Analytical Report on the Status of Multigrade Teaching:
Bangladesh Scenario

1. Introduction

The purpose of the UNESCO supported contract is to conduct a policy research on "Promoting Quality Learning through Multi-Grade Teaching in Bangladesh". The overall objective of the research is to examine the country’s current policies and practices concerning multi-grade teaching and identify evidence-based policy options for improving the overall quality of multi-grade teaching and identify evidence-based policy options for improving the overall quality of multi-grade teaching in the country.

2. Multigrade Teaching: Its significance

The achievement level of the students differ in each standard and in each section in a primary school. For example, in a school all the fourth standard students do not attain the same level of skills in the contents. Some may be in the third standard level and very few may possess the second standard level. Some other students may be in the higher level like fifth standard. These skill variations pose a great problem for the teacher in a new classroom situation. In this context, the multi grade teaching need not be considered as a burden, hindrance or difficulty to the teachers. On the other hand, it is the overcrowded class causes a serious concern. Therefore, it is clear that most of the classes are to be treated as multi-graded teaching classes. Even if all the five teachers are posted in a primary school, these are other factors which disturb the normal functioning of the school. Due to administrative problems, the transferred posts remain unfilled. The problems may vary from one country to another. But on the whole, a significant number of teachers in a significant number of educational institutions face this common problem. Reality dictates that schools in developed and developing countries (both primary and secondary) will be featured by large classes. Therefore, seeking quality improvement through reduction of class size becomes an impractical proposition. This is despite the fact that in Bangladesh the teacher student ratio has reduced over the years due to increase in provisioning. This calls for seeking improvements in quality through other means. This includes provisioning of adequate teaching learning material, improved training for teachers and in these cases strategies to improve classroom management and teaching practices. Multi-grade teaching can help in filling this strategic space. According to Mortimorep, “We should recognize that teachers, as well as pupils, have needs and that, even if clear gains cannot be identified in direct measures of student achievements, we should acknowledge the strain of managing and providing adequate feedback for large groups of pupils, particularly in the areas of social disadvantage” (Mortimorep, 1995, p.7). In Bangladesh, teachers are often challenged with managing large classes. They often share the same sentiments of being overburdened and fatigued. This is because they are trained to teach in ideal situation with much lesser class size.

Multi-grade schools are a community advocated means of providing primary education to children in rural areas of developing countries. Typically schools have one or two teachers with classes that are heterogeneous in both age and ability. Bangladesh has strong community heritage. Most development initiatives being implemented by the NGOs are community driven.
This implies that in Bangladesh favorable conditions exist where multigrade teaching is necessary. Following from this understanding, multi-grade schools are typically recommended as good educational practice for poor countries with low primary school coverage and quality in rural areas (Thomas and Shaw 1992; Hayes 1993). Advisors often refer to the Columbian experience, where multigrade schools, in the name of Escuela Nueva program, have been extensively implemented and favorably evaluated (Carnoy and Castro 1996; World Bank 1995; Colbert et al. 1993; Schiefelbein 1992; Lockheed and Verspoor 1991).

3. Meanings of multigrade teaching: Its meanings and implications

Multi-grade teaching has multiple meaning among the researchers and education practitioners, and is often deeply contested. According to little Multigrade teaching refers to the teaching of students of different ages, grades, and abilities in the same group. It is to be distinguished from ‘mono-grade’ teaching in which students within the same grade are assumed to be more similar in terms of age and ability. It is also to be distinguished from multi-age-within-grade teaching, which occurs when there are wide variations in age within the same grade. In their review of recent literature and projects on multigrade schools and classes in African primary school context, Brunswic and Valerien (2004:9) took a simpler approach of discussing multigrade teaching without dealing with the question of the meaning of the concept. They offer clues as to what multigrade teaching looks like, by stating that’s it is “…where a single teacher is responsible for pupils of various ages, spread over several grades, and who study different curricula.” Similarly, Joubert (2007:6). There are countries in which the above interpretation of multigrade teaching is contrary. In Greece, for instance, multigrade schools are called “monograde” schools, which is an exact opposite label to the one used in countries in Africa and elsewhere in Europe and so on. This is a contradiction between terms. This contradiction is a result of the approach used in Greece for naming schools. Brown (2009) indicates that Greeks count the number of teachers teaching in a school, rather than the grade level combinations. Although ‘multigrade’, ‘multi-age’ and ‘composite’ groups are often used interchangeably, PASTEP (2000) and others (Mason & Burns, 1996; Veenman, 1995) contend that the terms are not synonymous. ‘Multi-age’ suggests the existence, in the relationship between the situation/status leading to the adoption of multigrade teaching and its actual practice in schools seems to be a problematic one, which offers important lessons to researchers. When multigrade classes/teaching is established for reasons of necessity, the evidence suggests it is motivated by Geographic or demographic constraints (scattered settlements, low population density, declining population density resulting from rural urban migration, schools having a number of remote sites), or administrative or pedagogical problems (absenteeism, leave or lack of teachers, insufficient numbers of students in higher grades, excessive numbers of students in certain grades, competition between schools that are seen by parents as being of unequal quality).

4. Is Multigrade a response to necessity or choice?

Multigrade is usually seen as a viable response to resource constraints and a way of delivering basic education in the remote and inaccessible areas. However, ‘necessity’ is not the only reason why multigrade teaching is adopted. Vithanapathirana (2006:5) argues that certain systems of education deliberately adopt multigrade teaching considering the advantages that
can be drawn out of this approach. An example from England is given by Little (2006:21). In England, in order to implement the child-centred approach, vertical grouping rather than horizontal grouping was encouraged through which children are encouraged to learn through social interaction of the different grade groups. But the ‘necessity’ motive appears a more prevalent cause for multigrade teaching than choice. In Africa, Tambulukani (2004:8) as well as Brown (2008b:6) maintains that the adoption of multigrade teaching is mainly out of necessity -usually associated with the need to: (a) increase access to education provision to disadvantaged areas; (b) increase access to learning in understaffed schools; (c) maximize the use of available teachers and classroom space; (d) cost effective use of available material resources. [p. 8].

