

Access and Achievement in Commonwealth Countries: support for learning and teaching in multigrade classrooms

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Introduction

Multigrade teaching refers to settings where a single teacher has sole responsibility for two or more grades, or classes, of students simultaneously. Multigrade may be contrasted with the more familiar monograde teaching, in which a single teacher teaches a single grade or class at any given time. Various terms are used in different Commonwealth countries to describe multigrade settings e.g. combination class, vertical grouping, family grouping, composite class, mixed year class, split class, double-graded class, unitary schools. In some countries, while the reality of multigrade teaching is apparent on close inspection, no term to describe it has emerged. It follows that in the education policy discourse, the realities and challenges of multigrade teaching settings remain invisible (Little, 2001).

The invisibility of multigrade teaching in many countries is reinforced by the absence of educational statistics collected by national and international authorities. Neither UNESCO nor Commonwealth agencies, nor many Commonwealth countries, collect information routinely on the schools and classes in which multigraded teaching and learning is taking place. Table 1 presents information about the prevalence multigrade schools, classes, teachers and students for a selection of Commonwealth jurisdictions. A wide variety of sources, for different years, has been used to generate the Table.

Table 1 Estimates of the prevalence of multigraded schools, classes, teachers and pupils, selected Commonwealth jurisdictions

Country	Year	Multigrade prevalence ^a
Australia	1988	40% of schools in the Northern Territories had multigrade
Cook Islands	1990	Approx 50% of schools had multigrade classes
England	2000	25.4% of all classes in primary education were classified as 'mixed year'. 25% of all students were studying in mixed year classes
Fiji	1990	Approx. 1990 50% of all primary schools were multigrade schools; 25% of all teachers taught in multigrade classes
India	1996	84% of primary schools had 3 teachers or less. Since primary schools have 5 curriculum grades this means that some teachers must be responsible for two or more grades for part of the day
Kiribati	1990	Approx. 1990 60% of all primary teachers taught multigrade classes; 50% of students in primary education were taught in multigrade classes
Northern Ireland	2002/3	21.6% of all classes in primary (Y1-7) were composite classes.
Scotland	2002	27% of all primary classes were composite classes. 22.3% of all students were in composite classes.
Solomon Islands	1990	Approx. 25% of all schools had multigrade classes
Sri Lanka	1999	18% of all schools have four or less teachers. Primary schools have 5 curriculum grades but most schools contain post-primary grades as well. Hence some of the 18% will be offering primary and post-primary.
Tuvalu	1990	91% of all schools had multigrade classes
Turks and Caicos Islands	2000	30% of primary schools were multigraded
Vanuatu	1990	28% of all students were in multigrade classes
Wales	2002	34.4% of all classes in the first three years of primary (R-2) were composite classes. 33% of all students were in composite classes. 13.7% of Welsh schools have 50 pupils or less.
Zambia	1984	26% of all primary schools were one-teacher schools

- a Sources: Berry, 2001; Collingwood, 1991; Gupta, Jain and Bala, 1996; Little, 1995; Lungwangwa, 1989; Ministry of Education and Higher Education, Sri Lanka, 1999; Northern Ireland education statistics, 2002/3; www.dfes.gov.uk/statistics/DB/SBU/b0222/030-t6.htm; www.scotland.gov.uk/library2/doc02/ecsb-03.htm#b10; www.wales.gov.uk/keypubstatisticsforwales/content/publication/schools-teach/2002/siwgs2002/siwgs2002-ch3.pdf

Table 1 indicates that multigrade teaching is prevalent in many countries, small and large, industrialised and less industrialised. Multigrade teaching is probably more prevalent than many educators, teacher educators, curriculum developers and policymakers realise. In small and scattered communities, multigrade schools often have only one or two teachers. But multigrade classes within otherwise monograde schools are also found in urban areas, for both demographic and pedagogic reasons. It may come as a surprise to learn that in England, Northern Ireland, Scotland and Wales around a *quarter* of all primary school classes are multigrade. While many of these classes are located in rural areas, some are located in urban areas.

Multigrade teaching has a particular significance for the theme of the 15th Commonwealth Conference of Education Ministers (Edinburgh, October 2003: *Access, Inclusion and Achievement: Closing the Gaps*) for two reasons. The first is *Access*. In most countries, multigrade teaching arises through demographic necessity rather than pedagogic choice. Demographic conditions (e.g. small, uneven intakes) and finance preclude the allocation of one teacher to every grade in every school. In the majority of countries multigrade teaching occurs in rural, often economically disadvantaged and geographically remote, settings. In those countries that are striving to reach the EFA goal of 100% access to primary education, much of the unrealised access is located predominantly in disadvantaged rural areas. In these areas, were school places to be available, they are likely to be available in multigrade schools.

The second is *Achievement*. Curriculum and pedagogy are fundamental to learning achievement. National curriculum developers and teacher educators give relatively little attention to the needs of teachers and students in multigrade settings. Research evidence on the achievement effects of multi- and mono-graded teaching from Commonwealth and non-Commonwealth countries is equivocal (Pratt, 1986, Thomas and Shaw, 1992, Rowley, 1992, Little, 1995, 2001, Veenman 1995, Mason and Burns, 1997, Berry, 2001). However, there is no doubt that in many Commonwealth developing countries the mean achievement levels of students in multigrade schools is low by national and international standards. Teachers in multigrade schools struggle to deliver a national curriculum that has been designed for monograde schools. Teacher training rarely addresses the needs of multigrade classes.

