

Quality Indicators of Multigrade Instruction in Southeast Asia



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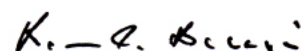
Foreword

Most Southeast Asian countries have traditionally provided access to education to remote, disadvantaged and marginalized learning communities through multigrade instruction. These countries implement multigrade instruction as a necessity rather than a choice. Their demographic and geographical characteristics call for the organization of multigrade classes. In some instances the lack of educational resources such as classrooms and teachers has further increased the need for this educational delivery approach.

Recognizing that multigrade instruction will likely continue to be a significant feature of the educational system of most Southeast Asian countries, the Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH) spearheaded a regional review of quality indicators of multigrade instruction through its SEAMEO Regional Education Program (SIREP). The study aims to identify present models of multigrade schooling, and quality of instruction in Southeast Asia.

The regional review reveals that significant progress has been achieved since the 1920's when countries first implemented multigrade instruction to resolve issues of access to educational opportunities. However, there are still challenges that must be addressed such as the need for advocacy to raise awareness on improving quality in the multigrade schools. In some countries policy support that specifically deal with multigrade instruction and multigrade schools concerns is sorely lacking at both the national and local levels. Sometimes education sector planning fails to consider the situation of multigrade schools.

This report aims to identify quality indicators of effective multigrade instruction. It likewise proposes an action agenda, which will hopefully provide guidance to multigrade school implementers on how to maximize the impact and benefits of multigrade instruction for learners. This report further presents an interesting mix of practices and strategies which may be useful for multigrade teachers and school heads.



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Acronyms and Abbreviations

AY	Academic year
BEC	Basic Education Curriculum (Philippines)
CD	Compact disc
DepEd	Department of Education (Philippines)
EFA	Education for all
E-IMPACT	Enhanced Instructional Management by Parents, Community, and Teachers (Philippines)
EQIF	Education Quality Indicators Framework
ICT	Information and communication technology
IT	Information technology
LGU	Local government unit
MGP-BE	Mainstreaming Good Practices in Basic Education
MOET	Ministry of Education and Training (Vietnam)
MoEC	Ministry of Education and Culture (Indonesia)
MPS	Mean percentage score
NAT	National Achievement Test (Philippines)
NGO	Nongovernment organization
NSP	National Standard of Education (Indonesia)
OBEC	Office of the Basic Education Commission (Thailand)
PALC	Perez Assistance Learning Center (Philippines)
PASEC	Programme d'Appui au Secteur de l'Education Primaire au Cambodge (Cambodia)

PC	Personal computer
PE	Physical education
PHIL-IRI	Philippine Informal Reading Inventory
PIPP	Education Development Master Plan (Malaysia)
PTA	Parents and teachers association
SEAMEO INNOTECH	Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology
SIREP	SEAMEO INNOTECH Regional Education Program
UN	United Nations
UNICEF	United Nations Children's Fund
UPSR	Primary School Achievement Test (Malaysia)
USAID	United States Agency for International Development

Glossary of Terms

Brother/Sister Teaches Brother/Sister Program

A multigrade teaching program in Thailand wherein peer tutors act as leaders and help out other students.

Context

Economic and social forces that have an effect on the multigrade educational system but are beyond its direct control. It has an important potential influence on educational quality, which may include condition and status of the society, policies, and aid strategies.

Entrance test

Also known as a “pre-assessment test” that is given at the start of the schooling process to gauge the students’ knowledge.

Family groupings

Multigrade classes borne out of pedagogical considerations.

Forced mixed grades

Multigrade classes formed out of necessity or enrolment characteristics.

Grade teaching

A type of multigrade teaching wherein a single teacher handles more than one class and teaches all of the subjects throughout the day.

HeKaSi

The combination of geography, history, and civics in the DepEd’s social studies curriculum taken up in the Philippines.

Inputs

Resources made available to support the multigrade teaching process such as materials and human resources, among others.

Itinerant teacher

A locally funded teacher in the Philippines employed for his/her special skills, training, and expertise in music, agriculture, and the like.

Kelas Bercantum

A combined or a multigrade class that is composed of a group of students from two separate grades who work within one classroom setting in Malaysia.

Mixed-ability group

A group of multigrade students whose members differ in terms of ages and abilities.

Multigrade class

A class wherein only one teacher is responsible for students of varying ages and grade levels and who study different curricula.

Multigrade Teach-Learn Package

A resource guide for multigrade teachers, which contains lesson guides, exercises, and directions on how to effectively and efficiently execute multigrade lessons used by the Multigrade Program in the Philippines.

Outputs/Outcomes

Developments or results of multigrade teaching, as in the case of education, students' attitudes, and achievement results.

Peer assessment

A type of assessment wherein students are asked to rate their peers' work, oftentimes with the use of specially designed workbooks.

Periodic assessment tests

Tests given for specific purposes such as determining how much students learned after completing a lesson. These can take the form of short or topic tests or homework.

Process

A set of activities resulting from the use and management of multigrade teaching inputs. It is the key area for human development and change dealing with curricula, teaching methods, and learner motivations, among others.

Programmed teacher

An older student who facilitates a pre-arranged lesson or acts as a peer group leader in a multigrade class in the Philippines. He/She is usually a fast learner from a higher grade level who can guide his/her fellow students in lower grade levels.

Regular assessment tests

Tests that are routinely given to students throughout the school year.

Resource person

A community resident in the Philippines who can be a parent or an alternative learner with special skills, training, and expertise asked to teach multigraders.

Rotational approach

Also known as the “quasi-mono-grade approach” wherein a multigrade teacher divides a class into groups, depending on the students’ grades then teaches each group one at a time, sets them to work, and moves on to teach the next group.

Same-ability group

A group of multigrade students that may be subcategorized as “advanced,” “average,” or “low” in terms of ability.

Same age/year group

A group of multigrade students of the same age and grade level.

Self-assessment

A type of assessment wherein students are asked to rate their own work, oftentimes with the use of specially designed workbooks.

Social group

A group of multigrade students based on compatibility.

Special model school

A government school in Malaysia that combines primary and secondary schools in the same compound that are equipped with the necessary infrastructure and a hostel far enough for the children to board in during weekdays and near enough for them to go home to during weekends.

Subject teaching

A type of multigrade teaching wherein students of more than one grade are taught by different subject teachers.

Team teaching

A type of multigrade teaching wherein three normal-grade classes are brought together with their three teachers to form one large group.

Tuition Voucher Scheme

A Malaysian government scheme wherein qualified students in the fourth to sixth years from needy families and who exhibit poor academic performance are given opportunities to enroll in extra classes covering critical subjects such as mathematics, science, English, and Malay.

VSAT technology

A technology uses a two-way satellite ground station with a dish antenna to allow broadband Internet access.

Whole-class, cross-grade instruction

A type of multigrade teaching wherein a teacher teaches students of varying grades at the same time but with open-task activities.

Executive Summary

Multigrade teaching and learning wherein only one teacher is responsible for students who belong to different age groups and grades took root in the first government schools in North America and Europe in the nineteenth century. Although no longer extensively practiced in the said regions, multigrade teaching persists in Asia/Pacific, Africa, and Latin America. Many of the multigrade schools in Southeast Asia were established in response to international commitments to education for all (EFA), the *Millennium Development Goals*, and the Convention on the Rights of the Child.

Multigrade classes, known in different countries as “combination” or “forced mixed-age classes,” “forced mixed grades,” and “vertical” or “family groupings,” are commonly found in impoverished rural communities that are isolated by geography and social differences, in areas with low or declining enrolments, and in areas facing significant shortages in teaching-learning resources and basic infrastructure. Since these are realities most Southeast Asian countries face, multigrade schools are viewed as a necessity rather than a choice. A few schools, however, chose to set up multigrade levels due to pedagogical and philosophical considerations.

Despite the prevalence of multigrade schools in many countries, biased perceptions still exist against their existence. Policymakers and educators, for instance, often dismiss multigrade instruction as a second class option. As such, lack of support for teachers and students in small multigrade schools still ensues. This negative perception may have developed as a result of poor multigrade instruction implementation, lack of awareness, weak curricular adaptation, insufficient learning materials, and inadequate teacher preparation. However, since mono-grade instruction is difficult to implement in areas with low populations, with insufficient enrolment rates, and with very few teachers, small multigrade schools are very likely to continue existing in many countries.

An interesting mix of practices and strategies characterize the implementation of multigrade instruction in Southeast Asia. Multigrade schools may vary in terms of organization, teaching-learning process, learning environment and facilities, curricular development and implementation, teaching-learning materials, and assessment.

Based on a framework that underscores the interconnection between context, inputs, the process, and products, a list of quality indicators have been drawn out. Quality indicators related to context refer to economic, social, and other background forces that have an effect on multigrade instruction. Those related to inputs include resources made available to support the multigrade process such as materials and human resources, among others. Indicators related to the process include activities that result from using

and managing inputs. Product-related indicators refer to developments or results arising from multigrade instruction such as achievements.

In Southeast Asia, multigrade instruction is facing many issues and challenges that must be addressed to attain quality status. For each issue, various actions are necessary from the government, supervisors, school heads, teachers, and other stakeholders.

First, countries in Southeast Asia suffer from lack of acceptance of, and involvement in, multigrade instruction by governments, community members, and other stakeholders. Steps such as conducting advocacy campaigns to raise awareness and support among policymakers, communities, and other stakeholders and tapping the media to highlight best practices and the benefits of multigrade instruction, should thus be taken.

Second, multigrade schools in Southeast Asia do not have or are not adequately considered in strategic planning, supervision, and evaluation both on the macro and micro levels. Steps such as including multigrade classes in the educational sector planning and programming and conducting regular multigrade instruction monitoring and evaluation should thus be taken.

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Furthermore, multigrade schools are oftentimes disadvantaged, particularly because of poor learning environments and the unavailability and/or irrelevance of resources. Since they are mostly seen in remote areas, multigrade learning environments tend to be some of the most underequipped, overlooked, and underfunded aspects of the educational system. Curricula and learning materials also tend not to suit the demands and features of multigrade instruction. As such, steps like mobilizing stakeholders to build and improve environments, facilities, equipment, and materials used in multigrade instruction should be taken. Another step is modifying, contextualizing, and localizing curricula, materials, and different assessment materials to make it appropriate for multigrade settings. Others steps like creating a mechanism for sharing locally developed multigrade materials among teachers and schools and mobilizing the community to become an integral part of providing support for multigrade systems should also be considered.

Multigrade teaching also requires different approaches and strategies but teachers often lack the capacity to provide quality teaching in a multigrade context. Teachers are inadequately equipped with skills of providing differentiated instruction, active learning and other pedagogical approaches relevant to multigrade instruction, as well as techniques in handling class situations and challenges that differ from the traditional mono-grade class setup. As such, steps like developing and enhancing teachers' competency in multigrade pedagogy through pre- and in-service training as well as interschool visits; developing policies that address the salary and working conditions of multigrade teachers; and investing in school head and teacher capacity building to improve skills relevant to multigrade instruction should be taken.

Finally, assessing students in multigrade classes is similar to assessing those in mono-grade classes. Given the special circumstances surrounding multigrade instruction, however, assessment does not reflect the students' performance. As such, national tests given to measure student performance should consider the learning context in multigrade classes. Various assessment modalities should be used, particularly in measuring unconventional teaching-learning practices in a multigrade class setup.

Multigrade teaching as a means to achieve quality EFA needs to be taken seriously. As Little (2006) put it, "Multigrade schooling can make a significant contribution to the EFA goals of access and quality." How this can be attained and measured may be gauged from an assessment of quality indicators of multigrade instruction.

CHAPTER I: Introduction

Multigrade teaching generally refers to classes wherein only one teacher is responsible for students of varying ages and grade levels and who study different curricula (Brunswic and Valerien, 2004). Various terms have been used to refer to multigrade classes such as combination classes; forced mixed-age classes; forced mixed grades, which refer to multigrade classes formed out of necessity or enrolment characteristics; vertical groupings (i.e., ungraded or non-graded); and family groupings, which refer to multigrade classes borne out of pedagogical considerations (Little, 2004).

In the nineteenth century, the first government schools in North America and Europe were multigrade in nature (Brunswic and Valerien, 2004). Today, multigrade classes can still be found in the said regions as well as in Asia/Pacific, Africa, and Latin America (Little, 2001, as cited in Brunswic and Valerien, 2004).

Multigrade instruction persists for a variety of reasons, namely, to provide education in areas that are difficult to access and that have low or declining enrolment, to maintain educational services in schools that lack teachers, and to innovate for pedagogical purposes (Little, 2004).

The expansion of educational opportunities allowed multigrade classes to benefit students deprived of access to education, bringing countries closer to realizing EFA goals (Little, 2004). Isolated, sparsely populated, and geographically inaccessible areas or those that lack sufficient educational resources, for instance, have adopted multigrade instruction to achieve EFA.

Multigrade instruction, however, has sometimes been criticized as a short-term solution even though some studies vouch for its effectiveness in delivering education. Little (2004), in fact, cited several studies that found lack of significant differences between the cognitive achievement of students in multi- and mono-grade classes. A few studies even reported that the cognitive achievement of students in multigrade classes was higher than those in mono-grade classes.

Moreover, although viewed by most as a matter of necessity to increase the participation rate, setting up a class comprising multigraders has been a matter of choice for some countries due to pedagogical and philosophical considerations. In some areas, multigrade classes have been set up to improve the effectiveness of educational delivery (Little, 2004). Vinjefold (1997) opined that the decades of educational innovation (e.g., open and individualized instruction)—1960s and 1970s—ushered in multigrade classes as the ideal class setting.

However, no matter how many multigrade classes contribute to access, academic achievement, and social development (Little, 2004), these are still often negatively viewed, particularly in developing countries (Brunswic and Valerien, 2004). This may be due to poor implementation (Bienvenista and McEwan, 2000), lack of awareness, weak curriculum adaptation, insufficiency of learning materials, or inadequate teacher preparation (Little, 2004).

To overcome inherent challenges and thereby harness the benefits of multigrade instruction, its implementation must be reviewed to come up with policy recommendations, research agenda, and capacity-building plans toward further improvement of multigrade classes.

Objectives

The Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH), committed to improving the quality of education in Southeast Asia, undertook a research study on multigrade instruction in the region through the SEAMEO INNOTECH Regional Education Program (SIREP). The project primarily aimed to identify quality indicators of multigrade instruction in Southeast Asian countries based on a situational analysis of the state of multigrade instruction in different countries across the region. It specifically aimed to:

- Determine the conditions and policies that support the establishment and management of multigrade classes in the Southeast Asian region
- Determine the meanings of various terminologies used to refer to multigrade instruction in the region
- Identify good practices with regard to implementing multigrade basic educational instruction in the region
- Determine issues, gaps, and challenges in implementing multigrade instruction in the region
- Recommend policies and strategies for the implementation of quality multigrade instruction in Southeast Asian countries

Methodology

Using the collaborative inquiry approach, SEAMEO INNOTECH conducted a research workshop among regional experts to identify quality indicators for multigrade instruction. The workshop implemented three key strategies to gather data.

Presentation of Country Papers

Representatives from the eight participating countries (e.g., Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Thailand, Timor-Leste, and Vietnam) were asked to each give a 30-minute presentation on how their respective countries implemented multigrade instruction. Each presentation was followed by an open forum wherein the participants could exchange information and ideas, make clarifications, or provide further explanations.

Regional Research Workshop Sessions

Five workshop sessions were designed to generate information on the following areas:

- Meanings, contexts, status, patterns, and policies related to multigrade teaching in Southeast Asia
- Good practices and innovations in implementing multigrade instruction in Southeast Asia
- Quality indicators for multigrade instruction
- Issues and challenges with regard to implementing multigrade instruction
- Recommendations to improve the implementation of multigrade instruction

The group discussion method was employed during the said workshops.

Analysis of Policies and Programs

Outputs from the workshop were consolidated to draw out pertinent ideas and to come up with a synthesis and lessons learned. Policy recommendations were also consolidated and presented for critique and refinement.

The research workshop specifically investigated policies, enabling environments, strategies, good practices on forming multigrade classes, and best teaching-learning practices. It also served as a venue to discuss challenges and issues pertaining to the implementation of multigrade classes such as the attitudes of policymakers, parents, teachers, and school leaders from Southeast Asian countries toward multigrade instruction.

Apart from the member countries' distinct terminologies, policies, attitudes, and practices in relation to implementing multigrade instruction, common best practices were likewise identified in order to develop a set of quality indicators that will help enhance multigrade instruction across the region.

CHAPTER II: Multigrade Teaching Concepts and Status in Southeast Asia

According to Thomas and Shaw (1992), multigrade classes were primarily set up in remote, thinly populated areas to provide full educational services or access. They cited rural areas in the United States and France, the mountainous region of Pakistan, Peru's Amazon Basin, the Pacific Islands, Western China, rural Guinea and Zambia, as well as many Scandinavian countries as places where multigrade schools were most likely to be found. They also cited the increasing number of multigrade schools in small towns and villages in European countries due to dwindling student populations. According to them, some countries like Zambia have also resorted to multigrade instruction due to budgetary and manpower constraints such as the inability to construct and maintain full-fledged schools.

