

MULTIGRADE TEACHING ANNOTATED BIBLIOGRAPHY H-M

Author: Hamzah Mohamad Daud, Raman Santhiram

Year: 1988

Title: Sabah multiple class project Phase II: project evaluation report

Reference Type: Report

Institution: Education Department, Sabah

Date: Oct 1989 - Mar 1988

Abstract by CB: This report is an evaluation of the Sabah Multiple Class Teaching Project II (October, 1986-March, 1988). The project focused on improving the educational climate in multiple-class schools, following on from Phase I of the project. Although these schools are not defined, they appear to be schools in which by virtue of their size there are multigrade classes. Improving the educational climate was seen as a function of not only teachers and educational administrators, but also of the society at large. To this end, an attempt was made to mobilise teachers, the local community, and extension agencies. The report both evaluates the project and makes recommendations as to how it could be improved. The evaluation of project outcomes is based on surveys conducted in eighteen schools. The authors of the report found that the project had been reasonably successful in introducing participating schools to new instructional approaches, but less successful at involving the community, or in disseminating project ideas to non-participating schools.

In the appendices, there is a very clear outline of three different instructional strategies suggested by the project for multiple class schools. These were splitting the grades, with one grade doing seatwork while the other was taught as a class, lessons based on graded worksheets to be worked through at the students' own level, and an approach based on ability grouping across grade groups. These approaches have potential value in other multigrade classroom situations.

Author: Harbison R, Hanushek Eric A

Year: 1992

Title: Educational performance of the poor: lessons from rural northeast Brazil

Reference Type: Book

Publisher: OUP for the World Bank

City: Oxford

Abstract by AL: References to multigrade teaching occur only in passing. They see multigrade as a way of increasing efficiency through class size increases, which seem to have no effect on achievement (p.202). Furthermore, their data on various grouping practices in schools in rural northeast Brazil (p.103) lead them to conclude that segregating by achievement level has no systematic effect on teaching and learning.

Author: Hargreaves, Eleanore

Year: 2001

Title: Assessment for learning in the multigrade classroom

Reference type: Journal article

Journal: International Journal of Educational Development

Volume: 21, 6

Page number: 553-560

Abstract by EH: This paper suggests that multigrade classrooms lend themselves particularly well to promoting assessment that enhances learning, rather than assessment aimed solely at selecting pupils for promotion to the next grade. Some strategies to encourage assessment for learning in the multigrade classroom are explored. These include facilitating individual responsibility for learning, drawing on other children as an assessment resource and using assessment tasks that have learning potential. For such strategies to be used, teachers need training, guidance and exemplification relating to the formative purposes of assessment and criterion and pupil referenced assessment.

Author: Hargreaves, E.; Montero, C.; Chau, N.; Sibli, M.; Thanh, T.

Year: 2001

Title: Multigrade Teaching in Peru, Sri Lanka and Vietnam: an overview.

Reference type: Journal article

Journal: International Journal of Educational Development

Volume: 21, 6

Page number: 499-520

Abstract by EH: This paper comprises reviews of multigrade teaching in three countries: Peru, Sri Lanka and Vietnam. For each country, we describe the context for multigrade teaching, the country's education system, the place of multigrade teaching within the system, problems associated with multigrade teaching and current strategies for multigrade teaching. We conclude by noting some common experiences for multigrade schools across the countries, including those of isolation and dispersion, lacking physical facilities, poor teacher backgrounds and conditions, limited classroom teaching and learning strategies and pupils' deprived backgrounds. Also common across the three countries is a national commitment to improving the situation for multigrade classrooms.

Author: Hargreaves, Linda, Comber, Chris and Galton, Maurice

Year: 1996

Title: The national curriculum: can small schools deliver? Confidence and competence levels in small rural primary schools

Reference type: Journal article

Journal: British Educational Research Journal, 22(1): 89-99

Abstract by CB: The research reported here shows generally very high self-reported competence and

confidence ratings from teachers in small schools. Evidence was also found of a slight decrease in teacher confidence at the most advanced stage of cluster development. The authors believe that this may be because as teachers become more aware of the complexities of curriculum implementation, they also become less confident in their capacity to deliver. No implications are drawn from the study, although the authors suggest that further research is needed to find out the extent to which teachers' confidence and competence translates into effective teaching practice.

Author: Harrison DA, Busher H

Year: 1995

Title: Small schools, big ideas: primary education in rural areas

Reference Type: Journal Article

Journal: The British Journal of Educational Studies Volume: 43 Issue: 4 Pages: 384-397

Abstract by CB: Harrison and Busher examine previous research literature to see how the introduction of Local Management of Schools (LMS) may affect the small school. LMS involves devolving the budget to the individual school to give them greater responsiveness. Three effects of LMS are identified as they may specifically affect the small rural school. First, headteachers may find that their administrative duties increase and that they are unable to devote enough time and energy to classroom teaching. Second, there is pressure on schools to reduce staff numbers and this can lead to larger mixed age classes. Third, LMS demands more time from support staff, such as secretaries, bursars, and caretakers, which small schools may find difficult to provide. School clustering is seen as a solution to some of these problems, although problems inherent in clustering, including the time and cost involved in travelling to meetings at distant schools, need to be addressed.

Author: Haugen Valerie R

Year: September 1998

Title: Evaluation of ethnic minority education project Quang Ninh Province, Vietnam

Reference Type: Report

Institution: Save the Children (UK), Hanoi, Vietnam

Abstract by CB: An evaluation of a Save the Children Project in one district in Vietnam aimed at improving the access and quality of education for primary school students and adult learners. The project had five components: a pre-school programme, training for primary school teachers, adult literacy/numeracy classes, education management Information Systems training, and commune boarding schools. There is no mention of multigrade in the report, although the context of the intervention suggests that it occurred in an area where multigrade schooling might have been an option in order to improve both the quality of, and access to, education.

Author: Hayes, Dennis

Year: 1999

Title: Organising learning in mixed age classes: a case study about a multi-task lesson.

Reference type: Journal article

Journal: Curriculum 20(2): 100-109

Abstract by CB: This case study examines teacher practise in a mixed age class in a small primary school in order to draw implications for in-service and staff-development provision. The class involved is key stage 2 and consists of a total of 32 students. The teacher uses a 'multi-task' approach to deal with the class. The students are divided into approximately four equal groups. The youngest children do claywork; the most able engage in a maths problem solving task; a mixed group of younger children write a literature review; and a mixed group of more experienced children practice using paragraphs in open writing.

On the basis of the lesson, the researcher draws out problematic issues in relation planning, reosources, explanations, monitoring, assessing, lesson conclusions, and progression. He also points to a number of lessons that can be learned from the case study about how teachers of mixed age classes might go about effectively organising and managing their classes. Finally, some concluding remarks are made about the difficulties inherent in models of collaborative classroom-based training. In particular, the author makes the point that if teachers are to open up their practice to close scrutiny, then account has to be taken of the affective and emotional dimensions that underpin the organisational aspect of teacher's decision making.

Author: Heeney, Margaret R.

Year: 1996

Title: The implementation process of two multigrade/multiyear teams in two middle schools in South Florida: a cross-site case study.

Reference type: Conference paper

Conference location: The annual conference of the national Middle School Association (23rd, Baltimore, MD, October 31-November 3, 1996).

Paper availability: ERIC Document Reproduction Service No. ED 410066

Abstract by CB: This paper reports on research that used a case study approach to describe and analyse the efforts of two middle schools to implement multigrade/multiyear teams in Florida. In both cases, the schools involved chose to implement the approach for pedagogical reasons. The study used cross-site comparisons in order to address the following five research questions:

- What is the process of implementing multigrade/multiyear teams?
- What are the perceived benefits to implementing multigrade/multiyear teams?
- What are the perceived barriers to implementing multigrade/multiyear teams?
- How do multigrade/multiyear middle school teams operate on a day to day basis?
- How do student outcomes in multigrade/multiyear middle school teams compare with student outcomes in single grade middle school teams?

Benefits to implementing multigrade teams were found to include the development of long term relationships, continuity and a family atmosphere. Conversely, barriers to implementation included systemic barriers (e.g. reporting requirements), lack of models of practice, negative attitudes, and lack of time for planning and preparation. The keys to the operation of the multigrade teams were flexibility, variety, and good teaching practices. Both teams tried to develop autonomous self-directed learners. Achievement in the multigrade teams was similar to that in the single grade teams. The paper ends by giving implications for principals, teachers, students, and parents, and recommendations for future research.

Author: Hopkins D, Ellis P David

Year: 1991

Title: The effective small primary school: some significant factors

Reference Type: Journal Article

Journal: School Organisation Volume: 11 Issue: 1 Pages: 115-122

Abstract by AL: Mixed-age classes are seen as an inevitable practice in small schools. Official criticisms of it, in various HMI reports, are countered with data supportive of small schools and vertical grouping. The key to success is seen to be the use of appropriate pedagogical methods and class organisation, particularly individual and co-operative group approaches to learning.

Author: Howells R

Year: 1982

Title: Curriculum provision in the small primary school

Reference Type: Book

Publisher: Cambridge Insitute of Education

City: Cambridge

Abstract by CB: This is a report of the results of a study undertaken into the problems and possible solutions facing small schools in the delivery of the curriculum. The study was conducted in 18 schools on the island of Jersey. The main source of data was a structured interview conducted with the head teacher. This was augmented by informal observation and discussion with other teachers and pupils. For the purposes of the study, a small school is defined as one that has less than one form entry, and consequently has classes that contain two or more year groups. The study concludes that small schools are not less educationally viable than larger schools. The main recommendations are as follows:

- Allocate special funding to small schools
 - Pool expensive equipment
 - Have a clearly outlined written curriculum
 - Develop school clusters
 - Involve parents in the life of the school
 - Give the head non-teaching time to organise the school
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Author: Hussain, R.; Retallick, J.

