

MULTIGRADE TEACHING: A DISCUSSION DOCUMENT

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Introduction

Multigrade teaching occurs within a graded system of education when a single class contains two or more student grade levels. It is contrasted with the usual pattern of classroom organization in graded systems where a single classroom contains students of only one grade level. In many graded systems, age and grade are congruent, so a grade level is also equivalent to a particular age group of students. However, this may not be the case in systems where grade level repetition and acceleration are common. There are three important reasons why multigrade teaching may occur in both developed and developing countries.

First, multigrading is often associated with 'small' schools in remote and sparsely populated areas. In such schools, there may be only one, two or three teachers, yet they offer a complete cycle of primary education. If that cycle consists of eight grade levels, then each of these teachers must deal with multigrade classes. These 'small' schools are also sometimes referred to as 'multigrade' schools. Multigrade schools have attracted attention in the developing country context because of their potential to increase primary school participation rates. By bringing the school closer to the community, they encourage more children, especially girls, into school.

Second, multigrade teaching is also common in larger urban and suburban schools. In some countries, it is a response to uneven student enrollment. For example, a school with a two and a half grade entry may have to combine two grade levels to make up class sizes. Also, in countries where teacher absenteeism is high, and there is no 'cover', grades may be combined to avoid having a class with no teacher present. A single teacher then has to deal with two grade level groups together. While the latter problem is not well-documented in the literature, it is probably a regular occurrence in countries in both Africa and the Caribbean.

Third, multigrade teaching may be a deliberate response to educational problems. In developed countries, this is linked to the multiage perspective. Proponents of mixed age grouping argue that there are sound pedagogical reasons for placing students of different ages together in the same classroom. Mixed age classes, it is argued, stimulate children's social development and encourage greater classroom cooperation. These arguments are seldom raised in the developing country literature, although several commentators take the view that multigrade organized classes are potentially a cost effective means of providing quality education in difficult to reach areas.

In much of Africa, a major rationale for multigrade education is probably its potential to increase access to the full cycle of primary education in areas where this is currently not available. It has been used for these purposes in Zambia and Burkina Faso, for example. In the Caribbean, the question of access is not so crucial as in most of the

region there is already full access to primary education. Rather, multigrading may be seen as an approach to increasing the quality of schooling by introducing innovative approaches to teaching and learning (World Bank, 1993)

This paper will limit itself mainly to a discussion of the developing country literature, with particular reference to the Caribbean and African contexts. It will also limit itself to a focus on basic, or primary level education. It is structured around the key themes identified in the terms of reference. These are as follows:

- Prevalence of multigrade teaching situations in Africa and the Caribbean
- Existing Training programmes for multigrade teaching
- Good multigrade practice
- Relevance to the monograde classroom
- Evidence of impact on pupil performance
- Guidelines and pitfalls in the African and Caribbean context
- Learning theories behind multigrade teaching and their practical application
- Implications for teacher education
- Multigrade teaching in the non-formal sector

Prevalence of multigrade teaching in Africa and the Caribbean

There is a dearth of statistics as to the extent of multigrading in either context. One indicator frequently used is the proportion of multigrade schools in a particular country. In the Caribbean, the best data available is probably from the Commonwealth Secretariat materials. These are reproduced in the table below. The figures indicate that in many of the countries in the region, these schools are a very important means of delivering education to remote communities. In the case of the Turks and Caicos Islands, these communities are scattered across several islands, while in Belize they are located in rural areas of the country.

Table: Prevalence of Multigrade schools in Caribbean countries

<i>Country</i>	<i>% multigrade schools</i>
Turks and Caicos Islands	30%
Belize	51%
Dominica	38%
Guyana	47%
Trinidad and Tobago	12%
Jamaica	43%

There is even less data available from Africa indicating the extent of multigrading. Little (1995) includes statistics only from only Zambia where 26% of schools were reported to have only one teacher in 1984. Thomas and Shaw (1992) include no statistics, but they comment that there has been World Bank support for multigrade schools in Gambia, Mauritania, Lesotho, Botswana, Niger, Senegal, Guinea, and Zaire. This lack of information is typical of the peripheral position that these kinds of school settings frequently have.

Training programmes for multigrade teaching

In addition to the Commonwealth Secretariat materials written for the Caribbean, there are four other important manuals that give specific guidance for multigrade teachers. These are listed below, together with a brief annotation for the content of each.