Most Southeast Asian countries implement multigrade instruction as a matter of necessity rather than choice. Multigrade instruction is being implemented in countries across the region primarily due to deficiency of educational resources such as classrooms and teachers. The geographical characteristics of the countries likewise factor in due to small learner populations or inaccessibility. Examples of such areas include the small islands and border areas of Indonesia (Noor, 2010) as well as inaccessible and thinly populated areas in Myanmar (Soe, 2100).

The implementation of multigrade instruction in the Southeast Asian region is further spurred by the countries' commitment to fulfill certain international and national obligations. In Cambodia, for instance, the implementation of multigrade instruction was expanded as part of the government's EFA strategy under *National Plan 2003–2015* to improve educational access in disadvantaged areas and to complete certain schools (Sopheak, 2010). To reach its national EFA goals, Vietnam also implemented multigrade instruction (Huong, 2010). Timor-Leste, on the other hand, established multigrade schools so that its government can comply with the United Nations (UN) Convention on the Rights of the Child and the Millennium Development Goals (Soares and Amaral, 2010). Finally, in the Philippines, the multigrade instruction program was conceptualized and implemented to serve the constitutional right of the country's citizens to education at the ground level (Villalino, 2010).

Several national policies also brought about conditions that necessitated multigrade instruction in Southeast Asian countries. In Thailand, for instance, the successful implementation of birth control led to a reduction in the population growth and

the emergence of smaller student populations in some communities, which led to an increase in the number of small schools that had no choice but to implement multigrade instruction (Kittiratchadanon, 2010). In Indonesia, the mandate to make basic education compulsory in 1994 led to the establishment of the multigrade teaching model for small schools in remote areas (Noor, 2010).

In Malaysia where many small schools exist, multigrade instruction is in the process of being phased out because of the sufficiency of teachers for each grade level. Classes are, however, still being temporarily combined when teachers are called for meetings or to take up courses outside the schools where they teach (Ahmad, 2010).

Multigrade teaching is a term used to describe instructing students from a number of grades, usually in one class, at the primary level (Vinjevd, 1995). However, various terms have been used to describe this same concept (Little, 2004). The different Southeast Asian countries define multigrade instruction in various ways (see Table 1).

Table 1. Definitions of Multigrade Teaching in Several Southeast Asian Countries

Country	Definition of Multigrade Teaching
Cambodia	Multigrade classes have mixed students and different grades. Each grade level has a small number of students. A multigrade class is also defined as one wherein only one teacher is responsible for teaching two or more grades in a single classroom at the same time for the entire school year (Sopheak, 2010).
Indonesia	Multigrade teaching refers to teaching students of different levels, ages, and abilities in one room at the same time. In multigrade teaching, a teacher teaches more than one grade or class at the same time, either in different classrooms or in the same room that is divided by a partition (Noor, 2010).
Malaysia	<i>Kelas Bercantum</i> or “combined class” (i.e., multigrade classroom) is composed of a group of students from two separate grades who work within one classroom setting (Ahmad, 2010).
Myanmar	The teachers in multigrade schools have to teach all subjects in all grades (Soe, 2010).
Philippines	A multigrade program or class is defined as a class of two or more grades under one teacher in a complete or an incomplete elementary school with a minimum of eight pupils and a maximum of 35 pupils (Villalino, 2010).
Thailand	Multigrade instruction is a term used to describe teaching primary schoolchildren from a number of different grade levels, ages, and abilities at the same time usually in one class (Kittiratchadanon, 2010).

Country	Definition of Multigrade Teaching
Vietnam	Multigrade instruction refers to teaching and learning in multigrade or in combined grade classes within a multigrade setting, which involves a single teacher instructing pupils from two or more class or grade levels in one room at the same time (<i>Decision of the Prime Minister No. 15/2010/QĐ-TTĐ, as cited in Huong, 2010</i>).

Source: SEAMEO INNOTECH Regional Forum on Quality Indicators of Multigrade Instruction in Southeast Asia, April 2010

Data on Multigrade Classes

The prevalence of multigrade instruction in developing Asian countries was part of Vinjevod's (1997) research, which stated that China had 420,000 multigrade schools while Indonesia had 20,000.

In Southeast Asia, the following describe the extent of multigrade instruction and the existence of multigrade schools:

- Cambodia has 1,353 multigrade classes, accounting for 1.6 percent of the total number of classes, which are spread out in 22 provinces (Sopheak, 2010).
- Vietnam has 8,404 multigrade classes, accounting for 3.1 percent of the total number of classes in 49 provinces (Huong, 2010).
- Timor-Leste has 135 primary schools that implement multigrade instruction (Soares and Amaral, 2010).
- In the Philippines, 12,225 schools, comprising 36 percent of the total number of public elementary schools, are multigrade in nature (Villalino, 2010).
- In Indonesia, 66 percent of the total number of schools in remote areas is multigrade in nature due to lack of teachers (Noor, 2010). A total of 3,899 schools in outlying, outer small islands and border areas are also multigrade schools.
- In Thailand, 44 percent of the 33,000 schools or 13,915 are small schools (Kittiratchadanon, 2010). In 2010, 3,600 multigrade schools were under the Office of the Basic Education Commission (OBEC) while 38 multigrade schools were under the Office of Chiangmai Educational Service Area 2.
- In Malaysia, multigrade schools are currently being phased out. In fact, only four small schools in the country still implement multigrade instruction due to lack of classrooms (Ahmad, 2010).

Existing Policies and Programs Related to Multigrade Teaching

Multigrade instruction is embedded in educational policies in Southeast Asian countries such as in constitutional mandates on education, in national strategic plans, and in educational acts, among others. It is also covered in specific policies that address special circumstances such as developing small island, border, and completing schools or addressing the educational needs of a special group of people such as poor children in remote areas.

Some educational policies cover both conventional and multigrade schools such as provisioning grants and scholarships, distributing educational resources, and providing teacher training and incentives.

A few countries have policies that specifically deal with multigrade instruction such as those that provide incentives to multigrade teachers in Cambodia and in the Philippines, those that provide for the operation and improvement of multigrade classes in the Philippines, and those that mandate the implementation of a multigrade curriculum in Thailand and Vietnam. Table 2 summarizes the policies related to multigrade instruction in Southeast Asian countries.

Table 2. Policy Support for Multigrade Classes

Country	Policy Support for Multigrade Classes
Cambodia	<p>Policies supplement subsistence allowances for multigrade teachers to:</p> <ul style="list-style-type: none"> • Add 60 percent of the multigrade teacher's salary to his/her existing salary if he/she teaches two-grade classes • Add 80 percent of the multigrade teacher's salary to his/her existing salary if he/she teaches three-grade classes • Add 160 percent of the multigrade teacher's salary to his/her existing salary if he/she teaches double-shift classes for two-grade levels • Add 180 percent of the multigrade teacher's salary to his/her existing salary if he/she teaches double-shift classes for three-grade levels
Indonesia	<ul style="list-style-type: none"> • A ministry decree to develop small-island, border, and remote schools was passed. • Multigrade teachers are covered in policies on teacher incentives, improvement, certification, awards and protection, as well as materials support. • Multigrade students are also included when granting scholarships or grants.

Country	Policy Support for Multigrade Classes
Malaysia	Policies supporting multigrade instruction include the <i>Education Act of 1996</i> , the <i>National Philosophy of Education, Vision 2020</i> , and the <i>Education Development Master Plan 2006–2010</i> .
Myanmar	Policies supporting multigrade teaching are embedded in those that involve priority groups such as poor children and those from remote areas for inclusive education. Multigrade instruction is also included in policies on providing support to schools, on teacher training, and on distributing textbooks and learning materials.
Philippines	Official Department of Education (DepEd) Orders exist to support multigrade instruction with regard to: <ul style="list-style-type: none"> • Improving access to education by providing complete grade levels through combination or multigrade classes • Implementing policies and guidelines on organizing and operating multigrade classes • Strengthening the implementation of the multigrade program in the country • Providing special hardship allowances to multigrade teachers • Conducting searches for the best multigrade teachers • Holding a National Summit for Multigrade Teachers
Thailand	Policies in Thailand regarding the following exist: <ul style="list-style-type: none"> • Organizing flexible and special types of curricula and textbooks • Improving teaching skills • Providing incentives for multigrade teachers
Timor-Leste	Policies on multigrade classes are embedded in Timor-Leste's constitution and strategic plan concerning educational accessibility for all girls and boys.
Vietnam	Some of the most important policies associated with multigrade instruction include: <ul style="list-style-type: none"> • <i>Decree No. 69/2008/ND-CP dated 30/5/2008</i> of the government has been approved to promote the socialization of education. • <i>Document No. 9548/BGDĐT-GDTH dated 13/10/2008</i> has been approved to guide the management and organization of multigrade primary classes. • <i>Decision No. 15/2010/QĐ-TTĐ of the Prime Minister</i> has been approved to declare the right of multigrade teachers to receive financial incentives.

Practices and Strategies in Implementing Multigrade Instruction

Little (2004) cites several factors that affect the quality of teaching and learning in multigrade classes such as organization of learners; distribution of teachers; structure and quality of curricula; quality and quantity of learning and teaching materials; content and quality of teacher preparation; and structure, content, and quality of assessment systems.

Organizational Forms and Approaches

Multigrade classes can take several organizational forms, ranging from grouping several grade divisions under the direction of a single teacher to forming a completely non-graded learning environment (Thomas and Show, 1992).

To facilitate learning, Birch and Lally (1995) mentioned several student-grouping strategies such as:

- **Grade teaching:** A single teacher handles more than one class and teaches all of the subjects throughout the day.
- **Subject teaching:** More than one grade is taught together by different subject teachers.
- **Team teaching:** Three normal-grade classes are brought together with their three teachers to form one large group.

Student groupings may take a variety of forms such as (Collingwood, as cited in Thomas and Show, 1992):

- **Same-ability group:** The students in each group may be categorized as “advanced,” “average,” or “low” ability.
- **Mixed-ability group:** Each group has members with a variety of ages and abilities.
- **Same age/year group:** Students of the same age and grade level are grouped together.
- **Social group:** Grouping is based on compatibility.

In multigrade classes in Southeast Asia, students are commonly combined by grade level. In Cambodia, the practice is to combine approximate grade levels of students not exceeding 35 per classroom. Note, however, that first graders are not combined with others (Sopheak, 2010). In Indonesia, the grouping strategy that works best is forming small groups based on the students’ ages (Noor, 2010).

In some countries, students are grouped based on what they can do. In Malaysia, it is common to group students together based on their achievement levels (Ahmad, 2010). Similarly, in Myanmar, groupings are based on the students' abilities. Bright, average, and weak students are grouped together (Soe, 2010).

Most multigrade teachers take on a rotational or quasi-mono-grade approach wherein they divide a class into groups depending on the students' grades then teaches each group one at a time, set them to work, and move on to teach the next group (Mulkeen and Higgins, 2009). In Timor-Leste, for instance, the approach used is the quasi-multigrade method wherein two classes are separately taught, alternating between groups (Soares and Amaral, 2010).

Another approach is whole-class, cross-grade instruction wherein a teacher teaches students of varying grades at the same time but with open-task activities (Miller, 1989). An alternative approach is that used in the Enhanced Instructional Management by Parents, Community, and Teachers (E-IMPACT) Project in the Philippines wherein the teacher manages not class sections but "families" that each comprise as many as 40–50 students from grades 1 to 6.

Table 3 shows the various organizational forms of multigrade instruction used in Southeast Asian countries that were identified during the SIREP regional workshop.

Table 3. Organizational Forms of Multigrade Classes in Southeast Asia

Country	Organizational Form
Cambodia	<ul style="list-style-type: none"> • For learning activities in the classroom, pupils are organized based on their abilities. • Mixed-ability groups of students with approximate levels also exist. For instance, grade 2 is combined with grade 3; grade 4 is combined with grade 5; or grades 2, 3, and 4 are combined.
Indonesia	<ul style="list-style-type: none"> • Pupils are organized in mixed-ability groups. For instance, grade 4 is mixed with grade 6. • Classes have students from different grade levels.
Malaysia	<ul style="list-style-type: none"> • Pupils are grouped into same- or mixed-ability groups or individually work, depending on the subject. They are separated by ability for subjects such as math, Malay, and English and mixed for other subjects. Students from years 1 to 3 are combined in level 1 and from years 4 to 6 in level 2. • Each subject per level has a fixed number of periods. The timetable is the same as that used for mono-grade classes to make it easier for administrators to allocate periods for teachers.

Country	Organizational Form
Philippines	<ul style="list-style-type: none"> Mixed-ability groups by grade level exist. Grades 1 and 2, grades 3 and 4, grades 5 and 6 may be combined. Sometimes, only grades 2 and 3 and grades 5 and 6 are combined.
Thailand	<ul style="list-style-type: none"> Pupils are grouped based on age or year. Pupils with the same abilities such as grades 1 and 2 are combined. Sometimes, students are categorized as “weak,” “middle,” and “good” then same-ability students from different grade levels are combined. Students are also grouped according to social status.
Timor-Leste	<ul style="list-style-type: none"> Pupils with the same abilities from the same grade are grouped together to allow them to learn more. Mixed-ability groups, however, may also benefit those with low understanding. Sometimes, students of the same age or year are mixed in grades 1 and 2 to benefit from alternative learning programs. Social groupings, particularly for poor students who need financial assistance, also exist.

Source: SEAMEO INNOTECH Regional Forum on Quality Indicators of Multigrade Instruction in Southeast Asia, April 2010

Teaching-Learning Process

This research identified several teaching practices that have proven effective for multigrade classes:

- Lesson preparation ensures clarity, efficiency, and effectiveness of message delivery; the use of a variety of teaching techniques; the availability of the best materials; and efficient time management. Lessons can be organized based on the same content but for different levels, depending on the everyday lives and capacities of the students (Sopheak, 2010).
- Self-directed learning allows students to independently work, providing teachers an opportunity to attend to them either individually or in groups. This helps develop their learning skills, a pillar of lifelong learning. Individual teaching is an effective strategy for students who need special attention or focus (Soe, 2010). This practice may require the use of self-instructional materials and contextualized learning.
- Peer tutoring can effectively reinforce and encourage deeper understanding of a subject matter in order to foster a positive attitude toward a subject and a

productive learning environment. An example of this is when an older student acts as a “programmed teacher” who facilitates a pre-arranged lesson or acts as a peer group leader, a fast learner from a higher grade level who can guide his/her fellow students in lower grade levels (Brusas, 2010). In the Philippines, this practice is embodied by Project E-IMPACT. In Thailand, this is called the “Brother/Sister Teaches Brother/Sister Program” wherein peer tutors act as leaders and help out other students (Kittiratchadanon, 2010).

- A conducive learning environment wherein learning can proceed without distractions and interruptions is crucial to realize multigrade instruction. This may be done by establishing a child-friendly school environment (Sopheak, 2010). In some instances, a conducive learning environment is created by carefully scheduling and developing routines to keep students meaningfully occupied. Moreover, having an agreement in class between the teacher and his/her students is also helpful in establishing a good learning place (Kittiratchadanon, 2010).
- Frequent assessment and feedback involves checking for mastery, particularly after completing a self-learning lesson, then allowing the students to track their own progress.

Table 4 presents the basic features of the teaching-learning process as practiced in some Southeast Asian countries.

Table 4. Teaching and Learning Process in a Multigrade Class in Southeast Asia

Country	Teaching-Learning Process
Cambodia	<ul style="list-style-type: none"> • For alternative learning, direct facilitators and group learning discussions exist. Alternative learning uses teaching-learning in the whole classroom by teaching the same subject and content such as arts and sports. • Independent learning is applied in combined grades such as 2, 3, and 4. Grades 2 and 3 students use interactive learning while grade 4 students independently study using learning materials as well as question-and-answer sheets.