In Bangladesh, multigrade teaching has been taken up seriously by DAM, a national NGO. There are few other NGOs who have recently engaged with the idea of multigrade teaching. These NGOs are at a very early stage of their learning curve. These NGOs are operating on ‘necessity’ argument since multigrade teaching are being implemented in difficult to access outreach areas. They are yet to try this concept as a ‘choice’ in order to address quality challenges in the education system both in the state and non-state sector.

5. Multi-grade and its policy implications: Bangladesh context

5.1 Overview of the structure and governance of education in Bangladesh

The educational system in Bangladesh is three-tiered and highly subsidized. The government operates a large number of schools in primary, secondary and higher secondary levels. It also provides partial funding for many private schools. In the tertiary education sector, the government funds more than 15 state universities. In addition, there are at least 20 private universities accredited by the government. The three main educational systems in Bangladesh, ordered by decreasing student number, are:

i) General education system;
ii) Madrassa education system;
iii) Technical vocational education system;

Each of these three main systems is further divided into four levels:

i) Primary level (years 1 to 5);
ii) Secondary level (years 6 to 10);
iii) Higher Secondary level (years 11 and 12);
iv) Tertiary level.

As stated, general education in Bangladesh has four major stages: primary, secondary, higher secondary and tertiary education. Primary education is a 5-year cycle while secondary education is a 7-year cycle, with three sub-stages: 3 years of junior secondary (now it is included under primary stage), 2 years of secondary and 2 years of higher secondary. The entry age for primary is 6 years of age. The junior, secondary and higher secondary are designed for
ages: 11-13, 14-15 and 16-17 years. At all levels of schooling, students can choose to learn either in English or in Bengali. Private schools prefer and offer English-based instruction and curriculum, while government-sponsored schools opt for Bangla medium. In the general education course, higher secondary is followed by college/university level education through the Pass/Honors Graduate Courses (4 years). The duration of a Masters or graduate degree is one year for holders of Bachelors (Honors version) and two years’ for the holders of Bachelors degree (Pass version).

The education system in Bangladesh is governed by two ministries, which are the Ministry of Education (MOE) and the Ministry of Primary and Mass Education (MOPME), in association with various departments and directorates as well as various autonomous bodies. The Ministry of Education is responsible for policy formulation, planning, monitoring, evaluation and execution of plans and programs related to secondary and higher education, including technical and madrassa education. There are a number of agencies involved in governing the education sector, which are:

i) Director of Secondary and Higher Education (DSHE) - this directorate is responsible for administration, management and control of secondary and higher education, and other special type of education.

ii) Directorate of Technical Education (DTE) - is responsible for the management and administration of technical and vocational institutions.

iii) Ministry of Primary & Mass Education (MOPME) - is responsible for running the primary and mass education as its name implies.

Agencies that directly participate in monitoring and aiding the education sector are:

i) DPE (Directorate of Primary Education) - this directorate controls, coordinates and regulates the field level administration for primary education.

ii) National Academy for Primary Education (NAPE) – it is responsible for the renewal, modification, development of primary teacher training education, conducting training for primary level education officers and conduct C-in-Ed examination.

iii) Compulsory Primary Education Implementation Monitoring Unit (CPEIMU) - monitors the compulsory primary education program at the field level and conducts child-survey to collect information on the numbers of primary school-age population and children attending schools.

In addition to the above, there are two specialized agencies, which provide technical and information support to both the ministries, which are:

i) National Curriculum and Textbook Board (NCTB) - it performs the responsibilities of renewal, modification, development of curriculum and distribution of primary, secondary and higher secondary textbooks and;

ii) Bangladesh Bureau of Educational Information and Statistics (BANBEIS) - this organization is responsible for the collection, compilation and dissemination of educational
information and statistics at various levels and types of educational levels, including primary education.

5.2 Policy implications relevant to multigrade teaching

The latest education policy elaborated in 2010 does not specify anything about multi-grade teaching. However, the Government is strongly committed to alleviating the existing problems in respect of management and quality through reforms across the education system. And in this regard it is mentioned that new and innovative approaches in education would be appreciated. Similarly nothing specific has been mention in all the preceding policies since independence. This is because multigrade teaching is a relatively new entry in Bangladesh policy discourse. It therefore, needs to be seen to what extent the objectives and outcomes of multi-grade teaching is consistent with the policy. It also requires to be seen under what circumstances primary education is being implemented, what constraints are being faced and whether, multi-grade teaching can be of any help in overcoming problems and facilitating process.

Multi-grade teaching in developing countries such as Bangladesh usually emanates from necessity. It largely has to do with the inability of the state and non-state agencies to provide adequate number of qualified teachers for all the grades. Bangladesh like any developing countries is faced with resource constraints at schools. Lack of adequate number of qualified teachers for all grades is one of major constraints that divine access with quality.

Multigrade teaching offers an innovative approach in dealing the quality issue meaningfully within the confines of limited resources. As this approach is a recent development around the globe therefore, it did not receive much attention in the national documents of Bangladesh. However, some relevant documents were reviewed and the trace or potential place for multigrade education was examined. The results of the review is given below.

The national education policy, in line with EFA goal-2, states “Equal opportunities will be created to ensure access of all sections of children to primary access of all sections of children to primary education irrespective of ethnicity, socio-economic conditions, physical or mental challenges and geographical differences. This is the constitutional responsibility of the state. And since many of the students seek employment after this stage a strong base in primary education is a must (Education Policy 2010, PP.5). Therefore, with limited resources the state is challenged with creating provisioning of primary education by addressing ethnicity, socio-economic conditions, physical or mental challenges and geographic differences.

The state is aware about the challenges that hinder achievement of quality. It was recognized the significance of link between capable qualified teachers and quality of education. In order to create space for facilitating the process the policy states “Research initiative to find out the appropriate methods for innovation of effective teaching, evaluation and implementation will be encouraged and supported (Education Policy, 2010, PP.9).

This clearly provides an outlet for multi-grade teaching to contribute to the access and quality discourse by taking innovative initiatives. The near universal achievement of primary education
has been confined to enrollment. A substantial number of children get dropped out from the system. These children due to their economic hardships and social reasons find it very difficult to trace their way back to school at any point in time. In addition, there are still children in extreme difficult circumstances like that of urban slums and coastal areas where it is very difficult to make educational services available.

