revision” (review) class to prepare for the final examination. The instructor asks a student to list the six elements of food on the black-board. Next, the

instructor gives a brief lecture on food nutrition and questions students using both whole class and individual questioning techniques. After questioning sessions, students completed a whole class brainstorm adding examples of food elements to the list on the blackboard. Afterward, the instructor asked both comprehension and critical thinking questions. Throughout the lesson students were attentive and actively participating. The instructor's voice is loud; however, he stayed at the front of the classroom for the duration on the class period.

Bangla class was held in a small room on the 2nd floor. There were approximately 75 student-teachers seated at long tables with benches. The instructor informed the class that the lesson objective was "strategies for teaching rhymes." The instructor recited a rhyme, and then led students in the rhyme as they clapped in unison to keep the rhythm. Next, the instructor divided the class into three large groups to recite the rhyme in unison, focusing on clear pronunciation and voice projection. This technique promoted friendly competition amongst the students. The instructor again varied the teaching technique, asking individual students to act out the rhyme at the front of the classroom. After the demonstration, the instructor discussed the benefit of using various teaching strategies with the student-teachers. They recognized that varying the technique kept the lesson interesting and engaging. The instructor told them, "Make your students smile when they are reciting and use physical movement to help them remember." He added, "Listen for individual student pronunciation by walking around and standing close to students." He tells them to be creative with descriptions to activate their students' imagination. During the discussion one student-teacher asked for clarification on the difference between poetry and rhyme. The instructor explained,

Rhymes are for entertainment, enjoyment, to redirect/refocus class, or to lighten up boring class. They also help students with pronunciation practice. Poetry builds comprehension and vocabulary. It is good to teach rhymes during the 1st half of the year, and poems during the 2nd half of the year.

Next the instructor asked teachers how they can use the three-step method for teaching rhymes and poetry recitation. During the last 10 minutes of class, the instructor asked me and my research assistant to introduce ourselves. The student-teachers were interested in my research topic. They asked about teaching and teaching strategies used in the United States. I was acutely aware of the contextual differences between the two systems and cultures as I explained the differences. After the class was dismissed, the students quickly found me in the hallway and were eager to discuss teaching and education in greater detail.

Social science class was held in a large room with approximately 80 student-teachers. A podium and a free standing white board were at the front of the room. Immediately after my arrival the instructor informed me, “There is nothing to see in my class. It is just a revision class.” The instructor began by writing on the white board, “Solutions to the population problem in Bangladesh.” The instructor led the students through a brainstorming session, writing the students’ ideas on the board as they call them out. The instructor questioned the students, focusing mainly on those sitting toward the front of the room. His voice was quiet, and students in the back of the room are not watching the lesson or taking notes; some talk quietly to each other. For the remainder of the class, the instructor reviewed the material by lecture, using the brainstorming graphic on the board as a visual resource. Some students took notes during the lecture. At the end

of class, the instructor called on one student to read the contents of the board aloud, then asked the student to erase the white board.

PTI documentation. Kanpur PTI provided me with several curriculum documents and one training textbook. The subject specific curriculum document contained 27 objectives for teachers to master for teaching Bangla (Appendix I). Of these objectives, 13 were related to subject specific lessons, five were teaching methodology for subject, and nine were instructional planning. The training textbook for teaching English contained seven chapters addressing the following areas: theory, teaching strategies, subject specific teaching methods, and planning/evaluation. The textbook appendices contained additional practice lessons, study skills, observing other classes for professional development, and enrichment activities.

Murals painted directly onto the walls in PTIs provided inspirational messages and cultural art (folk life, poetry, etc). A mural titled *An Ideal Teacher's Qualities and Professional Values* was painted on a wall at Nodipur PTI (translated):

1. A teacher should be polite, gentle, affectionate, and honest. Her behavior will be very pleasing. He/she is able to win everybody's heart.
2. He/she will be sympathetic, sincere, and patient. His/her affection, kindness, and love will be authentic.
3. He/she has to be honest and has to have a strong personality, sense of humor, joyful and a beautiful smile will be included in his/her qualities.
4. He/she will be truthful, dependable, reliable, responsible, and trustworthy. Relevancy exists in his/her speech and work.
5. Smart, cleanly dressed.
6. Confident, strategic, skillful and not greedy.
7. Creative, well cultured, and progressive/modern.
8. Moralistic, organized and punctual.
9. Ideal citizen and patriot. Responsible and sincere to his/her works and has to have a cultural mind.

The text of murals, like the one above, reveals cultural ideologies and values associated with teachers. This particular mural itemizes 27 personal qualities, or dispositions, a professional teacher should possess.

Challenges at PTIs and GPSs. When I asked what the biggest change in training has been over the last 5 to 10 years, one superintendent noted that the modification in the daily schedule from a single shift to two shifts—morning and afternoon—was a considerable change, causing problems with the classroom routine. He has recently been informed about changes under the PEDP3 initiative which will return PTIs to a single shift model, but extend the training period to 18-months. It is anticipated that this will reduce the class size to 30 trainees per class by increasing the number of sections offered each day. Instructors at two PTIs contend that the curriculum has been the same for the last 9 years and they are finding it uninspiring. One instructor explained that she knows that more creative teaching strategies would benefit her students; however, the demanding schedule and large class load provide her with little planning time so she often resorts to lecture. She claimed the course curriculum was “boring, boring, boring” and that it is difficult to motivate students. This instructor believed that a maximum enrollment of 100 teachers per shift, broken into groups of 10 would greatly improve the situation.

As for challenges for new teachers at GPS, the superintendent at Rajhimati PTI indicated that the lack of teaching materials and aids made teachers’ jobs more difficult. He went on to explain that due to funding restrictions the government and schools are unable to provide teachers with resources. When I asked how the PTI training prepares new teachers for this situation, the superintendent replied, “Teachers fully understand

these problems; they know what their job will be like.” He further elucidated that the situation is difficult to change and new government initiatives are needed.

This administrator also thought the long days with no break posed a challenge for teachers. Teachers often teach five to seven classes per day, with no or little preparation time. Additionally, if any teacher is absent or on extended leave, such as maternity leave, other teachers must cover the class.

At Kanpur PTI, instructors felt the most challenging aspect of teaching in GPSs for a new teacher was managing large classes and the additional community duties teachers must perform. In response, instructors state they try to instruct teachers on different classroom management strategies. At another PTI an instructor explained that teaching is not a life vocation and there is a lack of passion. The instructor further explained that some only enter the teaching profession with an aspiration to become an administrator. The superintendent at Nodipur PTI explained,

New teachers are young. They don't have any other options and they start a career in teaching thinking that something is better than nothing. They don't want to continue being a teacher, some will go to university and earn their master's degree and leave the profession. This is mainly because of the low pay.

I asked specifically how much he thought teacher's pay would have to increase to encourage teacher retention, and he suggested it should be doubled to at least 15,000 taka per month (equivalent of \$185 USD). It was widely acknowledged, in the education sector that teachers are paid so little that many young people are not inspired to enter the profession. This creates a crisis in education whereby young people with few options for their future go into GPS teaching. One professor at Dhaka University described the situation as “using a rotten resource to develop our most precious resource.”

Summary

Training at the three PTIs serving Dhaka were remarkably similar. The centralized educational system ensures all curricular materials and evaluations are standardized. Since the examination is closely tied to the textbooks, instructors do not deviate from the textbook or create their own instructional materials. Likewise, infrastructure (buildings and classrooms), instructor qualifications, program structure, and enrollment were comparable across all PTIs. All three PTIs had one technology enabled classroom where lessons were supported with PowerPoint presentations projected onto a portable screen. Due to the similarities across the three training institutes, the findings from the PTIs are presented together, independent of the individual case studies.

What methods are primary school teachers taught to use in PTIs and how do PTI instructors perceive the usefulness of these methods in promoting student learning? It was both reported and observed at all three PTIs that the methods of instruction include: Q & A, discussion, activities, projects, demonstration, technology enhanced presentations, multiple-choice questions, and group/pair work. Instructors frequently used Q & A, directed at individual students or the whole class, as an anticipatory set method, for critical thinking discussions, and to check comprehension. The three-step method was used to structure the class lessons in two of the 11 training classes observed. Demonstration and modeling, either by the teacher or students, was used in seven of the 11 training classes. Lecture was the primary teaching method used in four of the 11 classes. The two classes that used multi-media were a good example of using pictures

and videos to support student learning, despite the fact that most GPSs do not have technology resources.

In two of the classes observed at Rajhimati PTI, the instructors were quick to inform me that the class was a “revision” class in preparation for an upcoming examination, and there was “nothing to see.” The instructor seemed to acknowledge the fact that the class was not as interesting and dynamic when reviewing information, but in the Bangladeshi context it is necessary, nonetheless. This theme of revision classes (the equivalent of tuition classes for GPS students) being taught differently was evident in the GPS as well. Likewise, with the test and text book so closely linked, instructors expressed that it is necessary to work directly from the text book and not deviate during their lessons, lest students not be prepared for their examinations. It is clear that the PTI training curriculum in Bangladesh is test-centered and driven, which has an undeniable influence on teaching style. In the “revision” classes they used rote repetition and lower order (rote or comprehension level) questioning to prepare for examinations.

Conclusion of PTI Findings

Instructors in PTIs face similar challenges to teachers in GPSs. Namely, poor physical conditions, such as inadequate classroom facilities (dark, noisy). Also, large class sizes, limited teaching resources, and the test driven curriculum keep instructors from using innovative teaching strategies. For these reasons, instructors at PTIs do not always use or model the teaching methods they teach theoretically. Curricula that refer to using greater participatory methods, such as using group/pair work, student modeling/projects, and posing challenging critical thinking questions are taught mostly in theory. One of the greatest resources at the PTIs was the experimental school on the

premises; however, I believe it was not used to its fullest potential. PTI instructors do not model full classes on a regular basis and teacher trainees do not have the opportunity to teach newly techniques. The experimental schools hold the promise of more direct modeling of the training and, more importantly, teaching new teachers how to reflect and modify (re-teach) as professional practice.

PTI instructors are overextended. For example, they teach eight, 40-minute classes each day of the same content matter. In addition to a heavy teaching load, instructors must visit student teachers at their schools for formal observations. To further exacerbate the problem, instructors find the curriculum stale and uninspiring. Because teachers and school administrators do not have the authority or the necessary training, they do not innovate beyond the textbook. Centralized government control of the education system from training to the primary schools in Bangladesh has been criticized (Richards et al, 2008; Rabbi, 2007;) for a lack of transparency and accountability, which result in rampant corruption in the education sector (Choe, Dzhumashev, Islam, & Khan., 2007; Karim, Rodall, & Mendoza, 2004; Knox, 2009). Furthermore, centralized education and management in general is, “often expressed in long delays in decision making, and inordinate difficulties in implementing new programs and services” (Rabbi, 2007, p. 36). PTI administrators and instructors clearly recognized the problems in the system that adversely affect the quality of training, but are powerless to make necessary changes.

Chapter 5

Case Study Findings

This chapter presents the findings from three contextually bound cases. Each case study begins with a description of the GPS where the teacher participant worked in order to provide an understanding of the daily routine and school culture. The observation findings, in conjunction with the interview responses, are presented within each of Danielson's (2007) four frames—planning and preparation, classroom environment, instruction, and professional responsibilities.

The individual case studies are followed by a cross-case analysis which aims to answer the research questions guiding this study which address the teachers' classroom practice: What evidence is there of transfer of training to practice for recent Certificate in Education graduates of Primary Training Institutes in Bangladesh? What is the dominant teaching method used by teachers in the classroom and why is this method chosen? What do teachers perceive as influencing their choice of teaching methods in the classroom and why? Emergent themes from the findings are discussed in the chapter summary.

Case Study One

Pori has been a GPS teacher for two years. She was hired at another GPS in Dhaka in 2009, and within a few months she began her training at Kanpur PTI, where she earned her C-in-Ed. With her teacher training complete, Pori returned to the GPS where she was initially hired, teaching for one year. She then changed schools to be closer to her home. Dhaka has notoriously bad traffic and the travel time added to her time away from her young children and family. She had been working at Janalaganj for one year; however, she missed her first place of employment, which she described as a much nicer

school with considerably better management. Pori taught grades 2, 3, 4, and 5 in English, Science, Bangla and Math during the afternoon shift. I observed Pori's complete teaching day over 6 days. General observations were recorded in all classes. Additionally, questioning types, number of questions asked, and location of students called on by Pori were recorded on four of the six observation days.

Janalaganj primary school. The government primary school in this case study, referred to as Janalaganj (a pseudonym), was a three storied building with 7 functional classrooms (one classroom is unfurnished and unused). In addition to the classrooms, the school building had one teachers' break/planning room and an office for the head teacher. Each classroom measured approximately 14' x 18', and had two doors (one in the front and one in the rear of the room) and windows along the two outer walls (one wall facing toward the hallway area). The furniture was basic metal framed tables and benches with wooden tops. Benches could accommodate up to four students. There was one student bathroom and one teacher bathroom.

Total student enrollment at Janalaganj exceeded 1,700 (approximately 55% girls and 45% boys). Due to the large population this school served, it was one of five schools within the *thana* (catchment) that qualified for free World Food Program biscuits. Eighteen teachers (1 male; 17 female) and one head teacher were employed (no teaching assistants or administrative assistants) at Janalaganj. Students were placed according to ability, not age. Therefore, classes had an age range that spanning one to four year. For example, the 2nd grade class was comprised of children aged 8-12 years old. The school operated on a 6-day week, Saturday through Thursday. The school day was split into two

shifts, accommodating boys in the morning shift and girls in the afternoon. Below is the official posted class schedule, which was also confirmed by the head teacher:

Table 8

Posted Daily Class Schedule at Janalaganj GPS

Shift 1	6:30 am to 8:45 am	Grades 1, 2	Boys
	9:00 am to 11:45 am	Grades 3, 4, 5	Boys
Shift 2	12:00 pm to 2:00 pm	Grades pre-primary, 1, 2	Girls/boys
	2:30 pm to 5:30 pm	Grades 3, 4, 5	Girls

The head teacher reported that weekly instruction totaled 12 hours per week for pre-primary, 1st, and 2nd grades and 18 hours for 3rd, 4th and 5th grades; however, boys in 3rd - 5th grades received slightly less at 16.5 hours per week according to the schedule posted in the teachers' room. Furthermore, after one week at the school, I observed that students in the classes I visited received far less instructional time than the above reported hours. For example, the 2nd grade boy's class (second shift) was reported by the classroom teacher to be held from 12:15 pm to 1:45 pm; however, due to the lenient procedures followed at the school, this class often started late and ended early (12:30 pm to 1:30 pm). This actual schedule resulted in the class of 2nd graders that I directly observed receiving only 6-9 instructional hours per week rather than the 12 hours reported by the head teacher.

Physical environment. When I approached Janalaganj, the physical neglect of the school was immediately apparent. The grounds were completely covered in trash and there was no area for the students to run and play during their break. There was one metal play structure for climbing, but the surrounding area was so covered in trash, it was

unused. I later learned that due to the lack of outdoor play space, the school did not have a physical education class.

The hallways and classrooms were stark; there were no murals, posters, or other decorations on the walls. One classroom on the ground floor had no electric lights and little natural light. Classroom furniture was also in short supply. Students were observed moving benches and tables through the hallways and the stairways between classrooms to accommodate all of the students. The toilets for both teachers and students were very basic and highly unhygienic.

School culture. Janalaganj did not utilize a bell to signify the change of classes; therefore, students and teachers often went to class late (typically 10 minutes after the official start time). Some classes were left without a teacher, and students were loud and unruly. Between classes students ran around the hallways, disrupting other classes. One teacher brought her 2 year-old child to school every day. The young child would nap in the teachers' room or toddle between classrooms during the afternoon, finding a student's lap to sit on. Discipline throughout the school was lacking from the top down. The head teacher was not present on four of the six days I was at the school. On the days when she was there, I did not observe her visiting classes or monitoring the hallway.

Many parents walked with their children to school, or picked them up after classes. Parents sometimes visited with teachers in the preparation room to ask a question about their child or upcoming examinations. On several occasions, parents came to the door or window during class to give their child a message or speak with the teacher. While it was well-intentioned, it would temporarily disrupt the teacher's lesson. As with most GPSs, the school served working class families, of a low socio-economic level. In

the 2nd grade class, several of the students had tutors that were students themselves, in the 5th or 6th grades. Pori reported that the cost of a student tutor was less expensive for families, costing approximately 200 taka (2.50 USD) per month.

All of the teaching resources, the majority of which were posters and charts, were stored in four large trunks. Janalaganj had just received a new technology based resource called *English in Action* from a donor organization called. The *English in Action* resource included a cell phone pre-loaded with 35 English lessons and a rechargeable speaker system so students could hear English spoken by a native speaker. The training, provided by London Open University, taught teachers how to use the recordings in their English classes. The head teacher of Janalaganj referred to the new teaching aid as “giving the teacher a break from talking.” In this instance, the teaching aid was regarded more as a method of easing the work load for the teacher, rather than enhancing the learning process for students.

Class Observations

Planning and preparation. During the pre-observation interview, Pori stated she valued the training she received at Kanpur PTI, especially subject based training and child psychology. Pori stated, “While in training I didn't see the usefulness, but now I see how to apply the courses in teaching every day.” When asked what she did not find useful in her training, she identified some lesson strategies that emphasized repetitive instruction techniques (focusing on one or two words for an entire class period), which Pori found impractical and boring. Pori also thought that the method of modeling PTI instructors used with experimental school classes was not representative of the situation in the classroom because they used a small group of 8-10 students.

Pori appeared confident with the course content, especially with her English classes. In mathematics class, she often used real-world problems in her examples, such as the price of common goods and how to count change. Pori reported using the teachers' book for a "quick review before the lesson, for teaching ideas, or necessary points to emphasize." She stated that she used to write out her lesson plans her first year as a teacher, but at the time of the interview she felt it was no longer necessary and she did not have the time. Pori balanced the structure and pace in her class using the "Three-step Method." Pori used whole class and individual Q & A when practicing problems. Occasionally, she had students solve problems on the blackboard. Students solved problems individually in their notebook for the "task" phase of the lesson. Pori sporadically checked the students' notebooks (not in every class, nor every student's notebook). During the observation period, Pori did not assess student knowledge at the beginning of the lesson or review lessons from the previous day.