Country	Teaching-Learning Process
Indonesia	<ul style="list-style-type: none"> The teaching and learning model for multigrade teaching is an elaborate process. It involves competence analysis that combines learning materials from different levels based on an analysis of competencies that need to be taught for one semester or for one year. It also involves mapping the theme for related competencies, resulting in five themes, each taught for 3–4 weeks; developing a syllabus, which contains competencies as well as details of the activities, resources, and evaluation; and planning lessons, which includes step-by-step activities as well as strategies on organizing students (Noor, 2010). Because of the poor social status of most students' parents and with the economy of the community dependent on agriculture, the local community helps by sharing skills and expertise to help students learn entrepreneurship while nongovernment organizations (NGOs) provide financial and materials support.
Malaysia	<ul style="list-style-type: none"> Teachers per subject area such as math, science, and religion exist. They may also teach Malay, English, physical education (PE), music, and living skills. One teacher teaches two grades without a teacher assistant. The head teacher monitors the teacher, files his/her reports, and assesses the teacher. Teachers have access to the Internet via satellite to prepare lesson plans, to communicate with family and friends, to teach lessons via web television, and to get updates. The extent of flexibility depends on the teachers. Classrooms are well-arranged and have adequate facilities and resources. Each subject has a fixed number of periods. Pupils progress by grade and age without fast tracking.
Philippines	<ul style="list-style-type: none"> The Libmanan District of Naga uses E-IMPACT modules guided by pre-arranged and/or textbook-based lessons. It uses the cooperative learning process and an interdisciplinary learning approach. Schools that do not use the E-IMPACT system rely on a variety of delivery methods. In some instances, teachers present subjects that easily lend themselves to integration to all grades at the same time. In other instances, teachers intensively work with one group on one subject (e.g., English or math) while another group independently works on another subject (e.g., arts). The chosen method depends on the nature of the subject taught as well as the teacher's and class's personalities.

Country	Teaching-Learning Process
Thailand	<ul style="list-style-type: none"> • The teaching-learning process starts with an individual analysis and setting up a short timetable. Students are then organized into small groups while the teacher goes around to teach the different groups. • Teachers conduct different activities for each group such as mixed-ability group, matching, and individual activities. Students are then given an authentic assessment, after which their achievements are reported.

Source: SEAMEO INNOTECH Regional Forum on Quality Indicators of Multigrade Instruction in Southeast Asia, April 2010

Learning Environments and Facilities

To effectively carry out his/her role as the facilitator of the teaching-learning process, the teacher must have an ample supply of sources of information and an environment that is conducive to independent, pair, and group learning. The learning environment comprises the following (Thomas and Shaw 1992):

- A library containing enrichment and remedial educational media such as radios, television sets, and information technology (IT) tools such as personal computers (PCs)
- A good layout that considers the following:
 - A learning corner or a semi-private space for groupings
 - Blackboards on opposite walls for flexible class arrangements
 - Mobile furniture such as tables, chairs, and desks
 - Display boards, shelves, and lockable storage cabinets for books
 - Ventilation and lighting fixtures
- A wide open area for activities (i.e., ideally 1.2–1.4 square meters per student)

In terms of learning environments and facilities, the ideal condition practiced in Southeast Asia is to have a spacious area that can accommodate combined or mixed-grade classes with movable facilities and furniture. Schools are also mandated to provide a learning center and equipment in good working condition in each classroom. Table 5 shows what practices are done by a few Southeast Asian countries with regard to setting up multigrade classes.

**Table 5. Good Practices and Innovation:
Learning Environments and Facilities for Multigrade Classes**

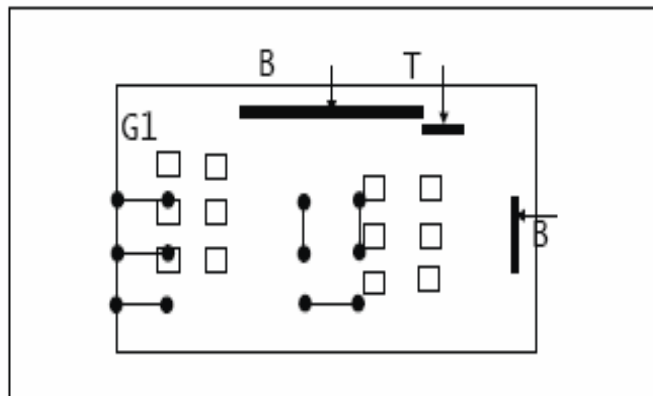
Country	Learning Environment and Facilities
Indonesia	<ul style="list-style-type: none"> • Use of natural laboratories, recycled materials, and movable facilities • Maximum use of open spaces
Myanmar	<ul style="list-style-type: none"> • Government-provided facilities and learning materials • Convenient learning environments • Students help manage the teaching-learning process
Philippines	<ul style="list-style-type: none"> • School buildings with adequate space, furniture, and movable chairs • The same environment as normal schools but has a learning center within each classroom
Vietnam	<ul style="list-style-type: none"> • Environments and facilities for teaching-learning must be in good condition • Has equipment, facilities, materials such as textbooks, and accommodation for students

Source: SEAMEO INNOTECH Regional Forum on Quality Indicators of Multigrade Instruction in Southeast Asia, April 2010

With regard to arranging students' seats in a multigrade classroom, Vietnam came up with three models (see Figures 1–3). The way the students are seated in a multigrade classroom enables the teacher to remain mobile so as to retain students' attention. The typical models usually have the following features:

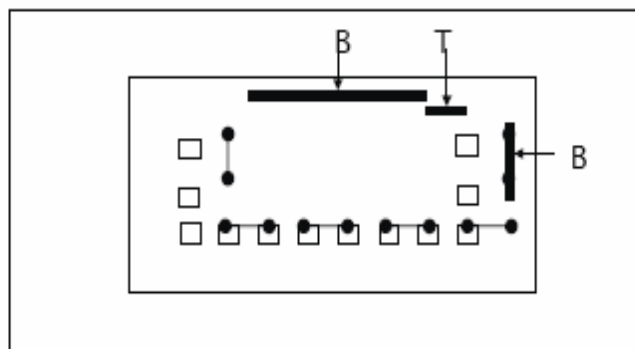
- **B:** Blackboard
- **T:** Teacher's desk
- **G:** Student groups

Figure 1. Model 1 of Seating Arrangement in a Multigrade Classroom in Vietnam



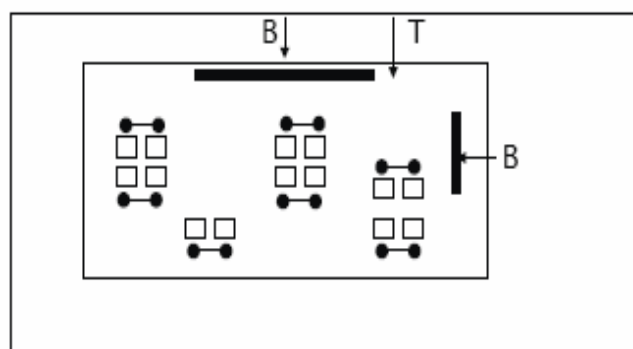
Source: *Huong, 2010*

Figure 2. Model 2 of Seating Arrangement in a Multigrade Classroom in Vietnam



Source: *Huong, 2010*

Figure 3. Model 3 of Seating Arrangement in a Multigrade Classroom in Vietnam



Source: *Huong, 2010*

Curriculum Development and Implementation

With the exception of Indonesia, Thailand, and Vietnam, the multigrade instruction curricula that Southeast Asian countries follow are based on their respective prescribed national curricula. In Indonesia, the teacher contextualizes his/her own curriculum based on a national curricular framework. As such, each school, whether mono- or multigrade in nature, has its own localized curriculum. Thailand prescribes the use of a multigrade- and mix-ability-based curriculum while Vietnam revised and adapted its national curriculum to better suit multigrade instruction. Table 6 shows the kinds of curricula that different Southeast Asian countries follow to implement multigrade instruction.

Table 6. Nature of Multigrade Curricula in Southeast Asia

Country	Nature of Multigrade Curriculum
Cambodia	Multigrade classes follow the national curriculum.
Indonesia	Every teacher develops his/her own curriculum called “KTSP” (i.e., a school-based curriculum) by referring to the national content standards. Assessment is made based on competencies developed on the basis of school-based curriculum. The national examination is conducted based on the national curriculum standards.
Malaysia	Multigrade schools follow the national curriculum.
Myanmar	Multigrade schools follow the national curriculum.
Philippines	Multigrade schools follow the national curriculum.
Thailand	Multigrade schools follow the national curriculum.
Timor-Leste	Multigrade schools follow the national curriculum.
Vietnam	The multigrade curriculum is adapted from the national curriculum in specific teaching settings wherein the number of subjects is reduced to focus on two key areas, namely, language and math. A bilingual program is incorporated into multigrade instruction. The multigrade curriculum develops local topics related to the cultural and social features of minorities.

Source: SEAMEO INNOTECH Regional Forum on Quality Indicators of Multigrade Instruction in Southeast Asia, April 2010

Most of the countries that implement multigrade instruction in Southeast Asia follow their respective national curricula although they are given leeway for flexibility such as in Cambodia wherein a flexible curriculum based on the core school curriculum is being implemented (Sopheak, 2010).

Curricula for multigrade classes may have the same content as conventional single-grade classes but use different approaches such as the following to suit multigrade teaching (Thomas and Shaw, 1992):

- An integrated curriculum that allows a teacher to teach a subject matter to different groups at different conceptual levels at the same time
- A modular curriculum that allows a student to progress at his/her own pace through learning modules, aided by teachers, peer tutors, and enrichment materials

In Southeast Asia, the common approach to implementing multigrade curricula involves integration. As such, themes or topics common to combined grade levels are taught but differentiated in terms of level and activity for each grade or level.

It is also common for Southeast Asian countries to practice the “jump-jump” approach in teaching in multigrade classes. In this approach, teachers face one grade level first then assign them an activity, after which they jump to the next grade level for instruction, after which activities will again be assigned before they can jump to the first level and so on.

In some cases, the ideal practice is to localize curricula and design lessons based on the students’ and schools’ needs. Table 7 shows a few of the common curricular practices.

Table 7. Good Practices and Innovations in Multigrade Instruction Curricula

Country	Curriculum (Modular or Integrated)
Indonesia	A school-based curriculum or local content based on the needs of the school (i.e., integrated by theme or topic or use modules for each grade) is used. Syllabi are made for each semester.
Myanmar	The curriculum is integrated. Common topics are taught in combined grades then students are assigned different tasks. It is also differentiated into separate levels.
Philippines	The curriculum is integrated, has differentiated activities, and uses the jump-jump approach.

Country	Curriculum (Modular or Integrated)
Vietnam	The curriculum is integrated and modular based on the national curriculum. Teachers follow Ministry of Education and Training (MOET)-designed guidelines for multigrade teachers who teach two grades. In most cases, multigrade teachers do not get instructions from the government and the local education department. As such, multigrade teachers adapt and design specific lessons using integrated and differentiated designs. In certain settings, they follow the jump-jump approach.

Source: SEAMEO INNOTECH Regional Forum on Quality Indicators of Multigrade Instruction in Southeast Asia, April 2010

Teaching and Learning Materials

Ideally, curricula, syllabi, teachers' manuals, textbooks, modules, and reference materials are provided by the national government while local teaching-learning materials are made by the teachers themselves. This practice can be seen in Southeast Asian countries (see Table 8).

Table 8. Good Practices and Innovations for Learning Materials for Multigrade Classes

Country	Learning Materials
Indonesia	Teacher-made curricula and syllabi are used. The government provides textbooks and reference materials, compact discs (CDs), radios, modules, and teachers' manuals.
Myanmar	The national government prescribes the curriculum and syllabi, teachers' manuals, and textbooks. Teaching-learning materials are mostly made by the teachers although some are provided by the government.
Philippines	The National DepEd Office prepares the curriculum, teachers' manuals, and handbooks. The teachers prepare local instructional materials.
Vietnam	The country follows the prescribed national curriculum or syllabus and teachers' manuals throughout the semester. Multigrade materials do not differ from mono-grade materials. Textbooks are based on regular school materials and are provided for free to children in multigrade schools (Birch and Lally, 1995).

Source: SEAMEO INNOTECH Regional Forum on Quality Indicators of Multigrade Instruction in Southeast Asia, April 2010

The Multigrade Program in the Philippines uses the Multigrade Teach-Learn Package, a resource guide for multigrade teachers, which contains lesson guides, exercises, and directions on how to effectively and efficiently execute multigrade lessons (Villalino, 2010). Schools that employ the E-IMPACT system use self-instructional and student-facilitated learning modules that were designed to match the competencies required by the *Basic Education Curriculum (BEC)*. These schools also use other instructional support materials such as audiotapes developed for both English- and Filipino-instructed classes.

A multigrade class should be equipped with textbooks and materials on self-learning, reading materials such as cards and storybooks, as well as radios for broadcasting. Low-cost and simple materials are organized and produced by the teachers, students, and members of the community (Soe, 2010).

Learner Assessment

Assessment should be a continuous and integral part of the teaching process (Birch and Lally, 1995). Several types of learner assessment exist, including the following:

- **Entrance/Pre-assessment test:** Given at the start of the schooling process to gauge the students' knowledge.
- **Regular assessment tests:** Routinely given to students throughout the school year.
- **Periodic assessment tests:** Given for specific purposes such as determining how much students learned after completing a lesson. These can take the form of short or topic tests or homework.
- **Self- and peer assessment:** Students are asked to assess their own work and those of their peers, most of the time through a workbook designed for these types of assessment.

It is also important to adopt various modalities for formative evaluation (UNESCO-APEID, 1989) such as the following:

- Observation of actual performance in school, in the community, and elsewhere
- Participation in simulated performance situations
- Assessment at the end of the unit
- Brief paper-and-pencil tests
- Anecdotal record cards
- Use of summative tests when students show evidence of success

It appears that in most Southeast Asian countries, learner assessment conducted in a mono- and a multigrade class does not differ that much. Internal assessment is regularly conducted by a teacher throughout the school year, examples of which include oral and pen-and-paper tests at the end of each chapter. External assessment is also conducted by district or national governments at the end of each educational level. Table 9 shows in more detail the various assessment practices in multigrade classes.

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Table 9. Assessment and Feedback Gathering in Multigrade Instruction

Country	Assessment and Feedback
Cambodia	Assessment of student learning is conducted on a monthly, semestral, and yearly basis to evaluate the outcomes based on a standard curriculum. The school director also conducts school self-assessments for management, environment, technical teaching, and development.
Indonesia	Regular and semestral internal assessments and a national examination for sixth graders are done. Internal assessments include classroom-based, teacher-made tests such as formative, summative, and self-assessment tests (i.e., oral for lower grades and written for higher grades). External assessment (e.g., district and national examinations) is done at the end of each educational level.

Country	Assessment and Feedback
Malaysia	Assessment and feedback gathering are the same as in mono-grade classes. A school-based formative test is given twice in a semester while a district-based summative test is given at the end of the semester. The public examination, UPSR, is given at the end of sixth year, the results of which are used to determine entrance to boarding and special schools. Feedback in the form of health, learning behavior, and achievement reports is also given.
Myanmar	A continuous assessment system is implemented through chapter-end tests. Two semester-end tests are given when half of the curriculum has been taken up and when it is finished.
Philippines	Teacher-made tests are regularly administered in classrooms. Paper-and-pencil and formative tests are given at the end of each lesson to find out the students' level of mastery of skills or competence while summative tests are given at the end of each quarter. Achievement tests are given at the end of the year by the school as well as by the district, division, regional, and national offices. In E-IMPACT schools, assessment measures follow conventional measures administered by the DepEd. However, additional diagnostic tests at the start of the school year and quizzes that serve as posttests after each learning module are also given. Instructional supervisors also assign homework and projects and rate students for recitations. Rubrics or checklists are used for observable competencies. Feedback from teachers is shared during parent-teacher meetings while sensitive feedback is discussed in the school head's office.
Thailand	Standard-based assessment is used wherein teachers use indicators for the lesson organized through rubrics, tests, or worksheets. Various forms of assessment are used such as worksheets, multiple-choice tests, true-or-false tests, matching-type tests, online worksheets, and writing tests. Continuous assessment (i.e., pretest, midterm, and posttest) is also conducted. Various levels of assessment such as classroom, school, district or local, and national tests also exist.
Timor-Leste	Self-assessment measures the individual abilities of students while local assessment gauges the performance of schools and districts. National assessment determines the performance of the whole country.
Vietnam	No differences exist between assessment for mono- and multigrade classes. Both include periodic assessment in the form of school-based written tests at the end of two semesters that measure achievement and continuous assessment in the form of a teacher-made tests administered within each semester (i.e., written and oral).

Source: SEAMEO INNOTECH Regional Forum on Quality Indicators of Multigrade Instruction in Southeast Asia, April 2010

CHAPTER III: Good Multigrade Instruction Practices in Southeast Asian Countries

Cambodia: Ensuring Quality Multigrade Instruction

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The *EFA National Plan 2003–2015* of Cambodia noted that multigrade teaching is one strategy to improve primary school access in disadvantaged areas and to complete incomplete schools.

Multigrade classes were established in remote or rural areas that lack human resources, are isolated and sparsely populated, are geographically inaccessible, or lack educational resources such as classrooms and teachers. To date, 22 out of 24 provinces implement multigrade teaching.

Multigrade schools provide learning opportunities for high-risk groups such as girls, ethnic minorities, and the poor. Apart from this, students are able to learn independently or in groups. It gives students the freedom to think and express their ideas and to make decisions about their own learning. Moreover, it helps students establish good social relationships, particularly with different members of the community.