Teacher Education for the Multigrade Classroom

There are several examples of *in-service* training courses (both self-study and face to face) that address the needs of multigrade teachers. The Commonwealth Secretariat has developed a set of training modules that can be used both for self-study and face to face training (Commonwealth Secretariat, 1998). The District Primary Education Programmes in various states of India have, in recent years, organised in-service training for multigrade teachers. So, too, many NGOs working in rural areas in India train teachers to work with combinations of grades in primary schools (e.g. CARE, India). In Sri Lanka, various booklets have been produced by teacher educators for in-service training, the most being produced by the National Institute of Education (NIE 2003). Handbooks have also been written for trainers in Bihar, India (Shabnam, 1989).

There are fewer examples of multigrade teaching being addressed within *pre-service* teacher training courses. Lungwangwa (1989) reports an attempt to introduce multigrade teaching within the pre-service teacher education course at the Malcolm Moffat Teacher Training College in Zambia. In Sri Lanka, from 2003, B.Ed students at the University of Colombo will be trained in the theory and practice of Multigrade teaching, will undertake surveys of the needs of multigrade schools and classes and will undertake action research in multigrade classes. In countries where there has been a strong pedagogical emphasis on individual student differences, the needs of multigrade classrooms have been addressed indirectly. The principle of *differentiation* of teaching and learning features in many pre-service training curricula in English, Northern Irish, Scottish and Welsh teacher education courses. This pedagogic principle stands teachers in good stead to meet the challenges of multigrade teaching. However the graded requirements of the National Curriculum often impose additional constraints in the multigraded classroom (see below).

Curriculum Development for the Multigrade Classroom

Most National Curricula and associated materials are structured by age-grade. Teachers of multigrade classes face challenges in organising the simultaneous delivery of graded curricula to two or more grades. Lungwangwa (1989), drawing from experience from Zambia and elsewhere, identifies three curriculum strategies adopted by multigrade teachers:

- In the *common timetable* strategy, students learn the same subject in the same timetabled period, but study at their own grade level.
- In the *subject stagger* strategy, students in different grades study different subjects in the same timetabled period. High teacher-input subjects are combined with low teacher-input subjects.

- In a third strategy, *subject grouping*, students are taught the same subject at the same time and in the same way. Daniel (1988) reports Canadian experience of teaching the French language in multigrade elementary schools and recommends a strategy that falls between strategy 1 and 3 which he describes as *common activities and reduction of grade-related sequential work*. In this strategy the teacher selects activities in which learners from both grades can engage together. However such an approach requires curriculum re-organisation, with an emphasis on the learning outcomes expected of each grade level.

In England, the National Numeracy Strategy for primary schools prescribed the curriculum in terms of *topics and learning objectives by year grade*. The challenge of curriculum planning faced by English multigrade teachers is more complex than that faced by monograde teachers. Very recently, Medium Term Plans for the National Numeracy Strategy have been published by the Department for Education and Skills. These present topics and year-grade learning objectives side by side (e.g. Year 1 and Year 2). This facilitates the work of the teacher and reduces the amount of independent curriculum planning that teachers will need to undertake.

In Sri Lanka, experimental work is underway to re-sequence the primary mathematics curriculum, so that similar topics (e.g. shape, measurement, operations) are introduced by the teacher to different grade groups with differentiated learning activities. This work has been undertaken by teacher educators working with teachers. In the coming year, the entire Grade1-5 Mathematics curriculum will be restructured and re-sequenced on an experimental basis.

Non-Commonwealth Countries

Many non-Commonwealth countries have experiences in multigrade teaching to share. In the U.S. Miller (1989) and others have studied multigrade schools and have generated extensive training materials. In Greece, Finland and Spain there are many multigrade schools. Currently teachers and academics are working together to generate teacher support materials that can be accessed, used and shared through information and communications technology (www.ellinogermaniki.gr/muse). In Colombia the *Escuela Nueva* Programme has used an integrated approach to improving teaching and learning in multigrade schools in rural areas. Central to this approach was the development of learning guides and the introduction of a flexible promotion system, enabling students to progress at their own speed. In-service training and demonstration schools have supported teachers in their professional development. Learning activity centres and libraries have supported students in their learning (Colbert 1999). And in Vietnam a recent curriculum development exercise undertaken by the National Institute of Education Sciences in collaboration with teachers generated a re-sequenced primary curriculum for Health for use in either multi- or mono-graded schools (www.ioe.ac.uk/multigrade).

Multigrade schools will exist in most Commonwealth countries for the foreseeable future. Indeed, in some countries the expansion of multigrade schools may be the only strategy that can be adopted for the achievement of universal *access* to primary education. And in order to meet the goal of educational *achievement*, teachers and students in multigrade schools in many countries would benefit from enhanced support for their work from those who develop National Curricula and devise Teacher Education Curricula.

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