Pori used the blackboard regularly and in a formulaic fashion, which helped students follow the process of problem solving in mathematics class. She would insert the word problem into the mathematical equation to show the process. When students were invited to the board to complete a problem, they used this familiar layout.

Pori used the *English in Action* audio recordings with her 2nd grade English on one of the observation days. The recordings allowed the students to hear English pronunciation from a native speaker. She noted that the students were more interested when the audio lessons were new, but at the time of the interview they failed to hold their attention. When I inquired about using teaching aids during classes, Pori told me the students have grown bored with the resources, so they are not used very often.

Pori assessed student learning through comprehension questioning and occasional checks of student work; however, she was careful to call on all students. Pori said she gave class tests approximately every two weeks, although no classroom quizzes or tests were administered during my observation period.

Pori's 5th grade English and science classes were preparing for their model text the following week. Model test preparation consisted of drilling from a PSC preparation textbook. On the last day of my observations, the model tests were delivered to the school. Pori hid the model test in her textbook, and questioned students directly from the test. Therefore, it is not surprising that the pass rate for PSC examination, as reported by the Janalaganj head teacher, is 100%. I asked her what the consequences would be if students did poorly on the PSC examination, to which she explained that the scores determine school effectiveness. She said, "If the students don't do well on the PSC, the Thana Officer will visit the school and monitor the school." For the students that continue their education past the compulsory 5th grade, PSC test scores determine placement in good secondary schools. Unfortunately, many students in the lower socio-economic class will not have the opportunity to attend secondary school due to the expense.

Classroom environment. Pori managed classroom routines, such as recording daily attendance and collecting test fees which were charged for the 5th grade model test. She guided the 2nd grade class in the opening routine each day. A group of four boys would lead the class in reciting the national oath and singing the national anthem.

Pori displayed an understanding of her students on a personal level, calling on them by name and making polite inquires about their family's well-being. She took time

at the beginning of class to connect with individual students and opened with friendly dialogue about their daily lives. In the pre-observation interview she explained,

I do exchanges like, 'good morning' and 'how are you' then we can clap together, or we can sing songs together, or we can recite a rhyme together. That way when they come into the classroom, I can manage them.

Pori understood the community her school serves and expressed concern when talking about the economic hardships these children live with every day. In turn, the students also showed a great deal of respect for Pori and one another. They were helpful with classroom chores (getting chalk, arranging benches) when the teacher requested them to do so, and they also helped each other with their class work.

During my week of observations, the students appeared to be very attentive in class; however, Pori reported in the post-observation interview they were better behaved because of my presence. She explained, "The students were very excited and very curious about you. They concentrate on their studies more to show you they are serious. Usually they don't give attention to their studies and make a lot of noise in the classroom." She characterized her 2nd grade class as "very naughty," stating that they "disturb me the most and don't pay attention" to her. She explained that she feels "more comfortable" teaching grades 3, 4 and 5 classes. Pori said that the 2nd grade students were "very young and it is difficult to hold their attention for such a long period."

Pori indicated classroom management was her biggest challenge in both the pre- and post-observation interviews. She varied her classroom management strategies, using verbal redirection, non-verbal cues (proximity and eye contact), changing students' seats, and removing students from class. Space was very limited in the classroom. The number of tables and benches needed to accommodate the students made moving through the

aisles nearly impossible. To access students in the back rows, Pori used the hallway and door in the back of the classroom. She did, however, lose her patience on two occasions, slapping students on the back. During the pre-observation interview, I asked what teaching strategy she learned in training that she has had to adapt for the realities of the classroom. She replied,

In training they taught us not to yell at students, but that is not practical because the children are misbehaving and I need to control the class. If there was another teacher in the room it would help. The students are very little and are very naughty.

She further explained that the students do not know how to behave in school or with a teacher because they come from very poor working class families. Pori reported that managing a large class had the greatest impact on how she teaches. In PTI training and GPS professional development workshops, classes are modeled with small groups of students, but the reality in the classroom is much different. In one interview, Pori explained that the techniques taught in training are not practical in her classroom experience,

The teacher says, "I am happy" and repeats three or four times, then says, "What am I?" The students reply "happy." She then asks each student individually. But is it possible when there are 50-60 students? This only works with a small group, not a class of 50-60 students. I go to play a game with the students, but when I start my game I need to manage the students. A smaller class would be better, 25-30 students, I could manage them, but with this number it is hard to keep control and have individual contact.

Pori worked hard to maintain control of the classroom using strong verbal control (voice, redirect) and eye contact. The students were responsive to her management and stayed on task as long as she maintained control. However, she unwittingly revoked control of the classroom to attend to personal details, such as taking or making cell phone

calls during class. These behaviors undermined the environment she worked hard to create. During the post-observation interview, we discussed the use of her cell phone during class. Pori acknowledged that using the cell phone was against DPE rules, but she needed to communicate regularly with her family (children, husband, and mother).

Instruction. Pori was clear when directing the students during the lesson in most of her classes. She used eye contact to connect with the students, determine understanding, and keep students on task. As previously noted, she frequently used the blackboard in her instruction to demonstrate problems. Pori allowed students to come to the board to demonstrate problem solving. When a student was working through a problem on the board, Pori would re-teach the concept and explain the process again. The class is very communal and students offer each other help in problem solving. She used the *English in Action* learning resource one, but did not use any other classroom resources during the week I observed classes.

Pori frequently used whole class and individual Q & A as a teaching strategy. The majority, 80%, of questions were used for checking student comprehension. The table below (Table 9) has the total of question types—rote (repeated information), comprehension, and critical thinking—in a total of 20 class periods over four days.

Table 9

Type of Question and Frequency Asked—Pori

Rote	Comprehension	Critical thinking	Total
63	315	16	394
16%	80%	4%	100%

Pori's classes had an average 43 students in attendance over the observation week. In all but one class she was careful to call on students in all areas of the room. The exception was her 3rd grade mathematics class located the 1st floor. This room had little natural light (windows blocked by the neighboring building) and no light bulbs. Furthermore, this class had the largest number of students in attendance, at 48. In this cramped and dark environment, Pori's teaching performance dropped dramatically. She spent less time on direct instruction and questioning than in her other classes (average of only five questions per class, versus 23.5 questions in her other classes). Additionally, in this mathematics class she only called on students in the front row, whereas in her other classes she called on students throughout the room. Furthermore, due to afternoon load shedding (systematic power outages to conserve electricity) the ceiling fans were not operational, making the room very hot. She ended this class 10 minutes early on five of the six observation days. During the post-observation interview, Pori discussed the challenges of this mathematics class, "When the environment is not on my side, I feel it is very difficult to do my job."

During the pre-observation interview, I asked Pori what teaching strategy she would like to use more often in her daily teaching. She responded,

I would like to have more one-on-one contact with the students, especially for reading class. I would also like to play more games. The students don't learn to read or write at home and they need intensive help, but there are too many students in the class. There is also a problem of the students misbehaving because they come from poor families and they are not taught how to behave. For these students class time is play time... During my school life we had large classes, but the students were well behaved. I think this is a difference of social status. Students get WFP biscuits and students only come to school to get biscuits, not to learn. This is especially the case in class 1 and 2.

Pori indicated her “brightest” students and which students she worried about due to their difficulties in class. This demonstrated that she had insight and understanding of her students learning needs. Pori did not differentiate instruction or use strategies, such as peer ability grouping or pair work, to assist weaker students.

Professional responsibilities. During the post-observation interview, Pori was unable to critically reflect on her teaching strengths and weakness. She could not identify a lesson she felt was particularly successful. When I asked her what she would like to improve in her teaching, she stated that she would like an improvement in conditions (more teachers, smaller class size) but she did not identify any improvements needed in her teaching strategies or lessons. She explained, “Without any improvement in conditions, I do know how I can improve my teaching.”

Pori recorded attendance examination grades in a ledger that is kept by the school. If a student is absent more than 15 days, the class teacher is responsible to visit the home and inquire about the students’ attendance. Pori stated that excessive absences are usually due to illness, marriage, or the family returning to their village. A chart of monthly home visits hung in the teacher preparation room with a tally of home visits that each teacher has made. I observed Pori have another teacher sign a Home Visit document with the parent’s name. I asked her why she did not visit the home to check on the student, and she said she knew the student and family returned to their village. Pori felt that the extra duties required by teachers were a burden, especially when they are already paid too little. Pori communicated with many parents on a daily basis at the school. Parents would either stop by the classroom or teachers’ room to speak with Pori or the other school teachers. Pori said written communications, aside from progress reports, are not sent

home. Pori explained that most parents prefer to talk in person or over the phone with the teacher.

As for training, Pori had reported that she found the year-long PTI training program too long, arduous, and boring, overstating the point, “In Bangladesh there is no training as long as PTI training.” She explained that she had to travel a considerable distance every day from the city to the suburban area of Kanpur. At that time, Pori had small children at home and it was a long day away from her family. She credits her husband for encouraging her and helping her throughout that demanding year.

The most recent training, *English in Action*, occurred two months prior to my visit. I asked Pori if she participates in professional development outside of the government sponsored training sessions. She stated that she had observed other teachers’ classes when she first began teaching, but at the time of the interview she did not find it useful,

Most of the teachers give tasks to students, like ‘do this’, then they sit. I think I do better than them. I try to maintain eye contact and follow what they are doing, if they are reading or if they are writing.

She also asserted that her rapport with students is better than the other teachers at the school. She reported that she collaborates with other teachers by planning lessons together or sharing ideas and grading procedures.

When I asked Pori what she learned about professionalism during her PTI training, she reflected on wearing the PTI uniform, which for women was a sari, “I wore a sari continuously for one year. It helped me to be a teacher in my manners, my etiquette, my style of talking to students and their guardians.” I also inquired about professionalism at the school level and Pori reported that the head teacher required the

teachers to arrive and depart school at the correct times and also to go to class on time; however, this was not observed the week I visited the school.

Pori was dejected when she discussed her attempt to improve the school, especially the playground area for the children. She offered to have it cleaned and wanted to donate money for play equipment, but the head teacher denied her request. Furthermore, Pori requested that the head teacher clean the school prior to my observation visits, yet the head teacher again denied her request. She was very discouraged by the school leadership at Janalaganj, she explained,

The head teacher could help more, but she doesn't... She should walk around at the beginning of the school day, visit classes, have more visibility. I was at another GPS and the head teacher helped me when I was a new teacher. She spent the entire first day in my class. She helped with class management and discipline. I asked my head teacher current head teacher to have the school cleaned before your visit, but she didn't care and would not have it cleaned.

Pori further explained that there was no formal process to report any problems she encounters as a teacher,

I don't have any channel or process to inform the authority about the problems I face. Right now I am responsible to conduct the national census which requires me to visit every home in the catchment. This is very difficult to complete in addition to my teaching duties. I am not paid enough... I don't have the time to complete this. This is a burden to me.

She discussed the corruption she had witnessed by the head teacher; specifically, that the head teacher had sold World Food Program biscuits to a local retailer.

Furthermore, she stated that the head teacher asked parents to pay a fee to have their student enrolled in a specific grade level, regardless of placement test outcomes. During my week at Janalaganj, I observed the head teacher charging twice the regular fee for the model test and also encouraging teachers to give the model test answers to students during coaching class.

Case Study Two

Bilkis began her teacher training at Nodipur PTI in 2008. She has been teaching at Jutara since she completed her training in July 2009. She is the newest teacher at Jutara. Bilkis is one of two 5th grade class teachers. She teaches four regular curriculum classes each day and one 5th coaching class in the afternoon. Her classes include, 5th grade Bangla and Science, 4th grade Social Studies, and 1st grade English.

Jutara primary school. Jutara GPS (a pseudonym) was a bright, spacious school located along a major road. Outside of the school walls, there was a lively bazaar where school children bought snacks and trinkets from street merchants. The school operated on a single, mixed-gender shift. There were approximately 730 students and 15 teachers (14 female, 1 male). School children in grades 3-5 attended a full day of school from 7:30 am to 2:25 pm, grades 1-2 attended half-day from 7:30 am to 11:45 am, and pre-primary attended from 7:30 am to 10:00 am. The table below (Table 10) shows the daily class schedule. According to this schedule, grades 3-5 received 41.5 hours of instruction per week, grades 1 and 2 received 22.5 hours of instruction per week, and pre-primary students received 21 hours of weekly instruction. The head teacher explained that this schedule is the result of a recent government directive for primary schools to increase daily instructional time. The classes I observed followed the posted schedule.

Additionally, coaching class was available for 5th grade students from 1:30 to 3:30. The coaching class fee at Jutara was 200 taka per month. The reported timing of the coaching session overlaps with period 7 for 5th grade students, which would suggest that coaching is not a supplemental class but rather integrated into the daily school schedule for 5th grade students. Both the head teacher and Bilkis stated that only 50-55% of the 5th

grade students will be able to continue their education after finishing the 5th grade; all the other students will enter the work force full-time.

Table 10

Posted Daily Schedule at Jutara GPS.

Summer (Feb-Oct)		Winter (Nov-Feb)	
School assembly	7:30-7:45	School assembly	8:00-8:15
1	7:45-8:45	1	8:15-9:15
2	8:45-9:35	2	9:15-10:05
3	9:35-10:25	3	10:05-10:55
4	10:25-11:15	4	10:55-11:45
Lunch/play break 30 min			
5	11:45-12:35	5	12:15-1:05
6	12:35-1:25	6	1:05-1:55
7	1:25-2:25	7	1:55-2:45

Physical environment. Jutara GPS consisted of a large three-storied building and a smaller single-story annex building for pre-primary classes. The school had a spacious, walled play area. The grounds were clean and attractive with flowering bushes and trees surrounding the school building. There were a total of 12 classrooms, all located on 2nd and 3rd floors with plenty of natural light and fresh air. The teachers' preparation room and administrative offices were located on the ground floor. The administrative offices were organized and professional, with a waiting area outside the head teacher's office. Given the ample classroom space and large play yard, Jutara had art and physical education classes for all grades. All furniture was standard issue metal framed tables and benches with wooden tops. In addition to the classrooms, there was one large assembly room, a resource room (for teaching aids), a reading room (library), two student bathrooms, and two teacher bathrooms. The teachers' planning room had a congenial feel, with the tables facing each other in a large square, which facilitated easy

communication. The resource room, adjacent to the teachers' preparation room, was stocked with a variety of teaching aids displayed on tables and sorted in categories, such as flowers, animals, etc. Resources included pictures, models, charts, and musical instruments. Some of the resources were contributions from teachers or old projects; others were the standard resources provided by the DPE. Teachers would frequently stop in the room on their way to class and pick up an appropriate resource for their lesson.

School culture. Time management was important at Jutara GPS. Every morning and afternoon teachers signed in and out of a log in the head teacher's office. In the morning, there was a whole school assembly led by several students and teachers, with the head teacher in attendance. During the assembly students stood in rows by grade, recited the national oath, sang the national anthem, and did calisthenics. After the assembly, students reported to their classrooms, with older students monitoring the hallways and ushering younger students along. A bell was rung before classes in the morning and throughout the day to signify the change of classes. The head teacher informed me that the school was not given a bell by DPE, but with the help of the School Management Committee and teacher donations, they were able to purchase a bell. During class time, there were no students in the hallways.

The head teacher was very accommodating and helpful during my visits to Jutara. Since the head teacher had only been at Jutara for a short time, she invited one a teacher who had worked there for almost 20 years to discuss the school community. She also explained that the school frequently hosts government and international visitors, which explains why the students seem unaffected by my presence. During the week, the head teacher often checked the condition of the classrooms to ensure there was an available,

clean desk for me to sit. She was also visible in the hallways and between classes. During the class period, she would spend time talking with the teachers during their preparation time in the teachers' room. I asked the head teacher if new teachers who have been trained to use a wider variety of teaching strategies are better than older teachers. She explained,

Older teachers have learned new techniques during URC training. So they know and do use newer techniques. It is not how long someone has been teaching or their training that determines if they use innovative teaching techniques, it is their personality—work ethic, courage, interest, and motivation.

Like the school in the first case study, one teacher brought her small child to school several of the days during the observation week. While she was teaching, the young child was cared for by the school *bua* (maid, cleaner).

Classroom observations

Planning and preparation. Bilkis had a strong command of both subject-based knowledge and pedagogy. She structured her lessons to build on students' previous knowledge of the subject matter. For example, in her 4th grade Social Studies class, Bilkis compared the Bangladeshi culture (food, sports, religion) with the culture of other Asian countries. In her post-observation interview she commented that she enjoyed teaching the unit on Asian culture and using comparisons with Bangladesh. She stated, "Using comparisons helps the students learn about and relate to their own culture. I used it as an opportunity to give emphasis on Bangladesh, and to create patriotism." Bilkis was also skillful in using a variety of teaching techniques to complement the subject matter, including whole class brainstorming, group work, and experiments. Her lessons were engaging and students stayed on task throughout the class period. When I asked her what

she learned in PTI training that she found most useful, she explained that time management and structuring lessons was most valuable.

Bilkis was also a very democratic teacher. She gave every student in the class an opportunity to answer questions and she balanced the participation of girls and boys. If a student did not know an answer, Bilkis used remediation techniques such as re-teaching and student pairing for peer re-teaching. She blended both student and teacher centered techniques throughout the lesson. These included student role-playing activities, group work, student board work (contributions to ideas and responses to questions), and demonstrations with student participation. For example, during science class Bilkis explained how to make saline solution for water-borne stomach illness. She then invited a student to the front of the room to make the saline as a live demonstration. Bilkis was able to recreate this lesson from the textbook using readily available household items (water, salt and sugar). She noted in her post-observation interview that this was the first time she used a live demonstration with this lesson. In the past, she would teach this lesson using lecture only, but she wanted them to really learn how to make this as it is practical and relevant to their lives. She said that gathering the ingredients was easy and now she will always use a live demonstration when teaching the lesson on water-borne bacteria and saline solution.