Year: 2005

Title: Teaching and Learning in Multigrade Classes in Retallick, J, and Farah, I. Transforming Schools in Pakistan: towards the learning community

Reference Type: Chapter in book

Publisher: Oxford University Press

City: Karachi

Abstract by AL: An account of a two year action research project conducted in schools in the Northern Areas of Pakistan. The main research question addressed was 'what is the reality of creating effective teaching and learning practices in multigrade schools in NA?'. In phase 1 a situational analysis was conducted with 15 schools, followed by an evaluation of interventions in four schools in phase 2. Interventions were made in four areas: curriculum reorganisation, resource development, community involvement and peer tutoring. Greatest results were achieved in community involvement and peer tutoring. Teachers achieved more limited success in curriculum re-organisation and resource development. The study highlighted the complexity of scaling up multigrade practices, the need for constant support in the development of resources and continuous teacher education. Nonetheless, the authors conclude that 'effective multigrade is possible when a well designed plan of action is created through engagement of stakeholders, when they work together to enhance and improve the teaching and learning processes in their schools and when they have a commitment to continue the same with support from the teacher educators as well'. (p 161)

Author: Her Majesty's Inspector of Schools

Year: 1978

Title: Primary Education in England

Reference Type: Book Record

Publisher: Department of Education and Science

City: London

Abstract by AL: A study of the work of 7, 9 and 11 year olds in 1,127 classes in 542 English primary schools. It comes out against the use of mixed-age classes. It examines the 'matching' between the level of work that students were actually being asked to do and the level it was felt suited their estimated ability. For 7 and 11 year-olds, single-age classes produced better matching of work to ability than did mixed-age classes. Eleven year olds in single-age classes also produced better reading and maths scores. Differences with 9 year olds were smaller, but still favoured single-organisation.

Author: Jarousse Jean-Pierre, Mingat Alain

Year: 1991

Title: Efficacite pedagogique de l'enseignement a cours multiples dans le contexte africain.

[The educational efficiency of multigrade teaching in the African context]

Reference Type: Report

Institution: IREDU-CNRS: University of Dijon.

Date: April 1991

Abstract by CB: This is a report of research into the effectiveness of multigrade school organisation carried out by Jarousse and Mingat in the context of Francophone Africa. They wanted to find out whether students in double grade classes achieved differently from students in monograde classes and whether multigrade organisation was a cost effective option. In order to do this, they adopted a pretest - posttest design and controlled for variables relating to both student background and teaching conditions. Data were collected from both Togo and Burkina Faso. Achievement tests were given in French and maths. In Togo, students in the 2nd grade and 5th grade were tested. In Burkina Faso, students in the 2nd grade only were tested. The Togo

research involved 7000 pupils and the Burkina Faso research concerned 2,900 pupils.

Using multivariate analysis, Jarousse and Mingat found that students in multigrade classes in both Burkina Faso and Togo achieved significantly better results than students in monograde classes. These differences were consistent for both French and maths, and for 2nd grade and 5th grade students. Jarousse and Mingat also tested for the effect of class size on achievement because multigrade classes tended to be larger than monograde classes. They found only a small negative effect associated with class size and this did not substantially alter the advantage of students in a multigrade class. A 2nd grade monograde student in a class of 25 students would be expected to score 4 points less than a 2nd grade multigrade student in a class of 50 students in Togo, and 6 points less in Burkina Faso.

Jarousse and Mingat conclude that multigrade organisation is a cost effective way to organise for instruction in rural areas because it both reduces unitary costs and confers an educational advantage. This is despite the costs involved in building classes of sufficient size, and providing enough instructional materials, for two grades. They speculate that the achievement advantages in multigrade classes are the result of a combination of differentiated instruction and better teacher knowledge of her pupils.

Author: Jarousse, J.P; Mingat, A.

Year: 1992

Title: L'ecole primaire en Afrique: Fonctionnement, qualite, produits. Le cas du Togo. (The primary school in Africa: function, quality, results. The case of Togo).

Reference type: Report

City: Dijon, France

Institution: Universite de Bourgnone, Institut de Recherche sur L'economie de L'Education

Abstract by CB: In Togo, Jarousse and Mingat studied a national random sample of 64 schools, stratified by urban/rural location, to find out what factors affect primary school student achievement. One of the factors identified for research was classroom organisation. French language and mathematics achievement in 16 multigrade classes was compared with achievement in 112 monograde classes. 7000 pupils were included in the sample, drawn from the second and fifth year of primary school. Multigrade classes were predominantly found in rural areas. They all consisted of double grades. Tests were administered at the beginning and the end of the school year. Data were also collected on the physical infrastructure of the schools, teacher characteristics and student characteristics using questionnaires.

Jarousse and Mingat used regression analysis to control for the effects of student characteristics, teacher characteristics, class size, and school facilities. They found significant differences at the 1% level in favour of students in the multigrade classes. The effect was felt in both French language and mathematics. They also found that although multigrade organisation frequently resulted in larger class sizes, it also mitigated the effect of large class size. Jarousse and Mingat (1991) modelled the acquisition of a child in a multigrade class and compared it to a child in a monograde class. The child in the multigrade class consistently did better, by 4 points in a class of 25 pupils, and by 7 points in a class of 50 pupils.

Three possible explanations are advanced for the differences in achievement between students in multigrade and monograde classes in Togo (1992:114; 152). 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. There is no indication of whether teachers were trained in the pedagogy described by Jarousse and Mingat.

Author: Jayawardena Ananda A

Year: 1995

Title: A study on the factors affecting the educational achievement of students in multigrade schools in disadvantaged areas in Sri Lanka

Reference Type: Thesis

University: University of Colombo

Abstract by MV:

The objectives of the study

- To review the levels of educational achievement /status in the multigrade schools or under privileged schools in Sri Lanka. - To investigate the difficulties /problems encountered by the students in multigrade schools - To study the problems related to multigrade schools that affect student achievement - To evaluate the teaching in multigrade classrooms

Study was carried out in the Ratnapura district with a sample of 40 multigrade schools. The sample consisted of 422 students, 70 teachers , 40 principals and 200 parents. Data collection tools used were questionnaires, interview schedules, evaluation sheets and observations.

Majority of multigrade schools situated in the disadvantaged areas in the country. Teachers find it difficult to find suitable residential facilities and the students encounter difficulties in obtaining the basic necessities for schooling. Number of children ranges from 10-30.

Physical facilities of schools

All multigrade schools have no separate classrooms. In certain schools the numbers of buildings are more than what is needed, but are not equipped with essential facilities. Even the facilities available need repair. There are no school libraries and even the few available books are outdated.

Teacher guides and text books

Teacher guides are not adequate. Students do not receive text books distributed free by the State in time.

Dropping out from School

Highest rate of dropping out is observed at year 5. According to teacher perceptions children dropped out of multigrade schools due to a range of reasons. The major ones are low socio-economic background, lack of year 6 classes in these schools, teacher scarcity, negative attitudes towards education among parents and children, very low educational levels of parents, getting employed as labourers, helping parents in their work, big family size, having to look after siblings and low accessibility of the school.

Teaching

Majority of teachers in these schools are untrained. Only 15.71% are trained while 84.28% are untrained. None of the teachers have been trained for multigrade teaching. Qualifications of these teachers are either G.C.E. A/L or O/L. 85% of them are new recruits. 84% are from the same district while 19% are from other districts. 59% of teachers come to school by walking. Others seek public or private modes of transport. 40% are happy in teaching in these schools. 60% are somewhat happy. All the teachers think that these schools should not remain as multigrade schools.

In most of the schools only Mathematics and Mother Tongue (reading and writing) are being taught. Subjects like English, Science and Environmental studies are never being taught. Syllabi are not covered. The

achievement levels of mother tongue and maths are also quite low. Averages for maths and Sinhala of year 5 students are 20.32 and 19.79 respectively.

The quality of teaching is very low, no teaching aids are used, no proper grouping methodologies are adopted. 70% of the teachers use only lecture method. 98% of teachers say that no time table followed in these schools. Integration of subject matter is found to be difficult while teaching for multiple grades. There are many problems that teachers encounter in working in these conditions. Lack of necessary equipment, lack of space, individual differences in students, lack of motivation in students and parents etc. Students are more interested in doing other activities out of the class and they never complete home work and they never receive any feed back from their parents. Students do not have any supplementary reading materials. Teachers indicate that it is hard to fulfil the learning needs of these students and comparison of achievement levels with zonal averages should not be done. There are no teachers for children with special needs although 65% of students are such.

Parents

Out of the fathers 22% have never gone to school. 65% have completed only their primary education. 10% have done their O.L while 2% have passed A/L. Out of the mothers 32% have not had any schooling while 46% have had their primary education. 68% secondary schooling, 10% O/L and 4% A/L.

None of the fathers are in permanent jobs. 2 fathers are casual employees of a government department. 52% are small scale tea, paddy and chena cultivators. 20% are labourers and 28% are unemployed. 80% of the mothers are unemployed, 19% are engaged in chena cultivation. Only one of them is a teacher. The housing conditions of the school community are very poor. Majority are without access to a source of pure water.

Recommendations for further study - investigate suitable teaching methodologies that could be adopted in multigrade situations - study as to how the community development could be done in these geographical areas.

Author: Jenkin Frank

Year: 1989

Title: Making small groups work

Reference Type: Book

Publisher: Pergamon

City: Oxford

Author: Joubert, Jurie

Year: 2007

Title: Adapted/Adjusted Curriculum for Multigraded Teaching in Africa: A real solution?

Reference Type: Unpublished paper

Abstract by JJ: This paper suggests that multi-grade teaching is not merely a pedagogy, but is a methodology for reflective, critical and good teaching requiring an adaptive and effective curriculum.

The paper maintains that all teaching and learning is multi-grade teaching. Even in a mono-grade class with just one grade group, there is always a considerable range of interests, abilities, maturity and needs. In fact, all teachers in all classrooms should consider themselves multi-grade teachers.

Today in many parts of Africa, growing up in a rural region often means growing up without a decent education. Poverty continues to put large numbers of rural learners at risk of school failure. The Dakar Framework for Action outlines a number of goals in order to meet the EFA challenges, each with special relevance to Education for Rural People.

