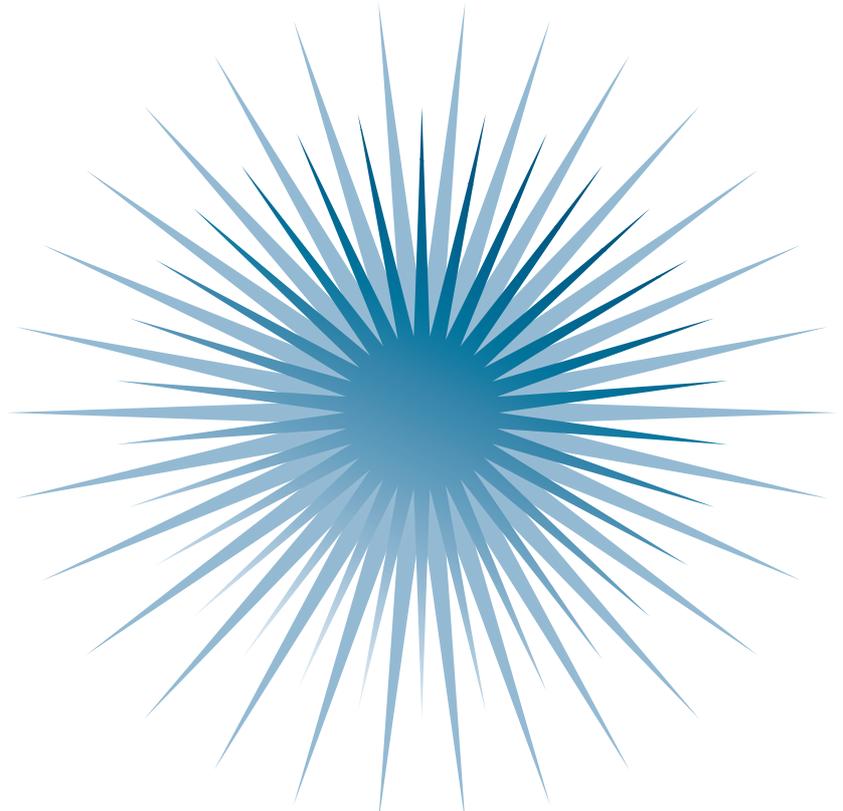


MULTI-AGE CLASSES

IN NEW SOUTH WALES

New South Wales
DEPARTMENT OF EDUCATION AND TRAINING
1997



MULTI-AGE CLASSES

IN NEW SOUTH WALES



NEW SOUTH WALES
DEPARTMENT
OF EDUCATION
AND TRAINING

Curriculum Directorate

© 1997 Department of Education and Training
Curriculum Directorate

ISBN 0 7313 0873 5
SCIS 917518

Design by Joanna Durney, Public Relations Directorate

CONTENTS

BACKGROUND	3
MEMBERSHIP OF THE WORKING GROUP	3
TERMS OF REFERENCE	3
METHODOLOGY	3
RANGE OF MULTI-AGE CLASSES	5
LITERATURE REVIEW	7
CURRENT AUSTRALIAN CONTEXT	11
CASE STUDIES AND SURVEYS	13
CONCLUSION	23
REFERENCES	25
APPENDIX A: SCHOOLS IDENTIFIED FOR SURVEYING	26
APPENDIX B: SCHOOLS PARTICIPATING IN CASE STUDIES	26

BACKGROUND

In July 1996 the Minister for Education and Training, the Hon John Aquilina, MP requested that a working group be formed to look at a range of multi-age classes in NSW primary schools.

The review was to provide the latest information about the range of multi-age classes in NSW, research findings and successful practices in regard to:

- ✦ forming multi-age classes; and
- ✦ teaching and learning in such classes.

MEMBERSHIP OF THE WORKING GROUP

Peter Bray, Director of Primary Education, was asked to chair the Working Group. The Minister had directed that a classroom teacher and a primary principal be included in the group. Following consultations with the NSW Primary Principals' Council, invitations to join the group were accepted by Colin Kaye, Principal of Terrigal Public School, and Sandra Usher, a classroom teacher from Villawood Public School.