The teacher's edition of the 5th grade science textbook Bilkis used recommended a variety of teaching strategies. Bilkis used many of the suggested lesson ideas during the week of observations, including: use of teaching aids (pictures and charts), demonstrations, discussion, question and answer, use of the blackboard, and critical thinking activities. This was also the case in her other classes.

Bilkis was clear about student learning goals. She regularly established the learning objectives at the beginning of class, reviewing the previous day's lesson first as a comprehension check. If students were ready for the new material, she would begin. In many of her classes, Bilkis used the "anticipatory set" technique, where she elicited student input on a topic as an introduction at the beginning the lesson. These first 5-10 minutes were often the most engaging for the students. Her anticipatory set techniques included class brainstorming, role playing, or critical questioning. She explained that some of these ideas "just come" to her as she is teaching, but she also uses a notebook for jotting down creative ideas. She showed me her idea notebook in the post-observation interview. She had a rough sketch of a brainstorming activity to start her lesson on basic human needs and what humans get from trees. The day she had taught this lesson, she began the class with a graphic organizer in the shape of a tree drawn on the blackboard. Students were invited up to the board to add ideas about what people get from trees (shelter, medicines, fruits, oxygen, etc.). After the whole class brainstorming activity, students worked in groups to discuss the role trees play in human society and answer several comprehension questions at the end of the chapter. As groups completed the assignment, they gave a unified clap. This created a friendly competition between groups, as no group wanted to be the last to complete the assignment. Bilkis collected the students' notebooks so they could not add to their answers and had each group report their answers to the whole class. At the end of the lesson she summarized the main points using whole class comprehension questions.

All of the teachers at Jutara, including Bilkis, used the teaching resources set out in the resource room throughout the day. Bilkis noted she would like to use models and

pictures with every lesson as it helps the students understand the concepts much quicker and it makes the lesson more enjoyable for them. She would like to have more resources at her disposal, especially class sets of items like crayons and flash cards. Bilkis also used items brought from her home, such as tea cups and hats, for a lesson on counting. For Bilkis, the most important factor when presenting a lesson was the students. She explained,

The ability level of students, some students are so fast and others are slow, or have a weaker ability. I have to consider and think at their level when planning a lesson. Also, the number of students in a class; it's too hard to control the students when there are so many of them or they don't have enough space in the classroom, sometimes they have to sit three students to a bench.

Bilkis administered quizzes in three of her classes during the observation week (5th grade Bangla, 4th grade science, and 4th grade social studies). These were simple, low resource assessments that help the students review critical material. The quizzes were directly related to the concepts learned in class that week. She wrote five to six questions on the black board that students answered on notebook paper. Students took the quiz seriously and she gave the students as much of the class period as necessary to complete it. She said she typically gives class quizzes at the end of a unit, approximately every two weeks.

Classroom environment. Bilkis was a serious, but kind teacher. The students seemed to enjoy her classes. Through a positive example, she created a productive learning environment. For example, she was always punctual and prepared for class. Furthermore, she consistently encouraged positive and respectful peer interaction. In her pre-observation interview she discussed how she learned the importance of teamwork during her PTI training,

I also learned about teamwork. How teamwork helps you to accomplish large tasks and how team work helps in the classroom. Like a community cleaning project and gardening at the PTI. I realized at that time that teamwork was the best, most easy way to complete tasks.

Not only did Bilkis exhibit professionalism in her punctuality and preparedness, but her creativity and enthusiasm for teaching created a positive culture of learning in her classroom. When Bilkis assigned class work, she would take the time to correct each student's work, making notes or comments on the page. Not only were the answers to the questions important, but she checked spelling, grammar, and handwriting as well.

Bilkis recorded attendance in an attendance register at the beginning of every class. When students had been absent for more than three consecutive days, she first asked their classmates if they know any news on the student. If the absenteeism continued, she would contact the parents. Her homeroom class was her class of 5th graders. Bilkis kept the phone numbers for all parents of her 5th grade homeroom, if she needs to check on a student.

Bilkis did not indicate in her interviews that classroom management was a problem, nor did it seem to be a source of difficulty or stress during the observations. When necessary, she used verbal and non-verbal redirection, which was effective. Her well-organized and engaging lessons provided the students with the opportunity to move around and talk; therefore, class disruptions were minimal. If necessary, at the beginning of class Bilkis would reorganize the students, seating the shorter students in the front and taller students in the back or moving the benches so that everyone had a comfortable seat.

Instruction. Bilkis' instruction was clear and concise. She directed student learning using both verbal and written directions. When necessary, she reviewed a concept until the students understood the content. For this she used whole class and

individual Q & A checks throughout her lesson. The majority of her questioning was at the comprehension level. She used rote repetition most often with her 1st grade English class, which is frequently recommended in the teachers’ guide for the textbook. The table below (Table 11) shows the frequency of different questions that Bilkis asked over six instructional days in 24 class periods. Note that some classes the Q & A strategy was not used.

Table 11

Type of Question and Frequency Asked—Bilkis

Rote	Comprehension	Critical thinking	Total
214	312	67	593
36.1%	52.6%	11.3%	100%

When I inquired about her regular use of rote with the younger students versus more innovative teaching strategies she used with the upper grades, she offered this explanation:

I feel it is not possible with the Grade 1 class. They are too little and their ability level is very low. I try to vary how they are memorizing, like today when counting “1, 2, 3, 4, and 5” I also did it backwards and other ways “one, one, one, two, two, two, three, three, three”, and so on. I also tried to confuse them, “one, two, three, four, one....”, and then they had to “correct” me. I had the students choose the flash card and say the number to the class. I also believe more resources would help me vary my teaching techniques with this class, rather than memorizing. But overall, Grade 1 students are too young to think critically or brainstorm. It’s not possible with grade 1 because I have to consider their level of understanding. Also, the Grade 1 includes students that come from a poor background--villagers and migrant workers who are living in Dhaka temporarily. There is only one section for class one, no advanced or lower levels like the grade 5 class. Many will not even complete school to the 5th grade. Some will return to the village and make their life there.

In the post-observation interview, Bilkis said she enjoyed teaching 5th grade Bangla class the most because, “I like to teach about my native language. Also, I can explain much more to my students.” Bilkis strove to make learning fun and interesting for the students. She stated in her post observation interview,

I use a lot of activities that promote student participation. I expect students to give input on a topic before I start the lesson. I also like to call students up to the board to write down the brainstorming points. I always try to listen to their opinion and input.

Bilkis’ classes are structured and she fills the instructional time productively.

When I asked her how she has adapted the teaching methods that she learned in PTI training, she stated:

I adapt group work—I use it differently than taught in PTI. Sometimes students work on individual work, but sit in a group and discuss answers. I use group work with all grade levels and classes; the students like it. Not every day, but sometimes

Bilkis took the time to collect and grade student class work on a regular basis. She mentioned in PTI training the instructors taught the teachers not to use an “x”, but rather to circle or correct a mistake so students would not be intimidated by the learning process. This was also the case with the class quizzes, which were graded in a meaningful manner.

Professional responsibilities. Bilkis reflected on her lessons during the post-observation interview noting successful lessons from the week. She enjoyed having the students take an active lesson, such as her 1st grade English class when they all acted out the poem from the English textbook, *One, two, three*. She also expressed that the lessons where the students learned practical life skills were extremely beneficial, such as making saline solution in science class. When I asked what she would like to improve about her

teaching she replied, “I don’t know, only another teacher watching me can answer that question. You can’t find your difficulties by yourself; you need someone else to point them out.” Bilkis also indicated that punctuality was crucial, “It is important to be on time for class, you can’t be late, not even 5 minutes. It will distract the students.”

Bilkis explained that during her first year, the teachers at Jutara GPS were helpful. She said, “They helped me mentally and encouraged me, as I am the newest teacher at this school.” Peer professional development was also encouraged at Jutara. During the observations, several other teachers from the school also observed Bilkis’ classes. I learned that Jutara has a tradition of collegial sharing. Bilkis explained,

Last year the school organized a school-based program, nothing formal or a government rule. We would arranged a class with an experienced teacher every week on Thursdays for other teachers to observe and learn new techniques—simulation classes. At first, it was every week, then once a month. We are talking about re-instituting this school based training model... [Now] I haven’t observed any classes for a year. When I have a free period, I usually have to cover another class if someone is absent, so I don’t have the opportunity to observe other classes. The only opportunity to observe other teachers is during Sub-cluster Training.

Bilkis displayed professionalism and a willingness to develop professionally. Sub-cluster training usually occurs every 3 months and they partner with another local school; however, last year there was no sub-cluster training provided by the government and they are not sure why. So far, this school year they have already had one sub-cluster training on teaching Bangla. Bilkis enjoys the sub-cluster training provided by the URC, as demonstrated by this comment: “You get to watch a new teaching method from an experienced teacher, with a model class of 25-30 students.” Bilkis especially enjoys URC sub-cluster training, explaining, “We were familiar with PTI instructors and their

teaching methods, but at the sub-cluster training we get to see something different—like a new teaching method from an experienced teacher.”

When I returned to Jutara for the member-check interview four weeks after the observations, I learned that Bilkis gave a model lesson at sub-cluster training to 28 teachers from two other GPSs. She taught the lesson that I had observed on cultural comparisons to a group of 20 students at the URC model school and the Assistant Thana Officer. As a result of participation in this study, Bilkis’ reputation as an excellent teacher grew with the recommendation from her head teacher. Bilkis was grateful to be recognized and contribute to improvements in GPS teaching.

Bilkis took attendance, recorded quiz grades, and performed the other record-keeping responsibilities I asked Bilkis if she talks with parents about their child’s progress. She explained, “I have all 45 parents’ contact numbers for Class 5. I call if necessary, but the parents are not interested or careful about their children.” She usually only calls home if a student is absent for a long time. If necessary, she will make a home visit as required. Bilkis expressed concern for her students frequently ask if they had breakfast that morning. I observed her share some crackers with one child who was not feeling well. Bilkis is also involved in the regular responsibilities of government primary school teachers, such as census recording, parent-teacher meetings, and other school based programs.

Case Study Three

Rashid attended PTI training from June 2010 to June 2011. Shortly thereafter, he began his assignment as Head Teacher at Nakoli GPS. Each morning, Rashid taught 5th grade PSC mathematics “coaching” class. For the benefit of this research project, Rashid

also taught a 1st and 2nd grade mathematics class during the observation week. Since he does not teach a full load of classes, observations were undertaken for seven days rather than six days.

Nakoli primary school. Enrollment at Nakoli GPS totaled approximately 750 students (57% female; 43% male). Staff included 11 teachers (seven female; four male), and two para-professionals. The school had two mixed-gender shifts—one shift in the morning from 7:30 to 10:00 and one shift in afternoon from 10:25 am to 2:15 pm.

Table 12

Posted Daily Schedule at Nakoli GPS.

Period	Times	Class	Grade Level
1	7:30—8:25	Bangla	K-2
2	8:26—8:54	Mathematics	K-2
3	8:55—9:34	English	K-2
4	9:35—10:00	Social Studies	K-2
Play break 10:00—10:25			
1	10:25—10:55	Bangla	3-5
2	10:56—11:35	Mathematics	3-5
3	11:36—12:15	English	3-5
Play break 12:15—12:45			
4	12:45—1:15	Social Studies	3-5
5	1:16—1:45	Science	3-5
6	1:46—2:15	Religion	3-5

Coaching was available for 5th grade students in the morning and afternoon, 7:30 am to 10:00 am and from 3:00 pm to 4:00 pm, respectively. The class schedule was adhered to throughout the observation period.

The school operates as a co-educational school. If there was not enough seating, boys and girls would share a bench. Furthermore, boys and girls did not sit on separate sides of the classroom; at Nakoli GPS they mixed throughout the room. When I asked about the differences in schools' policy regarding co-education, Rashid explained, "It

depends on the community and school traditions in that community. Also how students are transported to school and if “Eve teasing” is a problem in the area.” Eve teasing refers to verbal and/or physical and sexual harassment against women and girls. Eve-teasing can be detrimental for school girls and it has been shown to cause the school drop-out for girls (Weisfeld-Adams, 2008). In fact, it can be such a bad experience for young girls that they turn to suicide. In 2011, eve teasing resulted in 31 reported suicides (Sharif, 2012).

Physical environment. The school was set in a quiet *goli* (alley) surrounded by a high wall. Inside the wall, there was a large, clean outdoor play space, with three 2-storied buildings. The buildings had a total of 14 classrooms, two of which were used only for storage. Building 1 was the oldest, built in 1947. It was in disrepair, but some rooms were still used for classes and there are student bathrooms on the ground floor. Building 2 and 3 were newer and in better repair. Building 2 was the main structure and included the administrative office, the teacher’s room, eight classrooms, and bathrooms for teachers and students. Building 3 had two large classrooms, but no bathrooms.

School culture. Every morning the national flag was raised in the school yard. A bell was rung each morning to signify the start of the school day and between classes. Each day school started promptly at 7:30 am. Morning assembly was held in the individual classroom led by the first period teacher. A poster titled *Qualifications for Teachers* was created by the previous head teacher of Nakoli GPS and hung on the wall in the teachers’ room as well as the head teacher’s office. The translation reads:

1. Am I late for school?
2. Is it not my duty to be in class at the correct time?
3. Am I leaving school early? Is that right?
4. Don’t sit down without taking attendance.
5. Am I presenting the lesson correctly?
 - a. Do they understand the lesson I am presenting?

6. Am I fulfilling my responsibilities from my heart/with pride?

A large rack, which was kept in the hallway, held hanging charts and posters. All other resources were kept in the teachers' planning room. Rashid had a kind, friendly rapport with the other teachers and talked casually with them each morning before class.

Classroom observations

Planning and preparation. During the week of observations Rashid used a standard, habitual teaching routine based on the three-step method taught in PTI training. He appeared knowledgeable regarding the content and pedagogy. He involved students throughout the entire class period either through Q & A or student board work. For example, Rashid would first model how to solve a problem on the blackboard; afterward students would work through the problems at their desk, while Rashid circulated around the room helping students individually. After all students had completed the problem, one student was chosen to show the process on the blackboard.

Rashid communicated with students on a one-on-one basis at the beginning of class and while he checked student work. He inquired about the students' well-being academically and on a personal level. He relayed some of their personal situations. For example, two of the students worked to their families; one boy sold newspapers in the street every morning to commuters, while the other worked second shift at a local thread factory. He was very compassionate and empathetic to their plight.

Because Rashid was very disciplined and habitual in his approach, the students knew what was expected of them throughout the class period. Students stayed on task and were focused throughout the lesson. Rashid encouraged students to participate and ask questions for clarity. Additionally, he allowed the students to decide which problems they

wanted practice solving. For the days that I observed, the goal was very clear for the 5th grade class—the successful completion of the annual PSC examination, which were scheduled the week following the observations.

Rashid noted the importance of using instructional aids in both his pre- and post-observation interviews; however, he did not use them during my week of observations. In his pre-observation interview he stated,

How to show pictures and teaching aids, how to present them and how to direct the students during a lesson. Each particular lesson has an appropriate teaching style; each subject's style is different. I learned how to teach them a particular lesson, how to teach them repeatedly, after that the students repeat with the teacher. After that, using teaching aid and models to support what they just learned; and give students problems to solve. If students cannot solve problems, then the teacher can help them (re-teach).

Conversely, during the post-observation interview, I asked why he did not use teaching aids with any of his classes. He explained, “I would like to use more teaching aids. But chalk, eraser, pointer, and blackboard are also teaching aids in our country, in my perspective.”

Rashid's teaching style is very clear and follows the three-step method taught at the PTIs. While he did state that discipline was the most important thing he learned in his PTI training; he stated he also thought learning how to structure a class with the three-step method of structuring a class lesson was important. He said,

We learned the three-step method in training. First we give input to students, then they practice, then a task at the end of the lesson. If I have a class of 45 minutes, I will structure it like this: input—5 min; practice—20-25 min; and task for the remainder.

Classroom environment. Rashid was serious in his nature, but was caring with his students. It is apparent from his mannerism and interactions that he takes his job

seriously. He expected the students to behave and be ready to learn when class began. He takes time at the beginning of class to establish rapport, by greeting them and asking informal questions. He also asked if they had had breakfast that morning. He explained that the students often came to school without breakfast and were hungry in class, “They have an empty stomach and have a hard time focusing on the lesson.” He was very empathetic about their personal lives and tried to make school a haven for them by extending school day activities. When he circulated throughout the classroom, he would touch their head or back in a parental way. He used terms of endearment, such as “ammu” or “abbu” with them (literally “daddy” and “mommy”). He was especially kind and gentle with the 1st and 2nd grade students.

He motivated students in various ways. When I asked how he created a culture of learning he explained,

I always try to invite former good students from this school. I invite the former bright students and they motivate talk with them and motivate them to keep studying. The last former student, a doctor, who came to talk, said to them, “See now you have a bag. When I was here we didn’t even have bags. We didn’t even take three meals a day. So you have a better condition than I did. You can continue studying.

Rashid maintained high behavioral expectations for his students inside and outside of class. If students were misbehaving in the hallway area, he corrected them. When one student came to class without his book, Rashid told him to walk home and get it. When I asked him what the most valuable thing he learned during his PTI training was, he responded, “Person to person it varies, but for me it was discipline. Discipline is the most important thing for the structure and success of the class.”

Students were active in the learning process and enjoyed helping the teacher. For example, students often set up the mathematics problems on the board at the beginning of

the lesson, erased the board clean between problems, or brought items from the teachers' room if needed. Rashid used proximity to manage student behavior in his class. By continuously circulating throughout the room he was able to keep students on task and check on the progress of their work.