Most countries in Africa have national curricula and the prescribed curricula are the same for both urban and rural schools. A crucial issue is that the curriculum must be relevant to rural people's needs. Adjustment of national curricula's for MG children's needs should be made without changing their basic principles

Author: Juarez and Associates

Year: 1992

Title: Multigrade schools: an information packet

Reference Type: Report

Institution: US Agency for International Development Bureau for Latin America and the Caribbean, Office of Development Resources, Education and Human Resources Division

Date: December 31, 1992

Report Number: (Contract) LAC 0032 C 00 9036 00

Abstract by CB: This is a review of the multigrade literature that is intended to give practical advice on how to use multigrade schools effectively in Latin America and the Caribbean. After the statement of the problem, the manuscript focuses on a review of the research literature, from both developed and developing countries, into multigrade classrooms and the performance of children in those classrooms. In the next section, the factors influencing the success of multigrade programmes are discussed. These include interventions that can be made at the classroom level, at the community level, and at the national level. The first of these draws on ideas from Miller (1989). These encompass enhancing the classroom environment, improving scheduling and planning, developing curricula and materials, and varying instruction (types of grouping). The second level of intervention focuses on ideas for improving links between the multigrade school and the local community. The development of an appropriate teacher training programme is discussed as one important national level intervention. In the final section of the document, a case study of the New Schools Programme in Colombia is presented, with particular emphasis on the key components of the intervention. The appendices include a potentially useful pro-forma for assisting teachers in developing more student autonomy in the classroom, and a series of handouts that could be used for training purposes.

Author: Juarez and Associates

Year: 1994

Title: Indicators of democratic behaviour in Nueva Escuela Unitaria (NEU) schools.

Reference type: Report

Institution: United States Agency for International Development/Guatemala

Abstract by CB: This study compares the incidence of democratic behaviour amongst students in a sample of Escuela Nueva schools with that of students in a similar sample of non-Escuela Nueva schools. Democratic behaviour is an important dimension of the Escuela Nueva programme and therefore it is of interest to see

whether such behaviour is promoted. Observable indicators of democratic behaviour were developed, including turn taking, directing others in an activity, and receiving positive feedback on performance, and groups of students in the experimental and control classes were observed over time to see to what extent these behaviours occurred. The study found that students in Escuela Nueva schools exhibited significantly more democratic behaviour on many measures than their counterparts in non-Escuela Nueva schools. These trends favoured students of both sexes, and also applied in different sub-regions.

Author: Kamat Kusum N

Year: 1998

Title: Management and organisation of learning in multilevel/multigrade situations for school effectiveness

Reference Type: Conference Proceedings

Conference Name: Seminar on Studies on Learning Organisation, Community Participation and School Effectiveness at Primary Stage: International Perspective 1998 Conference

Location: National Council of Educational Research and Training, India

Abstract by MV: The study aimed at changing the organisation of instruction for ensuring effective learning of each individual of Grade I to IV in the multilevel situation. Different grouping strategies were adopted for organising instruction i.e. large groups, small groups, peer-pair groups were formed in many different ways. Individual self-learning assignments and graded exercises were also used. In addition school and classroom atmosphere was also improved by renovating with spacious and clean classrooms with display boards and black boards. This change resulted in improvement in attendance. Evaluation of strategies used in the classroom organisation was done by giving a questionnaire to the teachers regarding the utility and effectiveness of changed organisation. Performance reports of teachers and students given by head of school and Inspecting officers, observation of student in learning and attendance to school, studying children's performance in periodical tests and annual examinations. The study revealed that there was an improvement in pupils' achievement especially low and middle groups by using small group teaching techniques. Study also revealed that self learning skills can be developed even amongst the first graders and the material prepared with the Programmed Instruction Approach helped to hold students' interest and promote active participation and self learning effectively.

Author: Kazibwe, Francis Musisi

Year: 2004

Title: An Assessment of the Strengths and Weaknesses of Multi-Grade Teaching in Kalangala District (Alternative methods of providing formal basic education)

Reference Type: MA Dissertation

Abstract: This study was carried out to analyse the strengths and weaknesses of MGT in Kalangala District, Uganda. MGT involves a single teacher instructing more than one class/grade in one room at the same time. The case study design was chosen as the most appropriate design for the study that was guided by five (5) research questions. The main source of literature for the study was the Internet and review of literature was done under the major themes:

- The concept, application and history of MGT
- The effect of education policies and practices of a country on MGT
- Socio-economic and political factors affecting MGT
- Cognitive and non-cognitive outcomes of MG

- The study collected data from four categories of respondents namely:
- All teachers from the five pilot primary schools
- Some district officials that were key players in the education sector
- Officials from the departments of Teacher Education and Primary Education of the MoES
- Parents of children in the pilot schools

Consequently, four (4) research tools were piloted to weed out ambiguous questions before the actual data collection was done. Research assistants trained by the researcher collected data in November-December 2002.

The study found that low enrolment, fully sensitized key stakeholders, big-sized classrooms and an adequate supply of teachers were favorable to the successful introduction of MGT in a school. The study also found that teachers had to be adequately trained, supplied with relevant instructional materials, implementation guidelines and appropriate furniture for them to successfully implement MGT. Furthermore, the study established that it was Government's policy to use MGT where appropriate. It also established the stakeholders' opinion about MGT as MGT having advantages over Mono-grade teaching; MGT having weaknesses in itself and in the way it was introduced; and that for perfect implementation of MGT, certain issues needed addressing.

Finally, the study recommended that a study be conducted to establish whether academic achievement was not affected by the use of either MGT or Mono-grade teaching.

Notes: A Dissertation Submitted in Partial Fulfillment of the Requirements for the Award of The Degree of Master of Management Studies (Public Administration and Management) of Uganda Management Institute.

Editor: Keast David

Year: 1987

Title: Small schools primary: perspectives 30

Reference Type: Edited Book

Series Title: Perspectives

Series Author: P, Preece

Publisher: School of Education, University of Exeter

City: Exeter

Abstract by CB: This edition of Perspectives reports on developments from four LEAs that have begun to implement policies in support of small schools. The background to these policies is the widespread view that small schools are uneconomic and face challenges to maintaining a quality of educational provision. The developments are concerned with experiences of different versions of school clustering. School clustering is the building of co-operative links between groups of schools in order to strengthen curriculum provision by sharing expertise and resources. A key factor in successful schemes appears to be the appointment of an advisory or other experienced teacher to co-ordinate, encourage and lead the work among schools.

Author: Keast David

Year: 1991

Title: Small schools in clusters

Reference Type: Book

Publisher: Exeter Small Schools Network

City: Exeter

Abstract by CB: This is one of several publications to emerge from the Exeter Small Schools Network. It brings together six articles that describe examples of clustering activities for different purposes by groups of small schools in various areas of England. School clustering is believed to be of particular value to small schools where the challenge of scale can limit access to both material resources and staff expertise. Two factors appear to contribute significantly to clustering activities. First, is the teacher's belief that involving other teachers and children in the life of their school is a worthwhile undertaking. Second, is the degree to which the LEA supports school clustering activities. Support may be in the form of money, advice, materials, or protection in the face of opposition. All the examples given in the articles were facilitated by financial or material support from their LEA.

Author: Keast David

Year: 1992

Title: Small schools after ERA: 1992 (the second) survey

Reference Type: Book

Publisher: Exeter Small Schools Network

City: Exeter

Abstract by CB: This is the second annual survey of small schools in England conducted through the Exeter Small Schools' Network. Its purpose is to provide information on the consequences of the 1988 Education Reform Act and subsequent legislation as they relate to small schools. The author feels that it is important to systematically gather information on how small schools function because of the general view that they are inadequate. The research is based on 124 questionnaire responses from 33 LEAs. It gathers information from four categories of small school (defined in terms of pupil numbers). The 33 LEAs were selected to take part because they had high proportions of schools with less than 100 pupils. The survey collected information on LEA policy for small schools, funding arrangements, staffing and headteacher commitments, opting out, and the consequences of 'open enrolment'. Some of the main findings were as follows:

- There was variability in the support of LEAs for small schools, but the majority had special funding arrangements to compensate for the higher costs in small schools
 - Relatively few schools were engaged in clustering arrangements with neighbouring schools, nor were many LEAs supporting small school clusters.
 - Despite increases in management and administrative duties, there was no evidence of a corresponding increase in staffing in small schools.
 - Government efforts to increase parental choice through open enrolment were helping small schools by bringing in more pupils.
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Author: Keast David

Year: 1992

Title: Small rural primary schools: a resource book

Reference Type: Book Record

Publisher: Exeter Small Schools Network

City: Exeter

Abstract by CB: This booklet is designed to give information about small schools as part of the work of the Exeter Small Schools Network. It responds to an environment in which small schools are often seen as cost ineffective and of poor quality. The document begins by discussing definitions of small schools and then presents data on LEAs in England with high proportions of small schools. It goes on to argue that size per se does not affect the quality of education, but rather what the teachers in the school do. Other issues addressed are the way in which schools are funded (formulas based on pupil numbers do not generate enough funds to cover the staff in schools with below 25-30 pupils), the potential value of a school to its local community, the extent to which different LEAs have a pro-active small schools policy, and the possible repercussions for small schools of 'opting out'. The booklet also includes a useful bibliography of small schools literature and extracts from the White Paper 'Choice and Diversity' as they relate to small schools in clusters.