UNESCO/APEID (1988) Multiple class teaching in primary schools: a methodological guide

This is a synthesis of material from guides produced separately in India, Japan, Malaysia and Nepal. Although full of practical advice on teaching in multi-grade classes, it is probably not intended for use as a primary teachers' handbook as such, but rather as a resource for the production of such a book, or other teacher materials, in other countries. Principles and practical suggestions are presented on school and classroom organisation, teaching strategies and techniques, materials production, and assessment and record-keeping. Many of the suggestions are generally applicable rather than being purely of relevance to multi-grade classes. It adopts the position that multi-grade school organisation is a response to difficulties and shortages rather than being a practice to be recommended on educational grounds, but it does list advantages of the approach as well as disadvantages and difficulties.

Miller (1989) The multigrade classroom: a resource handbook for small rural schools

This handbook was written to review current research on multigrade instruction, to identify key issues faced by multigrade classroom teachers, and to offer novice teachers a set of resource guides for improving instructional quality. The first chapter reviews previous research on multigrade instruction. It addresses questions regarding the effect of multigrade instruction on student performance and the training needed to teach in a multigrade classroom. The other chapters of the handbook cover topic areas considered essential for effective multigrade instruction: (1) classroom organisation; (2) classroom management and discipline; (3) instructional organisation and curriculum; (4) instructional delivery and grouping; (5) self-directed learning; and (6) planning and using peer tutoring. Each chapter presents background information, basic concepts and principles, sample schedules, classroom layouts, instructional strategies, and further resources for multigrade teaching. In addition, each chapter contains a list of pertinent references, which together amount to approximately 100 entries.

Collingwood (1992) Multiclass teaching in primary schools: a handbook for teachers in the Pacific

A book full of practical suggestions for teachers, intended for use as a handbook in a five-day in-service workshop for multiclass teachers. The second part is actually intended for the organisers of such a workshop and suggests a timetable for the coverage of the first part of the book. This first part begins with a brief review of the difficulties and advantages of multiclass teaching, but consists mainly of seven chapters of excellent advice, illustrated profusely with concrete examples. This covers school and classroom organisation, planning, classroom routines, grouping, peer teaching, and use of the local community. Many of the suggestions are simply good teaching practice, multi-grade or not, and the book would be of practical use to all teachers, with or without the intended workshop.

Birch and Lally (1995) Multigrade teaching in primary schools

A monograph, providing a theoretical overview of multigrade teaching as well as practical guidance. The document draws on Vietnam as its context, but has wider application to Asia and the Pacific. In its overview, it stresses the political nature of all education and promotes a paradigm shift in educational thinking, teacher education, the role of pupils, parents and the community in multigrade teaching and in issues relating to quality and evaluation.

The monograph then addresses the following practical issues, giving a theoretical introduction to each section: organising the curriculum, in which the author stresses flexibility and integration; teaching-learning strategies; materials development; and teacher training. It provides discussion of educational politics and multigrade teaching, the function and role of the multigrade teacher, future orientations for multigrade teaching and alternative scenarios. The monograph concludes with a statement of the need for more research into the methods and techniques of multigrade teaching.

Good multigrade practice

There are five key areas which are generally the focus of training packages for multigrade teachers. These encompass the following features.

Classroom management techniques

Managing a multigrade classroom is difficult because there is more than one grade level in the classroom. Hence, the teacher must be skilled in managing instruction to reduce the amount of 'dead time' during which children are not productively engaged on task. This means that teachers must be aware of different ways of grouping children, the importance of independent study areas where students can go when they have finished their work, and approaches to record keeping which are more flexible than those prevalent in the monograde classroom. Students may need to be taught the value of independence and cooperation by involving them in classroom decision making.

Instructional strategies

These are seen as a key to improving the quality of teaching and learning in the multigrade classroom. The promotion of approaches that increase the level of student independence and cooperative groupwork tend to be suggested. These involve a change in the role of the teacher from 'giver of information' to 'facilitator'. This is to ensure that time spent away from the teacher is spent productively. Three important strategies are peer instruction, in which students act as teachers for each other, cooperative groupwork, which involves small groups engaging in collaborative tasks, and individualized learning programmes which involve the student in self-study.

Planning from curriculum

National curricula are typically produced for the monograde classroom. Each set of grade level material is typically placed in a separate booklet, which may include specific content to be taught as well as guidelines on how to teach it. Such curricula are difficult for the multigrade teacher to use because they tend to require plans to be written for each grade level separately. This is not only time consuming, but may also result in ineffective instruction. Teachers need to be taught how to plan across grade level objectives, or how to amend the curriculum to make it more suitable for their setting. Similar observations may also apply to the school timetable.