During the pre-observation interview, I asked how he had adapted teaching strategies he was taught in the PTI training. His responded,

Classroom management... PTI training taught me to use group work frequently, but it creates too much noise and they talk too much to each other. Academically strong students finish first and weaker students can't do the work as fast. If there is a bright student in a group, the weaker students will create noise and a disturbance. For this reason, I prefer to give individual work in order to maintain discipline. In PTI they learned to teach the students using social work, like classroom cleaning, but in reality the students don't want to clean the class and they do not respond to this.

Despite this response, I observed Rashid ask his students to clean up trash on the floor or straighten the benches before class on several occasions. He would also take a few minutes at the beginning of class to reorganize the furniture in the classroom so every student could see, or he would move students so there were only two seated per bench. It was clear that for Rashid, the key to discipline was routine. The students understood what was expected with their academic work and behavior. They students also maintained the expectations establish in the classroom and school community.

Instruction. As previously stated, Rashid used the three-step method to structure his classes. This procedure helped him pace his lessons. The three-step method also allowed for comprehension checking as the students completed the task phase. Using the familiar structure also helped students know the learning expectations throughout the lesson. During the week of observations, Rashid did not use traditional group work; however, when students solved problems at the board, the whole class would often

contribute, working through the problem together. When I asked him what teaching strategy he used most often, he replied, “Question and answer, for the [whole] class or [individual] students. I like to make them think more than the examples in the book, take the problems a step further and think critically.” During the observation period, 76% of the questions asked were comprehension level questioning. The table below (Table 13) shows the frequency of each of the three question types Rashid used during his classes over seven days (nine class periods).

Table 13

Type of Question and Frequency Asked—Rashid

Rote	Comprehension	Critical thinking	Total
26	93	4	123
21%	76%	3%	100%

During the post-observation Rashid explained why he used rote memorization for the mathematics questions,

I like to make them remember the questions by repeating them because it makes it easier for them to understand and it explains the problem. They will have the same type of questions on the examination and know how to solve the problem.

Although the students solved problems at the blackboard in all the classes, during the pre-observation interview when I asked Rashid what strategy he learned in PTI training that he does not use regularly he stated,

I don't have students use the black board because there is not enough time in class. I also don't use group work frequently, because of lack of time and it creates too much noise. In my class solving the problem on the blackboard is a competition of who can solve it first. In many schools, students do not come up to the blackboard to solve problems, but the students like the competition here.

After the observations, I asked him about the discrepancy in what he reported during the interview and the typical classroom practice during the past week, he explained,

With grade 5 there was pressure with the PSC coming up...I normally use more teaching aides, not only the blackboard. If you would have observed classes at the beginning, like January or February it would have been more interesting. I use more teaching aids, not only the blackboard. Also, you would see the students enjoying the lesson more and you would see more of their curiosity. This was a review for them and there was a lot of pressure to practice with the annual examination within one week.

The approaching PSC examination could be the reason for the disparity between his interview responses regarding teaching aids, critical thinking questioning, and blackboard use and what was observed.

On several occasions, Rashid indicated his preference for using teaching aids. For example, when I asked what strategies he would like to use more often in his teaching practice, he stated, "I would like to use more teaching aids, like pictures. It makes it easier for the students to understand. Also, it would be better if I had a projector in my class." He explained that many of the students have a difficult time focusing on the lesson because they come to school without eating breakfast before school.

Rashid checked on students' individual work when he circulated around the room. He waited until all of the students completed the problem and understood the process before starting a new problem. When I asked him what has the biggest influence on how he presents a lesson or unit he responded, "Student feedback on whether they understand the question and if students can answer my questions. When I repeat a question, then the students can understand what actually they have to solve." He would re-teaches material when necessary. During the PSC review class he allowed students to choose the problems

they wanted to practice. Rashid also collected and marked individual student work with constructive feedback. He reported that he regularly gave quizzes of the material during the school year. Verbal feedback was the most frequently used form of feedback for students. Being chosen to solve problems on the board was also a form of positive teacher recognition or praise. However, he often relied on the same groups of students (approximately 10) to solve problems on the blackboard.

Rashid explained that coaching class was especially important for his students because many will not continue their education after they complete the 5th grade, “The government says coaching is required for the weak students only. But I do it for all of the students because I don’t want them to lose the chance for extra help.” During the post-observation interview, I asked Rashid how the coaching class differed from the regular 5th grade classes:

They get much more time in coaching class with Bangla, English and Mathematics. And they can take practice examinations. Only special teachers teach the coaching class, because they are really good teachers and also they don’t have a regular teaching schedule. In the regular 5th grade class, a student can only solve two or three problems. But in the coaching class they have time to solve five problems.

Rashid cared about the educational outcomes for his students. He worked hard to provide them with the knowledge they need to be successful in life, realizing that this may be their last year of school. He used kindness and encouragement regularly to inspire them to succeed, and possibly continue their education.

Professional responsibilities. Every day, Rashid kept a daily count of students in his coaching class on the blackboard, listed as “students in attendance.” Since the other two classes I observed were not part of his regular schedule, the class teacher took attendance in the class ledger at the beginning of class. During the week of observations a

student who resided in a village outside of the city was permitted to attend coaching classes. She was in Dhaka to see her family, but her mother did not want her to miss her coaching classes since the PSC examinations were scheduled for the following week. The girl joined the coaching class for three days before returning to her home outside of the city. Rashid could often be seen speaking with parents in the play yard before classes. He was also called upon during class to speak with a parent on two occasions.

Rashid was consistently positive about his training experience at the PTI, as demonstrated by the following statement:

PTI training is more structural (practical; based on class practice) than theoretical, which helps the students learn. The structural method taught in the PTI was really important; it helps the students learn more. I think the PTI training was very effective.

All professional development was provided by the government, and there were no independently opportunities arranged at the school level. After PTI training Rashid immediately started at Nakoli GPS as Head Teacher, and explained that as such he was no longer eligible to participate in URC training. Furthermore, training workshops provided by the government are not always reliable. Rashid elaborated on the problem,

After getting this job, I could not attend any more URC training. There was supposed to be training for teachers three or four month ago, but the URC didn't have funds. There are no funds for training. There has not been any URC training since I took the position, there are no funds available. If funds become available they are scheduled to have a one-day training at the URC in two months, it will use model teaching. There was a two-day sub-cluster training "Evaluation of the paper" on how to grade examinations.

Rashid reported observing other teachers an average of once per week. He said he felt it helped him to improve his own teaching. He also said that he frequently worked with the regular curriculum mathematics teacher when planning lessons. He credits his

staff with helping him when he was new to the position and school. He explained, “They offered help in every way. They handed over the keys, documents, papers, and economic information. They helped me to understand the official paperwork and reporting responsibilities, as well as the economic condition of this community.”

He felt that PTI training prepared the teachers well, stating, “Anyone who had PTI training can time lesson well and finish the lesson in class.” He elaborated that older teachers have more experience, but sometimes lack energy. “New teachers are energetic. The teaching style has been changed, for example... you can use new methods, like hanging flash cards in the room and asking the students to find the letter ‘e’.” When I asked if he had authority to manage teacher behavior, such as lateness, he explained,

I do, but it is limited. There is an Annual Certificate Report given to the Thana Officer every year for each teacher. This determines a raise in salary (time scale, 1-8 years). Also, if a teacher is late for work three times, they get one day’s wages cut.

During the post-observation interview I asked him if teaching classes helps him in his duties as head teacher, to which he replied, “There is no connection between teaching and being a head teacher. One can be a bad teacher in class, but can be a good administrator. And one can be a bad administrator, but a very good teacher.”

Rashid was passionate about his profession; he talked about teaching and managing a GPS as a higher vocation. When I asked him what professionalism meant to him, he responded, “It’s my life and death. I feel it from my heart. I deprive my family and new born baby for the profession because I stay here for a long time—the whole week.” For example, on the third day of my observations, school was officially closed for the Hindu Puja holiday. Rather than closing the school completely, Rashid held coaching classes at the school from 9:00 am until 12:00 pm. It was very important to him that the

students not be deprived of any instruction or review so close to the PSC examination. He further explained why extra programs at school can really help the students:

I try to give the students time for extra help before and after their classes so they are at school longer. At their home they cannot study easily, so we give them coaching and extra help in the morning and the afternoon. Sometimes I have classes over a long holiday break or on Friday to give them extra help.

Rashid explains that the families are poor and share one room in their homes. He said it was difficult for the students to study at home, “They are easily disturbed and don’t have a good learning environment. What you saw in the classroom, how they are expert at solving the problems, is because we start our coaching class in January.”

He motivated and encouraged both his students and staff, through friendly competitions between students and comparisons to other local GPSs. For example, he explained how he encouraged his staff, “I compare them with another school. For example, I tell them a teacher at another school uses this strategy in his class, we should try that.”

When I asked how he best prepared the 5th grade students for the future, he said he wanted to influence them to continue their studies. To help them continue their schooling, Rashid and the other teachers at the school have raised money and advocated on behalf of some of the students, “I contact the high school master and talk with them personally to get financial help.” During the interviews Rashid’s reflections were driven by student learning outcomes. This was observed in his dedication in preparing his 5th grade students for the PSC examination.

Cross-case Analysis

The three teachers had markedly different approaches to teaching despite the standardization of training, curriculum, and materials. The following section examines the cases with the same four frames (Danielson, 2007) used in the individual cases. Following the integrated analysis of the three case studies each of the research questions are addressed.

Planning and preparation. There was a striking difference in the way each teacher approached planning and preparation. All three teachers were competent in subject based content knowledge; however, a stronger understanding of pedagogy was exhibited by Bilkis, and at times, Rashid. This was evident by both Bilkis' and Rashid's focus on student learning; during interviews both teachers referred to using varied teaching strategies and resources as a way to best help students learn. Bilkis was clear and consistent in her instructional goals in all of her classes and she assessed student learning based on those goals. However, Bilkis did not allow observations of her coaching class, whereas I did observe both Pori's and Rashid's coaching classes. In the GPSs and PTIs visited during this study, coaching classes were part of the daily routine. GPS teachers and PTI instructors were careful to mention when I was observing a coaching or revision class. This was a clear indication that the expectations of coaching class are not of the same caliber as regular subject classes. Drilling through rote repetition and comprehension level Q & A were the typical teaching methods used during coaching class to prepare for examinations.

Pori's distractions had an adverse effect on her class preparation and lesson objectives. Pori did not use her planning time to prepare for class. She was often just

struggling to get through the class, disregarding instructional objectives in the process. All three teachers discussed the use of teaching aids/resources, but Bilkis actively used them on a regular basis to increase her students' learning potential. Bilkis used her planning time to prepare resources (flash cards, gather materials/resources, etc.) and write out lesson ideas. In Rashid's classroom, he was intently focused on repeated practice of mathematical problems in preparation for the upcoming PSC examination.

Classroom environment. Classroom management was important to both Pori and Rashid. During the pre-observation interviews, both teachers stated that maintaining control of the classroom affected how they taught. Pori repeatedly relinquished control when she became distracted or overwhelmed. For Rashid, control of the classroom was consistently maintained through his expectations for student learning. Bilkis' method of classroom management was to create engaging lessons for the students. She used the available resources and her creativity to plan lessons that kept the students on task and interested throughout the class period. Due to the large number of students in attendance, all three teachers were firm toward students when exerting control of the classroom or correcting behavior. Bilkis and Rashid would frequently rearrange student seating to alleviate crowding or increase the students' ability to engage in the class. Pori re-arranged seating as a disciplinary measure, but only after students misbehaved or were off-task. It should be noted that at Pori's school, Janalaganj GPS, the school grounds, building and classrooms were the smallest of the three schools in this study. Furthermore, student enrollment at Janalaganj GPS was the highest of the three cases. Therefore, Pori's classrooms were considerably smaller and more crowded than Bilkis' and Rashid's

classes. This is another way that the environment was “not in her favor,” as she described the situation.

Instruction. A central theme of all three cases was the teachers’ ability to create and maintain a culture of learning within the classroom. For Bilkis and Rashid, the learning culture established in the classroom was conducive to and focused on student learning. Both teachers took responsibility for student learning. Bilkis interview responses and teaching strategies indicated that student learning needs determined how she taught a lesson. Likewise, Rashid was concerned with student learning outcomes, but at the time of the observations those outcomes were defined by the PSC examination. Like Bilkis, Rashid’s interview responses revealed that the students’ learning and future was his primary concern when considering his teaching practice. Repeatedly, Pori pointed out the problems at her school; namely, poor leadership, the students’ home-life, and the physical condition of the school. These challenges dominated her teaching practice and supplanted her training.

The three-step method—input, practice, task—was used by all three teachers to structure lessons; however, the way the those three steps were carried out differed greatly between the three teachers. Bilkis used a variety of teaching methods based on the learning objectives. She sought to engage and challenge student learning by providing meaningful lessons, and she used the resources available to her (teachers’ edition of textbook, charts/posters, models). Rashid focused his lessons on the testing needs and preparation of his students, allowing them select and solve problems to prepare for examination. During the post-observation interview, he acknowledged his teaching style was limited, but found it necessary for the students to do well on the PSC. Bilkis and

Rashid consistently provided feedback, thoughtfully checking the work of each student. All three teachers had students solve problems at the blackboard as a way of engaging students in the lesson. Pori's main instructional technique was Q & A. When checking students' work, Pori only checked a few and provided nominal feedback (checkmark only).

Professional responsibilities. Each teacher's approach to their professional responsibilities was centered on their individual view of professionalism itself. Both Bilkis and Rashid were serious in their demeanor, as well as punctual and conscientious. At Bilkis' and Rashid's schools, the overall atmosphere of the school was also professional; there was a sense of pride in providing education to the students and population that they served. Conversely, Pori demonstrated a lack of professionalism in her behaviors; specifically, her responsibilities (home visits), tardiness, and distractions (phone calls) during class. These same behaviors were also observed by other teachers and the head teacher at the school. In these three cases, the quality of individual teacher professionalism reflected the professionalism and culture of learning at the school as a whole. All three schools served families from the low socio-economic status (the working poor). Correspondingly, all three teachers expressed concern for their students' home life. However, Bilkis and Rashid sought to provide the best educational experience, knowing that for many of the 5th graders this would be their final year of school. In contrast, Pori did not convey high expectations for student learning. She stated in the interviews and during the observations that the students' home-life was the cause of bad student behavior and lack of focus on learning.

Research Question Response

What evidence is there of transfer of training to practice for recent Certificate in Education graduates of Primary Training Institutes in Bangladesh? All three teachers used the three-step method and Q & A frequently. The three-step method was taught in the PTIs as a flexible way of structuring a lesson. PTIs frequently used, and thereby modeled, Q & A as a way of engaging students in a lesson. The PTI instructors also used rote memorization and comprehension Q & A to prepare students for examinations in their coaching and revision classes. This was the same method used by the teachers in the GPS to prepare for examinations. From her training, Pori used feedback and comprehension checks through whole class and individual Q & A, modeling problem solving on the blackboard, and student board work. Pori admitted that she did not use all of the methods she was taught during PTI training. She would like to use teaching techniques such as group work or games, but the management of a large class dominated her classroom practice. Pori explained that during training instructors demonstrating with the adult teachers or modeled lessons with small groups of students (8-10) from the experimental school. She did not find this useful because her situation in the classroom was much more challenging.

Bilkis used the teaching methods modeled at the PTI, as well as teaching methods that were taught in theory. For example, she used Q & A, songs and rhymes, and group work; but she also used teaching strategies from the teacher textbook, such as demonstrations, experiments, and kinesthetic activities. Furthermore, she used teaching aids and resources that were available at her school (government supplied and teacher gathered). Bilkis was able to use her creativity to innovate with her available resources and environment.

Rashid stated unequivocally that his training at the PTIs was extremely beneficial in preparing him to teach in a GPS. Rashid used Q & A comprehension checks and frequently had students solve problems on the blackboard. However, Rashid used the time that a student was demonstrating at the blackboard to circulate around the room and work with individual students. By doing this he made himself available to answer individual student questions and check their process of problem solving.

What is the dominant teaching method used by teachers in their first years as classroom teachers and why? All three teachers used the three-step method to structure their classes. Additionally, Q & A was used often by all of the teachers as a way to engage students and easily assess student comprehension. Frequently, Bilkis and Rashid turned the blackboard over to the students to contribute to discussions or demonstrating problems. Pori had students solve problems at the board less frequently, and this technique was usually reserved for mathematics class. Bilkis and Rashid considered how students learn concepts best when planning lessons. Bilkis used teaching aides and resources with every lesson; whereas, Pori considered them a classroom management tool.

Bilkis was the most innovative of the three teachers. She was creative in her use of anticipatory set questioning, brainstorming, group work, kinesthetic activities, and demonstrations. She was open-minded and thoughtful in her lesson planning. She considered how to engage her students, how they would best learn the concepts, and what resources she had available to accomplish the learning objectives.

While I observed fewer classes in the third case study, there was a clear pattern in Rashid's teaching style. He was structured, yet very student-focused. The blackboard was

the chief resource used. Students demonstrated problem solving on the board while he would circulate throughout the class checking work and helping individual students.

What do teachers perceive as influencing their choice of teaching methods in the classroom and why? Pori perceived classroom management and the physical conditions of her classroom (large class size; small rooms) as the greatest influence on her teaching practice. She cited the conditions—power outages, cramped and overcrowded classrooms, and no resources—as a source of daily stress. This was directly observed when she taught in the dark room with the large number of students in attendance. Furthermore, during her pre-observation interview, Pori stated she wanted to do more interactive lessons using games and individualized contact; however, she felt this was too challenging with so many students in her class. She felt the students were misbehaved because they had no play yard or physical education class.

Bilkis consistently referred to the learning needs of her students. This is what influenced her teaching style. This was directly observed in her willingness to use a variety of teaching methods to meet the students learning needs. For Bilkis, helping the students to understand and apply the concepts they learned in her class to their life inspired her. She used resources as tools to help her students learn.

Compassion for his students influenced Rashid's teaching style. He was a serious, dedicated professional that was empathetic toward his students and wanted to help them succeed in life. Rashid frequently mentioned the poverty of the students, as well as their future prospects with and without education. Rashid did not dwell on the challenging conditions of government schools; rather he focused on helping the students succeed through motivation.