Author: Khan, Jalal Wali

Year: 2006

Title: School Improvement in Multigrade Situation (SIMS) An innovation of the PDCC

Reference type: Conference Paper

Publisher: Aga Khan University

City: Karachi

Abstract by JWK: Professional Development Center, Chitral (PDCC), since its establishment in Chitral, is committed to work with its partner education providers for the improvement of quality of teaching and learning in schools. PDCC believes that effective teaching and learning in primary, acts as a foundation stone for higher education, but currently it does not happen in majority of our primary schools. Multigrade situation in primary schools is one of the many reasons of low quality education. School Improvement in Multigrade Situation (SIMS) was piloted in five schools aiming to improve the current Multigrade Teaching (MGT) situation in schools. This study intended to explore some of the successes, challenges and lessons learned as a result of the SIMS intervention. The focus of the study was to assess the effectiveness of the in multigrade situation. For gathering information a number of inquiry tools were used. For example, ongoing assessment of teachers during workshop, field visit reports(field notes) of the Professional Development Teachers (PDTs) who facilitated the teachers of pilot schools, classroom observations of teaching and learning, formal (interviews) and informal discussion with students and teachers, and teacher reflective journals. The collected data was brought together in order to develop themes. Through the comparison of the data collected from various sources, it was found that SIMS creates better teaching and learning environment in the classroom, makes school happy place for the students to be in and provides opportunity of sharing resources. However, MGT demands for both the capacity and will of all the stakeholders especially the teachers.

Notes: Available online selected texts in full

Authors: Jalal Wali Khan and Sultan Ali Khan

Year: 2007

Title: School Improvement in a Multigrade Situation. An Action Research carried out in Chitral-Pakistan

Reference type: unpublished article

Abstract by JWK and SAK: In Multi-grade Teaching (MGT), teachers are responsible for teaching across two or more grades, within a timetabled period. This is a common practice in Pakistani primary schools in general and in Chitral district in particular. Teachers find MGT a difficult pedagogy, but necessary pedagogy. This paper discusses some achievements and challenges for example, academic and attitudinal achievements, observed on the part of the teachers and students as a result of an action research conducted by the Professional Development Teachers (PDT) of the Professional Development Centre Chitral in a government primary school. A cyclic approach of action research was opted to explore the achievements and challenges of MGT interventions. Classroom observation, formal and informal interviews of stakeholders, reflective journal of teachers and document analysis were used throughout the study. The study found that teachers' professional development with respect to MGT, support for teachers at the workplace and teachers' positive attitude towards MGT play important roles. Consideration on the findings of the study may help to improve teaching and learning in multi-grade setting and the adoption of MGT in schools.

Notes: Available online selected texts in full

Author: Kich Pham Vu et al,

Year: 1995

Title: Teacher Training Modules on methods and techniques of multigrade teaching and learning (Module 4, module 5, module 6)

Reference type: Book

Publisher: UNICEF

City: Hanoi

Abstract by CB: These three modules are part of a course intended to train Vietnamese teachers in multigrade techniques. The three modules in this booklet cover introducing local content into lessons, second language teaching and learning, and assessment. Each module is designed to be introduced to teachers over a period of 2-4 days. The modules include detailed instructions on how to deliver them in a training session. The content of the modules is very practical and includes opportunities for micro-teaching and also the observation of demonstration lessons.

Author: King S, Young P

Year: 1996

Title: Opening the door on best practice: contrasting teaching styles in the multigrade classroom

Reference Type: Journal Article

Journal: Education in rural Australia Volume: 6 Issue: 1 Pages: 28-36

Abstract by CB: This paper reports on the findings from case study research into the teaching practices of two multigrade teachers working in schools in rural Australia. The research results are used as the basis for a discussion of what constitutes 'best practice' in the multigrade classroom. One outcome of the research was to inform decisions about the content of pre-service education courses for multigrade teachers. The research was conducted by interviewing the case study teachers five times over the period of one month. Concept mapping strategies were used to uncover the teachers' particular skills and knowledge. Both case study teachers were experienced in multigrade schools and were working in two teacher schools at the time of the study.

The findings focus on the role of the teacher, planning and preparation, and teaching strategies and classroom management. The authors conclude from a comparison of the two teachers that there was no 'typical' multigrade teacher apart from in a commitment and enthusiasm for the task. Aspects of best practice identified by the research included the encouragement of natural competitiveness between year groups, establishing routines, through knowledge of the curriculum, child centered learning activities, and collaborative learning. The implications for pre-service training are reported to be in the areas of identifying the individual needs of children, acquiring an awareness of the curriculum across grade levels, promoting effective practice through classroom observation, and practice in grouping for instruction.

Author: Knight Elton E

Year: 1938

Title: A study of double grades in New Haven city schools

Reference Type: Journal Article

Journal: Journal of Experimental Education Volume: 7 Issue: 1 Pages: 11-18

Abstract by CB: Knight reports on a study designed to find out whether children placed in classes containing two grades could be expected to advance as rapidly as those in a single grade. The design of the study combined a questionnaire survey with an experimental comparison of achievement. The experimental study focused on the achievement of fourth grade pupils in both the higher grade and lower grade of a two grade classroom. Twenty-two different classrooms in thirteen schools took part in the experiment in New Haven primary schools. Two sub-groups were formed. In group A, the experimental group consisted of 120 higher fourth grade pupils in combination classes and the control group of 198 fourth grade pupils in single grade classes. In group B, the experimental group consisted of 120 lower fourth grade pupils in combination classes and the control group of 195 fourth grade pupils in single grade classes. Students were matched on measures of their age, nationality and general ability. Pupils were given the Stanford Achievement Test and an intelligence test, once in 1934 and again in 1935.

Using mean differences and critical ratios, tests were made for significant differences between the experimental and control groups. No significant differences were found except in spelling which favoured the control group. The results of the questionnaire study were listed separately. The overall main conclusions drawn from the study were that children in double grade classrooms did not suffer academically from this mode of organisation and that the teacher appeared to be the most important factor to the child's development.

Author: Kotze, Herman

Year: 2000

Title: Struggling no more. An evaluation of Molteno's multigrade foundation phase classroom model

Reference type: Report

Organisation: Molteno Project

Location: Braamfontein, Johannesburg, South Africa

Abstract by CB: This report evaluates the work of the Molteno Project in farm schools in the Free State of South Africa. These schools operate in very difficult circumstances, including poverty, lack of learning materials, poor facilities, and disillusioned teachers. Most of these schools function with one or two teachers. The Molteno

Project trains foundation phase teachers (those working with the first three years of primary school) in these schools in, amongst other things, classroom management, materials development, and teaching strategies. Of particular concern for the project is assisting the teachers to work within the Outcomes Based Education (OBE) framework.

The evaluation used a combination of documentary analysis, classroom observation, and interviews. Educators in both Molteno and non-Molteno schools were included in the sample for comparative purposes. The evaluation is extremely positive. The main benefits of the programme for the multigrade classroom are claimed to lie in both the quality of teaching and the quality of the work produced by students. Limitations of the study include the extremely small sample of non-Molteno schools, and the lack of information on the characteristics of the two groups of schools.

The evaluation also includes an interesting literature review relating to multigrade and graded education. The conclusion by the author is that the well-organised multigrade model offers a superior form of classroom organisation to single gradedness because

"They provide an environment that allows for each learner to progress at his/her own pace; the development of co-operative learning skills essential to work in a democratic society are promoted; success amongst learners is increased because learners have more opportunity to become role models and to take on leadership roles; self esteem is enhanced and formative assessment is the standard assessment approach. (p.67)

Author: Laukkanen R, Selventoinen Pekka

Year: 1978

Title: Small schools and combined grades in Finland

Reference Type: Book Record

Publisher: OECD, Centre for Educational Research and Innovation

City: Paris

Abstract by AL: For demographic reasons, combined-grade secondary schools are common in Finland. Common practice seems to have been for combined grades to have been taught as a single class, which often resulted in a reversal of the intended order of exposure to the curriculum for some of the students in the class. This document describes a 'year course' experiment based on a spiral curriculum approach that allows the same general topic to be covered at the same time in up to four combined year groups, with each group studying the topic to be covered at the same time in up to four combined year groups, with each group studying the topic at its own appropriate level. The production of suitable instructional materials is seen as the key to success in this project. The concluding section gives a refreshing view of Finnish attitudes to combined-grade schools. They are not only seen as a fundamental part of the system rather than an anomaly, they are also accepted as fertile ground for the development of new ideas for use in other schools, rather than merely as the recipients of modified practices devised elsewhere.

Author: Lee, Jan

Year: 1984

Title: Vertical grouping in the primary school: a report of a study by Lancaster University on behalf of the Schools Council

Reference Type: Journal Article

Journal: School Organisation Volume: 4 Issue: 2 Pages: 133-142

Abstract by AL: The emphasis in this study was on the reality of changing organisation to vertical grouping, which was found to be widespread but often comprising a very limited age range. The attitude of teachers and principals was found to be important for success, and their attitude was generally better when it was felt that vertical grouping had not been forced on them. In practice, it seems that teachers do not change their approach or organisation in a move to vertical grouping. While many felt they were making greater use of group-work, this was often just a form of physical organisation rather than a co-operative learning venture.

Author: Levin Henry, Meister Gail

Year: 1986

Title: Is CAI cost effective?

Reference Type: Journal Article

Journal: Phi Delta Kappan Volume: 67 Issue: 10 Pages: 745-749

Abstract by CB: This study is of interest because it compares the cost effectiveness of computer assisted learning with the cost effectiveness of cross-age tutoring. The latter is an instructional strategy frequently associated with the multigrade classroom. The study investigated the comparative effectiveness in raising achievement in reading and mathematics of four interventions: CAI, cross age tutoring, reducing class size, and increasing instructional time. The effectiveness was then related to the costs of the intervention. Levin and Meister report that of the four interventions examined, cross age peer tutoring was the most cost effective way of increasing achievement in both reading and mathematics.

Author: Little, Angela

Year: 1995

Title: Multi-grade teaching: a review of research and practice

Reference Type: Book

Publisher: ODA

City: London

Author: Little, Angela, W.

Year: 2001

Title: Multigrade teaching: towards an international research and policy agenda

Reference Type: Journal article

Journal: International Journal of educational Development

Volume: 21, 6

Page numbers: 481-498

Abstract by AL: Despite its prevalence in many educational systems, multigrade teaching remains invisible. In the global effort to achieve education for all in the post-Dakar decade the needs of multigrade teachers, classes and schools must be addressed. The paper (i) explores the meaning of the term multigrade teaching in developing and industrialised countries and identifies a range of conditions under which it arises; (ii) synthesises knowledge of the practice of and research on multigrade teaching; and (iii) proposes an international agenda for future research and dissemination of practice. The agenda underlines the need for context-specific questions and comparisons, more awareness of the prevalence and challenges of multigrade teaching, more research on the practices and training needs of multigrade teaching and the exploration of synergies between teachers, curriculum, assessment and classroom organisation. It is suggested that knowledge of multigrade teaching strategies is needed by all teachers and not simply those in classes designated as 'multigrade'.