Multigrade classes are regarded as a way to provide complete education services to inaccessible areas with low or declining enrolment or with incomplete schools. Moreover, it is said to contribute to academic achievement, increasing enrolment and reducing the number of dropouts at reduced costs.

However, students, parents, community members, and authorities have a poor understanding of multigrade classes because most of the multigrade schools are located in disadvantaged, rural, and remote areas. In particular, parents and community members view multigrade classes as a second-rate necessity and feel that students do not receive the same educational benefits as children in single-grade classes.

Teachers also have a negative attitude toward multigrade instruction because of the additional load this translates to. School directors and local administrators view multigrade instruction as a mere cost-efficient strategy to provide access to primary education, not taking into account its potential benefits in terms of quality.

Policies and Programs Supportive of Multigrade Instruction

In the face of problems in the educational sector, the *Programme d'Appui au Secteur de l'Education Primaire au Cambodge (PASEC)* Project provided funds for infrastructure and teacher training. In 1996, the Teacher Training Department, supported by the *PASEC* Project, developed a multigrade teaching methodology and trained teacher trainers of the Provincial Teacher Training Center, district teacher trainers, and inspectors in 16 provinces in order to motivate and improve multigrade instruction in local areas. Some 975 people were trained in multigrade teaching.

In 1997, the Council Minister disseminated *Sub-Decree No. 69 GnRkbb* to define the functions of multigrade teachers. In 2000, the Teacher Training Department revised the *Multigrade Teacher's Guide* and integrated the multigrade teaching methodology into the *Teacher Training Curriculum*. In 2003, *Letter No. 3293 Gyk>bl* advocated that all provincial education offices use multigrade and double-shift teachers to resolve issues with regard to lack of teachers and classrooms.

From 2007 to 2009, the Teacher Training Department retrained multigrade teachers and teacher trainers in provinces where multigrade classes were used. In 2010, the Teacher Training Department started monitoring multigrade teachers in local areas.

In 2007, *Circular No. 05* provided supplemental subsistence allowance for multigrade and double-shift teachers:

- 60 percent salary increase for multigrade teachers handling two grades and 80 percent for multigrade teachers handling three grades
- 100 percent salary increase for double-shift teachers of a single-grade class, 160 percent for double-shift multigrade teachers handling two grades, and 180 percent for double-shift multigrade teachers handling three grades

Factors to Ensure Quality Multigrade Instruction

Community and Stakeholder Support

A good school-community relationship paves the way for the successful implementation of multigrade instruction. This is the reason why it is imperative for members of the community of a multigrade school to pay attention to the school and to contribute to student learning.

Multigrade Teacher Training

As revealed by monitoring studies, teachers who were trained to teach multigraders were able to competently handle multigrade classes. They are prepared to become planners, organizers, facilitators, observers, and evaluators.

Multigrade Class Monitoring

Officials from the central level, along with officials from the provincial level, monitor multigrade instruction in order to improve the quality of and to assist multigrade teachers in terms of:

- Classroom management and administration
- School and classroom environment maintenance
- Technical multigrade teaching

As an administrative strategy, multigrade schools are clustered as a means to motivate and help multigrade classes.

Child-Friendly Environment Provision

Multigrade classes thrive on child-friendly school environments with clean and spacious classrooms that allow for various teaching-learning activities.

Well-Organized Classes

With an easy and simple class list, students can be combined. Experience shows that it is best to avoid combining grade 1 with other grade-level students, if possible. Grade 1 students need greater attention to ensure that they obtain the foundational skills necessary to move to upper grade levels. The number of students should not exceed 35 per classroom. Classroom arrangement can be based on a parallel plan, a contrary plan of half classroom, an opposite back plan, a U plan, a mixed-grade plan, or others. It must have desks, a cabinet for teaching materials, a learning corner, a subject corner, a hygienic corner, and wall decorations.

Flexible Instruction Plans

A multigrade instructional plan can be organized annually, per semester, or monthly. Organize flexible schedules for each week, depending on the national school curriculum. With clear objectives, subject or lesson content can be easily organized and combined. The approach should be learner centric.

Innovative Methodologies

Cambodian multigrade teachers can use direct and alternative teaching approaches. Three types of direct teaching can be used in multigrade classes, namely:

- Direct teaching for one person
- Direct teaching for one team or grade class
- Direct teaching for a whole class or for all of the grades in a classroom

In direct teaching for a one-team class, the teacher directly instructs one class and lets the students of another grade independently learn.

In direct teaching for a whole class, the teacher teaches one lesson of each subject to all of the students. As such, the teacher must have a clearly defined lesson objective and organized learning activities favorable for each grade level. The teacher should avoid giving a task or a problem with the same degree of difficulty to the entire class and instead provide the lower grade with a task or a problem first then do so to those in the higher grade level.

In some multigrade classes, the teacher instructs the entire class by teaching a subject at different levels. To facilitate the teaching-learning process, the teacher should employ the help of higher-grade students in order to motivate and help the lower-grade students.

Indonesia: Realizing Compulsory Education Through Multigrade Teaching

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Since the implementation of compulsory education from primary to junior secondary school in 1994, Indonesia established a policy of education that requires all families and communities to send their school-aged children (i.e., 6–17 years old) either to formal or non-formal educational institutions.

In an attempt to eradicate illiteracy, to reduce the dropout rate, and to accomplish compulsory educational goals, Indonesia developed three different stages of multigrade teaching approaches for primary education. The first stage aimed to overcome the shortage of teachers in populous areas. The second stage aimed to overcome the shortage of teachers in remote areas and with difficult contexts. The last stage aimed to educate a small number of students in remote places where establishing a school, even a small one, was not viable.

Involvement of Various Ministries in Multigrade Teaching

Indonesia aims to provide all school-aged children access to education. In basic education, three ministries (i.e., Ministry of Education and Culture [MoEC], Ministry of Religious Affairs, and Ministry of Home Affairs) are involved in enhancing the participation of school-aged children in freely obtaining minimum basic education. The Ministry of National Education, in collaboration with foreign agencies such as the United States Agency for International Development (USAID) and the United Nations Children's Fund (UNICEF), have been developing the country's capacity for basic education. One of their targets is to improve the quality of basic education through the implementation of multigrade teaching in elementary schools in remote areas.

Within the three ministries, other institutions are in charge of developing multigrade teaching with the aid of different programs. The MoEC uses multigrade teaching to improve the quality of basic education, particularly in elementary schools in remote areas. The Directorate General of Quality Improvement for Teachers and Education Personnel in the MoEC plays a very important role in training elementary schoolteachers, principals, and supervisors. The Directorate General of Management for Primary and Secondary Education and the UNICEF also plan to develop schoolteachers, principals, and supervisors in multigrade teaching in certain areas such as the Malang District in East Java.

The Ministry of Home Affairs, with the aid of district and sub-district offices, prioritizes the enhancement of the latter's staff capability to motivate and support the society as well as the community to help manage schools and to develop materials and infrastructure. The Ministry of Religious Affairs also helps schools manage instructional teaching and learning and train religious basic education teachers, including elementary schoolteachers, in remote areas.

Based on the roles and functions of each ministry, institution, or agency, the status of multigrade teaching in elementary schools in remote areas varies. For schools in remote areas managed by the MoEC, multigrade teaching has long been an innovative strategy of elementary school teaching and learning in remote areas. In district and sub-district offices managed by the Ministry of Home Affairs, multigrade teaching has become a part of school management. The ministry considers multigrade teaching as one of the most innovative ways to help teachers conduct teaching-learning activities, especially in religious schools in remote areas.

Multigrade Teacher Training

To fulfill the need to improve multigrade instruction, teachers have to be adequately trained. In Indonesia, the first ever multigrade training was conducted in East Java from March 6–9, 2006. It had 64 participants, comprising teachers, head masters, supervisors, parents, and association representatives from seven districts in East Java. All of the

districts established multigrade schools as a result. The Pacitan District hosted the first project, which restructured its planning and teaching-learning instruction. The district also found that the problem was not insufficiency of teachers to cover schools but inefficient teacher distribution. One school had a very small class while others had large classes. Some teachers thought multigrade teaching required teaching two classes in two shifts, as in teaching one class in the first shift and teaching another in the next shift. It was necessary to train the teachers on what multigrade teaching is, which is teaching two classes at the same time and not teaching two classes at separate times and places.

In order to implement the program, Mainstreaming Good Practices in Basic Education (MGP-BE) established a website (<http://www.mgp-be.depdiknas.go.id/>) and put up a monthly bulletin on multigrade teaching, which also served as models and venues for exchanging teaching experiences. The MGP-BE Project also asked the district to disseminate the program based on different districts' capabilities.

Teaching-Learning Strategies

The Multigrade Model is an instructional strategy that implements teaching two or more different classes or levels with different abilities and competence levels at one time and in one class.

A multigrade class is a combination of students who belong to adjacent levels such as grades 1 and 2 or grades 4, 5, and 6 taught by one teacher at the same time for one academic year. Multigrade teaching involves the following:

- A teacher does not separately teach two classes for different programs.
- Teaching and learning are done using a theme. However, a certain competency that cannot be included in one theme can still be separately taught.
- The instructional strategy chosen by a teacher is based on the number of students and the kinds of techniques and methods used.
- The instructional strategy should mirror the different forms of instructional and active learning, which must be creative and effective as well as enjoyable.
- To make a good plan, one multigrade class should be taught by one teacher for two years.
- Teaching and learning materials should be based on the content standards implemented by the National Standard of Education (NSP).

Innovations to Realize Quality Multigrade Teaching

In Indonesia's case, multigrade teaching provides many advantages if the teachers can design and carry out their tasks well. Such is the case of public elementary school, Gunungsari 4 in Sub-District Bumiaji in East Java, a small school located in a remote area with an average of only nine students per class.

Before introducing the multigrade teaching approach, the teachers in this school taught grades 1 and 2, grades 3 and 4, and grades 5 and 6 students in one classroom that is divided into two.

Multigrade teaching in Public Elementary School 4 Gunungsari was successfully implemented and improved the students' learning achievement. The percentage of graduates in academic year (AY) 2005–2006 reached 100 percent compared with that in AY 2004–2005, which only reached 67 percent. The average score in school exams for the five subjects examined in AY 2005–2006 significantly improved compared with that in AY 2004–2005.

Multigrade teaching approaches involve inviting local community members to become tutors, local school management coordinators, materials and facilities contributors, and professional teaching staff (e.g., local experts in arts, culture, handicrafts, languages, history, and religions).

In relation to innovative teaching and learning in elementary schools, research conducted by Triana Rejekiningsih (2009) about teaching strategies and involving parents in multigrade teaching in Public Elementary School Jetis Lor 3 in the Pacitan District in East Java found that:

- The school often implements a strategy of teaching small groups because it is the most effective way for multigrade teaching. A teacher divides a class into several groups based on students' ages. The strategy was chosen by the teachers themselves but required the use of the same group of learning materials.
- Parents support multigrade teaching by collaboratively working with one another and by raising awareness to help schools. Parent-school associations should provide support to school management.

Malaysia: Educational Access and Efficiency Beyond Multigrade Instruction

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Education in Malaysia, as stated in the *National Philosophy of Education*, is an ongoing effort toward further developing the potential of individuals in a holistic and an integrated manner in order to produce individuals who are intellectually, spiritually, emotionally, and physically balanced and harmonious based on a firm belief in and devotion to God.

Multigrade Classes in Under-Enrolled Schools

Primary education is mandatory for Malaysian children. As such, under-enrolled schools guarantee that every child has the opportunity to get free education no matter where they are. Even when the number of students is very minimal and not enough to create a proper class, these schools cannot be closed because the government believes that every child must have access to primary education near their homes. Multigrade classrooms became the answer. However, not all under-enrolled schools implement multigrade instruction.

The Malaysian Ministry of Education's guidelines for multigrade classrooms (1982) state that:

- If the enrolment in a grade is more than 10, classes need not be combined.
- If the number of teachers is sufficient, classes need not be combined.
- If the number of teachers is not enough and the number of students is less than 10 then two classes should be combined.
- One combined class cannot have more than 20 students.
- The students' ages in each class should be almost the same.

However, considering the fact that first year students need more teacher attention to build strong 3R foundations and that those in sixth year will sit for the Primary School Achievement Test (UPSR), they are not combined with other classes. Many under-enrolled schools that need to have combined classes combined the second and third years as well as the fourth and fifth years.

Fatimah Mohammad (1993) reported that in 1992, Malaysia had 2,406 under-enrolled schools, 738 of which implemented multigrade instruction. These schools were mostly

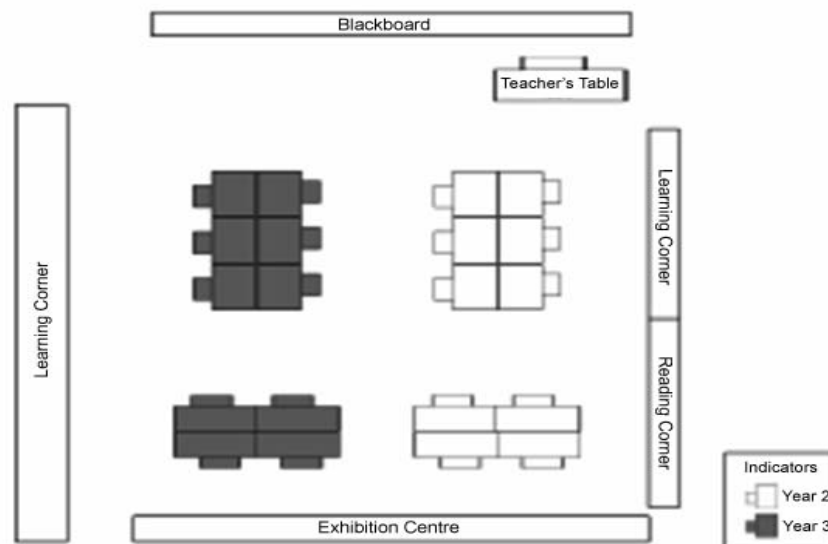
found in rural and remote areas. Some, however, were also found in cities like Kuala Lumpur and Putrajaya.

Over the past 20 years, the number of multigrade schools in Malaysia drastically declined. These are gradually being phased out, as the Ministry of Education continues to step up its efforts to increase the number and quality of teachers in schools and to ensure that adequate learning facilities exist in each school.

Some under-enrolled schools had multigrade classes prior to 2008. Since 2008, schools, regardless of enrolment size, gained a sufficient number of teachers to cater to each grade. Currently, a handful of under-enrolled schools that employ multigrade instruction still exist but mainly as a result of lack of classrooms. A few schools still combined classes whenever some teachers were called for meetings or took courses outside their schools.

In conducting multigrade classes, the normal arrangement for a multigrade classroom is shown in Figure 4. This type of arrangement was suggested by the *Teacher Training Curriculum for Conducting Multigrade Classes*. This curriculum teaches student teachers to instruct multigrade classes. In such classrooms, students from different grades are separated and, in each grade, put in groups based on their achievement levels.

Figure 4. Multigrade Classroom Setup in Malaysia



Malaysian Way to Create an Ideal Multigrade Classroom in Under-Enrolled Schools

Instructional Assessment

Evaluating and assessing multigrade classrooms is carried out as in normal ones. Students are assessed via observation, checklists on individual and group work, and formative and summative tests. The UPSR at the end of the sixth year measures primary students' achievement throughout their primary years.

Teacher Factor

Malaysia found ways to solve problems related to lack of teachers such as the *Ministry of Education Development Plan 2001–2010*, which was revised in 2006 and called the “*Education Development Master Plan (PIPP)*” that specifies a teacher-student ratio of 1:17 in under-enrolled schools. Since 2008, under-enrolled schools now enjoy an adequate number of teachers and clerical staff and the same teaching and learning facilities as normal schools, if not more.

To entice teachers to go to remote areas, the Ministry of Education introduced the Remote Schools Incentive Allowance that gives teachers and support staff allowances based on how remote the schools they will go to are. Houses were also built for teachers so they could more easily go to school. These incentives successfully made sure that more teachers continued to serve in remote and rural areas. To ensure continuous professional development, teachers in under-enrolled schools are given several in-service courses. Moreover, postgraduate diploma courses are also being offered to those who are posted in rural and interior schools.

Infrastructure and Facilities

All government programs enjoyed in normal schools are enjoyed by under-enrolled schools as well. Their facilities match that of normal schools.

Remote rural schools without telephone lines and wireless or satellite Internet connectivity are provided VSAT technology. This technology uses a two-way satellite ground station with a dish antenna to allow broadband Internet access. This initiative enabled teachers in interior locations to utilize *SchoolNet*, which connects schools nationwide to provide access to information and communication technology (ICT) content about teaching and learning, management, and assessment.

Under-enrolled schools that did not have electricity used to exist in remote areas. These now have generators or are being supplied by private electric providers. Some 64 schools in the peninsula, 103 in Sabah, and 407 in Sarawak use hybrid solar systems for their electricity needs.