Doug Cole, Chief Education Officer, was assigned to coordinate the work of the group. Sheldon Rothman, Manager of the Information Unit of the Department of School Education, was co-opted to advise on the availability and interpretation of data on the organisation of classes across the State, and Leola Jacobs was commissioned to prepare a literature review.

TERMS OF REFERENCE

The Working Group was asked to advise the Minister on:

- ✦ the range of multi-age classes operating throughout the State, including details of any unusual arrangements
- ✦ the latest research on multi-age classes
- ✦ successful practices in forming multi-age classes
- ✦ successful teaching in multi-age classes (including planning and organisation).

METHODOLOGY

MULTI-AGE CLASS ORGANISATION ACROSS THE STATE

Members of the Working Group examined the 1994, 1995 and 1996 Organisation of Classes data collected from school returns.

Schools with more than seven classes were selected for closer investigation, in order to identify those schools which had formed multi-age classes on the basis of an educational philosophy rather than because of uneven enrolments. Each school's return was examined and, where the organisation appeared to be different from the traditional composite combinations, principals of these identified schools were interviewed by telephone.

To complete this process, principals of these schools were invited to complete a survey.

A list of the schools surveyed is presented as Appendix A.

THE EDUCATIONAL EVIDENCE AND LATEST RESEARCH ON MULTI-AGE CLASSES

The following steps were taken:

- ★ a comprehensive literature search was completed
- ★ articles, papers and books were circulated within the Working Group
- ★ a literature review was undertaken
- ★ telephone contact was made with researchers and educational officers involved in research projects in Queensland, Western Australia, Victoria and the Northern Territory.

SUCCESSFUL PRACTICES IN FORMING MULTI-AGE CLASSES AND SUCCESSFUL TEACHING IN MULTI-AGE CLASSES

In addition to the processes described above, chief education officers (CEOs) visited urban and rural schools to identify the successful practices in both of these focus areas. The CEOs, in consultation with district superintendents, selected schools to achieve a balance in regard to the size of schools and, where appropriate, a balance in regard to the range of combinations of age groupings operating.

The CEOs assigned to visit schools to collect and analyse information on successful practices were:

- ★ Warren Brown (Riverina area)
- ★ Doug Cole (Bankstown area)
- ★ Don Goodsir (Yagoona area)
- ★ Ron Hankin (Western NSW)
- ★ Barry Laing (St George District)
- ★ Mary McRae (Coffs Harbour District)
- ★ Pat Skinner (Lismore District)
- ★ Judy Whittaker (Tweed/Ballina District).

Focus areas for the visits to schools were developed to reflect the terms of reference.

Questions were framed as a guide to CEOs and a report format devised to facilitate the analysis of information collected.

The list of schools participating in the case studies, along with the focus areas and questions, are presented as Appendix B.

RANGE OF MULTI-AGE CLASSES

“Grouping students from several years together is not a new form of class organisation. Composite classes have been, and are likely to remain, the common class organisation in small schools when the number of children in each year is not sufficiently large to form classes based on age grouping.” (Roseth 1981)

These classes are the accepted pattern of organisation in many government and non-government schools across Australia, especially in rural areas.

Whereas in larger schools forming classes by years is the more common practice, multi-age classes are usually formed because of the uneven pattern of enrolments at the school. Sometimes, however, these classes are formed for educational reasons in schools where it is felt that the mixing of children of different ages is educationally and socially advantageous. The number of schools in this latter category has been increasing steadily during the past ten years.

The most common pattern of organising such classes continues to be to combine two consecutive years, particularly Years 1/2, 3/4 and 5/6. However, a wide range of variations exists in schools, including multi-age classes which involve Kindergarten students.

While the majority of these classes are still across two years, a variety of multi-age organisations have developed recently.

A number of schools have organised multi-age classes for sections of the school. Of the schools surveyed, ten had organised all classes for Year 5 and Year 6 students as multi-age classes rather than having a mixture of “straight” and “composite” classes.

Similarly another five schools had organised all the Year 3 and Year 4 students into multi-age classes and three had used the same approach for Year 1 and Year 2 classes.

These schools reported that such a pattern of class organisation had advantages in regard to flexibility when placing enrolments during the year, in separating difficult students and in grouping students in accord with syllabus stages as outlined in *English K-6*.