Author: Little, Angela

Year: 2008

Title: Size Matters for EFA. CREATE PATHWAYS TO ACCESS. Research Monograph No 26

Reference Type: Research Monograph

Publisher: CREATE

City: Brighton

Abstract by Author:

This monograph reviews literature on school and class size for its relevance to the concerns of CREATE. It estimates the numbers of small schools and numbers of children learning in small schools worldwide. It assesses the implications of school size, large and small, for learning outcomes, costs and for social equity. It outlines how policy 'issues' of size, large and small, are constructed and presented in a range of education systems. It identifies the curriculum, teaching and learning issues associated with small schools and examples of good practice and discusses the evidence on learning outcomes in small, multigrade schools. It synthesises the research on class size, large and small, in developed and developing countries, and identifies its relevance for EFA Goals 2, 5 and 6. Finally, the monograph draws implications for on-going and future CREATE studies, in particular the Community and School studies in Bangladesh, Ghana and India.

Author: Lockheed Marlaine E, Verspoor Adrian M

Year: 1991

Title: Improving primary education in developing countries

Reference Type: Book

Publisher: Oxford University Press/World Bank

City: Oxford/Washington

Abstract by AL: This book reflects the World Bank's new enlightenment that the quality of learning in primary

schools is important. Explicit reference to multigrade education is only brief: it is seen as one option for reducing disparities of access and achievement, and both the Indonesian Small Schools project and Columbian Escuela Nueva project are presented as successful examples of what can be done. It is pointed out, however, that multigrade approaches require specialised instructional materials and teacher education. In the more general discussion of learning quality, pedagogical practices that are cited as enhancing student learning include just those which many proponents see as necessary consequences of effective multigrade organisation. In particular, cross-age peer tutoring is recommended as advantageous to both tutors and tutees.

Author: Loewe, Mary Anne

Year: 1997

Title: Issues in basic education: The Department of Education, Culture and Sports.

Reference type: Paper

Institution: ERIC Document Reproduction Service No. ED 431689

Abstract by CB: This paper examines the work of the Department of Education, Culture and Sports in the Philippines. In addition to providing an historical overview of the department, and reviewing some of the key challenges it faces, the paper examines several projects with which they were involved in 1997. One of these projects is a multigrade programme that has been instituted in order to address the dual issues of access to, and quality of, basic education. A brief description of the programme is included.

Important achievements are:

- the employment of 20, 479 multigrade teachers throughout the country;
 - realignment of minimum competencies for English to meet the needs of multigrade classes;
 - creation of model lesson plans and tests;
 - data collection;
 - setting up of multigrade demonstration schools in 12 districts based on Escuela Nueva principles and designed to facilitate training of teachers.
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Author: Lungwangwa G

Year: 1989

Title: Multi-grade schools in Zambian primary education: a report on the pilot schools in Mkushi District

Reference Type: Report

Institution: SIDA Education Division

Date: 1989

Report Number: 47

Abstract by AL: Multigrade primary schools have been introduced in Zambia as a way of extending full primary education opportunities to sparsely populated areas. This report suggests that the policy has been a success in terms of improved achievement, reduced attrition rates and a more positive attitude among pupils. At the same time, it does not try to disguise the difficulties which have been experienced, and it suggests that multigrade is still seen largely as a temporary expedient, in some areas at least. The fact that these schools tend to be in the poorer, more remote areas leads to problems of supervision and materials distribution, and limits the extent to which local community support can be realistically expected. The approach is clearly very demanding for the

teachers. Although multigrade teaching has been introduced into teacher education courses, it is often not taken seriously, as a good performance may lead to unpopular posting to a remote area.

Author: Malmros Asa, Norlen Catharina

Year: 1984

Title: Aldersintegrerade Klasser: forekomst och spridning

Reference Type: Report

Institution: Stockholm Institutionen for pedagogik

Date: 1984

Abstract by AL: A report on the occurrence and distribution of multigrade classes in Sweden, principally those formed for educational reasons rather than because of pupil or resource shortages. There has been recent growth in support for such classes. A 1976 government bill included a passage encouraging age integration for the benefit of individual student development, and new curricula have supported such moves by removing year by year divisions and stressing inter-age co-operation. Teachers have expressed an interest in multigrade approaches as a means of developing more meaningful and stimulating teaching methods, but the report cautions against the belief that multigrade organisation by itself will lead to effective multigrade teaching. Data on the extent of multigrade shows that the proportion of 'boroughs' (kommuner) with such classes increased from 25% to 46% between 1982/3 and 1983/4, although the proportions of schools or pupils involved are not given.

Author: Malmros Asa, Sahlin Birgitta

Year: 1992

Title: Aldersintegrerade klasser i grundskolan forekomst och spridning: uppfoljande kartlaggning lasaret 1987/88

Reference Type: Report

Institution: Hogskolan for lararutbildning i Stockholm Institutionen for barn och ungdomsvetenskap

Abstract by AL: This is a follow-up study on Malmros (1984), giving data for 1987/88. By this date, some 35% of all Swedish primary classes had multigrade classes, of which 44% had introduced them for educational reasons and 20% giving a mixture of educational and resource-oriented reasons for introduction. A further 10% of all primary schools indicated that they planned to start multigrade classes: expansion seems to be continuing. Almost all of the multigrade classes involve integrations in the early years of primary schooling or between early and middle years. Upper primary classes still seem overwhelmingly to be organised along monograde lines.

Author: Marklund S

Year: 1969

Title: School organisation, school location and student achievement

Reference Type: Journal Article

Journal: International Review of Education Volume: 15 Pages: 295-318

Abstract by CB: Marklund reports on research conducted in Sweden that compared student achievement in multigrade schools (schools with two or more grades per teacher, but excluding single teacher schools) with monograde schools. The multigrade schools were located in sparsely populated areas. Marklund found that there were no significant differences in achievement after controlling for a measure of intelligence, except when the size of the classes was above 26 students. Marklund concludes that, with small classes, multigrade schools provide as good an environment for pupil achievement as urban schools. A second study, relating to the effect of length of school journey on achievement, indicates that students with a longer school journey are educationally disadvantaged and also that students in small schools are more likely to achieve their 'developmental potential'. Marklund suggests that his results indicate that school consolidation is not pedagogically justified.

Author: Martens Clarence C

Year: 1954

Title: Educational achievements of eighth-grade pupils in one-room rural and graded town schools

Reference Type: Journal Article

Journal: The Elementary School Journal Volume: 54 Issue: 9 Pages: 523-525

Abstract by CB: Martens reports on a study of student academic achievement in one room rural schools compared to achievement in graded town schools in Iowa. The research was prompted by the failure of previous studies to control for students' initial ability. Students were compared on a battery of nine achievement tests in aspects of mathematics, reading and English Language. A test of mental ability was included as a control variable. Tests were administered once over a two week period in 1952. A total of 70 rural eight-grade students and 70 town eight-grade students took part in the study. They were evenly split by gender.

Analysis of covariance was used to analyse the data because this allowed the researcher to test for differences in achievement in relation to mental ability. After adjusting for intelligence, the study found significant differences on all tests in favour of students in graded schools, except in spelling. While recognising the limitations imposed by the small scale of the study, Martens suggests that his findings are a justification for the closure of one room schools on the grounds that the education received in those schools is not as effective as in graded town schools.

Author: Mason DA, Stimson J

Year: 1996

Title: Combination and non-graded classes: definitions and frequency in twelve states

Reference Type: Journal Article

Journal: The Elementary School Journal Volume: 96 Issue: 4 Pages: 439-452

Abstract by CB: This study examines the frequency of combination and nongraded classes in twelve states in the USA. Combination classes are defined as the response to imbalanced enrollment, while nongraded classes are formed by choice. Data were collected by surveying 571 elementary school principals about their classroom organisation. California had by far the highest frequency of these types of classes, at 17%. In the other states surveyed, the frequency was between 3%-7%. Nongraded classes were extremely rare, between 0%-0.8% of classes. The majority of the combination classes (95.3%) consisted of two grades. Mason and Burns express some surprise at the low incidence of both types of classroom organization in comparison to countries such as

Canada, Finland and England.

Mason and Burns found that the frequency of combination classes was higher in rural and urban areas than in suburban areas. In rural areas, combination classes exist as a response to sparse population. In urban areas, they are used to deal with fluctuating enrollment. Combination classes were found to be most common in 'multitrack year-round schools'. These schools are commonly used in California to cater cost effectively with rising school enrollments. Combination classes in multitrack schools are reported to be associated with lower student achievement.

Author: Mason Dewayne A, Burns Robert B

Year: 1997

Title: Reassessing the effects of combination classes

Reference Type: Journal Article

Journal: Educational Research and Evaluation Volume: 3 Issue: 1 Pages: 1-53

Abstract by EH: This article is a recent, comprehensive review of the research on combination classes, and their relationship to achievement and affect. It emphasises the distinction between combination classes formed as a result of imbalanced or inadequate enrollments and multiage/nongraded classes formed as a result of pedagogical or philosophical interests. The authors show that conclusions about the effects of combination classes are confounded by a) the merging of combination class studies with those that included several multiage/nongraded components and b) the slighting of a unique and important feature of combination classes: the assignment of certain types of students and teachers to these classes. Although comparisons between combination and single-grade classes generally show no student achievement differences, they conclude that consistent findings from observational research, interviews with practitioners, and comparative studies in which selection bias was naturally controlled, point to a plausible hypothesis that, all things being equal, combination classes have at least small negative effects. The article suggests that the negative aspects associated with multigrade teaching apply particularly in schools who are multigrade because of a scarcity of teachers, where no special assignment of pupils or teachers occurs (except perhaps a negative one) and where multigrade teaching is not a pedagogic or philosophical choice, e.g. in the schools our multigrade project is likely to deal with most.

