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INCREASING ACCESS THROUGH MULTIGRADE TEACHING AND LEARNING

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Multigrade teaching and learning – where a teacher is responsible for learners in two or more curriculum grades at the same time – is a frequent occurrence in small schools worldwide. These schools are particularly common in low income countries and in rural areas, making the provision of quality multigrade teaching and learning in them key to achieving Education for All and to increasing meaningful educational access. This policy brief outlines the challenges facing teachers and students in multigrade settings, key strategies for multigrade management, and examples of innovative practice. It is based on the CREATE Pathways to Access Research Monographs, *Size Matters for EFA* (Little, 2008) and *Small, Multigrade Schools and Increasing Access to Primary Education in India: National Context and NGO Initiatives* (Blum and Diwan, 2007).

Why is Multigrade Teaching and Learning Important?

Small schools constitute a significant proportion of educational provision worldwide, and are particularly common in low income countries and in rural areas (see CREATE policy brief #4). Multigrade teaching and learning – where a teacher is responsible for learners in two or more curriculum grades at the same time – is a common occurrence in these schools. Although often not called ‘multigrade teaching’ many teachers are engaged in developing ‘coping’ strategies in *de facto* multigrade classes. Table 1 presents estimates of the numbers of children currently enrolled in *de facto* multigrade classes worldwide and in low income countries, and the numbers that would be enrolled were universal primary education (UPE) to be achieved. Around 30% of children worldwide and in developing countries are currently enrolled in such *de facto* multigrade schools (Little, 2006) and 32% would be enrolled were UPE to be achieved. Provision of quality multigrade teaching and learning in small, multigrade schools is therefore key to achieving Education for All and to increasing meaningful educational access (see Lewin, 2007).

Table 1 Estimates of numbers and percentages of primary school-age children learning in *de facto* multigrade settings, 2005

	Enrolled	Enrolled in <i>de facto</i> multigrade settings. Total and %s	Out-of-school	If out of school enrolled, Nos. in <i>de facto</i> multigrade settings	Total and %s in <i>de facto</i> multigrade
Worldwide	688.3 m	206.4 m (30%)	72.1 m	36.05 m	242.45 m (32%)
Low Income Countries	607.5 m	182.25 m (30%)	68.8 m	34.4 m	216.65 m (32%)

Source: calculations based on Little (2006) and latest figures from UNESCO (2007)

Schools may choose multigrade teaching and learning strategies as part of a positive pedagogy (see Blum and Diwan, 2007). However, multigrade classroom management is more often a result of low enrolment and/or too few teachers (multigrade through necessity). These schools face substantial shortages in terms of teaching and learning resources and basic infrastructure. This frequently leads to poor educational quality, student disillusionment, high rates of drop-out and low rates of retention. Schools organize classes and timetables in varying ways in the light of these constraints, and face significant challenges in providing quality teaching and learning.

Challenges to Multigrade Teaching and Learning

Where there are too few teachers, and sometimes only one, the burdens of lesson planning and teaching increase. National curriculum development and teacher training programmes are generally based on a model of monograde teaching (with one teacher per class/grade), leaving teachers in *de facto* multigrade schools to fend for themselves.

Little (2006) has argued that teachers in *de facto* multigrade schools should not be *expected* by higher authorities to adapt curriculum to their multigrade circumstance as is often the case. In most monograde systems teachers are not expected to exercise such levels of adaptive professional autonomy (and indeed are often discouraged from so doing). Why should so much more be expected from the multigrade teacher? The involvement of national level curriculum developers in the adaptation, re-organisation and re-alignment or reform of the curriculum framework, on the other hand, would legitimate the work of multigrade teacher. It would dispel the message that she is a second class teacher trying her best to teach in the monograde style. It also indicates that there is another way which meets with the approval of higher authorities.