Instructional materials

These also tend to be written for the monograde classroom. Consequently, they are produced as grade level textbooks and are designed to be delivered by the teacher to the children. More suitable materials include a self-study element. This might be in the form of workbooks with a self-correction key, or a small classroom library that can be accessed independently by the children. Teachers need to be shown how to produce such self-study materials in a cost effective way. Materials relevant for one country situation may not be appropriate in another. Birch and Lally (1995) include several examples of materials developed in Asia and the Pacific.

School and community

Multigrade schools are often located in remote and difficult to reach areas. They may be far from the educational center and receive little pedagogical support. The communities in which they are located may not see the value of education, and may speak a different language to the 'official' one of the school. For these reasons, it is essential that the community be involved in the life of the school. Parents can be asked to come in to act as a resource, the curriculum of the school might extend out into the community, or the community can be asked to support the school in other ways. Multigrade teachers should be trained in approaches that help to develop relations between the school and the community.

Relevance to the monograde classroom

A link is sometimes made between the problems facing the multigrade classroom teacher and those confronting the monograde teacher. Particularly in developing countries, monograde classrooms may be characterized both by extreme mixed ability, and wide age range if there is a lot of grade level repetition. Consequently, the kinds of problems are similar. In monograde classrooms, however, they may not be recognized as problems. It is common in many developing countries for instruction to be very teacher directed and to include limited opportunities for student participation (Lockheed and Verspoor, 1991; Kutnick et al, 1997). These approaches are liable to marginalise low achieving students, lead to high levels of under-achievement, and potentially to drop out from the system. There are three multigrade related innovations that have particular relevance in the monograde classroom context.

First, curriculum reform is one way in which multigrade teaching can be made more effective. The type of reform suggested usually focuses on the recognition that a group of children in any one classroom will be developing at different speeds. The development of specific learning objectives, together with more flexible approaches to retention and promotion, may be one way in which students of mixed abilities in monograde classrooms can be allowed to move through the system at a pace appropriate to them, and also to achieve the minimum learning objectives that the system sets.

Second, monograde teachers in many countries need to reduce their dependence on 'chalk and talk' and to increase the range of instructional strategies that they commonly use. Some of these strategies are those promoted in the multigrade context. They include peer instruction, cooperative groupwork, and independent self-study.

Third, the way in which monograde teachers manage their classes should in some cases become more like the facilitator role suggested in the multigrade class. This involves changing the way in which the classroom is organized by increasing access to self-study areas such as classroom libraries, and promoting more groupwork independent of the teacher. Groups may be formed by ability or by mixed ability, depending on the teacher's purpose for instruction.

Evidence of impact of multigrading

In this section, evidence of the cognitive and non-cognitive effects of multigrade organised classes will be considered. Studies are included that have been conducted in only developing country contexts.

Cognitive effects

Escuela Nueva (new schools) in Colombia is a project in support of small rural schools. It includes inputs in the areas of teacher training, curriculum development, and instructional materials. The effects of the project have received two independent

evaluations. Psacharopoulos et al (1993) compared achievement in Spanish language and maths in the new schools with achievement in 'traditional schools'. They found significant achievement advantages in the new schools for students in both grades 3 and 5, although the effect was reduced for grade 5. A subsequent study (McEwan, 1998) obtained similar results from a different data set.

In Belize, Nielsen et al (1993) surveyed the population of 85 multigrade schools in order to gather information on multigrade teaching and learning. On average, the schools had fewer than 60 pupils, were located in rural areas, and were quite far from main towns. About half were one room schools. A comparison was made between academic achievement in multigrade schools and monograde schools. The test used for comparison was the promotional examination for entry into high school. The scores are based on percentile rankings. Using school averages over a four year period (1988-1991) the multigrade schools received a composite ranking of 31.75 meaning that, in general, student achievement was in the lowest third of the country's schools. However, there was much variation in achievement scores from individual schools.

Jarousse and Mingat (1991, 1992) studied achievement in French language and maths of students in multigrade classes in Togo and Burkina Faso. In both countries, they found that students in the multigrade classes outperformed those in the monograde classes. These differences were significant for students in both grades two and five. The multigrade classes were mostly located in rural areas, indicating that they were probably in multigrade school type contexts.