Decrepit and outdated school buildings in remote areas are also being rebuilt or relocated to conform to government specifications. The Malaysian government also provides housing for students in remote schools called “special model schools,” which combine primary and secondary schools in the same compound, that are equipped with the necessary infrastructure and a hostel far enough for the children to board in during weekdays and near enough for them to go home to during weekends.

Bringing Children to School

To encourage the poor to come to school, the Poor Students’ Trust Fund, for one, distributed RM1.54 million to 800 primary school students nationwide in 2003. Each poor student received a maximum of RM2,000 a year to pay for school expenses. In

2003, the Ministry of Education introduced a financial assistance program for children at risk of dropping out of school because of poverty.

Students in the fourth to sixth years have also been given the Tuition Voucher Scheme, which gave qualified children from needy families and those who exhibit poor academic performance, opportunities to enroll in extra classes covering critical subjects such as mathematics, science, English, and Malay.

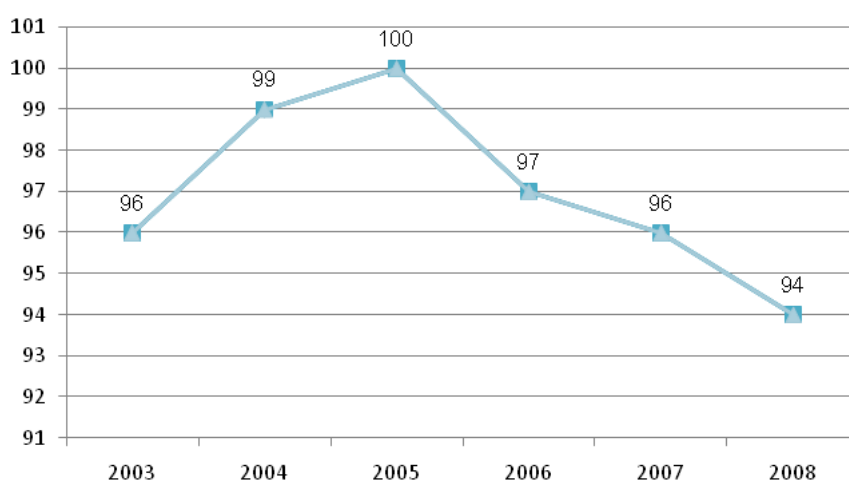
The Malaysian government also implemented the *Rancangan Makanan Tambahan* (Additional Food Program) that provides RM1.8 a day to each primary schoolchild so he/she can enjoy breakfast and get proper nutrition. The Pocket Money Program, which provides RM50 a month to eligible students, also helps encourage them to go to school.

Apart from these, the government also takes measures to attract indigenous people and those with special needs to go to school.

All of these efforts and funds invested in under-enrolled schools, in particular, and in the educational system in general, are reflective of the priorities that the Malaysian government places on ensuring that all children have access to quality basic education services. The problems of under-enrolled schools are part of the national agenda and have been mentioned in parliamentary discussions several times. Under-enrolled schools are consistently being monitored so that gaps will not exist among schools wherever these may be. The Malaysian government strives to ensure that all schools, whether under-enrolled or normal, are provided facilities to enhance teaching and learning and to produce global players.

These measures helped increase the number of children attending primary school as evidenced by the net participation rate from 2003 to 2005 (see Figure 5).

Figure 5. Net Enrolment Rate in the Primary Level in Malaysia 2003–2008



Source: UNESCO Institute of Statistics

However, much more needs to be done, as this progress has not been sustained after 2005. Despite this, however, efforts to phase out multigrade classrooms are ongoing amid the government's drive to address the problems that gave rise to the need for multigrade schools.

Myanmar: Teachers Are at the Heart of Multigrade Instruction

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In Myanmar, schools play an important role in building the nation. Teachers who actively participate in running a school are important people as they are:

- Responsible for effectively implementing the curriculum throughout their day-to-day contact with students
- Working in the primary unit for producing the educated manpower necessary for the country's progress
- Responsible, to a large degree, for transmitting, preserving, and promoting the country's cultural heritage

As such, the role of a Myanmar teacher is of great importance to the society. His/Her main task is to bring up new people or citizens in the process of creating a stronger country. These new people must be imbued with the finest human qualities. It is every teacher's duty to pass on his/her knowledge to the masses and to take part each day in public life.

However, remote, border, and mountainous areas in Myanmar consistently experience lower socioeconomic indicators and have difficulty retaining teachers, all resulting in the need for improved quality and equity.

In order to overcome difficulties with teacher shortage, to expand the pool of qualified teachers, and to produce an adequate supply of teachers, pre- and in-service teacher training programs were introduced. Teacher certification is also continuously being done. To provide more effective pre-service teacher training programs, teacher training

institutions were upgraded and new programs were introduced to meet the changing needs of schools.

However, students in geographically difficult and thinly populated areas still face problems in terms of teacher shortage or even absence. As such, they are taught in combined groups in multigrade schools that hold a significant place, especially in rural areas.

Qualities of Competent Multigrade Teachers

Most of the multigrade teachers in Myanmar possess three qualifications and other qualities. The first requirement is academic qualification or mastery of the subject matter. The second is professional qualification or being well-versed in the art of imparting knowledge, skills, and attitudes. The third is attitudinal qualification or being imbued with the finest mentality.

Responsibilities of Multigrade Teachers

In multigrade classes, competent teachers perform a variety of tasks. One of these is to establish good relationships with parents as their partners in educating learners. They should convince parents that all-around student development depends not only on them but also on parents.

Teachers cooperate with parents in matters concerning education, health, and discipline. Moreover, they should intimately get to know the parents capable of contributing to school improvement. Under the auspices of people's participation in education, parents contribute money or their own efforts to help build schools, sports grounds, and other facilities. Entire communities should make joint decisions as to how to better educate students, for instance, by taking over certain teaching assignments.

Doing activities by level and developing materials are important factors that make the task of implementing multigrade instruction easier. In these activities, teachers, along with students and community members, produce learning materials. In terms of teaching materials, freely available, low-cost, inexpensive, and simple materials should be used as teaching aids.

The biggest role of teachers is to manage the teaching-learning process. They specifically have to help students gain the knowledge and understanding that will equip them to handle important ideas in the basic field of knowledge. They should fulfill the intellectual or academic goal of scholarship.

Teachers should try to encourage every student to develop his/her own talents to the fullest. Worthwhile social experiences such as recreational sports, games, as well as dramatic and musical activities, among others, can contribute to their health, happiness, and enjoyment. As such, teachers are responsible for facilitating self-development in students.

Multigrade teachers directly face the task of ensuring that learners acquire the knowledge, skills, and attitudes necessary for genuine participation in duties and responsibilities of citizenship. They are responsible for planning; managing; and facilitating student learning, monitoring, evaluation, and communication, among others. They also group students based on ability (e.g., bright, average, or weak).

Multigrade teachers mostly manage the teaching-learning process using active participation methods, along with managing the needs; objectives; as well as assessment, feedback, and reinforcement processes of the curriculum.

They engage in whole-class, individual, or group teaching, depending on the subject and class situation. In subjects like PE, music, moral studies, art studies, and life skills, general information can be presented to students of all grades. In whole-class teaching, a teacher groups students in multigrade classes as a whole, making one lesson plan according to the ability of the average students.

Teaching Techniques

Multigrade teachers employ various methods, depending on their varying effects on students' learning. Some competent teachers combine a number of strategies to meet students' individual educational needs. The major teaching techniques include questioning, interacting, discussing, reinforcing, and self-instructing.

Individual Teaching

This is the most commonly used method and one of the most effective teaching strategies in multigrade instruction. The main way of conducting individual teaching is by providing seatwork to all students. While doing so, individual students can be brought forward for personal attention. Individual teaching allows the teacher better control of the teaching-learning environment. This teaching method is also used in remedial instruction for students with learning difficulties.

Group Teaching

Group teaching is a common strategy used by multigrade teachers in our society. It enables teachers to oversee the activities of all of the students and to give students who need personal attention what they need. One of the greatest problems every teacher faces after dividing the children into different groups is keeping all of them purposefully busy so he/she can freely teach basic skills such as reading to a group with a particular ability. It is necessary for a teacher to provide children with a wide variety of self-instructional or practice materials. The teacher should also see to it that the students are encouraged to tackle more difficult materials each time and to ensure that slow children will keep working on something until they succeed.

Most students in multigrade classes are, therefore, very receptive. They know their situation and are hungry for knowledge. Their educational standards totally depend

on their teachers. As such, if a multigrade teacher knows the intricacies of his/her profession and if he/she can make use of his/her potential then teaching multigrade classes will not be such a challenge.

Philippines: Community-Based Multigrade Schools

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The *Philippine Constitution* provides that the state shall protect and promote the rights of all citizens to quality education at all levels and shall take the appropriate steps to make education accessible to all. The ideal setup would be for each barangay to have its own public elementary school that offers all six grade levels. It has thus been a declared policy of the DepED to build schools in barangays that do not have any but whose enrolment and population growth trends warrant the establishment of such. There is, however, not enough professional manpower and resources for this setup. Furthermore, while some barangays are geographically separated from those with schools, the population and age distribution of their children do not warrant the establishment of complete elementary schools.

The Multigrade Program was conceptualized and implemented to serve the constitutional right to education despite realities at the ground level. As of school year 2008–2009, there were 37,697 public elementary schools, 12,225 or 36 percent of which were multigrade in nature. Of the 12,574,506 total enrolment, 866,296 or 8 percent studied in multigrade schools, which were generally located in the farthest-flung and most disadvantaged barangays. These were often found in communities that were not easily accessible via regular means of transportation and may not even have electricity or piped water systems. Compared with regular schools in the same division, multigrade schools were generally disadvantaged in terms of teacher–student, textbook–student, and classroom–student ratios.

Multigrade schools also had relatively younger and, hence, less experienced teachers, as well as higher teacher turnover rates.

Performance of Multigrade Schools in the Philippines

A common misconception regarding multigrade classes is that these implement a watered-down version of the *BEC* that regular schools use. Such is not the case though, as even if the strategies multigrade teachers used differ from those their counterparts in regular schools used, they use the same curriculum. In fact, the same scheme and tests are used to assess the performance of both regular and multigrade students nationwide. Foremost of these is the National Achievement Test (NAT), which measures the students' mastery levels in different learning areas of the *BEC*.

The data presented in Table 10 shows that the average mean percentage score (MPS) of multigrade schools in any learning area is lower than that of either regular schools or the national MPS.

Table 10. Philippine NAT Results for School Year 2008–2009

	MPS per Learning Area				
	Filipino	Science	Math	English	HeKaSi
Multigrade schools	70.15	52.76	57.88	55.84	61.3
Regular schools	72.21	59.63	68.7	62.14	69
Difference multigrade-regular	-2.06	-6.87	-10.82	-6.3	-7.7
National (multigrade and regular)	71.9	58.86	67.37	61.81	67.84
Difference multigrade-national	-1.75	-6.1	-9.49	-5.97	-6.54

The generally lower performance of multigrade schools could be attributed to disadvantages such as:

- **Location:** Multigrade schools are generally located in the farthest-flung and most disadvantaged of barangays. Often, these schools are in communities that are not easily accessible by regular means of transportation and may not even have electricity or piped water systems.
- **Limited resources:** Compared with regular schools in the same division, multigrade schools are generally disadvantaged in terms of teacher-student, textbook-student, and classroom-student ratios.
- **Inexperienced teachers:** Multigrade schools have relatively younger and, hence, less experienced teachers and higher teacher turnover rates. Due to

the physical demands of working in far-flung, hard-to-reach barangays, it has been the practice among divisions to assign young, oftentimes, newly recruited teachers to multigrade schools. It would seem that physical fitness for the assignment is given more consideration than any other qualification. The practice is so prevalent that others consider it as part of being inducted to the teaching profession. Thus, teachers generally do not stay long in multigrade schools.

The relative disadvantages of multigrade schools compared to regular schools may, to a large extent, be rooted on the following issues:

- **Low priority in terms of funding and resource allocation:** The DepEd may not be one of the agencies that have been devolved to the local government but it still greatly relies on local government units (LGUs) for physical facility requirements. The low visibility of multigrade schools and their small student population work to their disadvantage as far as prioritization of resource allocation is concerned. From a political perspective, spending on multigrade schools may not be a worthwhile investment.
- **Teacher preparation for challenges related to teaching in multigrade schools:** Multigrade teachers work amid difficult circumstances as teachers, as administrators, and as advocates tasked to represent schools well to the communities that host them. At present, only few of the skills needed by multigrade teachers are taught in teacher training institutions.
- **Perceptions and practices in relation to multigrade schools:** The disadvantaged situation of the multigrade schools, their generally poorer performance compared to that of regular schools and the high turnover rate of teachers, contribute to the misperception that multigrade schools are second-class schools.

Multigrade School Community-Based Instructional Scheme

Having identified the relevant factors that led to the relatively poor performance of multigrade schools, this situation is definitely not beyond remedy. A scheme that was implemented in one of the districts in a region south of Manila provides a good case of how effective measures can be devised and applied to reverse the current trend and to realize the potential of the multigrade system.

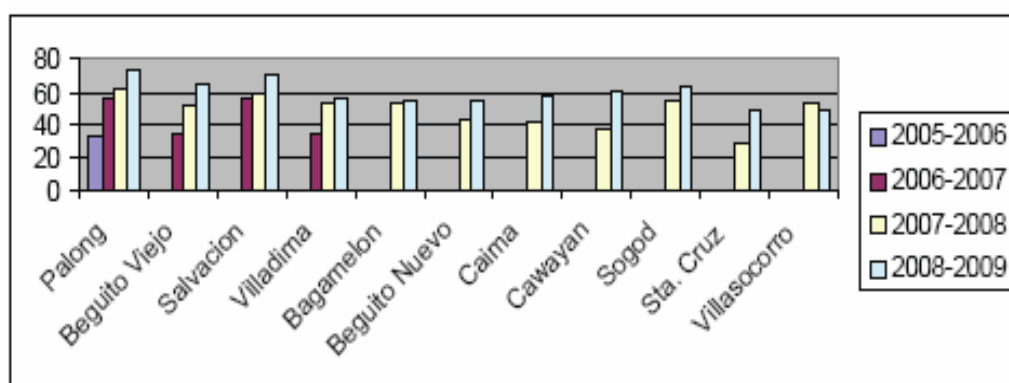
In the Libmanan South District Multigrade School in Camarines Sur, the academic performance of the students has been poor, as manifested by its low NAT results. In response, Dr. Emilia Brusas, the district supervisor, implemented the Multigrade School Community-Based Instruction Scheme.

This scheme is an alternative mode of teaching technique or strategy that utilizes human and material resources. It is a self-help project formed as a community initiative and by the resourcefulness of teachers with a little help and assistance from the local government of Libmanan, Camarines Sur.

The essence of the Multigrade School Community-Based Instructional Scheme lies in the utilization of the E-IMPACT modules developed by SEAMEO INNOTECH as an alternative instructional delivery designed to improve the academic performance of pupils.

It was piloted at Palong Elementary School in the Libmanan South District under the Camarines Sur Division in Region V in school year 2005–2006. After its success, as evidenced by a 23-point NAT score increase, three more schools implemented the scheme the following year, followed by seven more schools the year after. Figure 5 shows an increasing trend in the NAT scores in 10 out of the 11 schools.

Figure 6. NAT Results of the Libmanan South District Public Elementary Schools



Source: Brasas, 2010.

The successful implementation of the project improved not only the students' academic performance but also other performance indicators such as schools' participation, survival, and retention rates. Apart from academic benefits made evident by school statistics, multigrade instruction became known for bringing about sociocultural benefits to students, teachers, parents, and the community.

Multigrade students' morale, motivation to succeed, as well as leadership and lifelong learning skills increased. Teachers, on the other hand, felt more satisfied with the more innovative way of preparing lessons; increased support from students, parents, and the community; and more harmonious relationships among stakeholders. Instilling a sense of ownership over multigrade schools also developed among parents and the community concern for schools, the desire to improve school environments and performance, as well as a sense of fulfillment.

Innovative and Effective Practices

Part of the scheme is the introduction of several innovations and good practices of multigrade schools in Libmanan.

One innovation is the employment of a programmed teacher, a parent or an elderly student who has already mastered basic literacy and numeracy skills through prearranged lessons. There are also peer group leaders who are selected fast learners from grades 4–6 classes. Programmed teachers and peer group leaders either assist in or actually conduct instruction supported by specially designed instructional modules. Once in a while, the school is visited by an itinerant teacher or a resource person. An itinerant teacher is a locally funded teacher employed for his/her special skills, training, and expertise in music, agriculture, and the like while resource people are residents of the community who can be parents or alternative learners with special skills, training, and expertise. Itinerant teachers and resource persons are tapped by schools for subjects such as home economics, industrial arts, agriculture, music, arts, and PE.