Conclusion of Findings

The observational findings indicate that the teachers in this study most used the teaching strategies taught at the PTIs which (a) were modeled frequently by PTI instructors, (b) were easily implemented within similar classroom contexts, such as Q & A with large groups of students, and (c) had similar learning objectives, such as test preparation. All three teachers frequently used Q & A for the purposes of reaffirming previously taught concepts and checking comprehension. Additionally, the three-step method of structuring a lesson was used the majority of the time by all of the teachers. Likewise, the teachers used rote level Q & A at times, while rarely questioning students at critical thinking level. During the post-observation interviews, the teachers explained that rote questioning was primarily used for two reasons. First, if the teacher considered the concepts too difficult for students to grasp, and second, for test preparation. This indicates that the teachers have a lack of trust in the students' ability to think critically or problem solve without memorization. This lack of trust is deeply embedded in the learning culture of Bangladesh; hence, the ubiquitous practice memorization for examinations at all education levels. In addition, Pori and Rashid were more resistant to using cooperative learning strategies that challenged their conception of how a classroom and learning should be managed by a teacher.

During the post-observation interviews, the teachers struggled with the process of reflecting on their teaching and the lessons from the previous week. Often questions needed to be rephrased several times before they were able to respond. This may indicate that teachers are not used to self-evaluation and professional reflection. However, it is also possible that this was the result of unfamiliarity with the language surrounding self-

reflection from a Western context. During the observations at Nodipur PTI, one instructor gave a lecture on the process of improving teaching practice through critical reflection and briefly modeled the technique with one student. The experimental schools located on the grounds of the PTIs provide an excellent opportunity for teachers to learn this valuable skill during training; however, it was not observed that the experimental schools are used in this way. Also, school-based professional development programs, like the one established previously at Bilkis' school, provided teachers with the opportunity to practice new teaching methods, observe other teachers, and reflect on their teaching. This is akin to the professional learning communities (PLC) concept used in US schools. Empowerment of schools and *upazilas* to create "in-house" professional development is even more crucial in Bangladesh where the centralized system often fails to provide needed resources and timely professional development. It is also noteworthy that Bilkis was recognized and honored for being an innovative teacher at her school. Not only did the other teachers at Jutara GPS join my observations of her classes, but on the recommendation of Jutara's head teacher, Bilkis was chosen to be the model teacher at a sub-cluster teacher workshop.

The professionalism displayed by the teachers reflected the professionalism displayed by the head teacher at each school. In fact, the head teacher had a strong impact on the overall school culture, and ultimately the culture of learning in the classroom. In the two schools with strong leadership, the teachers were more focused on student learning. School conditions, which were another reflection of school leadership, also influenced school culture and teacher motivation. This was most evident in the dichotomy of Pori's and Bilkis' cases. The poor condition of Pori's school caused her

great distress and directly affected her teaching. Pori expressed her despondence in her inability to bring about positive change at her school. Conversely, conditions and behaviors were dramatically different at Bilkis' school. This may have been the result of more authentic accountability due to frequent school guests and visits.

In conclusion, the three cases show that new teachers are able to transfer what they learned in training; however, PTI training did not challenge the status quo in pedagogical practice in order to make consequential improvements to the quality of primary education. The good news is many of the elements necessary to improve teaching and student learning are already in place. Namely, experimental schools at PTIs, teacher-training support offices for regular localized training (Upazila Resource Center), model schools at each URC, and community support systems (School Management Committees). Better quality training, in an authentic training environment and greater accountability can be enacted through these already embedded components of the current system.

Chapter 6

Discussion

The findings of the cross-case analysis clarify how the transfer of teacher training is supported or challenged in the Bangladeshi primary schools system. The following five sections detail these supports and challenges at the person, program, and system levels. At the person level, the teachers' concept of professionalism and their own professional identity (1) influenced their approach to classroom teaching and student learning. At the program level, teacher behavior was affected by school leadership (2) and the established culture of learning at the school. Finally, at the system level, high-stakes testing (3), the status and pay of GPS teachers (4), and corruption (5) further challenge training and teaching. In fact, education improvement directives are often at odds with the current norms and practices in education. For example, the call for greater pedagogical practice that encourages greater student participation, more interactive approaches, and critical thinking is hampered by the lack of basic resources, the test-centered curriculum, and the student to teacher ratio in the classroom. Furthermore, the low salaries earned by GPS teachers, leads to fewer motivated educators entering the profession and corruption in the education sector. Corruption in the Bangladesh education sector has been identified as a major obstruction to quality improvements and the availability of resources (Choe et al., 2007; Karim et al., 2004).

(1) *Professional identity*. How the teachers in this study viewed their professional role shaped the teaching methods they used. During the interviews and observations, when the teachers discussed their approach to teaching and student learning they reiterated the following role conceptions of themselves as teachers—as a *manager* of

classroom behavior (Pori), as an *inspirer* of student learning (Bilkis), and as *motivator* of students for their future well-being (Rashid). While professional identity was not considered a factor when constructing the theoretical framework, during the course of the research teacher professional identity emerged as a prominent indicator of how teachers approached their job. Research (ten Dam & Blom, 2006; Webster et al., 2011) on the development of teacher professional identity suggests that school-based collaborative programs help teachers develop a positive professional identity within a community of learners. This is also evident when examining the differences in classroom teaching in this research. In those schools that supported collegiality (second case study) the teacher was more focused on student learning and trying innovative teaching strategies to best assist student learning, as compared to the school (first case study) where teacher professionalism was not encouraged or fostered.

(2) School leadership. The effect school leaders have on teachers, and consequently student learning, has been the focus of a great deal of research interest in the U.S. and abroad. In this study, the impact the head teacher had on shaping the learning culture in each school was undeniable. At Jutara GPS (second case study), the atmosphere of the school and classroom was student-focused. Teachers shared lesson ideas and observed other teachers' classes both on their own accord and as part of an in-house professional development program. The head teachers' support and encouragement of the teachers empowered teacher leadership and thereby improved the culture of learning at Jutara GPS. Research (Horng & Loeb, 2010) from the U.S. has established that schools with consistent gains in student achievement have principals who support teachers and direct resources toward professional development. Encouragement

of teacher leadership has also been found to be a crucial component of school improvement (Hart, 1995; York-Barr & Duke, 2004). Teacher leadership empowers teachers to create meaningful change in their environment using their expertise and knowledge.

(3) *High-stakes testing.* Bangladesh has a long tradition of using rote memorization in education and testing. It was clear from the observational data and interview responses that these methods remain deeply ingrained practices in schools and training centers, and is inadvertently supported by mandated assessments. The continued use of rote teaching and learning strategies, despite calls to teach in a more a more “participatory” and “child friendly” manner, persists due to the test-drive curriculum at PTIs and GPSs. Thornton’s (2006) research on secondary school teachers in Bangladesh explains, “This mode [rote], experienced by teachers throughout their own school and college lives, is perpetuated in training colleges, and even the practical element of their training emphasizes teacher centered lessons” (p.192). The ubiquitous practice of using rote recitation during “coaching” and “revision” classes undermines quality reforms in the public school sector. Coaching class at GPS is a daily examination preparation class, whereas revision class is when a regular subject area class focuses on reviewing material from the curriculum in preparation for an upcoming test. In every coaching or revision class observed in this study, lower-order thinking was encouraged through rote repetition of both questions and answers that students may encounter on the examination. PTI instructors and GPS teachers were both quick to remind me if the class was “just” coaching or revision. I also found it interesting that despite repeated requests, Bilkis would not allow me to observe her afterschool coaching class. I surmise that the teaching

methods she used during coaching class were inferior to the teaching methods she used during her regular class. Those methods may not have been as innovative or creative as the regular classes that I observed.

(4) Status of GPS teachers. PTI administrators and instructors concede that the profession of teaching in GPSs is a last resort for young people, and that ultimately many will depart the profession after only a few years of service. The low salary, burden of additional community responsibilities, and poor school conditions deteriorate teacher motivation and job satisfaction (Haq & Islam, 2005). One study (Tasnim, 2006) found that female primary school teachers in Bangladesh were well respected and considered “engineers of nation building”; however, the insufficient salary forced many to seek side jobs tutoring in their home. Tasnim (2006) asserts that often the private tuition and coaching sessions the teachers offer pay more than their teaching salary at the GPS. Consequently, motivation and responsibility toward their teaching job at the school decreases. Similar conditions exist in India, where teachers enter the profession with noble intentions, but quickly lose motivation due to low salaries, an irregular pay schedule, and other bureaucratic inconsistencies (Ramachandran, Pal, Jain, Shekar & Sharma, 2005).

(5) Corruption. In the education sector in Bangladesh, corruption is well documented. Unfortunately, the corruption encountered during this study is not out of the norm. Knox (2009) used data collected from a large national survey on corruption to examine the impact on the education sector. Respondents reported that the most common corruption in schools is teacher negligence of duties at 51%, followed by embezzlement at 21%, and bribery at 20%. As observed and reported in the first case study,

instructional time was reduced, families offered bribes for favors, fees were charged for tests, and resources were embezzled (WFP biscuits). Corruption is often associated with centralized power, poor government management, inadequate of information or communication regarding decision making, and a lack of transparency with foreign aid (Hallak & Poisson, 2005). Despite investments in education by international donors, educational quality continues to languish. Corruption has an undeniable and devastating effect on the education of students in GPS classrooms. Needless to say, education reform initiatives aimed at improving the education sector should coincide with corruption fighting efforts (Choe et al., 2007).

Recommendations

Greater localized control of education. The highly centralized education system in Bangladesh inhibits innovation and self-sufficiency at PTIs and GPSs. School and training center staff repeatedly cited sluggish updates to curriculum, deficient resources, and inadequate professional development opportunities provided by the DPE. These problems are further compounded by inefficient communication from the DPE. At the GPSs, head teachers did not know why professional development workshops were not scheduled or when the next training sessions would be held. I was surprised to find that the head teachers did not have a computer or email address.

Decentralization will empower GPSs, PTIs, and URCs to meet the needs of teachers and students through greater control of professional development and curriculum. Glewwe and Kremer (2005) acknowledge that there is a lack of conclusive evidence on the positive impact of decentralization, but they agree that communities “arguably have the best knowledge about the needs of their children, strong incentives to

monitor the performance of teachers and headmasters, and a comparative advantage in conducting this monitoring” (p. 44). Rabbi (2008) asserts that decentralization and development of power and decision-making to the *upazila*, school, and community levels is necessary for successful reform,

“It is necessary to implement systematic reform, capacity building and organizational reform at all level, especially at the Upazila, school and community level. Upazila level should be focused as the key unit of every administrative, monitoring, supervision, training and capacity building program.”

Capacity building at GPSs, URCs, and PTIs would help these education providers find solutions to challenges faced in their communities or regions. The following recommendations for GPSs and PTIs require capacity building and greater autonomy of education providers. It should be noted that the current reform initiative, PEDP3, calls for decentralization. Specifically, PEDP3 seeks to delegate a greater amount of management functions to districts, upazilas, and schools and increase grants expenditures for upazilas and schools. Included in the initiative’s directives for decentralization are programs that would develop school-level leadership and build capacity at mid-level institutions (*upazila* and district offices). Recently, the government has attempted to place more local control with SMC, but the student researchers (Richards et al., 2008) at the Robert M. La Follette School of Public Affairs at the University of Wisconsin–Madison found SMC wrought with strife over political favoritism in committee appointments, lack of transparency, and lack of communication resulting in the SMCs inability to garner greater community involvement. This failed attempt at localized control affirms Glewwe and Kremer’s (2005) assertion that the details of decentralization efforts are critical to their success.

Recommendations for training. In order to influence teachers' professional identity and foster professional traits associated with an effective teacher, the PTI must implement self-reflection, collaboration, and modeling strategies throughout the training program. Self-reflection is instrumental to the process of developing professional identities of teacher trainees (Kirwan, 2009; Knowles, 1980; Masui & De Corte, 1999; Schulte, Edick, Edwards & Mackiel, 2004). For example, Kitsantas and Baylor's (2001) study found that the disposition and attitude of pre-service teachers toward instructional planning were improved when they used a self-reflection tool. Collaboration during training has also been cited as a crucial element in the development of professional identities and behavioral practices of new teachers (Brownell et al., 2003; Green & Ballard, 2010; Korthagen et al., 2006). The literature on learning transfer and teacher training consistently recommends modeling pedagogical techniques during training and professional development (Brownell et al., 2003; Korthagen et al., 2006). Researchers (Green & Ballard, 2010; Korthagen & Russell, 1999) also recommend teaching educational theory in conjunction with direct practice during training. This could be easily accomplished with the PTI experimental schools. Small cohorts of teacher trainees could be paired with experimental school teachers for regular classroom observations of experienced teachers, as well as, practice teaching session for the trainees. These trainee cohorts could also be collaborative groups that work together on instructional planning and providing critical feedback to one another. Thus, modeling, peer collaboration, practice teaching, self-reflection and critical feedback would all be implemented during the PTI training to support learning and learning transfer.

Recommendations for government primary schools. Instructional leadership training for head teachers in the GPSs is essential for promoting programs that support teachers and are focused on student learning. Effective school leaders offer assistance to new teachers by coordinating collaborative programs (mentorships and induction), organizing in-house professional development, and encouraging collegial sharing. Mentorship and collaborative programs for new teachers not only bridge the training to practice gap, they send a message that the training was valuable by re-affirming and putting into practice concepts learned during training, thereby promoting learning transfer. Recent studies (Hoque & Alam, 2011; Opel, et al, 2011) in primary and secondary schools in Bangladesh have found success with school based professional development programs that focus on collaboration and peer observations. However, Thornton (2006) warns that meaningful teacher collaboration in Bangladesh faces significant institutional and systematic challenges, thus requiring a considerable shift in the status quo of teaching and education to be truly successful. Thornton identified Bangladesh as a “culture of blame” whereby the teachers blame the students for poor performance and the government lays the blame for low student achievement with the teachers.

“The government suggests that by giving further training to teacher there will be an improvement in examination results and does not acknowledge or, I would argue, understand that a significant number of students, many of whom are first generation learners, cannot access the essentially elitist curriculum” (p. 191).

Salahuddin (2012) suggests school leaders take the first steps in building organizational capacity by sharing expertise and developing collegial relationships with teachers.

Summary. Realigning program goals and re-directing current resources to focus on quality teacher training and practice will mitigate the challenges new teachers face in

the transferring of training to practice. I hypothesize that strengthening the programs that support teachers—professionalism, self-reflection, collaboration, mentorships/induction—at PTI and GPS sites will help improve teaching in the classroom and meet the goals of current policy initiatives. However, these school and training center programs require thorough training of school leaders and training center administrators and staff for successful implementation.

Infrastructure elements, such as experimental schools at the PTIs and model schools at the URCs, as well as community support organizations such as the SMC and PTA, are already in place and operational. It is a matter of refocusing the priorities of these programs and organizations to improve classroom teaching. Autonomy of the URC and GPSs to create programs that support new teachers and emphasize the professional community will help to relieve problems at the system level, such as ineffective bureaucracy and corruption. I further hypothesize that improving site based programs and the professionalism exhibited in public schools will result in improved fidelity in government provided education.

Limitations of the Study and Direction for Future Research

Case study research is inherently limited due to its inability to be generalized to the greater population. This study is limited by the use of a case study approach and purposive sampling. While time and research resources were limited, a manageable sample size of three teachers allowed for more frequent observation visits and interviews. With the exception of extremely rural GPS teachers in Bangladesh, I believe the findings of this research are representative of the situation of GPS teachers in Dhaka and other cities. In addition to the schools in this case study, I have visited numerous other primary

schools in Dhaka and have found them to be similar to the schools included in this study. Moreover, the centralized system creates uniformity across PTIs and GPSs. Given the influential role of head teachers in this study, future research on quality in the primary education sector in Bangladesh could examine more deeply the impact of the head teacher on teaching practice, student learning outcomes, or school community. While educational leadership studies are ubiquitous in the United States, research on school leadership in Bangladesh is extremely limited.

Significance and Implications of Findings

The findings indicate the need for PTI training to more formally address the professional identity of new teachers through self-reflection, collaboration, and critical thinking in training. Likewise, training is needed for head teachers. As effective instructional leaders, head teachers would be empowered to implement in-house mentoring and professional development programs, and foster a culture of learning where the focus of teachers is student learning. Also, it was found that schools with greater visibility and accountability were more successful at creating a culture of learning in the school and classroom. School leaders and teachers that are trained and empowered to create positive change are the direct link to successful reform initiatives. However, the importance placed on examinations that require lower-level thinking and memorization will continue to undermine improvements to educational quality.

The studies cited in this research support the recommendations made regarding training and school-based programs. They have been found successful in various cultural contexts, including NGO schools in Bangladesh. Furthermore, research reports from

Bangladeshi and international agencies have long acknowledged the deleterious effects of centralized control of education and its role in aiding corruption.

Conclusion

If quality improvements in education are the goal of government initiatives, then it is necessary to put aside ambiguous policy language such as “increasing child-friendly and participatory teaching techniques.” Quantifiable improvements should be centered on evidence-based program components during training and at the school sites. The literature supports training that includes self-reflective practice, integrating practice and theory, and peer collaboration. Given the crucial role of school leaders in the developing of a culture of learning and professionalism at the schools, specific leadership training is required. Bangladeshi PTIs and GPSs already have innovative program elements in place, such as experimental and model schools, but they need to function in a more comprehensive way. Wasteful management practices and corruption need to be addressed so that the funds dedicated to primary education are reaching the intended objective; namely, improved quality of education for more than 16 million primary school students.