An overstretched government is therefore trying ways to address this formidable EFA challenge through non-formal (one teacher-one center) means. To this end, it has initiated one teacher-one center strategy to reach the children what it calls Reaching Out of School Children (ROSC) project. Therefore, the state has by this time created conditions where multigrade teaching could be introduced to make teaching learning process more effective and efficient. The government has created an Education Policy Implementation Committee to oversee the progress of policy implementation. It is also assigned with the responsibility to give advice to the government to overcome challenges to policy implementation. Therefore, multigrade teaching offers an advocacy opportunity for the educationist and civil society to persuade the government to explore the potentials of multi-grade teaching through research and piloting.

Global experience suggests multigrade teaching requires intense community participation in order for it to become meaningful. Since multi-grade teaching is a response to resource constraint. It requires strong community support to replace institutional support like monitoring, evaluation and pedagogical support. Such support can better be orchestrated and coordinated through non-formal means. Therefore, apparently multi-grade teaching holds potentials to be integrated with NFE approaches designed for ethnic minorities and people residing in inaccessible outreach.

One of the central principles of multi-grade teaching is that the diversity within groups are managed through dividing different variants within group into homogenous clusters of subgroups. This principle has the potentials for providing new insights into better management of large classrooms. The teacher students ratio, even though has become much more favorable; yet teachers have to frequently deal with the challenges of managing large classrooms. Therefore, it needs to be explored to what extend needs-based modification in multigrade teaching practice can be utilized in different circumstances for addressing the challenges of quality. Bangladesh has also recently spelled out its skills development policy. The policy includes both formal and nonformal mode of education as vehicles to deliver skills development for economic emancipation of the poor and destitute. The policy emphasizes on the “need to think beyond state controlled TVET systems and emphasize the varied types of formal and nonformal training through which skills are developed. The nonformal mode of delivery in Bangladesh is largely delivered through community based centers. These centers usually are managed by one or two NFE facilitators. Therefore, principles and practices of multigrade with appropriate needs based modification might help to facilitate a more efficient process of skills delivery in a multigrade setting.

In Bangladesh, as stated multigrade teaching is a relatively new entry in the pedagogical discourse, specifically in case of state provision. The state system overwhelmingly remains monograde. The system is faced with a number of challenges in which multigrade teaching could potentially shed some insights in overcoming them. There are a large number of children in absolute terms, who remain out of school. These children cannot be covered under current
provisioning. In order to address that the state has introduced a national project entitled, Reaching Out of School Children (ROSC). This project is for out of school children in the rural outreach run on one teacher-one-center basis. On the other hand the mono grade system due to low quality teaching learning process ends up with students with large variations in achievement levels. For example, in a given school all the fourth standard students do not attain the same level of skills in the contents. Some may be in the third standard level and very few may possess the second standard level. Some other students may be in the higher level like fifth standard. This scenario is repeated in other grades also. These skill variations pose a great problem for the teacher in a new classroom situation. On the other hand, overcrowded class also causes a serious concern. Pedagogical training provided to them by PTIs (Primary Teachers Institute) are designed for ideal teaching learning conditions, which hardly exist in reality. Therefore, the education sector practitioners are gradually awakening to the idea that multigrade teaching learning could offer realistic solution to this challenge.

Having stated the above, the hindrances to quality teaching learning process could be deeper than the technical pedagogical issues coupled with resource constraints. One of the central problems of implementing an educational innovation on a large scale– as multigrade school programs attempt to do – is changing the ‘core of educational practice’ (Elmore 1996). Elmore defines the ‘core’ as ‘how teachers understand the nature of knowledge and the student’s role in learning, and how these ideas about knowledge and learning are manifested in teaching and classwork. The “core” also includes structural arrangements of schools, such as the physical layout of classrooms, student grouping practices, teachers’ responsibilities for groups of students, and relations among teachers in their work with students, as well as processes for assessing student learning and communicating it to students, parents, administrators, and other interested parties’ (p. 2). This can become one of the central departure points for addressing the quality challenge in Bangladesh. This is because after having ensured physical provisioning for primary education and securing near universal enrollment to primary education, the state has not been able to tackle the quality issue with expected level of success. It has taken a number of institutional and strategic steps like introducing public exams for grade five completers, improved further professionalization and intensification of training by establishing sub-district (upazila) resource center, introduced reorganization of its B.Ed program with national and international expertise etc. However, such supply oriented inputs have not delivered the expected quality.

The core of educational practice in developing countries is often centered on a rigid format in which teachers lecture, students passively copy from the blackboard, participation is not encouraged, and rote memorization is the norm (Lockheed 1993). For Bangladesh, despite training inputs to teachers, the pedagogy remains stagnated within the confines of traditional mode as observed by Lockheed (ibid). Like many other developing countries, in Bangladesh ‘teacher-student relations are often hierarchical and there is minimal discussion among students’ (Fuller and Clarke 1994). This is due to the local cultural norms that define relationship between the elderly and the young in a non-participatory and hierarchical mode. In addition to that this issue of cultural lag has been further compounded by the limitation in training and practical experience in the implementation of active pedagogy (Schiefelbein 1992). The necessity of dealing with heterogeneous ages and abilities in one classroom, most teachers do not receive special training or materials for multigrade instruction (Keith 1989). Furthermore, dictated by the center the GPS and RNGPS, which are responsible for 84%
coverage are often bound by inflexible schedules, despite the variability of agricultural calendars (Colbert et al. 1993). While the pedagogical delivery under the auspices of NAPE (National Academy for Primary Education) recognizes the significance of participatory mode of teaching learning based on constructivist principles.