Some schools described a 3-module form of multi-age organisation which accommodated elements of team teaching and integrated learning centres (Model A).

Some schools excluded Kindergarten from the multi-age class organisation of Stage 1 students (Model B).

Other schools are implementing a mixed ability form of multi-age organisation which accommodates elements of vertical grouping and overlapping stages. In these circumstances the classes were formed as set out in Model C.

Another variation of a pattern influenced by English K-6 syllabus stages is set out as Model D.

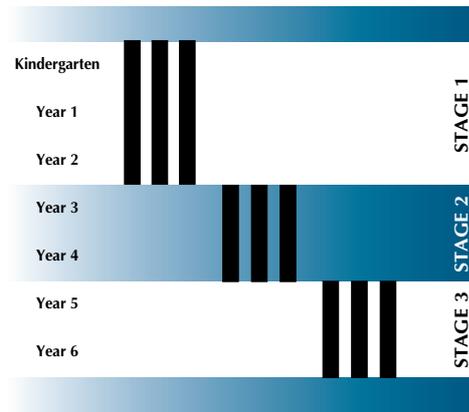
Model E illustrates a variation which accommodates vertical grouping within overlapping stages, preferred teaching

styles, special needs, and flexibility of student placement on such grounds as social factors, parental wishes and time of enrolment.

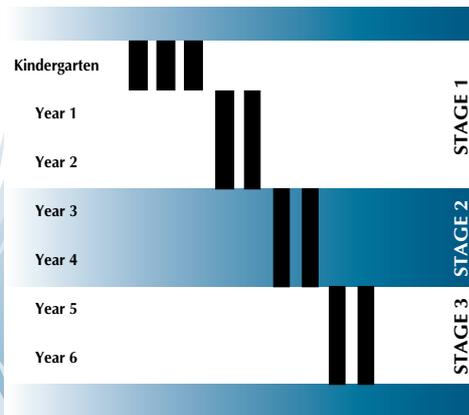
This model represents a sample of the types of multi-age class organisation which are appearing more frequently across NSW. Principals of the schools where such arrangements are in place identify them as multi-age because they believe that there are educational and social benefits to be gained.

This organisation also provides for teaching styles in that there is a blend of multi-age and “straight” classes. It also facilitates team teaching, collegial planning and flexible progression of students.

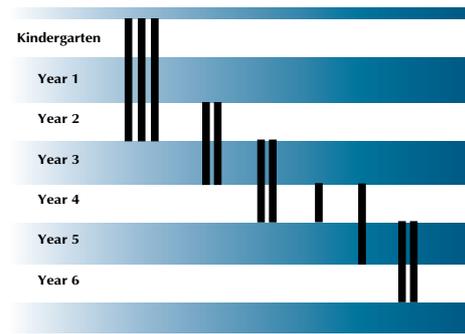
Model A



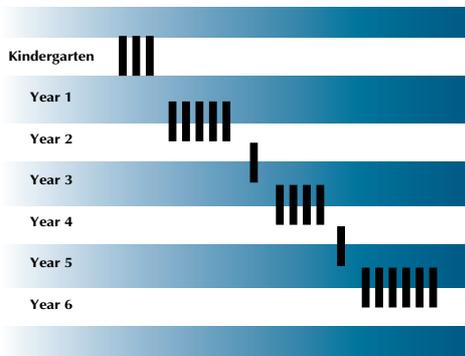
Model B



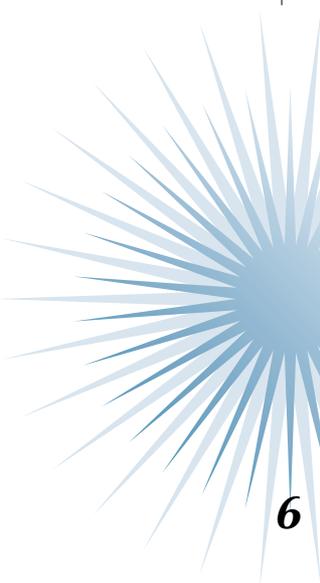
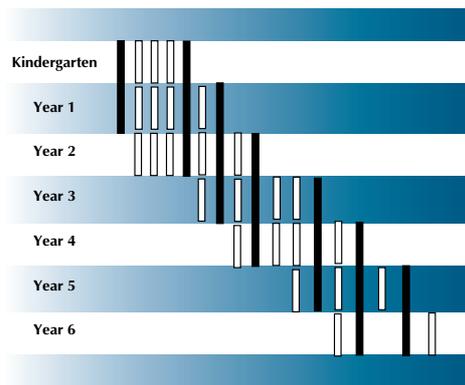
Model C