Other beneficial innovations are the *Module-Based Learning Matrix* and the *Textbook-Based Lesson Guide* instead of lengthy lesson plans. The matrix is easier for teachers to prepare and use than lesson plans. It only contains brief details of references, content, learning objectives, values integration, assessment rates, and remarks.

Other practices that contribute to the success of multigrade instruction include the utilization of other teaching strategies such as the Cooperative Learning Process and the Interdisciplinary Learning Approach.

Multigrade teachers, prior to deployment, undergo an orientation program while multigrade teachers and parents, alternative learners, and programmed teachers go through enrichment training. On the other hand, parents are also capacitated through a parenting session sponsored by the municipal counselor in charge of education, James Jaucian, and the Parent's Forum, which builds their capacity to support school-based management.

Programs and projects of multigrade schools were developed and sustained with the help of stakeholders such as Project Perez Assistance Learning Center (PALC), which provides financial support for training multigrade teachers. Linkages between or among government and NGOs such as LGUs, youth organizations, and the academe also exist.

Crucial to the success of multigrade instruction is monitoring and evaluation by the division area supervisor; the assistant school division superintendent; the regional education supervisor in charge of multigrade instruction; and stakeholders like LGUs, especially the municipal counselor in charge of education who visits and observes multigrade classes.

DepEd programs and projects like Phil-IRI, Read-a-Thon, Remedial Instruction, and others likewise played a vital role in improving the academic performance of students.

Thailand: Best Multigrade Teaching Fit for Small Schools

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The number of small schools in Thailand is on the rise. A small school is characterized by having less than 120 students and a student-teacher ratio of 12:1. At present, of the 33,000 schools in Thailand, 13,915 or 44 percent are small. This could be attributed to the success of the government's birth control program in reducing the population growth and the increasing social value of learning in city schools.

Challenges Small Schools Face

Small schools are facing issues with regard to quality and efficiency. These have a low achievement level due to small budgets (i.e., per head and top up) and the fact that students from affluent families go to school in cities. These also have low student-teacher ratios. Furthermore, the number of students has been increasing over time though only 12 percent of the total number of students attend these.

One of the strategies to raise the bar of learning achievement and the student-teacher ratio in small schools is multigrade teaching. Aside from fostering an intimate and a more personal learning environment, it also raises the student-teacher ratio.

There are two main reasons for implementing multigrade classes, namely:

- **Low enrolment and too few students:** This usually occurs in small rural schools wherein settlements are sparse, scattered, and thinly populated so there are too few students in each grade level and it is considered too costly to provide a teacher for every grade level.
- **High enrolment but too few teachers:** Small schools do not have enough teachers. In Thailand, about 13,915 small schools have only 6–8 classes each. Each school has about 2–5 teachers.

This year, there are 3,600 multigrade schools under the OBEC while there are 38 multigrade schools under the Office of Chiangmai Educational Service Area 2.

Quality Indicators of Multigrade Instruction in Thailand

Several indicators of quality multigrade instruction in Thailand exist, namely:

- High student achievement
- Improved multigrade teaching methods and techniques
- Good school and classroom climate
- Classroom improvement
- Closer schools to communities
- Reduced dropout and repeater rates
- Increased literacy and numeracy rates

Best Multigrade Instruction Practices in Small Schools

Curricular Development

The current curriculum is based on the *Basic Education Core Curriculum 2008*, which provides local communities and schools a framework and orientation for preparing school curricula. The teaching-learning activities organized for all Thai children and youth at the basic education level aim to enhance learner quality with regard to the essential knowledge and skills required in an ever-changing society. They will thus be empowered to seek further knowledge for continuous lifelong self-development. Locally developed curricula and lesson plans for multigrade instruction consider the following learning areas:

- Thai language
- Mathematics
- Foreign languages
- Social studies/Religion/Culture
- Science
- Integrated health, PE, occupations, and technology and arts

Teacher Training

Teachers are trained to teach different lessons at the same time to students from different grade levels. They are well-oriented in their roles in a multigrade classroom such as:

- Teaching in a differentiated classroom and meeting learners' individual needs
- Assessing student readiness through a variety of means
- Reading and interpreting clues about interests and learning preferences
- Creating a variety of ways for students to gather information and ideas
- Developing varied ways by which students can explore their own ideas
- Presenting varied channels by which students can express and expand their understanding
- Managing a differentiated classroom by having the ability to organize and focus on providing essential information, understanding, and skills; to diagnose students' needs and craft learning experiences in response to diagnoses; to think of things that can go wrong or to structure student work to avoid potential problems; to give students a voice; to flexibly use time; to scrounge for a wide range of materials; to organize materials and space; to give directions; and to move students among varied work arrangements to see them in new ways and to help them see themselves in new ways, among others

For a multigrade teacher to succeed, he/she must be well-organized, well-resourced, and well-trained. He/She must also be creative, flexible, and self-directed. It is important for him/her to have a positive attitude toward multigrade instruction and the willingness to work hard and closely with the community. A multigrade teacher must also have a strong belief in the importance of personal responsibility in the classroom and the ability to develop these characteristics in students.

Classroom Management

Multigrade classrooms in Thailand are clean, spacious, and comfortable with corners for computers and multimedia equipment, a resource center for reading, and an area for teachers. Teachers and students should agree in the classroom.

Three types of multigrade schools exist, namely:

- Type I has four classes in grade 1, combined grades 2 and 3, combined grades 4 and 5, and grade 6.
- Type II has three classes, combined grades 1 and 2, grades 3 and 4, and grades 5 and 6.
- Type III has two classes, mixed grades 1, 2, and 3 and combined grades 4, 5, and 6.

Table 11 shows how multigrade classrooms are managed in terms of number of students and teachers.

Table 11. Classroom Management in a Multigrade Classroom in Thailand

Grade	Student		Total	Teacher	Reason
	Boy	Girl			
1	8	12	20	1	Practice literacy/ Mathematics
2–3	7	14	21	1	
4–5	11	15	26	1	
6	7	9	16	1	National test
Total	33	50	83	4	

Table 12, on the other hand, presents a sample classroom schedule for a multigrade class for grades 1–3.

Table 12. Example of a Timetable for Grades 1–3 in Thailand

Day/Time	08:20–08:30	08:30–10:00	10:00–11:30	11:30–12:30
Monday		Math	Thai language	
Tuesday		Math	Thai language	
Wednesday		Thai language	Math	
Thursday		English	Computer	
Friday		Science	English	

Day/Time	12:30–14:00	14:00–14:10	14:10–15:30	15:30–16:00
Monday	Science		Social Studies	Activity
Tuesday	Integrated		Integrated	Activity
Wednesday	Integrated		Integrated	Activity
Thursday	Integrated		Integrated	Activity
Friday	Test		Social Studies	Homeroom

Classroom Activities

Activities in the classroom include individual analysis, setting up a short timetable, organizing students into small groups, frequent teacher movement between different groups, arranging students to sit in mixed-ability and grade-based groups, and giving reading instructions to one grade while giving directions to the other grade.

With the projected increase in the number of multigrade schools, it is recommended that policies, strategies, and technologies for implementing multigrade instruction be put in place.

Timor-Leste: Multigrade Instruction for “New Schools”

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Timor-Leste is a relatively new country that gained independence on May 20, 2002. Its educational system has been facing many challenges such as lack of teachers, poor infrastructure, and absence of school facilities.

Although the government is making enormous progress, much remains to be done. A new school management system is being established with 250 basic schools (i.e. for grades 1–9) arranged in clusters that start from cycle 1 that covers grades 1–4, cycle 2 that covers grades 5–6, and cycle 3 that covers grades 7–9. The clusters will also include some satellite schools.

While a number of schools are well-resourced, the condition of many rural schools is still not favorable to the teaching process due to lack of materials and resources. Teachers are understandably reluctant to teach in such a demotivating condition in isolated places.

Cases of Multigrade Instruction

Multigrade teaching goes way back to the Indonesian pre-independence era when there were some multigrade classes in remote areas. One case study illustrates the fact that methods of teaching suitable for mono-grade instruction are often also very suitable to multigrade instruction. It also shows that teachers need additional skills that, in the case

cited, were left to learn through experience. Some evidence that cross-age peer tutoring took place on an informal basis during this period also existed.

The development of multigrade teaching and multigrade schools in Timor-Leste conforms to a number of current government policy goals. Universal primary education and equitable access to education for girls and underserved groups are major priorities of the government of the Democratic Republic of Timor-Leste in part because of its commitment to the UN Convention on the Rights of the Child and the *Millennium Development Goals*. Multigrade schooling is one means of addressing these priorities, especially in remote areas or areas with small school-aged populations (UNICEF, 2005).

At present, 135 primary schools implement multigrade teaching. These schools are mostly poorly equipped and located in rural areas.

Timor-Leste is, therefore, still at a very early stage in implementing multigrade teaching in any systematic way but there is a growing realization that it has to be a way forward. However, a major initiative currently underway is the creation of a teacher career regime based on a staffing formula. The draft formula stipulates a teacher-student ratio of 1:32 in cycle 1, 1:34 in cycle 2, 1:30 in cycle 3, and 1:27 in cycle 4. It is envisaged that a school will be required to have at least two teachers. This will inevitably mean that many schools with less than 100 students will have to implement multigrade instruction. This initiative is still in the early stages and has yet to be supported by any systematized teacher training.

In 2005, the UNICEF supported the education ministry to carry out a study on teacher skills and knowledge training in multigrade teaching, which aimed to provide a snapshot of current practices. Observations were made on teaching practices, student activities, curriculum and teaching and learning material use, and physical school environments (e.g., buildings and furniture). Teachers were asked how they learned to work in multigrade settings and what their needs were in terms of training and other resources.

Escuela Nueva

In 2010, the education ministry started to implement the Colombia-inspired school model of Escuela Nueva with the assistance of the UNICEF in a partnership for the pilot in some schools in remote or isolated areas. These new schools considered children as the center of learning wherein they are required to actively participate. This method is also very useful for multigrade teaching, particularly in remote and isolated areas where access is not easy. The flexibility of this approach means that a teacher can teach different age groups who can work at their own levels. The focus of Escuela Nueva is to provide teachers skills to teach students as individuals and to help children help one another, which will be critical in implementing multigrade instruction.

There are indications that teachers are extremely enthusiastic about the multigrade approach, as some even walk 10 kilometers just to be able to attend training sessions. Table 13 summarizes case studies of schools with multigrade classes.

Table 13. Summary of Case Studies of Schools Implementing Multigrade Teaching

	Teacher Practices	Student Activities	Teaching and Learning	Physical Arrangement and Environment	Parent and Community Involvement
School A	The teachers used quasi-multigrade methods, that is, they taught the two classes separately, alternating between the two groups. The teachers rotated among classes, teaching their own subjects.	The students studied in the classroom although sometimes they went outside for measurement exercises and sports. Sometimes, older students helped younger ones such as in math, which involved group work.	Resources in the school included desks, chairs, blackboards (i.e., two per classroom), class sets of textbooks, exercise books, and a <i>Makalero-Tetun</i> word list (i.e., a local initiative in conjunction with a Japanese foundation). The school had a duplicating machine that they used to produce exams and tests but not to produce worksheets.	Grades were combined: 1 and 4, 2 and 3, and 5 and 6. Classes were arranged separately with their desks facing in different directions in each classroom.	The community provided paid labor to reroof the school using the Catholic church's funds.
School B	The teacher usually set separate work for each grade, using the two blackboards at the front of the room. Sometimes, the teacher taught the same subject to both grades at once while at other times he/she taught different subjects to each grade.	The students were mixed together and not separated into classes. They did activities and games as a whole class.	Resources in the school included students' workbooks and <i>Lafaek</i> magazines.	This school comprises a double classroom block made of palm branches, timber, and a grass roof. Only one classroom was used by 54 students in grades 1 and 2.	A parents and teachers association (PTA) was operational at the school. The parents built the school.

Vietnam: The Role of Multigrade Instruction in the Educational System

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There are many forms of multigrade classes in Vietnam. One teacher may be in charge of 2–5 different levels. However, the majority of combination classes consist of two grades, accounting for 95.3 percent. So far, multigrade schools are quite widespread in ethnic minority areas with the purpose of providing primary education to disadvantaged children by bringing schools closer to the communities where they live.

Multigrade teaching has proven to be an effective and important solution as an official classroom organization rather than a temporary response to certain situations (Primary Education Project, MOET, 2005).

There is a continuously increasing presence of multigrade classes in various places in Vietnam. According to 1995 statistics, 13 provinces and 108 districts had 1,130 multigrade classes, 3,800 teachers, and 86,853 students (APEID-UNESCO, 1995). These figures substantially increased in the following years, as 2,162 primary schools made up 1.8 percent of the total number of primary schools and 143,693 students representing 38 percent of the school population involved in multigrade instruction. In 2001, 2.5 percent of the primary classes (i.e., with 169,662 students) were multigrade (Son Vu, as cited in Little, 2007).

According to the MOET, the total number of multigrade classes in 39 provinces was 6,810 in 2004. In 2009, this figure increased to 49 provinces with 8,404 multigrade classes. The considerable increase in the number of provinces, schools, classes, and students involved in multigrade instruction from 1991 to 2009 is another example of its important role in the country's educational system (MOET, 2009).

Multigrade classes in most countries are established due to necessity rather than choice. Vietnam is not an exception. The country's government promotes multigrade schools to reduce gaps between children in urban and mountainous rural areas as well as to achieve universal primary education.

Benefits of Multigrade Instruction

Multigrade teaching has much to offer communities that are not well-served by the existing formal system of primary education (Berry, 2000).

Access

Multigrade schools are being used as means to reach communities in mountainous areas (UNICEF, 1994 and 1998, as cited in Berry, 2000), encouraging children to return to school and providing alternatives or home-based education where formal education, so-called “white education,” is nonexistent (UNICEF, 1998). This means that more girls are now able to go to school, as families are no longer worried that they have to travel long distances to do so.

Relevance

The second most important benefit that multigrade instruction brings to disadvantaged communities in Vietnam is the relevance of school curricula, which mainly focus on two key subjects (i.e., Vietnamese and mathematics) and creates more opportunities for children to leave or reenter classes to meet commitments at home.

The successive impact that resulted from the two benefits mentioned above is a decrease in the dropout rate. The APEID-UNESCO Project in 1995 summarized these positive effects in the statement, “In regions that have adopted the multigrade school system, student participation is 100 percent, rates of primary school completion have risen, and the dropout and repetition rates have dropped considerably (quoted in Brunswic and Valerien, 2004).”

Improved Student Performance

The APEID-UNESCO (1995) study showed another positive result of implementing multigrade classes in Vietnam. “Performance is better and students spend more time working in groups. Children are more active, more sure of themselves, and know how to appropriately react (quoted in Brunswic and Valerien, 2004).” In fact, this benefit was elaborated by the following points:

- Students know how to develop independent work habits and self-study skills.
- Students develop positive attitudes about helping each other.
- Cooperation between different age groups is more common, resulting in collective ethics, concern, and responsibility (APEID-UNESCO, 1995, as cited in Berry, 2000).

Research and Projects on Multigrade Instruction in Vietnam

Over the past 20 years, many projects involving multigrade instruction have been undertaken in the Asia/Pacific region and in Vietnam to promote the practice of multigrade teaching. Among the major works identified are:

- A UNICEF-MOET-funded project called “Multigrade and Bilingual Education Classes in Primary Schools in Vietnam” (1998), which was done to facilitate multigrade instruction in a bilingual context
- An evaluation of the Multigrade and Bilingual Education Project in Vietnam (1998) was completed by Donald Archibald for the purpose of:
 - Accessing the status of the UNICEF-MOET program on primary education
 - Identifying trends or issues focusing on the program’s activities
 - Suggesting cost-effective strategies
- A research study entitled, “Bringing the School to the Child: Multigrade Schools in Vietnam,” done by Pat Pridmore (1999) to seek out advantages that multigrade schools bring to disadvantaged Vietnamese children
- A study entitled, “Adapting the Curriculum for Teaching Health in Multigrade Classes in Vietnam” (Little, 2007) was carried out to determine the necessity of adapting the teaching curriculum in a multigrade context and to identify teaching strategies that best serve a mixture of student grades
- The Primary Education Project for disadvantaged children in a multigrade instruction context (MOET, 2005)
- A professional development project for multigrade primary teachers (MOET, 2006)

Innovative Programs for Multigrade Instruction in Vietnam

Not only authorities but many teachers as well who are concerned with multigrade instruction have been trying to promote its effectiveness and are creating an enabling environment for teaching in multigrade settings. The following are some examples of current good practices of multigrade instruction:

- **Adapting the national curriculum in specific teaching settings:** The curriculum for multigrade students has been reduced so they can reduce the number of school days. The curriculum was designed to only focus on two key subjects—language and mathematics. As a result, students can both go to school and do domestic work to help their parents out (Berry, 2000).
- **Introducing a bilingual program of education to multigrade schools:** This enabled some ethnic groups who do not speak Vietnamese to access basic education (Berry, 2000).