Author: Mason Dewayne A, Burns Robert B

Year: 1996

Title: Teachers' views of combination classes

Reference Type: Journal Article

Journal: Journal of Educational Research Volume: 89 Issue: 1 Pages: 36-45

Abstract by EH: In this article, Mason and Burns described elementary teachers' views about combination classes. They suggested that multigrade teaching is increasing, partly on the basis of theory and research drawn from nongraded, rather than multigrade or combination, classes. That is, reviews on multigrade teaching are sometimes merged with reviews on nongraded teaching. In this article, they began by mentioning previous studies into educators' views about combination classes, including Brown and Martin, 1989; Galluzzo et al, 1990; Pratt and Treacy, 1986; Veenman et al, 1985. The aim of the current study was to be '... normatively instructive and provide educators faced with combination classes some guidance in their decision making' (p.38.) It also aimed to find out whether multigrade teaching necessitated the use of a more developmental approach to teaching. It looked at: how combination classes were organised; how teachers taught in them; how

teachers felt about them. They explained, 'Although craft knowledge may contain idiosyncratic, superstitious, and erroneous opinions, it is likely to be instructive in illumination the full complexity of the teacher's task, the effects of organizational constraints on teaching, and teachers' mental constructs for pedagogical decision making' (p.38). Their study used 35 MG primary class teachers from California. They found that 83% of teachers thought that pupils should be assigned to MG classes according to ability, independence and/or behaviour. 71% said that actually little flexibility was possible. 91% said teachers were assigned to MG classes fortuitously. Teachers reported using three approaches for organising pupils in combination classes: two groups for all subjects; whole class for all subjects; mixed approach. The majority of teachers used the mixed approach, using two groups for reading and maths but whole class for social sciences and science. Mason and Burns suggested that this might be because teachers had a 'skill orientation' to reading and maths and therefore could not teach a single curriculum to the whole group. They define social science and science by topic and process, and may view them as secondary to reading and maths. 'In countries, states, or districts where grade-level assessments of science or social studies hold teachers accountable for a more specific curriculum, we suspect combination teachers experience a greater press to use two-group approaches' (p.44.) 77% of the teachers preferred not to teach combination classes, 14% preferred to. Teachers complained it was extra work and stressful, although may not be if the circumstances are right. Main benefits were that lower grade pupils got upper grade material and upper grade pupils got review, by coaching lower grade students. Main disadvantages were: time required to prepare two curricula and less time for instruction or individual help. Mason and Burns concluded that their teachers' views paralleled almost identically those found by Brown and Martin and by Pratt and Treacy in Canada and Australia respectively. A perhaps disappointing finding was that '... no one provided comprehensive descriptions or a clear articulation of how developmental approaches could be used in combination classes to more effectively focus on alternative curriculum, instruction and evaluation' (p.44.) That is, just removing grade barriers did not mean changing approaches.

Author: Mason, Dewayne A.; Good, Thomas L.

Year: 1996

Title: Mathematics instruction in combination and single grade classes: an exploratory investigation.

Reference type: Journal article

Journal: Teachers College Record 98 (2): 236-265.

Abstract by CB: This study investigates whether there are any differences between mathematics instructions in three types of classes:

- combination classes containing two grade levels;
- single grade classes where whole class teaching predominates;
- single grade classes where ability group teaching predominates.

The sample consists of 6 combination teachers, 6 single-grade teachers who used within class ability grouping, and 12 teachers who used whole class teaching. On average, each teacher was observed 6 times to gather data for the study. The majority of the combination classes were drawn from small schools. Analysis and presentation of the data is predominantly quantitative, although it is augmented with some qualitative comment.

The study indicates that combination class teachers usually taught the grade levels in their groups separately, following their own curriculum and using their own textbooks. This contrasted with both of the single grade formats which used a single curriculum and textbook. Consequently, the combination class teachers tended to have their students working independently of the teacher on lower order computation skills that were not meaningfully presented.

In all classes in the study, the mathematics curriculum was found to be narrow compared to the vision of mathematics teaching espoused by the National Council of Teachers in Mathematics. The researchers conclude by calling for research that develops effective models for the teaching of mathematics in both single grade and combination classes.

Author: Mason, Dewayne A.; Doepner, Roland W.

Year: 1998

Title: Principal's views of combination classes.

Reference type: Journal article

Journal: Journal of Educational Research 91 (3): 160-172.

Abstract by CB: In this study, a total of 36 principals in the state of California were interviewed in order to find out three things:

1. How they felt about combination classes.
2. How combination classes were formed.
3. What approaches were used when teaching combination classes.

The results of the interviews showed that the majority of principals were negative about combination classes, mainly because they felt it was difficult for teachers to cover two grade level curricula. In forming combination classes, where possible principals assigned their most experienced teachers, and the most able and independent students. Teachers tend to use a 'mixed' approach to teaching combination classes, with some subjects taught in grade level groups (mathematics for example) and others as a whole class.

The researchers conclude by suggesting that further research into combination classes might provide insights into how single grade teachers can better address the needs of the diversity of students in the classrooms.

Author: Matthews Mona W, Monsaas Judith A, Penick Jeff M

Year: 1997

Title: A comparative study of the literacy development of at-risk children in graded versus nongraded classrooms

Reference Type: Journal Article

Journal: Reading Research and Instruction Volume: 36 Issue: 3 Pages: 225-239

Abstract by EH: This study investigated the impact of a nongraded instructional organisation on the reading and language development of 117 KG-Y2 age children. Findings indicated there were no significant differences between the two groups on any measures. The authors conclude that peer tuition improves motivation for reading but that teacher-contact and heterogeneity of group are equally vital.

Author: Maurial Mahia

Year: 1993

Title: El impacto de la educacion escolarizada y no escolarizada en la comunidad de Callatiac, valle del Vilcanota, Cuzco Academic Dept.: Anthropology, PUCP

Reference Type: Thesis

University: PUCP

City: Lima

Author: McEwan Patrick

Year: 1998

Title: The effectiveness of multigrade schools in Colombia

Reference Type: Journal Article

Journal: International Journal of Educational Development Volume: 18 Issue: 6 Pages: 435-452

Abstract by EH: McEwan described how nearly half Colombia's rural schools have adopted the New School methodology. Despite its wide acclaim, however, he stated that few evaluations have been made of its effectiveness. He described how the New Schools programme was originally developed at grass roots level, through trial and error, until 1986 when it was made into a package in order to facilitate scaling up. Mc Ewan explained that the most comprehensive evaluations of the New School programme have been conducted by Psacharopoulos et al (1993) and Rojas and Castillo (1988), using a data set collected in 1987. But this data set only used schools who were implementing the programme best, not most normally. They found positive significant differences between types of schools in third grade Spanish and maths achievement and fifth grade Spanish. McEwan's own data were collected in 1992, using a random sample of schools in three departments, representative of primary schools whose school year is Sep to June. The study analyses the subsample of rural schools. As with the previous evaluations, McEwan's study found that important aspects of the programme, such as use of student government and individual study guides was by no means comprehensive. Less than half the schools used the official textbooks and one third did not have libraries. Grade 3 maths and Spanish were significantly better in New Schools and grade 5 Spanish was somewhat better but not maths. The results suggest that, in general, New Schools are better endowed with inputs, particularly textbooks that contribute to student achievement: the implication might be that a targeted investment in textbooks would allow governments to focus resources without investing in superfluous program elements. But: (p.447), 'Perhaps only synergies among various aspects of the program encourage the school environment necessary to promote learning'. Even after controlling for the effects of a library and text books, New School students still had higher levels of achievement. He concluded: (p.449) '... it may make sense to approach the New School program as an example of holistic, qualitative change, rather than interchangeable application of discrete, physical inputs. Additional research should be directed at understanding the process of such change at the classroom level'.

Author: McEwan, Patrick J. and Benveniste, Luis

Year: 2001

Title: The politics of rural school reform: Escuela Nueva in Colombia

Reference type: Journal article

Journal: Journal of Educational Policy, 16 (6): 547-559

Abstract by CB: A very interesting macro level historical analysis of the reasons for the uneven implementation of the Escuela Nueva reform. The thesis developed here is that the intentions of the state changed over time, sometimes seriously committed to rural reform, and at other times paying lip service to it. These shifts are attributed to struggles for power and the changing interests of key actors in the social and political sphere. The implication drawn from the analysis is that reform is a fluid and dynamic process rather than an enduring policy

package.

Author: McClellan, Diane and Kinsey, Susan

Year: 1998

Title: Children's social behaviour in relation to participation in mixed-age or same-age classrooms

Reference type: Journal article

Journal: Early Childhood Research and Practice, volume 1, number 1

Abstract: Research on the social and cognitive effects of grouping children in mixed-age (where there is an age span of at least 2 years among children) versus same-age classrooms is gaining increasing interest among practitioners and researchers. The present investigation used a teacher rating scale, based on research into the correlates of children's social skillfulness and acceptance by other children, to assess children's social behavior in mixed- and same-age classrooms. Confounding variables such as the child's age and sex, the teacher's educational level, and classroom practices were statistically controlled. Further, a pretest of teacher ratings of kindergarten children who were later assigned to either a mixed- or same-age first-grade classroom showed no preexisting behavioral differences. Findings suggested a significant positive effect on children's prosocial behavior as a result of participation in a mixed-age classroom context. In addition, fewer children appeared to experience social isolation in mixed-age classrooms than in same-age classrooms. Aggressive behaviors were significantly less likely to be noted by teachers in mixed-age than in same-age classrooms. Follow-up ratings were taken of third-grade children, all of whom were by then enrolled in same-age classrooms. Children who had previously participated in mixed-age classrooms continued to be rated as significantly less aggressive and significantly more prosocial by their third-grade teachers. No differences were found in friendship patterns between children previously enrolled in same-age versus mixed-age classrooms.