The role of teachers are now being reevaluated and are being reorganized within constructivist discourse that focus on change in teachers’ cognition and thought processes with teachers creating their own socially constructed teaching (Buchamann, 1986; Buchman & Floden 1990; Cochran, De Ruiter, & King; Condon, Clyde, Kyle, Hovda, 1993; Schon, 1987, Zeichner& Gore, 1990). Implementing multigrade schools along the lines of recent recommendations (Thomas and Shaw 1992; Schiefelbein 1992) implies a revolution at the core. For example, teachers would shift from their traditional role as direct lecturers to that of facilitators who guide students’ independent efforts to acquire and construct knowledge. Multigrade teaching also offers the opportunity to students to assume more responsibility both individually and collectively. These processes are facilitated by their classmates, as cooperative learning, self-instructional textbooks, peer tutoring etc. All these issues requires to be factored into the policy discourse in a more clear and consistent manner.

6. Bangladesh multigrade teaching: DAM initiative

The most of the rural schools there are one or two teachers to teach five grades, especially in tribal and hilly pockets. Evenly in thickly populated areas where enrollment is high, one or two teachers are posted. The financial constraints do not permit the government to provide sufficient teachers, therefore multigrade situation exists in Bangladesh. The government has paid special attention to improve multigrade schools qualitatively. A project named IMPACT (Instructional Management by Parents, Community and Teachers) in early 1970s with a concept known as “no more schools”. This concept proposed to replace textbooks, teachers and the grades with self-instructional material, peer learning centre with community support and the management of group learning. This innovation evolved in Philippines and Indonesia.

One of the key assumptions of IMPACT was that the instruction materials and proper physical facilities can improve the multi-grade schools. The linguistic problems in tribal areas obstruct matter in real learning, so the tribal teachers are needed for tribal area. It was also assumed that concentration upon instructional material, instructional organization and replacement of staff is also helpful in improvement of multi-grade situations.

Community volunteer teachers included incorporation of instructional supervisors, organizing community motivation, and promoting self-learning through modular instructional materials. Paradoxically the multigrade innovation disintegrated as stated earlier, despite the fact that owing to chronic lack of teachers in schools. The decline of multi-grade is evidenced from its virtual absence from the policy discourse. Long after the decline of IMPACT intervention, the multigrade issue was again raised by Dhaka Ahsania Mission through UNESCO’s initial support. This initiative is now being attempted to be replicated by a government managed ROSC project. Despite these developments the multigrade issue still remains in the fringes. There is no specific mentioning of multi-grade teaching in the latest policy documents. However, it is certainly to emerge by default when the issue of quality is dealt with.
The project is being implemented by a consortium of partners with Dhaka Ahsania Mission (DAM) as the lead agency. The other implementing partners of the project include Assistance for Social Organization and Development (ASOD), Christian Commission for Development in Bangladesh (CCDB), Development Organisation of the Rural Poor (DORP), PadakhepManabikUnnayanKendra (PMUK), SUROVI, Voluntary Association for Rural Development (VARD) and Young Power in Social Action (YPSA). Besides, Plan Bangladesh supports the project as a technical partner.

The multigrade initiative entitled ‘UNIQUE’ project being implemented by Ahsania Mission is perhaps the only mentionable project which can claim the potentials of revival of multigrade teaching. The project is being implemented with financial support of the European Union. The major objective of the project is to impart quality education to out-of-school and drop-out children particularly from the disadvantaged group through the opening of complete multigrade classes. It also intends to provide remedial services to the slow learners of targeted government and registered primary schools. Promoting and up-scaling quality education through implementing community based non-formal primary education and networking them with formal education were the core theme of UNIQUE model. All children learning activities evolved through the Community Learning Centres (CLC). These CLCs provided support to children aged 6-12 years. On the other hand, learning camps were set up mostly in the government primary schools and conducted pre-school activities for children aged below 6. Since, UNIQUE project will be one of the objects of study, the lessons learned and its future implications will be investigated and elaborated at greater details subsequently.

7. Global trends and Bangladesh experience in multigrade teaching with policy implications

Bangladesh is yet to adopt multigrade teaching in a meaningful way. Multigrade teaching is yet to emerge prominently in policy discourse. An understanding of global trends in multigrade teaching might help to enable the policymakers to identify the issues at stake within Bangladesh context. This has been discussed below.

7.1 Prevalence of multi-grade teaching

Multi-grade teaching has persisted throughout twentieth century and continues to assert its position during the twenty first. Since 1950s, large number and proportion of teachers who were teaching in one-teacher schools; some 20-40% in countries of South and Central America, 16% in India, 25% in Turkey and 15% in USSR.

The majority of multi-grade schools are located in poor disadvantaged area in the developing countries. For instance, in 1986 India had over 300,000 one or two teacher schools, representing more than 60% of all schools. In Sri Lanka the percentage is lower. However, seven hundred schools in Sri Lanka which has either one or two teachers are located in the most difficult environments in a country with achievement of near universal primary education. Many other developing countries such as Malaysia, both Malay and Chinese schools located in small villages and settlements in remote and secluded areas of Sabah; Tamil schools in rubber estates and aboriginal schools in the interior and remote areas of Peninsular Malaysia.
Similarly in Peru the percentage of schools which were one-teacher schools in 1988 was almost 40%, which are located in the Andean and Amazon regions of the country. In Zambia 26% school have multi-grade teaching. Similar trends are observed in case of Bangladesh. DAM has established multigrade centers in underserved and inaccessible areas located in hill tracts, coastal areas, as well as in the areas which are vulnerable due to extreme poverty.

7.2 The lack of multigrade approach in teacher education and curriculum

A study carried out by Little (1995) based the Library of the Institute of Education at the University of London, which has the one of the largest collection of texts in education suggests that primary schools tends to assume that same age class groups are basic organizational units for which curricula is developed. However, in few instances like in Sweden it has been reported by Malmoros and Sahlin (1992) that multi grade teaching enjoys positive reception by many teachers. In 1986 the National Institute of Educational Research undertook a research on elementary and primary school curriculum in countries of Asia and the Pacific (NIER, 1986). Although the information presented on class size indicates the multigrade teaching is rather widespread, no country makes specific mention of it. Even though the texts in India, Nepal and Australia includes section on school organization methods of the multigrade reality. According to Hawe (1979) based on his extensive study on Africa suggests that “deep rural areas are often low and uneven it is common to find small classes sharing a classroom, sometimes with more than one but nearly always seated as a separate group with their territory and blackboard for their exists a strange orthodoxy that teacher with modest education ‘cannot be taught to handle more than one class at atime” (Hawes 1979: 15). In Bangladesh, the multigrade teaching remains problematic. The textbooks that are used are designed for monograde puproses. As a result teachers’ training on multigrade teaching has become rather challenging. The implications surrounding this issue have been further discussed subsequently.