Lungwangwa (1989) studied the impact of a pilot multigrade teaching project in Zambia. Case studies were conducted in the four schools. As part of the evaluation, the end of primary school test results in the schools were analysed. Lungwangwa reports that the proportion of student passing the test in the four schools is at least comparable to the national average, and in three of the schools well above it. There was also reported to be a reduction in drop out from the schools and an increase in enrollment. Project inputs included in-service training for teachers, the provision of instructional materials, and regular school supervision.

Berry (2001) studied student achievement in the primary school system of the Turks and Caicos Islands in pursuit of a doctorate. He focused on reading score data obtained during a three year in-service teacher education project conducted in TCI between 1993-1996. The project focused on the support of teaching and learning in all primary schools. The data analysis shows that pupils in multigrade schools in TCI have significant advantages over pupils in monograde schools. This applies particularly to low achieving students. High achievers, on the other hand, tend to have a slight advantage in monograde classes.

Non-cognitive effects

Little (1995) reviews the literature pertaining to the evidence of non-cognitive effects in multigrade organized classes. She cites research from Colombia, Indonesia, and countries in the Asia and Pacific region.

In Colombia, Psacharopoulos et al also examined the effects of Escuela Nueva on measures of creativity, civic behaviour, and self-esteem. Positive effects were found for civic behaviour, but not creativity or self-esteem. In Indonesia, positive effects were found for multigrade organization on study habits, self confidence, initiative and cooperation. A UNESCO/APEID study from twelve countries In the Asia and Pacific region lists four advantages of multigrade teaching, all of them non-cognitive:

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

Although these four advantages are not grounded in systematic study, they do suggest the kinds of non-cognitive effects that a well-organised multigrade classroom can promote.

Guidelines and pitfalls

When considering the implementation of multigrade programmes for countries in Africa and the Caribbean, attention needs to be paid to the 'will' of teachers to implement. This is potentially affected by four factors (Beneviste and McEwan, 2000). These are lack of faith in multigrade pedagogy, professional and social isolation, difficulties of teaching in a multigrade classroom, and 'ownership' of multigrade teaching. Each of these factors has implications for the development of multigrade teaching programmes in developing countries.

Lack of faith in multigrade pedagogy

Most teachers view monograde teaching as the 'normal' way to organize classes. Multigrade classes are viewed as an unavoidable 'nuisance'. Consequently, teachers may be resistant to the idea of being trained in multigrade teaching methods, and motivation may be low. There is a need, therefore, to convince teachers and other in the field of education of the merits of multigrade pedagogy.

In Colombia, this is reported to have happened by 'word of mouth', with those teachers who were participating in the programme telling others about it. Certainly, programmes need to be developed in a coherent rather than a piecemeal manner, and all stakeholders should be clear about the rationale for the introduction of multigrade pedagogy.

Professional and social isolation

Multigrade education often takes place in remote schools in difficult to reach areas. Teachers not only face the difficulties of dealing with a multigrade organised class, but also other constraints such as lack of resources, infrequent supervision, and poor living conditions. These conditions also make teachers resistant to the idea of multigrade teaching and reduce their enthusiasm for the task. It also makes it difficult to recruit teachers for these kinds of jobs, and to retain those teachers who are recruited.

Teacher recruitment and posting in isolated areas demands a coherent strategy from central government. In some countries, for example, there is compulsory teacher assignment to rural locations. However, this latter approach does not solve the problem of low teacher morale, nor does it increase either recruitment or retention. One of the best strategies is probably the provision of specialized ongoing training, together with a policy of training and recruiting teachers from local villages.

Multigrade teaching is more demanding

There is no doubt that in a graded system of education multigrade teaching is more demanding than monograde teaching. Planning from the curriculum is more difficult because of the way in which it is structured, classroom management is more complicated because of the necessity of having more than one group on task at the same time, teachers may be required to write multiple lesson plans, and end of term tests have to be set for each grade level group. The headteacher of a multigrade school is also usually a class teacher, and this places greater demands on her time. Other staff members may have to fill a wider variety of duties than their counterparts in larger schools, including pastoral care.

For these reasons, graded systems need to move in directions that support the multigrade teacher, but also encourage more innovative teaching methods in the monograde classroom. One way in which this may be achieved is through curriculum reform. The graded curriculum model encourages teachers to view their class homogeneously, so perhaps other curriculum models need to be considered. One example is the modular approach adopted in Colombia, which involves dividing the curriculum into specific objectives and producing associated learning materials. Another approach is to develop curriculum frameworks that are based around themes rather than subjects. With such curriculum reforms, there is also a need for changes in the types of instructional materials that are made available to teachers.