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Appendix A: Education Management Divisions under DPE

The following list outlines the responsibilities of each of the six divisions within the DPE (Currently there are four main and two auxiliary divisions within the DPE, each headed by a Director):

Administration

- General administration of the central and field offices
- Coordinates the Divisional, District and Upazila Offices and the PTIs

Planning & Development

- Draw-up of various development projects on priority basis of effect general and gradual development of primary education in the light of government policies
- Getting approval of projects
- Implementation
- Evaluation
- Supervision and winding up of completed projects
- His division also conducts the preparation of development budget, disbursement and allocation of funds and redistribution of foreign exchange

Training

- Build up competent and efficient teacher for the class-room and school management
- Assesses training needs of the teachers as well as the officials at different levels
- Plans and implements training programs
- Organization of various workshops
- Training of PTI teachers and instructors
- Various short-time training of PTI staff members
- Sub-cluster training
- Curriculum dissemination courses and orientation courses
- Management training for the head teachers
- Short in-service training for teachers

Monitoring & Evaluation

- Collects data on primary education from the field level
- Analyzes data and publishes quarterly and annual reports
- Storage and distribution of textbooks
- Supervision of satellite schools
- Arrangement of regular inspection of various offices and primary schools at the field level

- Sending of reports related to these areas to the MoPME.

Policy and Operation (newly created, auxiliary division)

- Recruitment of teachers
- Advisor of field level administrative activities
- Evaluates progress of field level activities
- Communication with administrative ministry for subsequent course of action

Management Information System Cell (auxiliary division)

- Data collection of selected education indicators
- Computerization
- Development of data bank

Appendix B: Research Calendar

July 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
8	9 <i>Depart JFK</i>	10	11 <i>Arrive DAC</i>	12 <i>Visit Directorate of Primary Ed in Mirpur Research permissions granted</i>	13	14
15	16	17	18 <i>Appointment with Research Assistant (confidentiality agreement signed)</i>	19	20	21
22	23	24 <i>Appointment with Research Assistant—review of research project and plan</i>	25	26 <i>Appointment with Research Assistant—review of research project and plan</i>	27	28 <i>Exam period in GPS</i>
29 <i>Exam period in GPS</i>	30 <i>Exam period in GPS</i>	31 <i>Exam period in GPS</i>	1 <i>Exam period in GPS</i>	2 <i>Exam period in GPS</i>	3	4 <i>Exam period in GPS</i>

August 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
5 <i>Exam period in GPS</i>	6 <i>Exam period in GPS</i> <i>IRB Approval date</i>	7 <i>GPS closed for Ramadan</i>	8 <i>PTI visit: Nodipur</i>	9 <i>PTI visit: Kanpur</i>	10	11
12	13 <i>PTIs close for Ramadan</i>	14	15	16	17	18
19 <i>Contact perspective research participants</i>	20 <i>Contact perspective research participants</i>	21 <i>Contact perspective research participants</i>	22 <i>Contact perspective research participants</i>	23 <i>Contact perspective research participants</i>	24	25
26 <i>GPS re-open</i>	27 <i>Contact perspective research participants</i>	28 <i>Contact perspective research participants</i>	29 <i>Contact perspective research participants</i>	30 <i>Contact perspective research participants</i>	31	

September 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
2	3	4	5	6	7	8 <i>PTIs re-open</i>
9 <i>(GPS visit and meet with teacher—not used in study)</i>	10 <i>GPS visit Janalaganj</i>	11	12 <i>PTI visit Rajhimati</i>	13 <i>Pre-observation interview CS 1</i>	14	15 <i>CS #1 Observations</i>
16 <i>CS #1 Observations</i>	17 <i>CS #1 Observations</i>	18 <i>CS #1 Observations</i>	19 <i>CS #1 Observations</i>	20 <i>CS #1 Observations</i> <i>Post-obs interview CS 1</i>	21	22
23		25 <i>Nakoli GPS visit</i>	26	27	28	29

October 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30 <i>Juzra GPS visit</i> <i>Pre-obs interview CS 2</i>	1 <i>CS #2 Observations</i>	2 <i>CS #2 Observations</i>	3 <i>CS #2 Observations</i>	4 <i>CS #2 Observations</i>	5	6 <i>CS #2 Observations</i>
7 <i>CS #2 Observations</i> <i>Post obs interview CS2</i>	8	9 <i>Nodipur PTI revisit</i>	10	11	12	13
14 <i>Rajhimati PTI revisit</i> <i>NCTB visit</i>	15	16 <i>11:00 am Pre-obs interview with CS 3</i>	17	18	19	20
21 <i>GPS closed for Eid</i>	22 <i>Member Check CS 1 11:00 am</i>	23	24	25	26	27
28	29 <i>GPS re-open</i>	30	31	1	2	3

November 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
4	5	6	7	8	9	10
11 <i>CS #3 Observations</i>	12 <i>CS #3 Observations</i>	13 <i>CS #3 Observations</i>	14 <i>CS #3 Observations</i>	15 <i>CS #3 Observations</i>	16	17 <i>CS #3 Observations</i> <i>CS 2 Follow-up Interview 10:00 am</i>
18 <i>CS #3 Observations</i> <i>CS #3 Post-obs Interview</i>	19	20	21 <i>PSC examination period</i>	22 <i>PSC examination period</i>	23	24 <i>PSC examination period</i>
25 <i>PSC examination period</i>	26 <i>PSC examination period</i>	27	28	29	30	1

December 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
2	3	4 <i>Member Check CS 3</i>	5 <i>NCTB re-visit</i>	6 <i>AIBS presentation 3:00 pm</i>	7	8
9 <i>Depart DAC @ 4:40 pm</i> <i>(travel to airport at 2:00 pm)</i>	10 <i>Arrive JFK @ 4:30 pm</i>	11	12	13	14	15

Appendix C: Informed Consent Form

College of Education
Lehigh University
111 Research Drive
Bethlehem, PA 18015

Title of Research: Transferring training to practice: Improving primary teaching in
Bangladesh

Name of Primary Researcher: Amy Moyer

Phone Number of principal Investigator/Primary Researcher: 01-267-772-7919

Name and Email Contact of Committee members:

Dr. Sperandio	jis204@lehigh.edu	Committee Chair
Dr. Silova	ism207@lehigh.edu	
Dr. Columba	hlc0@lehigh.edu	
Dr. Stewart	tony.k.stewart@vanderbilt.edu	

A. Purpose and Background

Under the supervision of Dr. Sperandio, Associate Professor of Educational Leadership at Lehigh University's College of Education, Amy Moyer, a graduate student in International Educational Leadership is conducting research on teacher training and classroom teaching methods of teachers within their first years working at primary schools in Bangladesh. The purpose of this interview is to help the researcher study aspects of teacher training and how it translates into classroom practice.

B. Participant Selection

You were selected based on a recommendation from the Primary Training Institute you attended for teacher training. PTI personnel were asked to recommend an excellent student from the previous year. They provided you name and contact information.

C. Procedures

If I agree for to participate in this research study, the following will occur:

1. I will be asked to participate in a pre-observation interview where I will be asked about how my teacher training has prepared me for classroom teaching at a government primary school. I will also participate in a post-observation interview where I will reflect on my teaching practice. I will be asked for permission for the interviews to be recorded on an audio device for researcher use only.

2. The researcher will observe me teaching in my classroom for one week in September, 2012.

3. I will be given an opportunity to review the initial reports from my pre-observation interview, classroom observation and post-observation interview. If I disagree with any of the information, I can contest it at this time and correct misinformation.

4. Participation in this study will take a total of 2 months and occur during the Fall of 2012.

5. There will be no consequences if I choose to not participate.

C. Risks

Risks will include the possible loss of privacy, possible discomfort at answering some questions and inconvenience. There is the potential for professional reprimand based on research findings. This risk is chiefly professional and the following steps will be taken to minimize this risk.

Confidentiality: The information gathered from this study will be kept as confidential as possible. In order to protect all research participants and participating institutions, the names of people, names of participating institutions and precise location will be changed. My real name will not be used in the report and all files, transcripts and data will be stored in a locked cabinet in the researcher's home, and no one except the researcher will have access to them. My name will not be used and any identifying personal information will be avoided.

D. Direct Benefits

There are no guaranteed benefits to me; however, knowledge gained from this research has the potential to improve upon existing teacher training methods in Bangladesh, thereby improving student learning in government primary schools. It is recognized that quality in education is a challenge that needs to be addressed in government primary schools in Bangladesh. Teaching methods and strategies have the most immediate and significant impact on student learning. Addressing these issues is crucial to improving the educational future of Bangladesh's primary school children. The risk to human subjects is minimal, whereas the gains from the research will assist in the improvement to teacher training programs and most importantly, primary school students.

E. Alternatives

I am free to choose not to participate in this research study.

F. Costs

There will be no costs to me as a result of taking part in this research study.

H. Questions

I have spoken with Amy Moyer about this study and have had my questions answered. If I have any further questions about the study, I can contact Amy Moyer by calling 01-267-772-7919 or email her at als207@lehigh.edu or contact Dr. Sperandio, Chair of the Committee at jis204@lehigh.edu.

I. Consent

I have been given a copy of this consent form to keep.

PARTICIPATION IN RESEARCH STUDY IS VOLUNTARY. I am free to decline to participate in this research study, or I may withdraw my participation at any point without penalty. My decision whether or not to participate in this research study will have no adverse effects on my employment or any other aspect of my personal or professional life.

Signature _____ Date: _____

Research Participant (18 or older)

Signature _____ Date: _____

Primary Researcher

Appendix D: Interviews Transcripts

Case Study 1—Pre-observation Interview

Q: How did your training at the PTI prepare you for classroom teaching?

A: They provided big support and helped teach me how to make children learn, learn reading and understand. It prepared me well for the classroom by learning about child psychology.

Q: What was the most useful thing you learned in your training?

A: Teaching methods.... (*changes answer*)

How to teach subjects, such as Bangla, English, math, physical education, science, child psychology, arts & crafts was very useful. While in class didn't see the usefulness, but now I see how to apply the course in my everyday teaching and they are the most useful to me now.

Q: What was the least useful thing you had to learn?

A: The least useful is the long period of training; it was unnecessary, difficult and boring. I had to travel everyday from Dhaka to Munshiganj. My children were small at that time and it was too long every day. My husband helped me during that time by encouraging me in my profession and helping me with running the household. The length of the training period—one year, every day, all day—is too much. In Bangladesh there is no training as long as PTI training.

Q: What teaching method do you use most frequently?

A: I do warm ups at the beginning of class to get the students attention and focus on learning. It creates rapport with students, prepares them for learning. The children do not get help from their mothers and fathers, they don't learn at home. All of the students have

tutors, but they are not qualified. The children don't know how to learn and study. I do exchanges like, "good morning", "how are you" then we clap together, we can sing songs together, we can recite a rhyme together. That way when they come into the classroom, I can manage them.

Q: The teaching strategy that is not used or doesn't work well in the classroom?

A: In training they want you to focus on one word for an entire class period, everything about that word (G1 & 2 one word; G3, 4, 5 use only two or three words). It was, so boring for the children and I cannot get through the syllabus with this teaching method. It isn't practical for the syllabus or to keep the interest of the students.

Q: How have you adapted the teaching strategies you were taught for your class?

A: That change comes automatically when you are teaching. I have made changes for classroom management because the students are naughty. In training we are taught not to yell at students, but that is not practical because the children are misbehaving and I need to control the class. If there was another teacher in the room it would help. The students cause me much pain [stress], they are very little and are very naughty. Also, the students come from a culture/socio-economic level where they don't know how to behave in school, with a teacher. If there were 25-30 students I could manage them, but with this number it is hard to keep control and have individualized contact. The sub-cluster training or modeling in PTI are only done with 6 or 8 students who don't make noise and it is easy to control them. The teacher says, "I am happy" and repeats three or four times, then says, "What am I?" The students reply "happy". She then asks each student individually. But is it possible when there are 50-60 students? This only works with a small group, not a class of 50-60 students. I go to play a game with the students, but

when I start my game, I need to manage the students. A smaller class would be better, 25-30 students, I could manage them.

Q: What strategies would you like to use more often in your daily teaching practice?

A: I would like to have more one-on-one contact with the students, especially for reading class, or to play games. The large class size does not allow this. The students don't learn to read or write at home and they need intensive help. The misbehavior of the students is a problem of lower socio-economic status, not the number alone. For these students class time is play time. I think this is a difference of social status. Students get WFP biscuits and students only come to school to get biscuits, not to learn. This is especially the case in class 1 and 2. The head teacher could help more, but she doesn't (continue this topic later, under next question).

**Teacher requests to turn off recorder to discuss minor corruption at her school: The head mistress also takes money to admit students into certain classes. Even though the student is not qualified, she will admit a student to a class (grade 4, for example) for 100 tk who is not prepared for this class. This lowers the educational possibilities for the entire school. She has sold the WFP biscuits to a "hawker". Young children don't eat their allotted biscuits, rather than giving them to older students, she sells them to the local black/street market.

A: (What type of support do you get as a new teacher at this school?) You had mentioned that the head mistress doesn't help, what would you like to see her do?

@31:30

Q: She should walk around at the beginning of the school day, visit classes, have more visibility.

I was at another GPS and the head mistress helped me when I was a new teacher. She spent the entire first day in her class. She helped with class mgmt and discipline. I asked her current head teacher to have the school cleaned before your visit, but she didn't care and would not have it cleaned.

Other teachers offer support by taking (covering) classes when I am absent or if I am having classroom management problems. They also help explain some things

Q: How do you use the government supplied text books (teacher book) in your planning?

A: It is just a teacher-book, it helps for a quick review before teaching a lesson, for ideas and points to emphasize. The longer I teach, the less I need this.

Q: Do you write out your lesson plans?

A: It is mandatory to learn the process and I did this during practice teaching and when I was a really new teacher, but now it is not necessary and I don't have the time.

Q: What are your classroom mgmt challenges?

A: (indirect) small children have difficulty holding their attention for the duration of a block scheduled class; large class size; home life of students.

Q: How do you provide feedback to students on learning goals?

A: I give verbal praise when they are good in class, when they are clean or wearing a pretty dress, look nice. This is an acknowledgement in front of the class and they are proud.

Correction Q: feedback on academic goals?

A: I check papers they complete in class. I don't give tests to young students in class 2 or 3.... They are afraid of tests. Class test mainly in class 4 and 5, but younger students will be afraid of a test. Instead I do an oral assessment every day.

11. What kind of professional development do you participate in?

A: Sub-cluster training, this is good and productive. It is very useful and enjoyable... just a one-day program. One teacher demonstrates a classroom activity/teaching method for class 1, class 2, class 3, etc.

Q: How often did you get to teach or watch the instructor model teaching at the experimental school when you were at the PTI?

A: This is the final exam; at the end of the PTI training we teach a class at the experimental school. An external examiner comes to the school and evaluates their teaching.

Also, there is subject-training at the URC (6 days), it is not fixed. The government arranges this... the last one was for Math at the Model School. It is long (6 days, 8 am to 5 pm) and focused on teaching one subject. Also, there are specialty training sessions arranged by other agencies, like the English in Action training on using mobile phone as a teaching aid.

Q: Any other comments you would like to add?

A: I don't have any channel or process to inform the authority about the problems I face. Right now I am responsible to conduct the national census which requires me to visit every home in the catchment. This is very difficult to complete in addition to my teaching duties. I am not paid enough... I don't have the time to complete this. This is a burden to me.

Case Study 1—Post-observation Interview

Q: Please reflect on this week's classes.

A: The classes were as usual. The students were better behaved and focused on their studies because of your presence. You were there and the students were very excited and very curious about you. And they concentrate on their studies more to show you they are serious. Usually they don't give attention to their studies and make a lot of noise in the classroom.”

Q: What went well?

A: The students gave their concentration because of your presence. I feel more comfortable with Grades 3, 4 and 5, but the Grade 2 class is very naughty and disturb me more and pay no attention to me. The classroom is small and I can't get to the students by circulation around room. I used the recorder for the English in Action lesson. I like this lesson and the students were curious at first, but not any longer, it doesn't hold their attention as it did when it was new.

Q: What would you like to improve?

A: I would like to have an improvement in the conditions—more teachers, resources... Without any improvement in conditions, I do know how I can improve my teaching.

Q: Do you observe other teachers' classes?

A: Yes, I did this when I first started teaching, but not for the past year. It helped me learn, but I feel I am a better teacher than the others....Most of the teachers give tasks to students, like “do this”, then they sit. I think I do better than them. I try to maintain eye contact and follow what they are doing...if they are reading, if they are writing... I am watching them. I also check their work. I talk with them to show I care.

Q: Do you work with other teachers when planning lessons?

A: Sometimes. I share with another teacher of class 4.

Q: What kinds of things do you plan together?

A: How to teach them, how to put the lesson in their brain, how to give marks on their exam paper.

Q: Outside of the classroom, what has the biggest impact on how you present a lesson/unit?

A: The English book has a section on instruction and classroom mgmt issues.... (redirect about issues outside of the classroom)

I try to teach students about how to be safe in the community, to benefit them. Q: How would you describe your teaching style?

A: I give class work and check lessons every day. Grades 2 and 3 must complete their lesson in class because they will not get the homework not done at home. Grades 4 and 5 have big lessons that I can't complete in the class, so they are assigned homework. I try to make the lesson easy and accessible so they are comfortable with the content. Most of them have no teacher, no qualified teacher [referring to home tutors]. They get no help from their father or mother. I think how will they read? So I want to make their lesson complete in the classroom if it is possible for me... I try to make the lesson easy for them so they don't get frightened to read it. I make sure that they can understand me. If they want I repeat one lesson again and again. I help them to prepare for their exam.

Q: How is professionalism addressed in PTI training?

PTI teach us many things but all of our teachers do not follow all of these things, I think. It is not possible to follow everything in every period in every class every day, it's not possible. We get support from the PTI. PTI tells us how to put lessons in students. How to put lesson in student's memory, how to take classes, how to manage classes. The PTI

gives a lesson on how to wear a sari. I wear sari for one year, continuously one year. It helped me to be a teacher in my manners, my etiquette, my style of talking to students, to guardians.

Q: Professionalism at school level?

A: The head teacher makes us teachers arrive on time, and leave at the correct time, and go to class on time.

Q: Does she check on teachers?

A: She is talkative.

Q: Your use of the mobile during class time distracts from the learning environment. Can you comment on that?

A: The government has a rule of no cell phone use during class time. I only use it to keep in contact with my children. I get calls from my husband, mother, and children... I have to answer when my family calls.