Multigrade Teaching and Learning Strategies

At least three broad approaches have been identified in small schools around the world which address the issue of multigrade classes. These are: avoidance, quasi-monograde, and differentiation. These describe how teachers transact learning and teaching in classes and small schools within systems designed for larger classes and larger schools. Within the three approaches eight pedagogic strategies exist which are described below.

Avoidance

In some systems school principals and teachers avoid the need to adopt a multigrade curriculum by organizing schooling in one or more of three different ways. The first organizational strategy is *deferred entry*. While most schools admit students annually, some admit biennially or triennially. By deferring the entry of a group of primary grade 1 students and combining them with the next year's entry, a reasonable number of students can be enrolled at the same time and taught as if they are in a monograde class.

The second strategy is the use of double and sometimes triple *shifts*. In this way teachers teach more than one shift of school during the day. They may, for example, teach grade 1 in the morning and grade 4 in the afternoon. While this may avoid the need to combine classes, it often means that the length of the school-day from the child's perspective is shorter than it would be if he/she attended school for a whole day.

The third strategy is *abandonment*. In this strategy teachers divide the time available for a school day by the number of grades they are timetabled to cover. This generates the time teachers allocate to each graded class. These classes are each then taught as a monograde class. By implication, some students are ignored for some part of each day. They are not guided towards self-study because no teacher feels responsible for them.

Quasi-Monograde

The term quasi-monograde refers to attempts by teachers to organize a multigrade class as if it were a monograde class. Within this approach there are three main strategies.

In the first, the teacher organises the class into separate spaces and grade groups. Students work alongside their class grade peers. There are often separate chalk-board spaces for different grade groups. The teacher divides her time between the grades and may or may not use a pupil-monitor to supervise the work of one grade while she is working with another. Subjects requiring high teacher-pupil contact may be matched with those requiring little. The teacher then gives most attention to the group timetabled to follow the teacher-intensive subject. Alternately, two or three different lessons at different levels may be prepared on the same subject. This approach allows all children to learn the same subject in a given timetable period, with each group following its own work according to grade level.

In the second strategy, the teacher makes use of curricula that have been planned in units spanning more than one year – multi-year span curricula. Learners from different grades 'enter' the span at different times, but all students in the class then follow the curriculum unit together. For example, if grade 5 and grade 6 are combined to make a large enough class size, they can be taught a grade 5-6 combined curriculum. Children then flow into and out of the combined class after spending two years learning and cover the entire two year curriculum, albeit in a different order. The teacher has different

expectations of learning outcomes dependent on the formal grade of the learner.

In the third, the whole class strategy, the teacher teaches the same lesson to all the students in the same way and treats them as if they were a single monograde class. Music, art, religious knowledge and social studies lend themselves well to this option. Similar inputs and similar processes are followed and similar learning outcomes are expected from all students, irrespective of their formally assigned grade.

Differentiation

The third broad approach rests on the concept of differentiation, within which two strategies can be identified. The first strategy focuses on the teacher and her/his handling of curricula texts and material inputs with learners. This involves teachers reconstructing curriculum frameworks for each of two or more grades into one by identifying learning objectives and/or topics in common. The teacher focuses her attention on the common elements and teaches the whole group as one (see whole class strategy above), followed by some differentiated tasks and activities. With differentiated tasks come differentiated expected learning outcomes.

The potential advantages of this approach for the multigrade teacher are several. First, children from different grades can be grouped together and taught the same curriculum subject at the same time. Second, children of all ages, abilities and grades learn together. By structuring the stages of the lesson through a mix of whole class teaching, single and mixed grade discussion groups, individual enquiry and activity, the teacher can appreciate the unity of the lesson planning task – one topic across several lessons, albeit with differentiation within. Most importantly, she has been professionally supported in the planning task by a national authority. She has not been expected to carry the burden of planning for two or more grades alone. This support is particularly important for teachers in isolated, rural schools who frequently lack opportunities for professional support and development.

A different strategy of differentiation arises when the main driver for learning is *graded learning material*. This strategy is learner-centred and materials based. In this approach the curriculum does not necessarily need to be re-sequenced. Rather, learning materials are designed to help the learner progress through the curriculum sequence.