Model D



Model E



LITERATURE REVIEW

Multi-age grouping is a term used to describe a structure whereby students are drawn from two or more age levels to form one class unit. This method of forming a class is also referred to as mixed-age, family and vertical grouping. Multi-age classes, however, need to be distinguished from what has been known as the composite class. Historically, the *composite class* was formed in many instances as an administrative response to uneven enrolments, and was often taught as distinct year levels. Composite classes remain a common form of class organisation in schooling systems. They are often referred to as multi-grade and mixed age classes. Multi-age grouping, on the other hand, adopts a developmental approach to teaching and learning which does not separate students according to age, grade or ability.

The purpose of this review is to research the educational evidence with regard to multi-age classes. Most of the evidence searched comes from North American and British sources, with some studies conducted by Australian researchers.

A major review of international research into multi-age classes was recently undertaken by Veenman (1995). Veenman investigated 56 studies conducted in 12 countries, including one study from Australia (Pratt and Treacy, 1986). He reviewed the results of research that compared the effects of multi-grade/multi-age classes and single-grade/single-age classes on cognitive and/or non-cognitive outcomes. Based on the review of the studies in which the cognitive and non-cognitive effects of multi-grade and single-grade classes, and multi-age and single-age classes were compared, Veenman concluded

that there is no empirical evidence for the assumption that student learning may be hindered in multi-grade or multi-age classes.

It is important to note that the review divided the research studies into two distinct groups, multi-grade and multi-age classes. On the one hand, multi-grade classes referred to those groupings that were formed for financial or administrative reasons, while multi-age classes referred to those groups that were formed for educational and pedagogical reasons.

In summarizing the cognitive and non-cognitive outcomes of the 56 studies, Veenman concluded that in the 45 studies concerning “multi-grade grouping”, students in multi-grade classes do not appear to learn more or less than their counterparts in single-grade classes. There were no consistent differences found with respect to mathematics, reading, language or composite scores. A similar pattern emerged with regard to non-cognitive measures. Veenman concluded that in the affective areas of attitudes towards school, self-concept and individual and social adjustment, students are sometimes advantaged in multi-grade classes as against single-grade classes.

Summing up the outcomes of the eleven studies examining “multi-age grouping” Veenman found that students in multi-age classes did not learn more or less than students in single-age classes. In nine of the eleven studies of the cognitive effects of multi-age grouping, no significant achievement differences were identified. Similarly, in terms of non-cognitive outcomes, no significant differences were found. The findings are summed up as follows:

“In conclusion, parents, teachers, and

administrators need not worry about the academic progress or social-emotional adjustment of students in multi-grade or multi-age classes. These classes are simply no worse, and simply no better, than single-grade or single-age classes.”
(Veenman: 371)

In contrast to Veenman’s conclusions, findings of research studies in North America are beginning to indicate that multi-age grouping, when implemented as a philosophy of education, provides educational and social benefits.

Anderson and Parvan (1993), in analysing 64 research studies published between 1968 and 1990 in the United States and Canada, found substantial evidence to demonstrate that non-graded schools are most likely to benefit students from all circumstances and in all ability ranges. Their research investigated the viability of the concept of nongradedness, which is defined as a whole-school developmental approach to multi-grouping. In other words, the concept of nongradedness for Anderson and Parvan is a philosophy of education that means more than the vertical organisation of students into one class unit.

Analysis of the research studies led Anderson and Parvan to draw the following conclusions:

- (i) Comparisons of graded and nongraded schools using standardised achievement tests continue to favour nongradedness.
- (ii) Attendance in a nongraded school may improve the student’s chances for good mental health and positive attitudes toward school.
- (iii) Longitudinal studies indicate that the longer students are in a nongraded

program, the more likely it is that they will have positive attitudes and high academic achievement.