Case Study 2—Pre-observation Interview

Q: How did your training prepare you for classroom teaching?

A: I learned a new process, it felt like a completely new process. They taught me how to enter a class, how to manage the class, how to teach and how to use teaching aids and pictures. It was a new experience on how to teach a class, manage a class, and connect with the students.

Q: What was most useful/least useful?

A: Time management.... It is important to be on time for class, you can't be late, not even 5 minutes. It will distract the students. Also, the length of time a unit or lesson takes

to teach (how long it should take to get through the various learning activities). The lessons had listed timings.

I also learned about teamwork. How teamwork helps you to accomplish large tasks and how team work helps in the classroom. Like a community cleaning project and gardening at PTI. I realized at that time that teamwork was the best, most easy way to complete tasks.

Q: What teaching strategies do you use most frequently/Which ones don't you use and why?

Most frequently used

A: Q&A for both whole class and individual— depends on the lesson.

Q: Least frequently used?

A: I preferred more practical work over theoretical learning from the 11 subjects and books (Bangla, Eng, Math, etc). They are relevant or practical to teaching in primary schools. However, she did find subjects like Child Psychology useful.

Showing pictures is always good, like in science class you can easily use what we have in our natural environment.

Q: How have you adapted the teaching strategies you were taught for your class?

A: I adapted group work—I use it differently than taught in PTI. Sometimes students work on individual work, but sit in a group and discuss answers. I use group work with all grade levels and classes; the students like it. Not every day, but sometimes.

Q: What strategies would you like to use more often in your daily teaching practice?

A: I would like to show more pictures, with every class, but we don't have pictures for everything. It helps the students understand the concepts quickly and clearly, and they find it interesting. It helps make it relevant to their life.

Q: What type of support do you get as a new teacher at this school?

A: All of the teachers were helpful, also the principal was so helpful. They helped me mentally and encouraged me, as I am the newest teacher at this school.

Q: Did you observe other teachers in class?

A: Yes

Q: Did they share lesson ideas/plans?

A: Yes.

Q: Do you write out your lesson plans?

A: Yes.

Q: What resources do you use when planning a lesson?

A: Pictures, teaching aids (charts, etc) and models (realia). The school doesn't have any technology or audio equipment.

Q: How do you provide feedback to students on learning targets?

A: Verbally, and marking their work in notebooks. I write 'good', 'excellent' or draw a happy face. I don't mark mistakes with an 'X', but circle it and write the correct answer. I learned this technique in PTI training. I try to use colorful pens and don't want to intimidate them or scare them in the learning process.

Q: Do you talk with parents about their child's progress?

A: Yes. As a school policy we do not send home progress reports because we cannot ensure the parents really see them. So parents must come to the school and pick up report

cards. I have all 45 parents' contact numbers for Class 5 (this is her primary class). I call if necessary. The parents are not interested or careful about their children.

Q: How often do you call home?

A: Usually only call home if a child is absent for a long time. If one student doesn't come for 3 days in a row, I ask his friends that live near first.

Q: Have you participated in any PD this year?

A: Yes, the Bangla Sub-cluster training. SC training occurs usually every 3 months and they partner with another local school. But the last one wasn't organized by the government, we are not sure why.

Q: Do you like SC training?

A: Yes.

Q: Why do you like SC training?

A: You get to watch a new teaching method from an experienced teacher, with a model class with 25-30 students, it is monitored by the ATO (Assistant Thana Officer).

Q: What is the difference between SC training and PTI training with the experimental school students?

A: We were familiar with PTI instructors and their teaching methods, but at the SC training we get to see something different (new teaching method from an experienced teacher).

Case Study 2—Post-observation Interview

Q: What is your favorite class to teach, and why?

A: Grade 5 Bangla because I like to teach about my native language. Also, I can explain much more to my students

Q: Did you try anything new this week? How did it work out?

A: Yes. In grade 1 I had the whole class repeat after me and physically act out the rhyme, “One, Two, Three” with our hands and standing at the desks. Usually I just call on one student at a time, this way they all got to participate and be active.

(Adds during next question)—Also, the demonstration in Grade 5 Science class for making saline solution. Before, I just talked/lectured about the process of making saline, this time I showed them how and I think this will help them remember later in their life. This is something they can use, it is practical for their life.

Q: Please reflect on this week’s classes. What went well?

A: I like the lessons that also taught about life. I feel this is important because many students do not learn these lessons at home and they will not continue their schooling after Grade 5. For example, in Grade 1 I had students close their eyes during the “Lily and Rose” lesson and taught the students not to pick the flowers. During the lesson, I asked the students why they pick the flowers, and the flowers, Rose and Lily, said that they love the students so much they came to the classroom with her.

Q: Where did you get this idea?

A: It just came to me when I was thinking about what I wanted the students to learn. I always want to keep the class calm and quiet, so it is a better environment for learning. I want to teach them life lessons and lessons that help improve their behavior.

Using these type of demonstrations helps them to really learn and remember what’s in the curriculum—real life education. It builds your values and supports good behavior.

Hopefully, next time a student is in the garden, they will remember what they learned about not picking the flowers.

Also, teaching the Grade 5 students how to make saline. I realized I had all of the ingredients, so I decided to do a live demonstration, and it was very useful.

I like using brainstorming activities. It helps them to think through and about the lessons.

Also, I liked comparing Bangladeshi culture with the other Asian nations they studied (Japan and Malaysia). Using comparisons helps the students learn about and relate to their own culture. I used it as an opportunity to give emphasis on Bangladesh, and to create patriotism.

Q: Do you write out these lesson ideas?

A: I use a traditional lesson plan book, it is at my home, but I also use this notebook for “rough” ideas—(she shows us a notebook with a sketch of the tree brainstorming activity from the previous day).

At the beginning of class I ask a review question. If they can’t answer it she reviews the information before beginning new material.

Q: What would you like to improve?

A: I would like to use more resources if they were available. Like more colorful and bigger pictures. Also, more resources for each student, like flash cards and crayons (coloring pencils).

In my grade 1 English class, I would have been good to have 1-5 flash cards for each student and have them color them in for the counting lesson today.

Q: Question redirected to focus on improvement to teaching techniques:

A: I don’t know, only another teacher watching me can answer that question. You can’t find your difficulties by yourself, you need someone else to point them out. I would like to use more comparisons, like the Social Studies unit on Asian culture, everyday.

A: Do you observe other teacher's classes?

A: I haven't observed any classes for a year. When I have a free period, I usually have to cover another class if someone is absent, so I don't have the opportunity to observe other classes. The only opportunity to observe other teachers is during Sub-cluster Training. Last year the school organized a school based program, nothing formal or a government rule. We would arranged a class with an experienced teacher every week on Thursdays for other teachers to observe and learn new techniques—simulation classes. At first, it was every week, then once a month. We are talking about re-instituting this school based training model.

Q: Do you work with other teachers when planning lessons?

A: Yes, we often share ideas for lessons. This week one of the teachers offered to share a poem about over population he wrote for my Grade 5 Science lesson on population in Bangladesh.

Q: What has the biggest impact on how you present a lesson/unit?

A: The ability level of students, some students are so fast and others are slow, or have a weaker ability. I have to consider and think at their level when planning a lesson. Also, the number of students in a class; it's too hard to control the students when there are so many of them or they don't have enough space in the classroom, sometimes they have to sit three students to a bench.

Q: How would you describe your teaching style?

A: How would I know? Students enjoy my class, they like me very much. I still haven't heard my students say anything bad about me. I try to go to their level mentally and physically. I try to keep in touch with them mentally. For example, two students were

sick today with a fever, I didn't let them leave class, but I let them put their head down and rest. If a student tells me that they didn't have breakfast this morning, I give them money to go get something or I will share my lunch with them.

If someone is lying, and tells me they are sick, I try to keep an eye on them and ask them about their health. If anyone would lie, I will catch them in the lie. I am compassionate and affectionate with students. I take an interest in their life and check on them.

I use a lot of activities that promote student participation. I expect students to give input on a topic before I start the lesson—(Anticipatory Set); I also like to call students up to the board to write down the brainstorming points. I always try to listen to their opinion and input.

I am satisfied and confident with my teaching.

Q: Could you use more varied techniques like comprehension questions and critical thinking with your 1st grade class?

A: I feel it is not possible with the Grade 1 class. They are too little and their ability level is very low. I try to vary how they are memorizing, like today when counting “1, 2, 3, 4, and 5” I also did it backwards and other ways “one, one, one, two, two, two, three, three, three”, and so on. I also tried to confuse them, “one, two, three, four, one....”, then they had to “correct” me. I had the students choose the flash card and say the number to the class. I also believe more resources would help me vary my teaching techniques with this class, rather than memorizing. But overall, Grade 1 students are too young to think critically or brainstorm. It's not possible with grade 1 because I have to consider their level of understanding. Also, the Grade 1 includes students that come from a poor background--villagers and migrant workers who are living in Dhaka temporarily. There is

only one section for class one, no advanced or lower levels like the grade 5 class. Many will not even complete school to the 5th grade. Some will return to the village and make their life there.

Case Study 3—Pre-observation Interview

Q: How did your training prepare you for classroom teaching?

A: How to show pictures and teaching aids, how to present them and how to direct the students during a lesson. Each particular lesson has an appropriate teaching style; each subject's style is different. I learned how to teach them a particular lesson, how to teach them repeatedly, after that the students repeat with the teacher. After that using teaching aid and models to support what they just learned; and give students problems to solve. If students cannot solve problems, then teacher can help them (re-teach).

We learned the three-step method of teaching in training (input, practice, task). First we give input to students, then they practice, then a task at the end of the lesson.

Q: What was most useful/least useful?

A: Most useful: Person to person it varies, but for me it was discipline. Discipline is the most important thing for the structure and success of the class. Also, how to time lessons.

If I have a class of 45m, I will structure it like this:

Input—5 min

Practice—20-25 min

Task—remaining class time.

Q: What was the east useful?

A: Everything I learned in training was useful.

Q: What teaching strategies do you use most frequently?

A: Q & A (questioning students), uses both WC and IND, and I make them think more than the examples in the book, take the problems a step further and think critically.

Q: Which ones don't you use, why?

A: I don't have students use the black board because there is not enough time in class. I also don't use group work frequently, because of lack of time and it creates too much noise. In my class solving the problem on the blackboard is a competition of who can solve it first. In many schools, students do not come up to the blackboard to solve problems, but the students like the competition here.

Q: How have you adapted the teaching strategies you were taught for your class?

A: Classroom management... PTI training taught me to use group work frequently, but it creates too much noise and they talk too much to each other. Academically strong students finish first and weaker students can't do the work as fast. If there is a bright student in a group, the weaker students will create noise and a disturbance. For this reason, I prefer to give individual work in order to maintain discipline. In PTI they learned to teach the students using social work, like classroom cleaning, but in reality the students don't want to clean the class and they do not respond to this.

Q; What strategies would you like to use more often in your daily teaching practice?

A: I would like to use more teaching aids, pictures. It makes it easier for the students to understand. Also, it would be better if I had a projector in my class.

Most of the time the students are always hungry in class. They have an empty stomach and have a hard time focusing on the lesson.

Q; What resources do you have in the school?

A; Posters, charts, models, instruments (harmonium and microphone).

Q: What type of support do you get as a new teacher at this school?

A: They offered help in every way. They handed over the keys, documents, papers, and economic information. They helped me to understand the official paperwork and reporting responsibilities; also, the economic condition of this community (they are very poor).

As principal I encourage other teachers and motivates them.

Q: How?

A: I compare them with another school. For example, a teacher at another school uses this strategy in his class, we should try that.

Q: Can you offer them any kind of training?

A: After getting this job, I could not attend any more training, but there was supposed to be a training for teacher after 3-4 months, but the URC didn't have funds. There are no funds for training. There has not been any URC training since I took the position, there are no funds available. If funds become available they are scheduled to have a 1-day training at the URC in 2 months, it will use model teaching.

There was a 2-day sub-cluster training "Evaluation of the paper" on how to grade exams.

Q: What is the difference between older teachers and newer teachers?

A: New teachers can complete/finish the lesson within the class period, but it depends on where they got their PTI training. Anyone who has had PTI training can time lesson well and finish the lesson in class. Older teachers have experience, but some they are unfit physically. They get tired easily. New teachers are energetic. The teaching style has been changed, for example you can use technology when you are teaching if you have it. Or

you can use new methods, like put the flash card into the room and have the students find an “E”, the students can easily find it.

Q: Anything in closing?

A: PTI training is more structural (practical; based on class practice) than theoretical, which helps the students learn. The structural method taught in the PTI was really important; it helps the students learn more. I think the PTI training was very effective.

Case Study 3—Post-observation Interview

Q: Is the coaching class for grade 5 required by the government?

A: Government says coaching is required for the weak students only. But I do it for all of the students because I don't want them to lose the chance for extra help.

Q: Do you provide coaching year round in addition to the regular grade 5 students?

A: No. We start on January 1 and do it through to the PSC in November because they are poor and the whole family lives in one room, they are easily disturbed and don't have a good learning environment. What you saw in the classroom, how they are expert at solving the problems that is because we start our coaching in January.

Q: How does coaching class different from the regular grade 5 curriculum?

A: They get much more time in coaching class with Bangla, English and Math. And they can take practice exams. Only special teachers teach the coaching class, because they are really good teachers and also they don't have a regular teaching schedule. In the regular grade 5 class, a student can only solve 2 or 3 problems. But in the coaching class they have time to solve 5 problems.

Q: Reflecting on this week's classes, what was successful?

A: I was relaxed teaching grade 1. With grade 5 there is pressure with the PSCs coming up.

Q: What would you like to improve in your teaching?

A: I would like to use more teaching aids. But chalk, eraser, pointer and blackboard are also teaching aids in our country in my perspective.

Q: Do you observe other teacher's classes?

A: Yes

Q: How often?

A: About once per week.

Q: Has that helped you to improve your teaching?

A: Yes, obviously.

Q: Do you work with other teachers when planning lessons?

A: Yes, I do.

Q: What has the biggest impact/influence on how you present a lesson/unit?

A: Student feedback on whether they understand the question and if students can answer my questions. When I repeat a question, then the students can understand what actually they have to solve.

Q: How would you describe your teaching style?

A: I like to make them remember the questions by repeating them because it makes it easier for them understand and explains the problem. They will have the same type of questions on the exam and know how to solve the problem.

Q: What does professionalism mean to you?

A: It's my life and death. I feel it from my heart. I deprive my family and new born baby for the profession because I stay here for a long time—the whole week.

Q: How does teaching classes help you as a head teacher?

A: There is no connection between teaching and being a HT. One can be a bad teacher in class, but can be a good administrator. And one can be a bad administrator, but a very good teacher.

Q: Do you have authority to correct teacher misbehavior (lateness, etc.)?

A: I do, but it is limited. There is an Annual Certificate Report given to the Thana Officer every year for each teacher. This determines a raise in salary (time scale, 1-8 years).

Also, if a teacher is late for work three times, they get one day's wages cut.

Q: Many students will not continue after grade 5. How do you prepare them for the future?

A: The main thing is I influence them to keep studying. If one is financially weak, after PSC I contact the high school master and talk with them personally to get financial help. Some teachers from this school motivate them a lot.

Q: How do you create a "culture of learning" at the school?

A: I always try to invite former good students from this school. I invite the former bright students and they motivate talk with them and motivate them to keep studying.

Q: How do they motivate them?

A: The last former student, a doctor, who came to talk said to them, "See now you have a bag. When I was here we didn't even have bags. We didn't even take three meals a day. So you have a better condition than me. You can continue studying."

Q: In your classroom?

A: I exchange greetings and asking them questions at the beginning of class. During class I drill them on math and use teaching aids to help focus their learning.

Q: Anything else?

A: If you would have observed classes at the beginning, like January or February it would have been more interesting.

Q: What's different?

A: I use more teaching aids, not only the blackboard. Also, you would see the students enjoying the lesson more and more of their curiosity. This was a review for them and there was a lot of pressure to practice with the annual exam within one week.