7.3 Conditions under which multigrade teaching arises out of necessity

From situation arising out of necessity multigrade teaching is introduced under a given set of circumstances. Some of such trends which are more common in nature and there comparability with Bangladesh context has been provided below.

<table>
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<tr>
<th>Sl.No.</th>
<th>Global trend</th>
<th>Applicability to Bangladesh context</th>
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<tbody>
<tr>
<td>i</td>
<td>Schools in areas of low population density where schools are widely scattered and inaccessible and enrolment is low. Schools may have only one or two teachers responsible for all grades.</td>
<td>In Bangladesh this rarely the case, since it is one of the highest densely populated area in the world.</td>
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<td>ii</td>
<td>Increase access to education provision to disadvantaged areas.</td>
<td>Bangladesh has many disadvantaged areas like hill tracts where indigenous people reside, people living in chars and</td>
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<tr>
<td>Sl.No.</td>
<td>Global trend</td>
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<td>iii</td>
<td>Schools in areas where the student and teacher numbers are declining, and where previously there was monograded teaching.</td>
<td>This is not applicable for Bangladesh</td>
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<td>iv</td>
<td>Schools in areas of population growth and school expansion, where enrollments motivations for Multigrade Teaching in the expanding upper grades remain small and teacher numbers few.</td>
<td>This is not applicable for Bangladesh</td>
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<td>v</td>
<td>Schools in areas where parents send their children to more popular schools within reasonable travel distance, leading to a decline in the potential population of students and teachers in the less popular school.</td>
<td>This is not applicable for Bangladesh</td>
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<td>vi</td>
<td>Schools in which the number of students admitted to a class exceed official norms on class size, necessitating the combination of some students from one class grade with students from another grade.</td>
<td>Large class size is a common problem in Bangladesh.</td>
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<td>vii</td>
<td>Mobile schools in which one or more teachers move with nomadic and pastoralist students spanning a wide range of ages and grades.</td>
<td>This is limited to nomadic community known as ‘bede’. They usually live in boats and do not stay in one place for long. Many NGOs have set up ‘boat-schools’ for them.</td>
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<td>viii</td>
<td>Schools in which teacher absenteeism is high and supplementary teacher arrangements are non-effectual or non-existent.</td>
<td>Teacher absenteeism is a common problem in Bangladesh. However, there is little realization among the policy makers that multigrade teaching could be one of the ways through which this problem could be addressed.</td>
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<td>ix</td>
<td>Schools in which the official number of teachers deployed is sufficient to support monograde teaching, but where the actual number deployed is less (for a variety of reasons).</td>
<td>This is a common problem in Bangladesh</td>
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<td>x</td>
<td>Schools in which students are organised in multigrade rather than monograde groups, for pedagogic reasons, often as part of a more general curriculum and pedagogic reform of the education system.</td>
<td>Not a general scenario in Bangladesh</td>
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### 7.4 Professional and social isolation

Teachers in multi-grade teaching usually face assignment to more subjects, more grade levels and more extracurricular activities; lower budgets and salaries; and inadequate materials (Barker 1986; Dove 1982). The inaccessibility of supervisory offices hinders the distribution of textbooks and other resources, as well as limits the opportunities for district administrative support and teacher merit reviews. However, in case of Bangladesh it is less of a problem since due to high density of population, relatively better accessibility due to a developed communication network and presence of administrative set up at sub-district system makes timely distribution of textbook possible (even though sometimes there are delays due to administrative inefficiency). In addition, Bangladesh has a strong NGO community that makes it possible for delivering services to remote relatively inaccessible areas. However, problems of resource limitation remain, which restricts establishing schools for children who have dropped out of schools or did not have any chances to enroll all together. To address this situation the state has introduced one-center-one-teacher primary education system making NGOs the implementing agencies under ROSC (Reaching Out of School Children) project. The potentials for introducing multi-grade system based on global experience are rather strong since low quality of teaching remains a critical issue.

### 7.5 Workload and pressure on teachers

Multigrade teaching may require more work than single-grade instruction. Demands on teacher resources, both cognitive and emotional, are greater (Miller 1991b). Curriculum design and organization requires attentive preparation and greater coordination (Miller 1991a). This is particularly the case if teachers do not have access to specialized materials, such as self-instructional textbooks, to support their preparation. Bangladesh has a long way to go in developing quality specialized and self-instructional materials for teachers. Multigrade schools are usually understaffed so they must fulfill a variety of other roles involving administration, transportation or community organization (Scott 1984). Even though a concerted effort has been made with academia involving Dhaka University and BRAC University to strengthen the capabilities of the teachers, there is no evidence that it has had any worthwhile positive impression in the learning outcomes of the students. Moreover, the very low salary and impermanent nature of the job leaves negative impact on teachers’ motivation and morale.

### 7.6 Sense of ‘ownership’ in multi-grade teaching

Developing viable and replicable multigrade delivery strategy is often challenging since it has to deal with inner contradiction. On the one hand it requires a homogenous approach of implementation so as to create better conditions for ensuring effective and efficient implementation through appropriate M&E measures. On the other hand, such unified package of delivery creates hindrances for the teachers by taking away the space for creativity and
individual initiative. Therefore, meaningful implementation of multigrade teaching will require a meaningful balance between the two. In case of Bangladesh one needs to be cautious since multigrade teaching is relatively a new entry and it has long way to go before implications of multigrade policies and strategies could be fully understood.

7.7 Core multi-grade practices

Developing countries, specifically in Africa and Latin America have practiced multigrade long enough to experience a number of emerging trend. These trends need to be understood in terms of their effect and impact on learning processes and outcomes. In the following an attempt has been made to find out a few key trends in multigrade teaching and its relations to recent Bangladesh experience.