- (iv) A nongraded environment is particularly beneficial for blacks, boys, underachievers, and students of lower socioeconomic status in terms of academic achievement and mental health.
- (v) Further research is needed that includes an assessment of the actual practice in the allegedly graded or nongraded schools in order to determine if the labels as described are accurate.

In summary, Anderson and Parvan (1993) argued that the 64 studies most frequently favoured nongradedness on standardized measures of cognitive effects and mental health. The results of academic achievement show that, of the 64 studies, 58 percent found that students in non-graded programs had higher academic achievement scores than those students in graded programs; 33 percent found that students’ performance was the same; and only 9 percent found that students in multi-age classes performed worse.

With regard to mental health and social attitudes, 52 percent of the studies found that non-graded schools performed better; 43 percent found that the performance was similar; and only five percent found that nongraded schools performed worse than graded schools. They concluded that the research findings regarding nongraded, multi-graded and ungraded groupings of students generally support the adoption of these organisational forms in schools. This conclusion is not supported by the findings of a recent review of mixed aged class groups in Sweden (Sundell, 1994). Sundell found that the mixed age group can be viewed as overrated in

terms of the influence of the organisation on student outcomes and that the teacher's instructional competence and parent's importance were undervalued.

According to Sundell, organisational changes may have merit for some purposes but they do not ensure essential changes in the classroom. (Sundell: 390)

While the research findings of Anderson and Parvan (1993) support the claim that multi-grade and multi-age groupings, when based on sound educational principles, provide educational benefits (improved cognitive and affective outcomes), it would appear that such educational benefits are dependent on the effective implementation and operation of these programs (Vogel and Bowers, 1974; Roseth, 1981).

Vogel and Bowers (1974) conducted a ten-year research project into the practices of multi-age classes. These practices were measured against certain criteria they considered necessary for the effective operation of such classes. Their criteria were as follows:

- * no grade labels
- * continuous progress of course study in the skill areas, rather than a course based on graded material
- * organisation of subject areas in a cyclical manner, so that students of different ages learn the same concept
- * continuous educational progression of all students
- * flexibility in student grouping that provided for the creation of groups for specific purposes
- * multi-age grouping
- * flexibility in the instructional program to provide for adjustments to suit individual students
- * types of staff organisation that facilitated flexible grouping patterns
- * abundance of multi-media materials
- * a written statement of the school's objectives.

Vogel and Bowers found that the variables contributing towards the effective implementation and ongoing operation of multi-age classes were:

- * staff committed to developing a multi-age program and to collegial sharing
- * parents and community that supported the concept
- * board of education and central office that supported the program
- * provision of in-service education for staff
- * dynamic leadership
- * materials, facilities and budget that provided flexibility
- * curriculum consistent with a multi-age philosophy.

According to Vogel and Bowers, the key variables in creating problems regarding the successful implementation and operation of multi-age programs were:

- * reluctance of staff to change
- * lack of support from parents and the community
- * lack of materials
- * lack of adequate in-service education.

In an Australian context, Roseth (1981) conducted a research study that examined the organisation, mode of operation and attitudes held by teachers, students and parents to composite classes. The evaluation consisted of case studies of four schools that differed in their approach to the operation of composite classes. The study identified four central variables for the successful operation of composite classes:

- * an across-the-school commitment to the concept of composite classes and to the method of their formation
- * teachers who have had training in the methods of group training and individualised instruction generally and specifically in the methods of teaching composite classes

- * parents who are informed about the reasons for forming composite classes and the method of their operation
- * school staff who are aware of the perceived disadvantages associated with composite classes and are willing to respond to problems.

The study argued that State Office should promote the educational and social benefits of composite classes and suggest to schools ways in which the limitations can be overcome.

At the school level the formation of composite classes should involve:

- * whole-school commitment to the decisions made regarding the formation of composite classes, their composition, age range and allocation of teachers
- * development and articulation of the educational philosophy underlying the type of class organisation formed
- * avoiding particular types of class organisation that are contrary to the general school philosophy
- * avoiding forcing composite classes on teachers or students
- * avoiding class organisations that consist of older, less able students and younger, more able students
- * explaining the benefits of composite classes to parents.