Ownership

The types of policy level changes described in relation to curriculum reform run the risk of alienating teachers from the reform unless they are intimately involved in the process. One of the reasons for the early success of Escuela Nueva was that it was a grass roots movement, in that it was teachers themselves who trialled innovations and then disseminated good practice. When the project went to scale, however, the package of

inputs was 'frozen' and there was less scope for teacher involvement in the innovation. This may have reduced their ownership of the programme.

It is important, therefore, to involve as wide a spectrum of educators as possible in the process of reform. Teachers need to be given opportunities to feed into whatever policy formulations are selected as the focus of the innovation. Where possible, school-based solutions to problems should be encouraged, and a mechanism should be developed for sharing examples of good practice between teachers.

Practical application of multigrade techniques

One possible pedagogical underpinning for multigrade classroom organisation lies in the multiage literature. This perspective argues that grouping children across grade and age boundaries is beneficial for children both socially and cognitively. A good summary of this position is provided by Pratt (1986). He uses findings from anthropology to show that the 'natural' way in which infants are socialised in many cultures is in mixed age groups. He also points out that age segregation is a relatively recent phenomenon. The biggest advantage for children in a mixed age setting, it is argued, lies in the development of wider friendship groups and a reduction in competition and aggression. A review of qualitative research from the USA by Miller (1991) suggests that, if multigrade school contexts are not overly disadvantaged by virtue of their location, these types of advantages can and do accrue to children.

In developing countries, the evidence that exists of conditions in multigrade schools suggests that they may be extremely disadvantaged by virtue of their location. The UNESCO/APEID study referred to earlier lists several home background disadvantages, such as lack of parental interest in education, poor nutrition, and a mismatch between home and school culture. Other difficulties commonly lie in the supply of materials and infrastructure, and appropriately trained and qualified teachers. However, there is also some evidence that multigrade schools can be very positive places for children when these constraints do not apply.

In Togo and Burkina Faso, Jarousse and Mingat suggest three possible explanations for the differences they found in achievement between students in multigrade and monograde classes. Firstly, they argue that teachers in multigrade classes employ more effective pedagogy. There is more emphasis placed on individual work, peer work, and a wider variety of presentation techniques are used. Secondly, the pupils remain with the same teacher for a two year period. Thirdly, weaker students in the upper grade are able to catch up because some teaching is geared towards the younger children in the class. Lungwangwa also found that the introduction of multigrade techniques in Zambia resulted in a decrease in drop out rates from school, and an increase in enrollment.

In Belize, the more effective multigrade schools in the Nielsen et al study tended to be nearer to main towns, to have two classrooms or more and fewer than three classes per teachers, and to have access to above the national average in textbooks. Their teachers were more mature (above 30), more educated, more likely to be trained, and to live

close to the school. Teachers in the high performing schools made more use of peer tutoring and cross age tutoring. They also involved the community in the life of the school. High performing schools had frequent supervisory visits, and a principal who was supportive of her teachers and stayed at the school.

In the Turks and Caicos Islands, Berry found that multigrade teachers were more likely to employ groupwork than monograde teachers. This is because they had to deal with more than one grade level in the same class. He speculates that as a result of this, multigrade students are more likely to have opportunities to interact together in mixed ability groups. This leads to a more cooperative classroom and advantages for low achievers in particular. In monograde classes, on the other hand, teacher directed lessons with high levels of competition are much less advantageous to under-performing students.

There are, therefore, examples of good practice from both the Caribbean and Africa. In both regions, there is also evidence that the good practice in multigrade classes is in some respects superior to that found in monograde classrooms. This has potential implications for the way in which teachers are trained as will be discussed in the next section.

Implications for teacher education

Issues in multigrading have potential implications for teacher education in both the Caribbean and Africa. Clearly, there is a need to re-examine the content of existing pre-service courses to ensure that they cater to the needs of future multigrade teachers. More importantly, perhaps, there are implications for the way in which teacher education is organised and delivered to teachers. Two potentially important approaches are school clustering and decentralization.

School clustering

School clustering involves encouraging schools to collaborate on a range of educational issues. This might be as simple as sharing resources, but can also extend to sharing good teaching practice and management techniques. Clustering is frequently identified as a means of supporting small schools in the literature from countries such as England. Hopkins and Ellis (1991: 120) comment that:

"There are...many means by which small schools can enhance their curricula and alleviate the difficulties of only having a few teachers. For example, such innovations as cooperative ventures between schools, staff exchanges, LEA advisory and resource assistance and the formation of school federations and clusters have not only helped many small schools to maintain a broad curriculum, but also they have extended greatly their teachers' and pupils' experiences."