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<tr>
<td>i</td>
<td>A heavy bias on grouping methodologies; varied grade combinations; varied class size; and so on in South Africa and elsewhere in the world.</td>
<td>This is the case for Bangladesh. However, the variations of grouping are mainly limited to only grade combination.</td>
</tr>
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<td>ii</td>
<td>An emphasis on teaching students the value of independence and cooperation.</td>
<td>This is embedded within the instruction strategy.</td>
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<td>iii</td>
<td>A change in the role of teachers from giver of information to facilitators of learning.</td>
<td>This is intended, but teachers are usually inexperienced and with low education qualification.</td>
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<td>iv</td>
<td>Effort to assist teachers to plan across-grade level curriculum objectives/assessment standards, how to amend the curriculum to transform it from a single grade orientation to a multigrade orientation, and modify the school timetable.</td>
<td>This is a transformative process, best initiated from the state level. Currently capacity, intention as well as general policy awareness about multigrade teaching is non-existent.</td>
</tr>
<tr>
<td>v</td>
<td>Effort to develop self-study learning and teaching materials.</td>
<td>Attempts has been made for developing self-study learning and teaching materials but it is not being successful due to traditional rote based examination system.</td>
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<td>vi</td>
<td>Recognition of the need to incorporate multigrade teaching in teacher education. While teacher training institutions in many developed nations have gone on this trajectory, those in developing nations lag.</td>
<td>Such effort is virtually absent in the system.</td>
</tr>
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<td>vii</td>
<td>In many developed nations, attitudes of parents towards multigrade are often negative, while in developing countries</td>
<td>Initially multigrade teaching initiative was not popular among parents and teacher. However, after awareness and motivation</td>
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such as South Africa, the negative attitude is among teachers and school leaders.

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<th>Sl.No.</th>
<th>Global trends</th>
<th>Bangladesh experience</th>
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<td></td>
<td>intervention doubts have been reduced. Multigrade teaching has gained further legitimacy since learning outcomes are better than monograde schools.</td>
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### 7.8 Teachers’ attitudes challenging their own performance in multigrade classrooms

Several studies have focused on perceived challenges posed by the multigrade classroom for teachers and their teaching tasks. In studies of teachers in developing countries, there is evidence of their generally negative perceptions of multigrade classes and multigrade teaching (Little, 2005). In a study of teachers in the Nuwakot and Kavre districts of Nepal, 50 out of 56 teachers with experience of multigrade teaching think that multigrade teaching presents them with more difficulties than monograde teaching (Suzuki, 2004). However, surprisingly in Bangladesh, contrary to the global experience teachers are relatively motivated to teach. Especially this is true in case of women teacher. Women teachers belong to poor communities. They have very little prospects for economic activity, that also near to the location of their residence. The salary even though is low, it creates a sense of empowerment among women teachers since she enjoys elevated status in the community.

### 7.9 Managing multigrade class

Studies of principals in multi-grade schools, especially in developing countries, show that many are teaching principals; in other words, they also serve the role of classroom teacher (Murdock & Schiller, 2002; Perkins-Gough, 2002; Titus, 2004). This is possible in situations where there are more than one teaching staff in one multi-grade or one principal is responsible for more than one multigrade schools. However, in Bangladesh this situation is not representative of the various models used. In Bangladesh it is one teacher-one classroom model. All the problems and prospects of multigrade system emanates from this situation.

Currently Dhaka Ahsania Mission (DAM), which is in the forefront of implementing multigrade teaching has an elaborate system for managing multigrade class. Each multigrade class run by DAM has- beginners, advanced, skilled and independent. In the class there is opportunity to interact with the teacher and group leader from each group. A student with advanced ability becomes the group leader in each table who sometimes help the teacher to follow up the lower grade students. Learning-by-doing method is followed in the class while special attention is given to slow learners. Project work on issue based topic facilitates in-depth practical learning of the students. Moreover co-curricular activities and ‘activity in a big group in the beginning of each new subject’ stimulate children’s learning (Rahman, 2014).

In case of DAM there is one supervisor, who is equivalent to principal, for 10 multigrade centers. The supervisor is not involved in day to day administrative functions of the centers.

### 7.10 Achievements in multigrade and single-grade classes: literacy and numeracy factors
Miller (1990) reviewed 13 experimental studies assessing academic achievement in single-grade and multigrade classrooms and found there to be no significant differences between them, although some studies suggest there may be significant differences depending on subject or grade level (Mason & Burns, 1996; Pratt, 1986; Veenman, 1995; Veenman, 1996). The data clearly support the multigrade classroom as a viable and equally effective organizational alternative to single-grade instruction. Given the fact that Bangladesh is relatively new in multigrade teaching, it can indeed take benefit from lessons learned elsewhere in the world; and device needs appropriate strategy for Bangladesh.

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<th>Global trend</th>
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<tr>
<td>1</td>
<td>In Burkina Faso and Togo, Jarousse and Mingat (1991) found that students in multigrade classes performed better than those in monograde classes.</td>
<td>In Bangladesh, limited experience has indicated similar finding.</td>
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<td>2</td>
<td>In Colombia, within the Escuela Nueva programme, grade three students in the multigrade schools performed better in Spanish and maths, and grade five students better in Spanish (Rojas and Castillo, 1988; Psacharopoulos, Rojas and Velez 1993, McEwan 1998).</td>
<td>There is no such in-depth research conducted in Bangladesh. However, the field level implementers have mentioned that children in multigrade do better in social science, language and life skills.</td>
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<td>3</td>
<td>In Pakistan, Rowley (1992) showed cognitive differences in favour of monograde schools.</td>
<td>No such assessment has been conducted.</td>
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<td>4</td>
<td>In the Turks and Caicos Islands, Miller, Forde and Smith (1994) found that students in multigrade schools consistently outperformed those in monograde schools in the terminal grade of primary school. In a subsequent study, Berry(2001) found that students in multigrade schools performed better on a test of reading than those in monograde schools but that the advantage was greatest for the lowest achieving students.</td>
<td>There is no in-depth research findings available. However, there are early indications in favor of multigrade teaching.</td>
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<tr>
<td>5</td>
<td>In Indonesia, Bray reports that students in a project designed to support multigrade teachers, “performed better in most subjects than did other students” (1987:43).</td>
<td>No information whether this was tried out at scale where generalization is possible.</td>
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</table>
7.11 Productive personal and social learning effects