- **Applying seating and classroom management techniques and making use of a flexible teaching method:** This is being done by a King Teacher who works with Dao children in a two-grade class at Pa Noc School in the Son La province. The teacher teaches two grade groups at once. He/She takes turns teaching the two groups and monitoring and checking the tasks he/she gave (Pridmore, 1999).
- **Selecting and developing local topics:** This makes lessons relevant to the socioeconomic context the multigrade students live with (extracted from UNICEF-MOET, 1998).

CHAPTER IV: Multigrade Instruction Quality Indicators in Southeast Asia

Framework for Quality Instruction

Quality indicators of multigrade instruction are closely linked to the broad quality of education. To understand what quality education means, one should consider how the *Dakar Framework of Action* views it—quality education is at the heart of education. The *Dakar Framework of Action* defines quality education based on the following desirable characteristics:

- Learners (i.e., healthy and motivated students)
- Processes (i.e., competent teachers who use active pedagogies)
- Content (i.e., relevant curricula)
- Systems (i.e., good governance and equitable resource allocation)

The framework that will be used to identify quality indicators for multigrade instruction combines UNESCO's five dimensions in understanding educational quality (2005) and factors of quality educational indicators under the *Education Quality Indicators Framework (EQIF, 2010)*, namely:

- **Context:** Economic and social forces that have an effect on the educational system but are beyond the direct control of the system. It has an important potential influence on educational quality, which may include condition and status of the society, policies, and aid strategies.
- **Inputs:** Resources made available to support the process such as material and human resources, among others.
- **Process:** Activities resulting from the use and management of inputs. It is the key area for human development and change dealing with curricula, teaching methods, and learner motivations, among others.
- **Outputs/Outcomes:** Developments or results, as in the case of education, students' attitudes and achievement results.

From a list of what constitutes each factor, the quality indicators of multigrade instruction were drawn out. However, the quality of multigrade instruction cannot be separated from what goes on in other levels, as it is also necessary to consider action areas at the central and educational site levels when using multigrade instruction as a means of extending educational provision (Brunswic and Valerien, 2004). Thus, the context, inputs, process, and outputs are considered not only at the classroom but also at the school; at the local or community; at the regional, division, or district; and at the national levels when assessing quality indicators.

At the national level, the people involved include national policymakers and central educational authorities. At the regional, division, and district level, supervision and support are expected from supervisors and coordinators. At the local or community level, local government officials, parents, and community members are expected to become involved with and to contribute to the successful implementation of multigrade classes. At the school level, principals or school heads play a significant role. The classroom level is the domain of teachers. At the heart are learners who, as the rights holder of education, are the *raison d'être* of quality indicators and the embodiment of what constitutes quality multigrade instruction.

Southeast Asian Indicators and Measures of Quality Multigrade Instruction

In general, an indicator provides evidence that a certain condition exists or that certain results have or have not been achieved (Brizius and Campbell, 1991, as cited by Horsch, 1997). In the educational sector, indicators are designed to provide information about the state of the educational system, in a way serving as an early warning device to suggest the need for action (Nuttal, 1993). The information is expected to strengthen monitoring and evaluation and to give accurate and comprehensive data as basis for policymaking and improved educational outcomes (Riley, 1993).

Indicators will be used to assess progress, to gauge the attainment of goals and objectives, and to help decision makers improve multigrade instruction in Southeast Asia. These quality indicators for multigrade instruction should be accompanied by a rating system or rubric (Quijano, 2010, see Table 14).

Table 14. Rating System or Rubric for the Quality Multigrade Instruction

Score	Description
0	There is no evidence of this indicator.
1	There is minimal evidence of this indicator but clear evidence exists that it is in the process of planning for implementation.
2	There is some evidence or there is clear evidence for only a portion of this indicator.
3	This indicator is clearly evident.

Context: Quality Indicators of Multigrade Instruction

Beyond the educational system are contexts that affect the kind of instruction in multigrade classes. As multigrade instruction is never devoid of powerful forces in the background, contexts should be considered when determining what constitutes quality indicators of multigrade instruction. Some of these factors are described in the following sections.

Global and National Educational Commitment

Most recently established multigrade classes are products of adherence to educational goals that aim to universalize primary education, as stated in the EFA and *Millennium Development Goals*.

Southeast Asian countries' international commitment and national obligations has historically catalyzed multigrade instruction implementation. Vietnam and Cambodia, in hopes of fulfilling national goals and plans related to EFA, have expanded their implementation of multigrade instruction. Compliance to the UN Convention of the Rights of the Child and the *Millennium Development Goals* also spurred the Timor-Leste government to develop multigrade schools. Constitutional right to education, on the other hand, was a significant driving force of the Philippines' multigrade program.

The extent and importance a government attaches to its obligation to realize EFA shapes the kinds of multigrade instruction a country has. Therefore, the country's commitment to realize EFA and to adhere to the *Millennium Development Goals* should be considered when determining the quality of multigrade instruction.

Policy Support and Program Implementation

Related to educational aspirations that direct government actions are policies that recognize and support multigrade classes.

Cambodia has policies and programs on integrating multigrade teaching methodologies into teacher training curricula, providing multigrade teacher training and monitoring, establishing multigrade classes in provinces, and providing subsistence allowances for multigrade and double-shift teachers (Sopheak, 2010). Indonesia implements multigrade teaching in elementary schools as a teaching-learning strategy, as part of school management, and as an innovative way to help teachers in religious schools in remote areas (Noor, 2010).

In line with the Philippine government's constitutional mandate to provide accessible education to all, *DECS Order No. 38 s. 1993* was issued to provide complete grade levels in all public elementary schools through combined or multigrade classes. Another policy issued was *DECS Order No. 96 s. 1997*, which detailed the definition; organization; school plant facilities; curricula and programs of multigrade schools; and support, welfare, and incentive programs for multigrade teachers (Villalino, 2010).

The Ministry of Education of Timor-Leste, in partnership with the UNICEF, implemented Escuela Nueva in 2010, which employs active and participatory learning approaches. This is useful for multigrade teaching in remote and isolated areas (Soares and Amaral, 2010).

The Vietnamese government issued policies that promote multigrade instruction such as its guidelines for managing and organizing multigrade primary classes and the rights of multigrade teachers to receive financial incentives (Huong, 2010).

The existence of these policies increases the likelihood of implementing effective multigrade classes. For this reason, these are worth considering when determining the quality of multigrade instruction.

Table 15. Context: Quality Indicators

Indicators	Measures
National educational aspirations or goals	<ul style="list-style-type: none"> • The country adheres to EFA and the <i>Millennium Development Goals</i>. • The right to education is guaranteed by the constitution or an education act.
Policies recognizing and supporting multigrade instruction	<ul style="list-style-type: none"> • Multigrade teaching is included in national strategic plans. • Policies on multigrade instruction exist such as implementation guidelines, flexible curricula, and incentives for teachers.
Knowledge, attitudes, and perceptions	<ul style="list-style-type: none"> • Policymakers and educators are aware and supportive of multigrade instruction. • Supervisors and coordinators are committed to and competent in terms of improving the performance of multigrade schools.

Inputs: Quality Indicators of Multigrade Instruction

The difficult circumstances under which multigrade instruction exists need not translate to total lack of educational inputs. In multigrade schools, as in mono-grade schools, lack of teachers, textbooks, and learning materials can impair their ability to effectively perform. In this sense, resources are important to ensure educational quality (UNESCO, 2005). Therefore, adequate and appropriate inputs must be put in place in multigrade schools for the latter to be deemed effective. Several of these input indicators are described in Table 16.

Teacher Training and Support

The importance of teachers cannot be denied. This truism is very relevant in a multigrade class. In multigrade classes, teachers play a variety of tasks—managing the teaching-learning process, establishing relationships with parents and the community, and developing learning materials (Soe, 2010).

Multigrade teachers work under unique circumstances such as school isolation and the use of unconventional pedagogical approaches. The special demands of multigrade teaching require special preparation, training, and support for multigrade teachers to effectively function. This will ensure that the right number of competent teachers are deployed and retained in multigrade classes, resulting in quality instruction.

Pre- and in-service training is necessary for teachers to improve their multigrade teaching skills. In Cambodia, multigrade teachers who were trained in methodologies of multigrade teaching can competently teach and execute their roles well as planners, organizers, facilitators, observers, and evaluators (Sopheak, 2010). Multigrade teachers, prior to deployment, undergo an orientation program while teachers and parents, alternative learners, and programmed teachers go through enrichment training (Brusas, 2010).

Support mechanisms for teachers should also be put in place. In Malaysia, teachers are encouraged to teach by the Remote School Incentive Allowance and provided houses as well as in-service and postgraduate courses for professional development (Ahmad, 2010). Part of the teacher support mechanism in Indonesia is establishing a website and a monthly bulletin for multigrade teaching experience exchange purposes (Noor, 2010).

On-the-job mentoring, coaching and supervision of multigrade teachers, particularly less-experienced teachers, is an important component of teacher support and professional development.

Learning Environments and Facilities

For learners to become active participants in the learning process and for teachers to effectively act out their roles, an environment conducive for learning and that is well-equipped with facilities for nontraditional teaching-learning strategies is required.

Conducive Environment

An environment wherein one can learn without distractions and interruptions is crucial for multigrade instruction (Thomas and Shaw, 1992).

For learners of multigrade classes to thrive, a child-friendly school environment should be established (Sopheak, 2010). Making multigrade classrooms places for learning can be done by establishing a classroom agreement between the teacher and students (Kittiratchadanon, 2010).

Aside from making schools psychologically conducive for learning, the physical condition of classrooms also matters. Establishing a good environment requires that classrooms be spacious to facilitate learning management (Sopheak, 2010) as well as clean, beautiful, and comfortable (Kittiratchadanon, 2010).

Provision and Use of Facilities

In terms of learning environment and facilities, it is ideal for Southeast Asian schools to have a spacious area that can accommodate combined or mixed-grade classes with movable facilities and furniture. These are also required to have learning centers and equipment in good working condition in each classroom.

Southeast Asian countries have thus installed facilities that will make multigrade teaching more effective. For instance, in the Philippines, multigrade classes are provided the same environment as mono-grade classes with the addition of a learning center in each classroom. In Indonesia, it is common for multigrade schools to make use of open spaces and recycled materials. In Malaysia, these classes are required to have conducive learning environments equipped with self-access centers, libraries and resources, audiovisual equipment, cable television and Internet access, and PCs.

Multigrade schools in remote rural communities oftentimes face challenges in ensuring conducive learning environments. Some schools have limited access to water, sanitation and toilet facilities, while others have irregular supply of electricity, or none at all. In many countries local government authorities and PTAs assist in mobilizing resources to improve multigrade school facilities through school-community partnerships.

In terms of seating arrangement, Vietnam utilizes several multigrade class models to enable teacher mobility and to enhance student attention.

Organizational Approaches

Multigrade classes can utilize several grouping strategies that range from combining several grade divisions under the direction of a single teacher to having a completely non-graded learning environment (Thomas and Show, 1992).

In Southeast Asian multigrade classes, students are usually combined according to grade level. In Cambodia, grade levels comprising students not exceeding 35 per classroom are combined with one another. Note, however, that grade 1 students are not combined with those in other grades (Sopheak, 2010). In Indonesia, the best practice was coming up with small groups by age (Noor, 2010).

In some countries, students are grouped based on ability. In Malaysia, it is common to group students by achievement level (Ahmad, 2010). Similarly, in Myanmar, students are grouped based on ability. Above-average, average, and below-average students are thus grouped accordingly (Soe, 2010).

In other countries, students are grouped based on social status, which proved particularly useful in cases wherein learners were given certain activities to perform (Kittiratchadanon, 2010). This kind of grouping may also be a strategy to provide the necessary assistance to indigent students (Soares and Amaral, 2010).

Curricular Development and Implementation

With the exception of Indonesia, Thailand, and Vietnam, multigrade instruction in Southeast Asian countries is based on prescribed national curricula.

In Indonesia, each school—whether mono- or multigrade—has its own curriculum that is developed by each teacher based on national content standards. Assessment is based on the competencies students develop in accordance with a school-based curriculum.

Vietnam reduced the content of its national curriculum for multigrade schools. To better suit multigrade instruction, the said curriculum was localized focusing on two key areas—language and math. Moreover, the government incorporated local topics and a bilingual program to the revised curriculum in order to cater to minority groups.

Thailand, on the other hand, prescribes the use of the so-called “*Multigrade and Mixed-Ability Curriculum for Small Schools.*”

Most multigrade classes in Southeast Asia follow the countries’ respective national curricula although these are allowed a certain amount of flexibility. For instance, flexible curricula based on core school curricula are being implemented in Cambodia (Sopheak, 2010). In most cases, multigrade teachers are given more independence by national governments and local education departments. As such, they adopt and design specific lessons on their own that integrate varying designs (Huang, 2010).

In Southeast Asia, the most common approach to implementing multigrade curricula involves the use of integrated curricula that utilize themes or topics common to combined grade levels taught at differentiated levels and with varying activities. In Myanmar, for instance, curricula are integrated in such a way that common topics are taught to combined grades even if the students are assigned different tasks, depending on their respective levels (Soe, 2010).

The so-called “jump-jump approach” is also commonly practiced in Southeast Asian countries that implement multigrade instruction.

Teaching and Learning Materials

Ideally, curricula, syllabi, teachers’ manuals, textbooks, modules, and reference materials in multigrade schools are provided by national governments. Local teaching-learning materials are, on the other hand, made by the teachers.

The Indonesian government provides multigrade schools textbooks and other reference materials, CDs, radios, modules, and teachers’ manuals. In Malaysia, the Ministry of

Education provides teaching-learning resources such as courseware, learning packages, and apparatus. It also provides students free textbooks. Schools can purchase teaching aids using their own funds although teachers are encouraged to either use local materials as teaching aids or to improvise. Multigrade schools in the Philippines, on the other hand, make use of the so-called “Multigrade Teach-Learn Package,” a resource guide for multigrade teachers that contains lesson guides, exercises, and directions to help them more effectively and efficiently teach (Villalino, 2010).

In the Philippines, self-instructional modules and teachers’ guides offer greater support for self-directed learning. In Libmanan District in Region V, multigrade schools received E-IMPACT modules developed by SEAMEO INNOTECH which foster self-directed learning, and group or peer learning (Brusas, 2010).

Parent and Community Support

Students’ parents and communities play a crucial role in providing quality multigrade instruction. They can be sources of educational resources or the resources themselves. They can also be important members of school management or involved in instruction inside and outside multigrade classes.

Model multigrade schools in the Philippines adopt the Multigrade School Community-Based Instructional Scheme based on the technology and strategy in SEAMEO INNOTECH’s E-IMPACT Project. The success of implementing multigrade instruction can be credited to the commitment of parents, communities, and teachers as well as to good community-school relationships. Multigrade instruction benefits from communities in terms of providing the necessary facilities and learning resources in order to make human resources available for school operation and for the teaching-learning process (Brusas, 2010).

The poor social status of most students’ parents in Indonesia pushed members of local communities to serve as school coordinators, contributors of materials and facilities, or tutors or part of the teaching staff. They share their skills or expertise to facilitate student learning, particularly with regard to entrepreneurship (Noor, 2010).

NGOs were likewise tapped to provide financial and material support (Noor, 2010). In the Philippines, partnerships with NGOs facilitate the implementation of some multigrade programs. One example of this is the Multigrade Demonstration School Project 1996–1998, which was funded by the UNICEF. The Coca-Cola Foundation Philippines, Inc. also helped organize the Little Red School House Project from 1997 to 2002 (Villalino, 2010).

Table 16. Inputs: Quality Indicators

Indicators	Measures
Assigning and deploying teachers	An ideal teacher-pupil ratio is set and followed.
Availability of educational resources	An ideal class-pupil ratio is set and followed. An ideal textbook-pupil ratio is set and followed as well.
Teacher preparation and training	Multigrade teachers have completed pre-service training, which includes adequate training on multigrade instruction in teacher education institutions. Mandatory multigrade orientation programs are conducted for newly assigned multigrade teachers. Multigrade instruction in-service training courses are offered in teacher education institutions.
Teacher professional development and welfare	Enhancement training or continuous certification programs on multigrade instruction are regularly conducted. Multigrade teachers receive incentives or additional allowances and other support services. Teaching resources and technical support are available for multigrade teachers and facilitators.
Supervisor and trainer training	All supervisors and trainers are well-trained on multigrade instruction and supervision.
Infrastructure and facilities	Facilities such as learning centers, reading corners, and movable furniture suited for multigrade instruction are available. Schools have facilities to access resources for teaching and learning such as learning centers, libraries, and ICT tools. Learning centers in classrooms are available and used. Movable furniture are available. ICT facilities are available. The whole school is physically and psychologically conducive for learning. Classrooms are attractive, clean, spacious, and well-arranged. Adequate water and sanitation facilities are available and fully functioning.