Such materials need to be available in plentiful supply (Little, 2006).

Evidence from Research

Two examples of innovative approaches to multigrade teaching and learning stand out. In both cases, the development and use of graded learning material has been of central importance.

The first is the *Escuela Nueva* Programme, originating in rural Colombia in the 1980s. The development of the curriculum focused on the learning needs of students. Self-learning guides were developed for each of the subjects of the national curriculum, reflecting its objectives. Regional and local adaptations were made to the content where appropriate. Self-learning guides were developed in natural science, mathematics, social studies and language, with regional and local adaptations. These were organised by sequences of learning tasks and presumed levels of difficulty. Learning activity centres and libraries complement the study guides. Assessment of learner achievement is built into the study guides and flexible promotion systems allow students to progress at their own pace. Learners working at several curriculum grade levels are grouped together in the same classroom (see Colbert, Chiappe and Arboleda, 1993).

A second compelling approach comes from Rishi Valley in the state of Andhra Pradesh, India. Developed over the past eighteen years, the scheme is premised on differentiated learning and a curriculum programme that 'scales down the learning outputs of each class into a meaningful sequence of concrete and manageable units' (Menon and Rao, 2004: 43). Five types of learning activities are stimulated by work cards and learning aids that draw from the local environment and daily-life experiences of the learner. These are classified as: introductory, reinforcement, evaluation, remedial and enrichment. Multiple sets of activities comprise 'milestones', organised in ascending order along a 'ladder of learning'. This approach has recently inspired the developers of the activity-based programme in the state of Tamil Nadu. Hailed as 'The Silent Revolution', the programme is currently being introduced across the state.

Implications for Research and Policy

Several attempts have been made in the past to synthesise the results of studies on the relative effects on performance of multi- and monograde forms of teaching, but the evidence remains inconclusive (for a review see Little, 2006). Future research studies need to address and resolve at least three methodological issues:

- The terms 'multigrade' and 'monograde' embrace a very wide variety of classroom practices. As many researchers have pointed out, some schools and classes are *de facto* multigrade. They arise out of necessity and teachers manage as best they can. These are to be distinguished from schools and classes where multigrade is promoted as a positive pedagogy. Similarly, teaching and learning practices in monograde classes vary enormously. An understanding of the effects of multigrade teaching requires attention to the processes of learning and teaching inside classes.
- Few analyses of the effects of multi- and monograde teaching separate the relative effects of home background and school experience on learning outcomes.
- All studies of the relative effects of multi- and monograde schooling on achievement only study children already enrolled in school. For many millions of children the only school that they may be able to access in the coming decades is a multigrade school. Those who fail to enter school, or who dropout before the completion of primary are, by definition, excluded from such comparisons. For them the trade-off is between no access to any school and access to school, whether multi- or monograde.

Four main policy implications that flow from current research include the need for:

- greater awareness by policymakers of the extent of *de facto* multigrade classes within national education systems and a commitment to meet the needs of learners and teachers in these classes,
- a restructuring of national curricula and learning materials for multigrade classes by national curriculum developers,
- a restructuring of teacher education curricula to promote positive pedagogies for multigrade classes,

- concerted efforts to raise the status of multi-grade learning and teaching, which is often considered a last resort where resources are short and an option for the poorest schools in the poorest places. Paradoxically it is often considered leading edge practice in some high income countries which have surprisingly high proportions of multi-grade schools.

Selected References

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This policy brief is based on:

Little, A.. (2008) *Size Matters for EFA*. CREATE Pathways to Access Research Monograph No 26.

Blum, N and Diwan, R. (2007) *Small, Multigrade Schools and Increasing Access to Primary Education in India: National Context and NGO Initiatives*. CREATE Pathways to Access Research Monograph No 17.

Both monographs are available at www.create-rpc.org. This brief has been developed by the authors and the CREATE team.