When it comes to student affect, however, the case for multigrade organization appears much stronger. Pratt (1986) identified 15 studies that addressed, variously, children’s friendships, self concepts, altruism and attitude to school. Overall, he claimed that the socio-emotional development of students in multigrade groups is either accelerated or showed no difference, when compared with students in monograde groups, a conclusion confirmed in Miller’s (1991) review of 21 studies. And in her review of studies from the US and UK, Ford (in Little, 2005) reports positive and negative findings on the reduction of anxiety levels, the maturity of friendship patterns and on personal and social adjustment and positive findings on self concept, self esteem, and attitudes to school. Studies of the social effects of learning in multigrade settings in developing countries are very few indeed (Little, 2005). In the Escuela Neuva programme in Colombia an early evaluation credited the programme with positive effects on self-esteem and civic behaviour (Colbert, Chiappe and Arboleda, 1993). A subsequent study confirmed the positive effect for civic behaviour but not for self-esteem (Psacharopoulos, Rojas and Velez, 1993).

In Bangladesh, there appears to be high emphasis on learning outcomes measured mainly through tests based on nationally determined 29 competencies. The personal and social learning effects of education is hardly emphasized and the teachers are yet to develop their capacities in this field.

A UNESCO/APEID study from 12 countries in the Asia and Pacific region lists four advantages of multigrade teaching, which are non-cognitive in nature:

- Students tend to develop independent work habits and self study skills.
- Cooperation between different age groups is more common, resulting in collective ethics, concern and responsibility.
- Students develop positive attitudes about helping each other.
- Remediation and enrichment activities can be more discreetly arranged than in normal classes.

Although these four advantages are not grounded in systematic study, they do suggest the kinds of non-cognitive effects that a well-organized multigrade classroom can promote. The DAM multigrade teaching is designed to elicit personal and social learning. However, how the teaching process is having influence on children is not clearly known.

7.12 Professional development needs of teachers

A generally acknowledged point made by multigrade practitioners is that the multigrade classroom is more of a challenge than the single-grade classroom (Kyne, 2005). Skills and behaviour required of the teacher are different, and coordinating activities is more difficult (Lingam, 2007). In fact, such a realization is one reason graded schools came into being in the
first place (Callahan, 1962). It is thus logical to suggest that working in an open, multigrade school requires serious, ongoing teacher training and a commitment to hard work. The teachers in multigrade teaching under the remit of DAM have low qualification (Secondary School Certificate) and receive a short training before getting into teaching. However, this deficiency is compensated by the enthusiasm of the teachers, as well as intense monitoring coupled with regular technical support from DAM.

7.13 Instructional strategies

Kyne (2005) found that instructional strategies are key to improving the quality of teaching and learning in the multigrade classroom. The promotion of approaches that increase the level of student independence and cooperative group work tend to be suggested. Little (2001) suggests that these involve a change in the role of the teacher from ‘giver of information’ to ‘facilitator’. This is emphasized in Dhaka Ahsania Mission Model. However, since teachers in these multigrade centers are low paid young volunteers they are yet to make impression as effective facilitators. The DAM project implementers are aware of this very critical capacity in order to make multigrade teaching work. Facilitation-centered instruction strategies require a balanced meaningful interplay between i) peer instruction, in which students act as teachers for each other; ii) cooperative group-work, which involves small groups engaging in collaborative tasks; iii) individualized learning programmes which involve the student in self-study Kyne (2005). This implies that the widely practiced approach of the teacher being a transmitter of knowledge requires reconsideration. This also implies a new level of sophistication in the business of teaching learning process.

7.14 Instructional materials

Kyne (2005) found that instructional materials also tend to be written for the monograde classroom. Consequently, they are produced as grade-level textbooks and are designed to be delivered by the teacher to the children. There is evidence to suggest that such materials are ineffective in multigrade teaching (Little, 2005).

Bangladesh government’s policy is to deliver quality with equity. This has led to the policy of implementing unified curriculum with predetermined set of textbooks created for monograde teaching purposes. The multigrade teaching implementers have also chosen the same textbooks of the state prepared and distributed by NCTB (National Curriculum and Textbook Board). This is done for ensuring mainstreaming of children towards further education by providing education which in the eyes of state is considered to be legitimate. However, DAM has prepared its own supplementary materials tailor-made for the multigrade teaching learning conditions. What impressions these are having on teaching learning process, as well as learning outcomes is not clearly known.

7.15 School and community

Multigrade schools are often located in remote and difficult to reach areas (Juvane, 2005). They often are far from the educational centre and receive little pedagogical support (Titus, 2004). Titus found that the communities in which multigrade schools are located often do not see the value of education, and often speak a different language from the ‘official’ one of the
school. However, the limited multi-grade experience in Bangladesh is apparently somewhat different from the general global trend. Field experience suggests that in Bangladesh due to sustained awareness campaign over the years spearheaded jointly by the state and non-state providers, communities assign high priority to education. This is also true in remote inaccessible areas that includes hilly, chars and areas surrounded by large water bodies that makes communication difficult. According to DAM experience on multigrade teaching, people in the remote areas with abject economic circumstances have voluntarily provided land and full cost for establishing centers. DAM is also well known globally for its CLC initiative. They have a long experience of organizing communities through CLCs based on empowerment model of integrated community development. They have integrated the idea CLCs with multigrade teaching. In fact multi grade centers are located in CLCs. This gives a direct sense of ownership to multigrade teaching process. This also makes it easier to monitor the functioning of multigrade teaching since CLC is the congregation place for the community to discuss all issues related to community development.

7.1 Increased Awareness

After extensive literature analysis, Little (2005) found that many educational policymakers, planners, professional support staff and the public at large, are unaware of the extent and the nature of the needs of multigrade teachers and classes. Curriculum, educational materials, teacher preparation and assessment systems are predicated on monograded schools and classes (Little, 2005). In Bangladesh, since multigrade is yet to find a meaningful space in education discourse, and since it has not been taken seriously for the majority of education delivery it is yet to make any meaningful impression. However, even though DAM is implementing in a small way it has strategic and operational significance. Its importance is derived from its building on its multigrade teaching initiative based on its long institutional experience on community participation, as well as expertise in education sector. It is implementing multigrade since seven years. By this time it has gathered sufficient information to initiate policy dialogue based on its accumulated field experiences.