Appendix E: Observation Instrument-Danielson's Framework

NAME:	DATE:	TIME:
Description on subject(s) taught:		
Description of student age/grade:		
DOMAIN 1: Planning and Preparation		
Demonstration of content knowledge and pedagogy		
Demonstration of student knowledge		
Establishes instructional goals		
Coherent instruction		
Assessment of student learning		
DOMAIN 2: Classroom Environment		
Establishing a culture of learning		
Mutual respect		
Classroom management/student behavior		
Organizing space		
DOMAIN 3: Instruction		
Clear/accurate communication		
Teaching techniques		
Engaging students in learning		
Providing feedback		
Demonstrating responsiveness		
DOMAIN 4: Professional Responsibilities		
Reflection		
Maintaining accurate records		
Growing and developing professionally		
Professionalism		

Appendix F: Observation Instruments (3)-Question & Answer Teaching Strategy

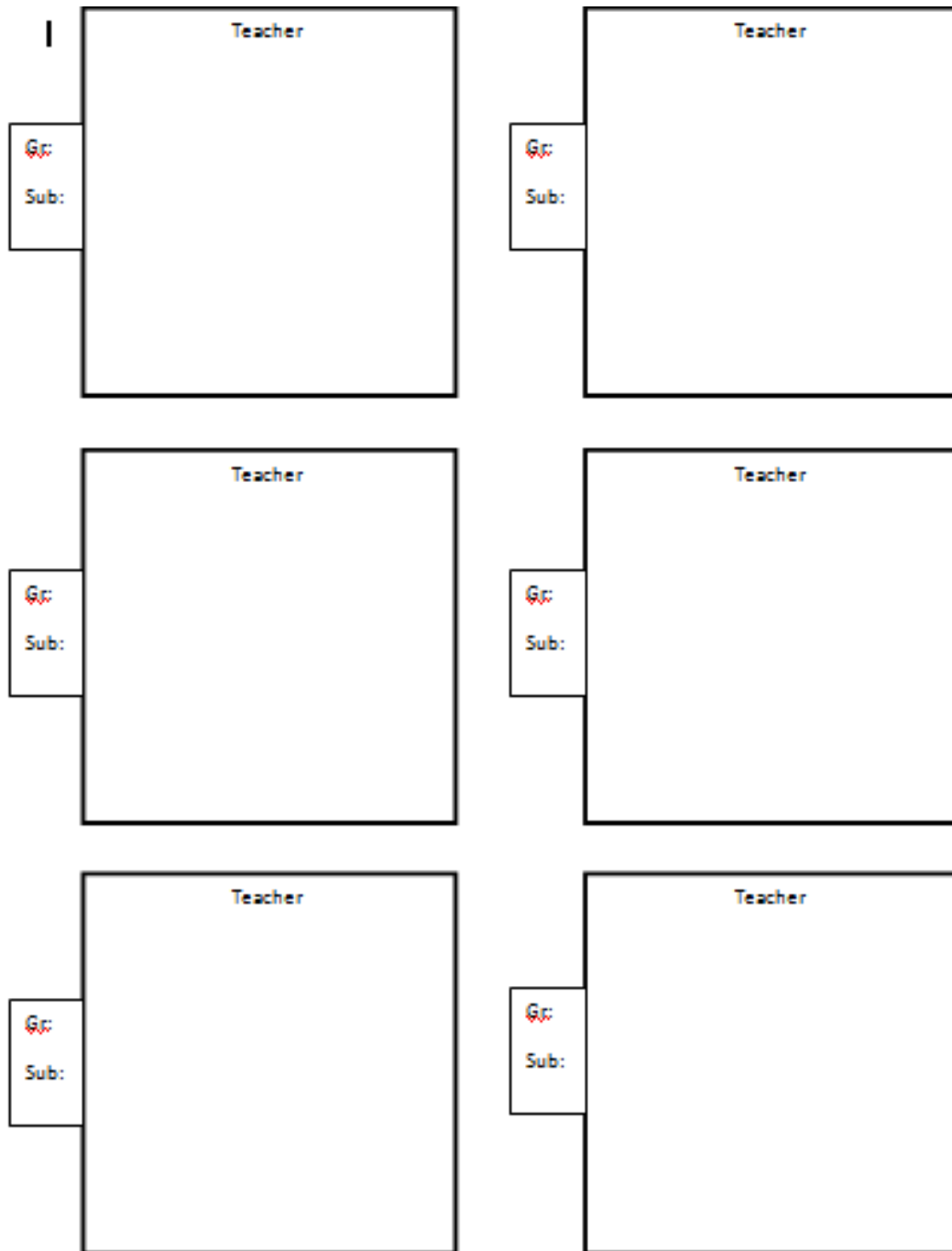
Question Types

	Rote	Check for comprehension	Critical Thinking	Other (note)
Class 1 GL: Sub: #:				
Class 2 GL: Sub: #:				
Class 3 GL: Sub: #:				
Class 4 GL: Sub: #:				
Class 5 GL: Sub: #:				

Question counts

	Number of teacher-student interactions during lesson		Total
	Whole Class	Individual	
Class 1 GL: Sub:			
Class 2 GL: Sub:			
Class 3 GL: Sub:			
Class 4 GL: Sub:			
Class 5 GL: Sub:			

Location of students called on during Q & A



Appendix G: Professional Experience of Panel of Experts

Donna Acerra: Ms. Acerra teaches been teaching Speech Communication at Northampton Community College for 23 years. She is an active member of the college community who facilitates faculty training during professional development, as well as serving on the Sustainability Committee, Faculty Senate, International Education Advisory, and Diversity & Global Engagement. As Program Coordinator of the Speech Communications Department, Ms. Acerra observes adjunct faculty and facilitates monthly instructional group meetings. Ms. Acerra earned both her B.A. in Radio, TV, and Film and her M.A. in Communications from Temple University.

Dr. Timothy Bonner: Currently, Dr. Bonner is the Director of English as a Second Language at Lehigh University in Bethlehem, PA. He has been an ESL/TESOL educator since 1994. His specialties include, research in Applied Linguistics and ESL pedagogy with specializations in Phonology, Phonetics, and Second Language Acquisition, as well as in language assessment. Mr. Bonner earned his Ph.D. in Linguistics from City University of New York, his MA in Literature and Education from Kutztown University, and his BA in English from University of Florida.

Laura Cipriano: Since 2002, Ms. Cipriano has taught English and Library Sciences in several secondary schools in Pennsylvania. She earned her M.S. in Library Science from Kutztown and her B.S. in Secondary English Education from Slippery Rock University. Currently, she is considering a Ph.D. program.

Dr. Karen Hendershot: Ms. Hendershot has over 15 years of experience working in international education programs. Her areas of specialization include second language program development and transformative learning for global citizenship. She has taught

graduate teacher development and language acquisition for graduate students at Lehigh University, the College of New Jersey, Camden County College, and Burlington County College. Dr. Hendershot earned her Ed.D. in Educational Leadership from Lehigh University, her M.Ed. in Teaching English as a Second Language from The College of New Jersey, and her B.A. in Cultural Anthropology from University of Pennsylvania.

Suzanne McAllister: Ms. McAllister began teaching with Teach for America in YEAR. When she lived in Germany, she worked with Teach First Deutschland for X years. Ms. McAllister is a consultant and author with Open Society Institute, Teach for American, and The New Teachers Project. Currently, she is a doctoral student in Lehigh University's Comparative and International Education Program.

Dr. Laura Roberts: Dr. Roberts is the founder of Right Angle Educators, a research consulting firm. She has mentored over 120 doctoral students during their doctoral research. She has been an adjunct professor in Lehigh University's College of education since 2000. Dr. Roberts earned her Ph.D. in Human Development and Family Studies from Penn State University, her M.Ed. in Education and Counseling Psychology from Temple University, and her B.S. in Biology from Lafayette College.

Ellen Snyder: Ms. Snyder has been a Social Studies teacher at Parkland High School in Allentown for 5 years. She completed her M.Ed. in Organizational Leadership from Lehigh University in 2012 and her B.A. in Secondary Education from Kutztown University

Appendix H: PTI Curriculum for C-in-Ed Requirements

**C-in-Ed Curriculum
Structure of the Educational Program**

Module	Subject	Subjective	Practical	Total
Mod 1: Rules & concepts of primary education	1. Introductory concept in primary education	50		50
	2. Importance of primary education and different countries primary education system	50		50
	3. Primary education of Bangladesh: Rules, strategies, and organization	50		50
	4. Child psychology	40	10	50
	5. Learning methods	50		50
	6. Learning and personality development theory	40		50
	Total	290	10	300

Mod 2: Learning teaching strategies in primary education	1. Bangla	80	20	100
	2. English	80	20	100
	3. Mathematics	80	20	100
	4. Sociology i. social science—55 ii. population education--25	80	20	100
	5. Science i. general science—40 ii. agricultural science—20 iii. health and nutrition—25	80	20	100
	6. Religion (Islam; Christian; Hindu; Buddhist)	50		50
	7. Physical education	20		20
	8. Arts and crafts		15	15
	9. Music		15	15
	Total	470	130	600

Mod 3: Practice	1. Practice teaching i. teaching—100 ii. lesson planning—25 iii. accessories—25 iv. communication skill—25 v. external evaluation (oral)—25		200	200
	Total		200	200

Mod 4: Other educational works/ sectors	1. Other/secondary works and behavior i. Social and cultural works (speech giving; poem recitation; debating; story telling; comic; dance)—15 ii. literature works (story; short story; poems; verse of poetry; drama writing; riddles; proverbs) iii. library use (C-in-Ed reference books; teachers' guide; review of teachers' edition)—20 iv. physical practice/physical works—25 v. rules of behavior—20		100	100
	Total		100	100

	All Total		760	440	1200
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Appendix I: Objectives for the PTI Bangla Curriculum

Subject: Bangla Language

Practical Work:

1. Practice the correct pronunciation of a letter.
2. Making words by using letters.
3. Making sentences by using words.
4. Practice paragraph writing by showing pictures or a real character.
5. Analyzing sentence structure.
6. Convert sentences from Shadu Basha to modern language.
7. Convert sentences from modern Bangla to Shadu Basha.
8. Create chart of objectives/standards of Bangla language subject.
9. Class-based (grade level) achievable qualification/objectives chart of Bangla.
 - a. Making a chart how to achieve Bangla language skills by using classroom activities.
10. Identify a connection in particular textbooks lessons with ability level.
11. Textbook review from class 1 to 5.
12. Practice listening and speaking
13. Primary schools' textbook based reading practice.
14. Practice how to write properly
15. Sentence order teaching practice (according to class 1 textbook)
16. Teaching methods practice (poems, rhymes, stories)
17. Making a sample question paper
18. Practice with child-centered teaching methods.
19. Practice with activities based teaching methods.
20. Practice writing paragraphs and short essays
21. Creative writing: Concept, thought, create an essay structure
22. Identification of grammar in lessons and texts
23. Practice teaching informal grammar
24. Grammar teaching by playing word games
25. Lesson explanation given personally?
26. Making resources (individually/group) based on class 1-5 textbook lessons
27. Making word cards, letter cards and sentence cards.

*Lesson related practice is mandatory/obligatory for everyone!

**Every trainee has to do at least two practical works individually (chart/picture, etc) and one practical work as a group.

Grade breakdown:

Exams	Essay	Objective	Practical	Total
Internal (PTI)	30	10	10	50
External (Board)	30	10	20	50
Total	60	20	20	100

Appendix J: Research Assistant Confidentiality Agreement

This study, Transferring training to practice: Improving primary teaching in Bangladesh, is being undertaken by Amy Moyer from Lehigh University

The objectives of this study are:

1. To examine teacher training process and program components at PTIs in Bangladesh.
2. To examine classroom teaching methods of new teachers in government primary schools.

Data from this study will be used to help the researcher study aspects of teacher training and how it is transferred into classroom practice.

I, _____ (research assistant), agree to:

1. Keep all the research information shared with me confidential by not discussing or sharing the research information in any form or format (e.g. disks, tapes, transcripts) with anyone other than the Primary Researcher;
2. Keep all research information in any form or format secure while it is in my possession;
3. Return all research information in any form or format to the Primary Researcher when I have completed the research tasks;
4. After consulting with the Primary Researcher, erase or destroy all research information in any form or format regarding this research project that is not returnable to the Primary Researcher (e.g. information sorted on computer hard drive).

Research Assistant:

(print name) _____
(signature) _____
(date)

Primary Researcher:

(print name) _____
(signature) _____
(date)

If you have any questions or concerns about this study, please contact:

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Appendix K: Designated Case Study Codes Categories

CS 1- Pori	CS 2- Bilkis	CS 3- Rashid
Centralized ed system	Adapted	Accountability
Classroom mgmt	Brainstorming	Centralized system
Collegial support/community	Centralized system	Classroom Mgmt
Corruption	Classroom Management	Collegial support
Cultural lessons	Collectivism	Critical thinking
Cultural values	Collegial support/sharing	Cultural values
Culture of learning	Corruption	Culture of learning
Distraction	Creativity	Differentiate instruction
Extracurricular	Critical thinking	Extracurricular
Group, pair work	Cultural lessons	Home life of students Homework expectations (assigned/ checked)
Home life of students	Cultural values	Instructional leadership
Institutional communication	Culture of learning	Learning expectations
Length of training	Extracurricular	Modeling/demonstrating
Low resources lesson	Group work	Observation in training
Modeling	Home life of students	Parental interaction
Parental interactions	Kinesthetic Learning	Participatory
Participatory	Life lessons	Perception
Physical conditions	Low resource lesson	Physical conditions
Professional Development	Modeling	Positive feedback/encouragement
Professional reflection	Nationalism	Professional development
Professional responsibilities	Opportunities for women	Professional responsibilities
Professionalism	Opportunities for youth	Professionalism
PTI evaluation	Parental interaction	Q & A Strategy
PTI instructor qualifications	Participatory/child friendly	Rapport with students
Q & A	Physical condition	Rote memorization
Rapport with students	Practice teaching	

Rote	Professional development	School Leadership
School leadership	Professionalism	Stress
Stress/challenges	Rapport with students	Structure
Student-centered learning	Reflection	Student-centered (models/demo)
Student board work	School leadership	Student board-work
Student learning feedback	Student board work	Student engagement
Student learning outcomes	Student centered learning	Student feedback
Student outcomes PSC	Student learning feedback	Student learning outcome
Student to student interactions	Student outcomes/testing	Student needs
Student work	Student project	Student work (ind)
Teacher centered	Student work (individual)	Students work together
Teacher demonstrates	Teacher centered instruction	Teacher centered
Teacher planning	Teacher created resource	Teacher checks work/learning
Teacher training	Teacher planning	Teacher circulates
Teaching resources	Teaching resources	Teacher dedication
Teaching strategy	Teaching strategy	Teacher demonstrates/models
Test centered instruction	Test centered instruction	Teacher helps
Training curriculum	Training resource	Teacher responsibilities
Training objective	Training strategy	Teaching resources/materials
Training resources	Vague teaching strategies	Teaching strategy
Training strategy	Value of education	Test-centered curriculum
Tutoring/coaching	Values in training	Test centered instruction
Value of research		Three step method
Values in education		Training objectives
Values in training		Training requirements
		Training resources
		Values in training
		Values of education

Amy L. Moyer Professional Vita

EDUCATION

Lehigh University, 2007-2014 Bethlehem, PA

- ◆ Ed.D. International Educational Leadership
- ◆ Dissertation title: “Transferring training to practice: Improving primary school teaching in Bangladesh” (Defended January 30, 2014)
- ◆ Program focus: teacher training; management and administration of education programs; education reform; education for development, educational equity
- ◆ Education Policy Committee, graduate student representative

DeSales University, 2000-2007 Center Valley, PA

- ◆ M.Ed. TESOL
- ◆ B.A. Secondary Education & History, graduated Magna Cum Laude
- ◆ Pennsylvania Teacher’s Certification in History 7-12; English 7-12; ESL Endorsement; Family & Consumer Science K-12

PROFESSIONAL EXPERIENCE

The College of New Jersey, 2014-present Ewing, NJ

- ◆ Adjunct instructor of ESL for two academically focused courses—Intermediate and Advanced level English as a Second Language

Community College of Philadelphia, 2014-present Philadelphia, PA

- ◆ ESL Specialist in the Learning Lab

Lehigh University, 2013 Bethlehem, PA

- ◆ Adjunct instructor ESL for two academically focused courses—Academic Writing and Speaking & Listening
- ◆ ESL tutor for graduate students in the International English Learning Center

Northampton Community College, 2011-2013 Bethlehem, PA

- ◆ Program Coordinator, Center for International Education
- ◆ Managed Community Colleges for International Development (CCID), American Councils UGRAD, IREX Pakistan-UGRAD, and visiting international faculty
- ◆ Monthly and quarterly reports; budget oversight; program planning; scheduling enrichment activities for international students; new student orientation

King Saud University, 2010-2011 Riyadh, Saudi Arabia

- ◆ Supervisor, e-Learning Department: provided teacher support and training for technology integration
- ◆ Lecturer, English as a Second Language
- ◆ Technology Committee member; Curriculum Committee member

Parkland School District, 2005-2010 Allentown, PA
◆ Teacher, history and FCS; Red Cross Club advisor
◆ Technology Committee; District Health & Wellness Committee

Carbon Lehigh Intermediate Unit, 2005-2007 Allentown, PA
◆ Teacher, Extended School Year Program: summer program for special needs students

United Friends School, 2000-2003 Quakertown, PA
◆ Director, After School Program--planned enrichment activities; budget oversight; supervise staff

INTERNATIONAL EXPERIENCE

Caring for Cambodia Siem Reap, Cambodia
◆ International Internship sponsored by Lehigh University
◆ Teacher training; program evaluation; independent research

American Institute of Bangladesh Studies, 2012 Dhaka, Bangladesh
◆ Junior Research Fellow: research field work in Bangladeshi government primary schools and teacher training centers

Critical Language Scholarship Program, 2009, 2010 Dhaka, Bangladesh
◆ Full scholarship for intensive Bangla language study through US Department of State and The Counsel of American Overseas Research Centers.
◆ Intermediate language proficiency in Bangla

Teaching English in Poland Program, 2004, 2008 Przystok, Poland
◆ Teacher, English as a Second Language: summer language program for Polish middle school students

American Institute for Foreign Study, 2001 Krakow, Poland
◆ Jagiellonian University, courses in Polish language, history and literature

PUBLICATIONS & PRESENTATIONS

South Asian Studies Association, 2014. Paper presentation. "Opportunities in teacher education: A cross-case analysis from Bangladesh." Salt Lake City, April 11-13.

Comparative & International Education Society Conference, 2013. Paper presentation. "The road to quality improvements in primary education: The case of Bangladesh." New Orleans, March 10-15.

Bangladesh Development Initiative Conference, 2013. Paper presentation. "The road to quality reforms in government primary schools: A case study from Bangladesh."

Berkeley, February 22-24.

Comparative & International Education Society Northeast Regional Conference, 2011.
“Sustainable reform: Transformative teacher education in Latvia.” Pittsburgh University,
October 28-29.

Webster, Silova, Moyer, McAllister (2011). Leading in the age of post-socialist education
transformations: Examining sustainability of teacher education reform in Latvia. *Journal
of Educational Change*, 12, 347-370.

Silova, Moyer, Webster & McAllister (2010). Re-conceptualizing professional
development of teacher educators in post-Soviet Latvia. *Professional Development in
Education*, 36, 357-371.

Comparative & International Education Society Northeast Regional Conference, 2009.
“Examining sustainability of post-Soviet higher education reforms: The case of Latvian
Association for Cooperation in Education.” Lehigh University, October 8-9.

VOLUNTEER EXPERIENCE

The Program for Women and Families, 2013-present Allentown, PA
◆ Board Member; Chair of Marketing Committee

Citizens for Society, 2012 Belgaum, India
◆ Worked with team (remotely) to create innovative curriculum for a grassroots
organization working to educate the extreme poor in urban areas in India