Author: Meyenn Bob, Squires Don, Woolley Maralyn

Year: 1994

Title: Evaluation of the multigrade teaching project in Vietnam

Reference Type: Report

Institution: UNICEF

Date: Feb-Mar 1994

Abstract by CB: This is an early evaluation of a UNICEF project aimed at increasing the access and quality of education in remote rural areas of Vietnam. The project commenced in 1992 and focused on bringing schools closer to the community and making the curriculum more relevant to their needs. The target group for the project was mainly the children of ethnic minority groups. The project is reported to have had a significant impact, particularly in improving access to schooling and the provision of supplies and equipment. The evaluation makes several recommendations, including the further improvement of teaching/learning, development of teacher training programmes, and an emphasis on mother tongue teaching in the early primary grades. Unit costs of the project were estimated at between us\$8 to us\$ 10 per student per year. The appendices include some useful information from district level attempts to monitor the impact of the project, including some comparisons of achievement between students in single grade and multigrade classes. These indicate that outcomes are similar in multigrade schools receiving project intervention. UNICEF conducted a further evaluation of the project in 1998.

Author: Miguel MM, Barsaga EB

Year: 1997

Title: Multi-grade schooling in the Philippines, a strategy for improving access to and quality of primary education

Reference Type: Book Section

Book Title: From planning to action: government initiatives for improving school-level practice

Editor: Chapman DW, Mahlck LO, Smulders AEM,

Publisher: Pergamon/UNESCO

City: Oxford/Paris

Abstract by EH: A very important chapter, describing the need for multigrade schools and for improved multigrade teaching skills in the Philippines. It explains that many Filipino children have no access to schools and that many others have incomplete elementary schooling (up to Grade iv only) or drop out because access to school is difficult, especially in rural areas. It also shows how Filipino children have low rates of achievement compared to other nations in the area (they scored 2 standard deviations below the norm on the IEA's science study, for example). It suggests that increased multigrade teaching could ameliorate both access and achievement. Perhaps the most useful part of this chapter is its summary of a Filipino survey about multigrade teaching, based on interviews and questionnaires with principals, teachers and supervisors at district and division level. The main findings were that: average enrolment was 30 pupils in MG classes; all teachers in MG classes had no training in MG methods; MG teachers taught skill subjects separately in each grade level and art, music etc all together OR taught each skill subject by ability group, irrespective of grade level OR taught basic skills to the whole class and then split into ability groups. Most pressing organisational problems included: lack of incentives for teachers to teach in different settings or try out new techniques; lack of MG materials; lack of professional update among MG teachers and their trainers; distance of teachers' residences from school. The recommendations issuing from the report included establishing: policy for minimum and maximum numbers in MG classes; policy on assignment of teachers and heads to MG classes; INSET on MG; priority to MG classes in distribution of materials; ITT programmes which include MG training; incentives for good MG teachers. A 1992 government order promoted MG classes as the means to improving access to elementary education (DECS Order No. 38).

Author: Milburn Dennis

Year: 1981

Title: A study of multi-age or family-grouped classrooms

Reference Type: Journal Article

Journal: Phi Delta Kappan Volume: 62 Issue: 7 Pages: 513-514

Abstract by AL: Two Canadian primary schools were studied over a five year period: one with multiage classes of 3-year span, while the control had single-age classes. Little difference in achievement was found, although the younger children tended to benefit from multiage classes. The children in multi-age classes did, however, show a more positive attitude to school.

Author: Miller Bruce A

Year: 1989

Title: The multigrade classroom: a resource handbook for small rural schools

Reference Type: Book

Publisher: Regional Educational Laboratory

City: Oregon

Abstract: 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 (taken from original document resume)

Author: Miller Bruce A

Year: 1990

Title: A review of the quantitative research on multigrade instruction

Reference Type: Journal Article

Journal: Research in rural education Volume: 7 Issue: 1 Pages: 1-8

Abstract by CB: Miller reviews studies that have attempted to study the cognitive and affective outcomes from multigrade organised classrooms. A total of 13 studies that focus on cognitive achievement in multigrade classrooms are identified, although some of these would be better described as multi-age settings. Miller reports that 10 of the studies found no significant differences between achievement in mixed age and single grade settings while the remainder were mixed. A total of 9 studies of student attitudes are reviewed. The weight of the evidence from these studies indicates an advantage for multigrade settings on measures of attitude. Miller concludes the review by calling for research into rural multigrade schools that links quantitative and qualitative research since such studies are lacking.

Author: Miller Bruce A

Year: 1991

Title: A review of the qualitative research on multigrade education

Reference Type: Journal Article

Journal: Journal of Research in Rural Education Volume: 7 Issue: 2 Pages: 3-12

Abstract by AL: Concerned primarily with the situation in US rural schools. The extra demands made on the teacher by multigrade teaching are emphasised throughout, as well as the poor preparation given by initial teacher education courses to meet these demands. The tendency for curricula to be inflexibly planned for

single-age classes is also criticised. The second half of the paper is particularly interesting because it looks at accounts by teachers of actual practice in multigrade schools. The key advantages of multigrade are identified as the development of both independence and interdependence among pupils. The author identifies implications of multigrade for teacher preparation, classroom organisation and student learning.

Author: Miller, Bruce

Year: May 1991

Title: Teaching and learning in the multigrade classroom: student performance and instructional routines.

Reference type: ERIC Digest

Report Number: EDO-RC-91-6

Abstract by ERIC: This ERIC digest reviews the history of the multigrade classroom, and summarizes research findings on multigrading effects on achievement and attitude. It also states requirements of teaching and learning in multigrade classrooms. Multigrade classrooms have ranged from the one-room schools of the early 1900s to the ungraded classroom of the 1960s and 1970s, to the cost effective two grade classrooms of today. Teachers are usually not trained to work in multigrade classrooms, and they face the challenge of working in school systems where single grade classrooms are the norm. Research evidence indicates that being a student in a multigrade classroom does not negatively affect academic performance, social relationships, or attitudes. Skills and behaviors required of multigrade teachers may be different, and coordinating activities can be more difficult. Six key instructional dimensions affecting successful multigrade teaching have been identified from multigrade research: (1) classroom organization; (2) classroom management and discipline; (3) instructional organization and curriculum; (4) instructional delivery and grouping; (5) self-directed learning; and (6) peer tutoring. Effective teachers share instructional responsibilities with students. A context of clear rules and routines help students develop independence. Teachers plan whole-class instruction that revolves around open task activities. Full text

Author: Miller, Bruce A. and Eldin, Taissir Hosam

Year: September 2000

Title: A study of Egyptian one classroom schools in the governorates of Behaira. Beni-Suef, and Min ia

Reference type: Report

Institution: Egyptian Ministry of Education/USAID

Abstract: This is a study of One Classroom Schools (OCS) in Egypt. It describes school, teacher, and student characteristics, including common instructional practices found in a sample of schools in three governorates. OCS are located in rural areas and cater to the schooling of girls. They generally have five grades, each consisting of 7 girls, and four teachers. All the grade levels are housed together in one classroom. 9% of the population of OCS are included in the study, a total of 40 schools. Survey instruments, including classroom observation schedules, were used to collect information. Based on their findings, the authors of the study are positive about the impact of OCS, and suggest that 'they can serve as fertile ground for instructional improvements with potential for transference to other schools in Egypt'. A key recommendation of the study is in the area of the preparation and training of teachers, particularly in relation to in-service training.

Author: Ministere de l'education de base et de l'alphabetisation

Year: 1996

Title: Reunion d'experts pour l'amelioration des ecoles a maitres uniques et a classes multigrades: communication du Mali

Reference Type: Conference Proceedings

Conference Name: Inter-regional workshop on single teacher schools and multigrade classes

Conference Location: Lillehammer, Norway

Abstract by CB: This is a paper produced by the Ministry of Education in Mali for a conference on multigrade schooling held in Lillehammer, Norway in 1996. Mali faces shortages of teachers, materials, and classroom space, which together mean that not all children are enrolled in school. The paper argues that the use of multigrade classes would not only increase enrollment, but also increase access for girls as the schools would be closer to their homes. The paper also refers to double shift classes as another way of increasing access.

Author: Ministere de l'enseignement de base et de l'alphabetisation

Year: 1996

Title: L'impact des innovations pedagogiques sur l'augmentation de l'offre educative et du taux de scolarisation

Reference Type: Conference Proceedings

Conference Name: Inter-regional workshop on single teacher schools and multigrade classes

Publisher: Ministere de l'enseignement de base et de l'alphabetisation

Conference Location: Lillehammer, Norway

Abstract by CB: This paper was written by the Ministry of Education in Burkina Faso in preparation for a conference into multigrade teaching held in Lillehammer, Norway in 1996. The paper reports on an experiment with multigrade schooling undertaken in Burkina Faso between 1992-1996. The purpose of the experiment was to increase access to schooling in sparsely populated rural areas by putting two grade levels into one classroom. No details of the approach to the experiment are given, but the quantitative analysis seems to indicate that the experiment allowed more children to enter school than previously

Author: Ministerio de educacion

Year: 1995

Title: Estructura curricular para centros educativos unitarios

Reference Type: Book Record

Publisher: Ministerio de educacion: programa de educacion basica para todos

City: Lima

Abstract by PA: This document contains a curricular structure for multigrade schools in Peru, organized in three phases. Each phase corresponds to two grades of the six grades that comprise primary education. After a brief description of multigrade schools, teachers and communities, the document presents the learning areas

and their foundations, the contents and objectives, and some suggestions for learning activities. It is basically a guide for the teacher and encourages the adaptation of the guide for different situations and locations.

However we do not know if this guide had been applied in multigrade schools, or if it was distributed to teachers. The teachers that we visited over the last two years used the curricular structure for primary education designed for non-multigrade schools. In 1995, a new program in primary education was implemented which works with competences instead of objectives. All the teachers in the country must be instructed in how to apply the new methods and program, but in these training courses this curricular structure was absent. Although the first phase includes the new methodology, the second and third phases are designed according to the older methodology, so the teachers might now be unable to use them.