7.17 Curriculum Adaptation

Little (2005) maintains that curricula premised on a single-graded structure need to be adapted to meet the needs of the multigrade classroom. Training to do this is paramount (Ninnes, 2006). The adaptation, according to Little, should be undertaken jointly by teachers guided/supported by curriculum experts working at national (or teacher training) level. But the adapted curriculum must be sanctioned and validated by the highest authority. Since multigrade teaching is yet to receive its due share of attention among the policymakers; also since, it has not spread to the magnitude whereby it could be termed as a national issue; the issue of curriculum adaptation has not been taken seriously by any agencies; both state and non-state. Since multigrade teaching is in its early stage and field lessons are emerging; it would perhaps be expedient to engage with the issue. DAM can certainly play a facilitating role. Four curriculum adaptation strategies have been shown based on global experience to be effective in multigrade classrooms, and could be promoted in teacher training:

- Multi-year curriculum spans:
In this strategy units of curriculum content are spread across two to three grades rather than one. All students work through common topics and activities (Daniel, 1988; Little, 2005).

- **Differentiated curricula:**
  In this strategy the same general topic/theme is covered with all students. In this arrangement, Vithanapathiran (2006) suggests that students in each grade group engage in learning tasks appropriate to their level of learning.

- **Quasi monograde:**
  In this strategy, Little (2005) points out that the teacher grade groups, in turn, as if they were monograded. Students follow the same or a different subject at the same time. Teachers may divide their time equally between grade groups, or they may deliberately divide their time unequally, choosing subjects or tasks within subjects that require different levels of teacher contact.

### 7.18 Learning materials

The evidence is suggesting that successful strategies for multigrade teaching depend on adequate supplies of learning materials to support individual and group based learning (Lingam, 2007; Vithanapathirana, 2006). Little (2005) reasons that this would enable teachers to spend time with some groups of students while other students work alone, in pairs or in small groups. Multigrade teachers need preparation in developing effective materials for learning in their unique teaching context. The Escuela Nueva programme, in which study guides for individual students were developed for each of the core curriculum subjects, is the best known example of this principle (UNESCO, 2004). In Bangladesh, DAM has not taken any attempt to change the curriculum and the text books used. However, it has created supplementary materials, which apparently are of high quality. Much effort is needed to develop learning materials that could ensure wider national use. Therefore, an optimum balance has be struck between quality and cost to ensure replicability of the learning materials developed specifically for multigrade purposes. Similar approach of developing learning materials is found in case of NCTB for pre-primary level education where about ten extra supplementary readers were developed and distributed to learning centers.

### 7.19 Assessment systems

Educational assessment has many purposes. The most dominant purpose in most systems of education (and especially so in developing countries) is selection for further education or occupations (Little, 2005). Other purposes include (a) the monitoring and/or accountability of the performance of systems and schools; (b) the promotion of learning through formative assessment (Little & Wolf, 1996). Hargreaves (2001) argues that multigrade settings lend themselves to assessment systems to promote learning, because they encourage teachers to recognize individual differences in learning, rather than treating all students as if they were at the same level. Currently, the assessment system used in multigrade teaching in Bangladesh does not take into consideration the specific learning pathways of students based on individual capacity. Rather it takes the current traditional path, which is ultimately to prepare students for successfully passing public exam for grade five completion. This puts limitation to the entire concept of multigrade teaching in terms of ultimate learning outcomes.
7.20 Areas of further research

Since Bangladesh is relatively new in adopting multi-grade teaching in different settings, the core of research would be formative in nature. Global experience in this regards suggests at least three domains where research needs to be carried out; these are: i) Formation of multi-grade classes; ii) Teaching and assessment practices with them; iii) Attitudes to them by parents, teachers and school leaders.

Tsolakidis et al. (2005:12-15) argue that the structure which multigrade teaching and its approaches demands in order for it to work as a teaching model disallows it to be treated in the same way as other teaching models. They put forward a comprehensive postmodern perspective in which multigrade teaching is constituted by a multiplicity of practices at all levels, including learning out of school, with the following as primary objects of research:

- The nature of multigrade teaching and multigrade schools;
- The structure of multigrade teaching, and learning;
- The goals of multigrade teaching and schooling;
- Cognitive and noncognitive outcomes;
- Subjects and aspects of subjects that multigrade teachers use certain approaches in;
- Effective ways of organising students for instruction in multigrade classes;
- Time students in multigrade classes spend on independent seatwork and paired/group seatwork;
- Multigrade teaching, including the methods, processes and approaches involved;
- The full range of texts, materials, aids and electronic sources employed;
- The human and social contexts of multigrade learning/teaching in all their complexity; and
- The interaction and relationships between all of the above factors.

8. Conclusion

The literature is suggesting that a more radical approach to curriculum is premised on a shift in philosophies of learning and teaching, from one that emphasizes student homogeneity and standardization of teacher inputs to one that acknowledges the diversity of students and the need for a differentiation of inputs (Little, 2005). Differentiation refers to how the same teacher organizes learning for different individuals and/or groups of students (Little, 2005). But differentiation can also refer to difference of subject taught, difference of input/stimulus, difference of activities undertaken by students, difference of outcomes expected (Little, 2005). While each type of differentiation can be observed in multigrade and many monogrades classes, they are not generally built into the fabric of national curricula (Lingam, 2007; Little, 2005) as stated. The experiential learning in multigrade teaching combined with its philosophical underpinning is yet to reach the awareness threshold of the policymakers in Bangladesh. Considering the degree of serious uphill battle the state is experiencing on quality issues, it appears that it is high time to consider both the ‘choice’ option along with the ‘necessity’ option of multigrade teaching in ensuring universal access to primary education with equity
and quality in Bangladesh. Finally, Bangladesh can certainly benefit from systematic understanding and application of global experience by adapting it within its own contextual needs.

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