Process: Quality Indicators of Multigrade Instruction

The key factor that matters when it comes to implementing multigrade instruction comprises activities involved in the teaching-learning process, including assessment. In Indonesia, for instance, the teaching-learning model for multigrade instruction is an elaborate process that involves competence analysis (i.e., combining similar learning materials from different levels based on an analysis of competencies that need to be taught in one semester or one year; mapping the theme for related competencies; developing syllabi, which contain competencies and detailed descriptions of activities, resources, and evaluation techniques; and planning lessons) (Noor, 2010).

On the other hand, the teaching-learning process in Thailand involves individual analyses and setting up short timetables. Students are divided into small groups while teachers attend to one group at a time. Each group is given a different set of activities. Afterward, mixed-ability groups are given activities before the students are given individual activities. Assessment is then conducted, after which their achievements are reported (Kittiratchadanon, 2010).

In general, assessment for mono- and multigrade classes in Southeast Asia do not differ much. Internal assessment is regularly conducted by teachers throughout the school year while external assessment is conducted by district heads or national governments at the end of each grade level. Table 17 lists down quality indicators related to the process.

Table 17. Process: Quality Indicators

Indicators	Measures
Supervision	Channels of exchange are available and utilized for close supervision. Regular field visits are conducted.
Monitoring and evaluation	Monitoring and evaluation tools and systems are able to meet the unique contexts and needs of multigrade schools. Reports and documentation of monitoring and evaluation are available. School heads conduct school self-assessments for management, environment, technical teaching, and development. Instructional supervision is regularly conducted with each staff member assigned an individual supervision plan. A management information system is available for use to monitor and evaluate multigrade classes. Teachers practice individual supervision and receive appropriate internal support and guidance from school heads and mentors.
School clustering	Schools are clustered and partnerships are developed for sharing of resources and to facilitate supervision.
Planning	The school has annual and medium-term plans of action.
Teaching-learning process	Active learner-centered and differentiated instruction approaches are followed in the teaching-learning process. The teaching and learning process takes into account flexible and localized curricula, schedules, materials development, grouping arrangements, and activities such as peer tutoring and self-directed learning. Teaching-learning activities support inclusive and right-based education.

Indicators	Measures
Lesson preparation	Teachers use matrix guides instead of detailed lesson plans for each subject. Lesson preparation takes into account flexible curricula in localizing content, scheduling, materials development, seating, group arrangement, and activities such as peer tutoring and self-directed learning.
Classroom management	Varied organizations or groupings are used, depending on the activities (e.g., same ability, mixed ability, or same social status). A variety of ways to group students is also practiced such as learning as a whole class, in small groups, in pairs, or individually. Rules and regulations on group and individual work and proper conduct are established and followed.
Assessment	Regular assessment and feedback are undertaken. A variety of assessment methods are used to track learner progress and to support differentiated instruction.

Outputs: Quality Indicators of Multigrade Instruction

The measure of the quality or lack thereof of multigrade instruction can be gauged using some quality indicators. The following are some indicators of quality multigrade instruction:

- **High participation rate:** An effective multigrade school encourages parents to enroll their children in school. A high participation rate for school-aged children from a certain area who attend a multigrade school can be equated to the quality of instruction it offers.
- **Reduced dropout and repetition rates:** Most multigrade classes exist in rural communities with challenging socioeconomic contexts. For poor children, going to a multigrade school is a struggle on its own. It will thus take quality multigrade instruction to keep students part of the learning system.
- **Increased academic achievement rate:** Learners who gain the desired learning competencies comprise the best measure of the quality of instruction in multigrade schools.

The social, emotional, and psychological development of learners brought about by innovative multigrade instruction approaches such as child-centered learning, independent and group learning, and peer-mentoring strategies, among others, are also indicators of quality multigrade instruction.

The impact of multigrade instruction on teachers, parents, and community members' lives can also be measures of quality multigrade instruction. The greater they value education and the more involved they are in implementing multigrade programs show how effective these are.

The ultimate outcome of quality multigrade instruction is the attainment of EFA goals or the provision of accessible quality education through the collaboration of multiple stakeholders. The quality indicators related to outcomes are enumerated in Table 18.

Table 18. Outputs: Quality Indicators

Indicators	Measures
Quality education	Students of multigrade classes reach the desired learning outcomes, as measured by NATs and other student academic achievement and holistic child development tests.
Motivated and trained teachers	Teachers have developed competencies in classroom management, strategies, and use of resources for multigrade instruction. They have a positive attitude toward multigrade instruction.
Use of community resources	Teaching and learning are extended to the community. Parents and the community are utilized for instruction inside and outside the school.
School performance	Schools have high participation and completion rates. They have low dropout and repetition rates. They have high academic achievement rates.

Quality indicators such as those mentioned above should guide implementers, supervisors, teachers, advocates, and other stakeholders in assessing the status, performance, and achievement of multigrade schools. Multigrade instruction as a means to achieve quality education needs to be taken seriously. As Little (2006) put it, "Multigrade schooling can make a significant contribution to the EFA goals of access and quality."

CHAPTER V: Conclusions and Policy Recommendations

Multigrade teaching and learning wherein one teacher is responsible for students who belong to different age groups and grades is a setup that is rooted in the first government schools in North America and Europe in the nineteenth century. The use of multigrade teaching persists to this day not just in those continents but also in Asia/Pacific, Africa, and Latin America. Many of the multigrade schools in Southeast Asia were established in response to international commitments to EFA, to the *Millennium Development Goals*, and to the Convention on the Rights of the Child.

Multigrade classes, known in different countries by various names such as “combination” or “forced mixed-age classes,” “forced mixed grades,” and “vertical” or “family groupings,” are commonly found in impoverished rural communities that are isolated by geography and social differences, in areas with low or declining enrolment, and in areas faced with significant shortages in teaching-learning resources and basic infrastructure. Since these are realities most Southeast Asian countries face, multigrade schools were viewed as a necessity rather than a choice. A few schools, however, chose to set up multigrade levels due to pedagogical and philosophical considerations.

In some Southeast Asian countries, the prevalence of multigrade instruction can only be estimated using the number of schools in far-flung areas. Some 66 percent of the schools in remote areas in Indonesia lack teachers while 44 percent of the schools in Thailand are classified as “small schools.” Cambodia has 1,353 multigrade classes in 22 provinces while Vietnam has 8,404 classes in 49 provinces. In Timor-Leste, 135 primary schools implement multigrade instruction. In the Philippines, 36 percent of the public elementary schools offer multigrade classes. Malaysia, on the other hand, is phasing out multigrade schools. In fact, only four under-enrolled schools in the country still carry out multigrade instruction.

Despite the prevalence of multigrade schools in many countries, biased perceptions still exist against implementing multigrade instruction. Multigrade instruction is, for instance, often dismissed by policymakers and educators as a second option. As such, lack of support for teachers and students in small multigrade schools still ensues. This negative perception may have developed as a result of poor multigrade instruction implementation, of lack of awareness, of weak curricular adaptation, of insufficient

learning materials, and of inadequate teacher preparation. However, since mono-grade instruction is difficult to implement in areas with low populations, with insufficient enrolment rate, and with very few teachers, small multigrade schools are very likely to continue existing in many countries.

Practices and Strategies in Implementing Multigrade Instruction

An interesting mix of practices and strategies characterize the implementation of multigrade instruction in Southeast Asia. Multigrade schools may vary in terms of organization, of the teaching-learning process followed, of learning environments and facilities, of curricular development and implementation, of teaching-learning materials used, and of assessment.

- **Organization:** Multigrade classes can take several organizational types. In Southeast Asia, students are commonly combined by grade (e.g., in Cambodia and in the Philippines). Some countries group students based on their abilities or achievements (e.g., in Malaysia and Myanmar). Countries like Timor-Leste use the quasi-multigrade approach to multigrade teaching.
- **Teaching-learning process:** A variety of teaching-learning models such as the cooperative learning process, the interdisciplinary learning approach (e.g., in the Philippines), and independent learning (e.g., in Cambodia) are used in Southeast Asia. In Indonesia, this process involves competence analysis that combines the use of learning materials from different levels based on an analysis of competencies that need to be taught in one semester or in one year; maps themes for related competencies; develops syllabi; and plans lessons.
- **Learning environments and facilities:** It is ideal in Southeast Asia for multigrade schools to have spacious areas that can accommodate combined or mixed grades with movable facilities and furniture as well as learning centers. Good practices include using natural spaces, recycled materials, and movable facilities; maximizing the use of open spaces; and establishing learning centers in classrooms.
- **Curricular development and implementation:** All of the countries in the region except Indonesia, Thailand, and Vietnam, implement multigrade instruction based on prescribed national curricula. These schools are left with room for flexibility in terms of implementing curricula. Other common approaches include the use of the integration and jump-jump approaches. In some cases, it is even ideal to localize curricula and to design lessons based on the students' and schools' needs.
- **Teaching-learning materials:** One good practice in Southeast Asia involves the provision of curricula, syllabi, teachers' manuals, textbooks, self-instructional

and peer learning modules, and reference materials by the national government while the teachers produce their own teaching-learning materials.

- **Assessment:** Assessing mono- and multigrade classes do not differ much. Internal assessment is regularly conducted by teachers within the school year while external assessment is conducted by local education supervisors and by the national government at the end of each grade level.

Quality Indicators of Multigrade Instruction

Multigrade teaching as a means to achieve quality EFA needs to be taken seriously. As Little (2006) put it, “Multigrade schooling can make a significant contribution to the EFA goals of access and quality.” How this can be attained and measured may be gauged from an assessment of indicators of multigrade instruction.

Based on a framework that underscores the interconnection between the context, inputs, the process, and products, a list of quality indicators has been drawn out. Quality indicators related to context refer to economic, social, and other background forces that have an effect on multigrade instruction. Those related to inputs include resources made available to support the multigrade process such as materials and human resources, among others. Indicators related to the process include activities that result from using and managing inputs. Product-related indicators refer to developments or results arising from multigrade instruction such as achievements.

Overcoming Challenges in Achieving Quality Multigrade Instruction: Policy and Program Recommendations

In Southeast Asia, multigrade instruction is facing many issues and challenges that must be addressed to attain quality. For each issue, various actions are necessary from the government, supervisors, school heads, teachers, and other stakeholders.

Changing Perceptions Among Stakeholders

Countries in Southeast Asia suffer from lack of acceptance of, involvement in, and intervention in multigrade instruction by governments, community members, and other stakeholders. The following steps can be taken:

- **Conduct advocacy campaigns to raise awareness and support among policymakers, communities, and other stakeholders.** Prevailing perceptions of multigrade teaching need to be altered. The status of multigrade learning and teaching among various stakeholders also needs to be raised. Policymakers

tend to devote extensive resources on traditional models of teaching and learning. However, since the necessity of multigrade schools, particularly in geographically isolated and sparsely populated areas in the Southeast Asian region, cannot be denied, greater effort in making stakeholders understand what happens in these schools in order for the latter to be given the support they need should be accorded.

- **Tap the media to highlight best practices and the benefits of multigrade instruction.** The media can spotlight stories and cases that bring out successes and gains some multigrade schools achieved throughout the years, making it easier for the public and stakeholders to appreciate their value even more. The gains that multigrade classes helped bring to the fore and which the media can share with the public are related to greater access by children living in remote communities and the improvement of their performance as they become more active and motivated amid a more collaborative classroom environment.

National- and Local-Level Management, Monitoring, and Evaluation

Multigrade schools in Southeast Asia do not have or are not adequately considered in strategic planning, supervision, and evaluation both on the macro and micro levels. The following steps can be taken:

- **Include multigrade classes in educational sector planning and programming.** Creating a dedicated subsector on multigrade instruction to address concerns such as integrating multigrade instruction into the teacher education curriculum, innovating instruction and management using ICT, and evaluating multigrade instruction may be required.
- **Conduct regular multigrade instruction monitoring and evaluation.** The status of implementing multigrade classes should be regularly reported. Workshops and fora should also be conducted where experiences, needs, and initiatives to solve problems or to make improvements can be shared.

Provision of quality multigrade instruction requires not only motivated teachers, but also division supervisors and school heads with strong instructional supervisory skills. Experience shows that instructional supervision is oftentimes lacking due to the remote geographical location of multigrade schools. Teachers in multigrade schools should be regularly monitored and evaluated and provided technical assistance as maybe necessary.

School principals need to formulate a vision-mission as well as short- and long-term plans. They also need to be capacitated on leadership and management, including using ICT to manage multigrade schools.

Learning Environments and Resources

Multigrade schools are oftentimes disadvantaged, particularly because of poor learning environments and the unavailability and/or irrelevance of resources. Since these are mostly seen in remote areas, multigrade learning environments tend to be some of the most underequipped, overlooked, and underfunded aspects of the educational system. Curricula and learning materials also tend not to suit the demands and features of multigrade instruction. The following steps can be taken:

- **Mobilize stakeholders to build and improve environments, facilities, equipment, and materials used in multigrade instruction.** In terms of learning environments and facilities, the ideal condition practiced in Southeast Asia is to have spacious areas to accommodate combined or mixed grades with movable facilities and furniture. However, the reality does not always live up to ideals. Thus, mobilizing stakeholders and managing multigrade systems within supportive networks will help upgrade learning environments to adapt to the many challenges that multigrade instruction faces.
- **Modify, contextualize, and localize curricula, materials, and different assessment materials to make these appropriate for multigrade settings.** With the exception of Indonesia, Thailand, and Vietnam, multigrade instruction curricula in Southeast Asian countries are based on prescribed national curricula. National curricula should be restructured, along with learning materials and assessment tools, by curriculum developers. Teachers should localize curricula, design lessons, and develop materials based on their students' and schools' needs.
- **Create a mechanism for sharing locally developed multigrade materials among teachers and schools.** Multigrade instruction will be greatly enriched by exchanging locally made materials in a network of multigrade schools and teachers. A mechanism that allows and encourages sharing should be established based on agreed-upon guidelines.
- **Mobilize the community to become an integral part of providing support for multigrade systems.** Efforts to more strongly connect multigrade schools to communities should be exerted so community members are encouraged to offer expertise and to share resources for materials development and for improving the teaching-learning process. Community involvement can help boost the resource level—both physical and human—which teachers and students can draw upon.

Instructional Techniques and Teacher Support

Multigrade teaching requires different approaches and strategies but teachers often lack the capacity to provide quality teaching. Teachers are inadequately equipped with skills

to provide differentiated instruction, active learning and other pedagogical approaches relevant to multigrade instruction, as well as techniques in handling class situations and challenges that differ from the traditional mono-grade class setup. The following steps can be taken:

- **Develop and enhance teachers' competence in multigrade pedagogy through pre- and in-service training as well as interschool visits.** Periodic courses and programs to improve the quality of multigrade teaching methods should be given to multigrade teachers. Governments can also support teaching and learning through radio or television broadcasts or with the help of the Internet.
- **Develop policies that address the salary and working conditions of multigrade teachers.** Incentives should be made available to multigrade teachers such as scholarships, grants, awards, promotions, bonuses, and housing allowances. Teacher recruitment must be based on localization laws and teacher reassignment should only take place after three years.
- **Invest in school head and teacher capacity building to improve skills relevant to multigrade instruction.** School heads and supervisors must be trained on the pedagogy of multigrade instruction and of instructional supervision. They should monitor and provide technical assistance to multigrade teachers. School heads should conduct in-school capacity-building activities on strategies and techniques in multigrade instruction as well as develop positive attitudes and benchmarking processes. They should empower teachers to innovate. Master teachers should conduct demo-teaching and learner-assessment seminars specific to multigrade content. Teachers should also be capacitated in coaching and mentoring techniques focusing on best multigrade teaching-learning practices. These improvements, aside from the benefits that accrue to the students' learning process, will help develop more positive professional images for teachers and, in effect, promote more positive images of the schools among parents and communities.

Assessing Student Performance

Assessing students in multigrade classes is similar to assessing those in mono-grade classes. Given the special circumstances surrounding multigrade instruction, assessment does not reflect the students' performance. The following steps can be taken:

- **National tests given to measure student performance should consider the learning context in multigrade classes.** Assessment tools should be sensitive to the context in which students from multigrade classes learn in order to accurately and appropriately measure student performance.
- **Various assessment modalities should be used,** particularly in measuring unconventional teaching-learning practices in a multigrade class setup. Stronger

recognition that teaching-learning practices within a multigrade setting, owing to its nontraditional learning environment, may be in forms different from the usual or the traditional should ensue. Assessment techniques for such should also be varied enough to suit the practices employed. Include the use of authentic measures to balance traditional qualitative measurements.

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