Author: Ministerio de educacion

Year: 1996

Title: La escuela rural guatemalteca en los albores del tercer milenio: genesis de una nueva escuela unitaria. Memoria tecnica de la experiencia piloto.

Reference Type: Report

Institution: Ministerio de educacion Guatemala

Abstract by PA: The Nueva Escuela Unitaria (NEU) began in 1992 with the support of the Ministry of Education and USAID. The aim of the project is to improve the curriculum, teaching and materials in multigrade schools, most of which are in rural and indigenous areas. This text presents the origins, processes and general characteristics of this project.

The project draws upon a previous experiment, Escuela Unitaria, which began in 1961, and the experiment from Escuela Nueva in Colombia. The strategy used was to create, with the teachers, a new curriculum adapted to the necessities of rural children. The project comprises several integrated components: - School government - Learning centers - Flexible evaluation and promotion - Self-instructional guides developed into active and democratic principles of multigrade teaching.

The teacher-training was developed in progressive phases. The basis of teacher training is to organize teachers into permanent groups (circles). The parents also participate in the project and the curriculum aims to include the community and incorporate elements from the local environment.

The program determined that it was necessary to include a bilingual and intercultural approach into the proposal. Since its experimental phase, the program has been adopted in a growing number of rural schools.

Author: Ministry of Education and Training

Year: Unknown

Title: Multigrade teaching for primary age children

Reference type: Teacher training materials

Publisher: UNICEF Hanoi/Ministry of Education and Training

Place: Vietnam

Author: Ministry of General Education and Culture

Year: 1985

Title: Multi-grade teaching system

Reference Type: Report

Institution: Malcolm Moffat Teacher's College

Date: 28 Oct- 1 Nov 1985

Abstract by CB: This is a report on a seminar held at the Malcolm Moffat Teacher's college in Zambia. The purpose of the seminar was to acquaint participants with issues relating to multigrade teaching and with strategies for dealing with multigrade classes. Multigrade teaching is regarded as a means of increasing access to the full cycle of primary education in rural Zambia where as many as 25% of primary schools do not offer education beyond grade 4 because of a lack of teachers and low pupil enrolment. The policy advocated in Zambia was to combine two grades together in one class with one teacher and to develop strategies for teaching such classes. The seminar included examples of lesson plans, forecasts and timetables that would be useful in a multigrade setting. Participants were also given the opportunity to micro-teach and to observe demonstration lessons. Papers were presented on audio-visual aids for use in the multigrade classroom, an approach to multigrade teaching, and the experience of Sweden.

Author: Montero Carmen, Oliart Patricia, Ames Patricia, Cabrera Zoila, Uccelli Francesca

Year: 1999

Title: La escuela rural: estudio para identificar modalidades y prioridades de intervencion

Reference Type: Report

Institution: IEP

Abstract by PA: This text presents the results from a research project for the Ministry of Education that sought to identify the characteristics of educational service in Peruvian rural areas and to formulate proposals to improve educational quality. The study comprises five components: - Rural children's situation and their relationship with the school - Rural teachers' situation - Curricular management and the educational achievements in multigrade schools - Educational experiments in rural areas around the world - The scope and internal efficiency in rural schools.

The methodology combines quantitative and qualitative methods and data. National statistics were used and a national survey was taken of the teachers. Sixteen case studies in schools were conducted in different parts of the country (stratified by their social, cultural, linguistic, geographic and economic characteristics) using an ethnographic approach.

The study shows the importance of the multigrade rural schools in the educational system. It shows that these schools are impoverished in resources, materials, substructure, furniture, methods and governmental support. The teachers have problems due to a lack of training in multigrade and bilingual methods; and the educational system fails to address multigrade issues in the curriculum. The document concludes with several proposals related to the pedagogical process, school organization, school buildings, the attention and treatment given to children, the relationship with the parents and community, and management and administration.

Author: Montero Carmen, Oliart Patricia, Ames Patricia, Cabrera Zoila, Uccelli Francesca

Year: 2001

Title: La escuela rural: Estudio para identificar modalidades y prioridades de intervención

Reference Type: Report

Institution: Documento de trabajo No.2. Ministerio de Educación - MECEP. Lima.

Abstract by PA: This text presents the results from a research project for the Ministry of Education in order to identify the characteristics of educational service in Peruvian rural areas and to formulate proposals to improve educational quality. The study comprises five components: 1. rural children's situation and their relationship with the school; 2. rural teachers' situation; 3. curricular management and the educational achievements in multigrade schools; 4. educational experiments in rural areas around the world; 5. the scope and internal efficiency in rural schools.

The methodology combines quantitative and qualitative methods and data. National statistics were used and a national survey was taken of the teachers. Sixteen case studies in schools were conducted in different places of the country (in terms of their social, cultural, linguistic, geographic and economic characteristics) using an ethnographic approach.

Among the most important conclusions, the study shows the importance of the multigrade rural schools in the educational system; their poverty in resources, materials, substructure, furniture, methods and governmental support; the bad conditions in which the teachers work daily and the problems that they have due to a lack of training in multigrade and bilingual methods; the failure of the educational system to incorporate into the curriculum, methods and schedule rural children's particularities and activities. The document concludes with several proposals related to the pedagogical process, school organization, school buildings, the attention and treatment given to children, the relationship with the parents and community and the management and administrative organisms within the educational system.

Author: Mulcahy Dennis

Year: 1999

Title: From multigrade to multiage: A journey of discovery, affirmation and transformation

Reference type: conference proceedings

Conference name: The sustainability of small rural schools across the North Atlantic Rim: 50th anniversary symposium (August 11-15, 1999)

Conference location: St Anthony, Newfoundland, Canada

Abstract by CB: In this paper, Mulcahy draws out the structural similarities and differences between multigrade and multiage grouping. While there are several important points of similarity, it is argued that multigrade classes are organised on the premise that a graded structure is somehow better. This leads to instability and a lack of continuity in small schools with multigrade classes because they may be targeted for closure or amalgamation. Mulcahy suggests that multigrade classes need to become more multiage by removing their gradedness. With this shift in philosophy small rural schools would become more responsive to the diverse needs of children. The structural changes required to support such a shift include much greater flexibility in time and curriculum, and the complete removal of grade level labels. Mulcahy recognises that these changes might take time, but believes that many rural teachers are only waiting for 'official' permission to begin the process.

Author: Mulcahy Dennis

Year: 1993

Title: Developing a 'distinctive approach' for multi-grade classrooms: some preliminary considerations

Reference Type: Journal Article

Journal: Education Canada Volume: 33 Issue: 1 Pages: 24-29

Abstract by AL: In common with those in many other locations, the multigrade teaching concerns of small rural schools in Newfoundland and Labrador have received little attention. Mulcahy suggests that this may be due partly to their being considered as a temporary anomaly, and partly to the belief that the multigrade classroom is essentially the same as a single-grade classroom, and needs no special attention. Both of these are rejected. Parents, teachers and children all dislike multigrade classrooms, and Mulcahy argues that this is a consequence of a lack of concern for the pedagogical and curricular attention to the particular demands they make. He calls for effective training of teachers to deal with multigrade schools and for modified or distinctive curricula responsive to multigrade organisation.

Author: Muthayan Saloshini

Year: 1999

Title: Case studies of multigrade teaching in India and Canada: implications for improving primary school effectiveness

Reference Type: Conference Proceedings

Conference Name: International Seminar of Researches in School Effectiveness at Primary Level

Conference Location: National Council of Educational Research and Training, New Delhi, India

Abstract by MV: It is estimated that over 50% of schools in South Africa are multigrade. This paper is based on a broader study which examines multigrade teaching in selected schools in India and Canada and their implications for improving multigrade teaching in South Africa where basic education is characterised by a high incidence of drop out, repetition and out of school children. Interviews and non-participant observations were adopted methodologies. Despite similarities in the education policy of these two countries, such as the child centred, activity and outcomes-based curricula and differences in situational context, namely developed and developing contexts, the problems surrounding multigrade teaching are the same. - little or no official recognition of multigrade teaching - a lack of academic and financial support for multigrade teaching - the lack of pre- and in-service training on multigrade teaching - very little research in this area.

Despite the similarities of the problems the Canadian teachers appeared to manage multigrade teaching better than their Indian counterparts. Teacher education in Canada does not prepare teachers specifically for multigrade teaching however the course work included "teaching strategies that would apply in a multigrade situation." . They used their own initiative to transfer and adapt their training for application to the multigrade classroom. Their apparent success may be the result of the critical thinking skills and sense of professionalism they developed during their training. The Indian teachers appear to wait for instructions from the top. A comparison of the two models indicate that relevant and appropriate teacher education is essential for improving teaching practice in primary classrooms especially in multigrade classrooms.

Author: Mycock Mary A

Year: 1967

Title: A comparison of vertical grouping and horizontal grouping in the infant school

Reference Type: Journal Article

Journal: British Journal of Educational Psychology Volume: 37 Pages: 133-135

Abstract AL: An abstract of her MEd thesis in which she compared four English infant schools, all labelled 'progressive', two using vertical grouping and two using horizontal grouping. Her research showed that vertical grouping can reduce emotional stress, improve teacher-pupil relationships, and raise aspirations, but has no effect on achievement. The quality of the teacher is seen to be crucial to the success of vertical grouping. She found some evidence that, in reading, vertical grouping benefits slow learners but not the quicker learners.

Author: Mycock Mary A

Year: 1970

Title: Vertical grouping

Book Title: Teaching in the British primary school

Reference Type: Book Section

Editor: Vincent, R

Publisher: Macmillan

City: London

Abstract by AL: A fairly comprehensive review of the history, meaning and philosophy of vertical grouping in English primary schools by a keen advocate of the practice. She sees the educational principles behind vertical grouping as being an emphasis on the child as an individual and an agent in his or her own learning. A recognition of these principles, rather than merely a response to necessity, is the key to success. The wider implications of adopting vertical grouping are examined: the need for an unstructured day but a highly structured classroom, the change in the role of the teacher to being more of a facilitator of learning, and the greater demands of assessment and recording of individual progress.