In other country contexts, too, school clustering is an effective way of building capacity in remote schools and reducing the feeling of teachers that they are isolated from

innovation. School clustering is an innovative feature of the secondary school system in Malawi, for example. Clusters of schools focus on improving management systems and on encouraging teachers to share 'good' practice. Clusters require support from central or regional government if they are to operate effectively, since there is a need for someone to take a leadership role in the cluster, at least in the early stages. Later on, it may be possible to leave the clusters to manage themselves.

There may, however, be difficulties associated with the development of school clusters. The financial commitment can be quite high initially, and ministries may lack the regional capacity to give school clusters the kind of support they need in their early stages. One way in which regional needs can be met is through the decentralization of the education system. This is discussed further below.

Decentralisation

Thomas and Shaw (1992: 23), in their review of the issues in multigrade schools make the following comments as regards decentralization of the educational administration

"A decentralized education system lends itself to building effective multigrade schools. Such a system encourages teachers and local education officers to actively participate in managing schools, developing learning materials, and in making decisions regarding curriculum and pedagogical methods. In short, it fosters independent learning and development of decision making skills in teachers and local administrators."

Highly centralized systems tend to marginalise schools at the periphery, and it may be beneficial to strengthen the regional and district presence of the education administration. In Belize, for example, district education offices have been given more autonomy and are now charged with at least some of the responsibility for delivering the pre-service teacher training programme. Consequently, more control over decision-making has been given to the districts. This gives them more freedom to tailor programmes to meet the needs of the communities in their immediate area.

Multigrade teaching in the non-formal sector

Multigrade schooling has much to offer communities that are not well served by the existing formal system of primary education. Such communities are frequently isolated, both physically and socially, and consequently may have only limited access to a school. Even where they do have access, the school curriculum may seem irrelevant to the lives of the local community. Multigrade schools have the potential both to increase the accessibility and relevance of schooling to such communities.

Accessibility

Multigrade schools are by definition small, and they can be a cost effective way of bringing education closer to the community (Thomas and Shaw, 1992). They also allow the full cycle of primary education to be brought to the community. In Vietnam, for

example, multigrade schools are being used as a means of reaching communities in mountainous areas of the country, many in areas where no schools existed at all before (UNICEF, 1994; 1998). In Zambia, multigrade schools have been seen as a way of upgrading existing primary schools in remote areas that only previously offered an incomplete, or partial, primary education (Little, 1995).

One of the effects of increasing the accessibility of schools to remote communities may be that more girls are allowed to attend school. In communities where families are reluctant to allow their daughters to travel long distances to the nearest town for school, there may be more willingness to let girls attend a small local day school. This is reported to be the case in Vietnam, and it has also been put forward as one reason for developing the multigrade schooling in Burkina Faso.

Relevance

Where curricula and materials are produced for urban areas of a country, schooling may be perceived as largely irrelevant in remote rural locations. Not only that, but the inflexibility of graded structures also makes it difficult for normal schools to accommodate irregular attenders in areas where children are needed at certain times for work in the community. For this reason, there may be little parental interest in the idea of sending children to school (UNESCO/APEID, 1989). Multigrade schools can be a means of providing more relevant schooling to pupils, and hence of potentially reducing dropout.

In Vietnam, for example, the curriculum for multigrade schools has been reduced so that children can have a reduced school day. This is also designed to focus on key subject areas such as language and mathematics. There have also been attempts to introduce a bi-lingual programme of education into the schools because many of the communities served by the schools do not speak the majority Vietnamese language.

In the Colombia Escuela Nueva project, a system of flexible promotion that is organized around a modular curriculum has been introduced. This is to allow children more opportunities to leave and re-enter the school as commitments at home demand. In addition, the school curriculum has been integrated into the life of the community, and also includes more activities that are relevant to the child's daily life.

In Southern Africa, multigrade schools have been suggested as one of the means of reducing the marginalisation of the San people from formal education (Le Roux, 1999). Multigrade schools are suggested not only because they would reduce the dependence on boarding schools, but also because schooling in multigrade classes more closely resembles the cultural norms of this group. It is argued that the less formal, more 'family-like' atmosphere in the multigrade school would make the transition from home to school less traumatic for San children.

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