In examining multi-age teaching, Murdoch (1994) reported that an important educational principle underlying successful programs is a shared staff view of student learning. Murdoch interviewed five teachers at Maidstone Primary School, one of 36 schools involved in Victoria's *Pilot Project for the First Years of Schooling*. The project is an outcome of the 1991 Ministerial Review of School Entry Age in that State, and involves the upgrading of the complete junior/primary section of 28 Government and 8 Catholic schools

for three years starting in 1994. From the interviews conducted at Maidstone Primary School, Murdoch identified eight characteristics for successful multi-age teaching:

- * teaching to need rather than to an age or grade level
- * team work
- * using different grouping strategies for a range of purposes
- * developing a broad repertoire of open-ended activities
- * organisation and predictable routines
- * informing and involving parents
- * planning and record-keeping
- * developing a sense of community.

Concerns and problems that emerged from the interviews were:

- * difficulties of timetabling in a small school
- * ongoing search for resources to challenge and support student learning
- * the exhaustion caused by a greater workload.

In summary, the crucial variable in overcoming the above concerns and problems was collegial sharing. Murdoch concluded:

"Time needs to be available for staff to map out the big picture—to develop a shared view and ways of working. Only then will the pieces of the puzzle fit together with real meaning and success for children." (Murdoch, 1994)

An important conclusion drawn by Murdoch (1994), Sundell (1994) and Veenman (1995) is that class organisation on its own will not produce educational benefits for students. Successful student learning is dependent on quality teaching practices and the specific needs and characteristics of each particular school and of its community, and the skills and understandings of its teachers.

CURRENT AUSTRALIAN CONTEXT

In Australia, interest in multi-age grouping as an educational practice has attracted varying attention and debate. The following summary provides information on current projects related to multi-age grouping which are operating in the various states and territories of Australia.

QUEENSLAND

In December 1995 the Queensland Department of Education received an interim report entitled *Review of Flexible Schooling in the Early Childhood Years*.

The report was requested to enable the Department to respond to the Wiltshire Review Panel's recommendation that there be a

"...move to a more flexible arrangement for early childhood classes that takes account of developmental differences and differences in home background of children - specifically, a move away from the 'lockstep' approach based on chronological age to a multi-level approach for Years 1, 2 and 3, where some children may take four years to complete the first three years of schooling." (Wiltshire et al, 1994)

As a result of the review the following recommendations emerged:

- ✦ that the Department of Education officially recognise the value of multi-age grouping as one of the approaches for providing appropriate learning environments that allow for flexible progression through the early years of schooling and beyond

- ✦ that consideration be given to the development of informational materials for use by schools choosing to implement a multi-age approach
- ✦ that schools be encouraged to focus on teaching to individual differences across year levels throughout the early years of schooling and beyond, irrespective of the school's organisational pattern.

Department of Education, Queensland (1995). *Interim Report on the Review of Flexible Schooling in the Early Childhood Years*.

Contact:

Ms Sherrard Blessing
Senior Policy Officer (Early Childhood Education)
Department of Education
Queensland.

WESTERN AUSTRALIA

In Western Australia a pilot project is under way in 13 schools to examine the implications of school organisational strategies that focus on multi-age approaches in the early years (K-3). This Multi-age Grouping Project arose out of interest in the report of the Ministerial Task Force on Voluntary Full Time Education in Western Australia, 1993, the Scott Report.

VICTORIA

In Victoria 36 schools are participating in a project to explore translating the concepts of multi-age grouping into practice. Known as the *First Three Years of Schooling Report*, the project was commissioned by the Victorian Ministry of Education in 1994 as a response to the Ministerial Review of School Entry Age in Victoria (1992).

The *First Three Years of Schooling Project* involves 36 schools with a three-year commitment to translate the concepts of multi-age grouping into practice. The project has five major components: curriculum, organisation, transition, teacher education, and parent education.

Department of Education, Victoria (1992). *Summary of the Report by the Ministerial Review of School-Entry Age in Victoria*.

Recommendation:

that the Victorian Ministry of Education commission a 3-year pilot project of multi-age classes.

Contact:

Christine Ure, Faculty of Education, University of Melbourne.

Molly De Lemos, Australian Council for Educational Research.

SOUTH AUSTRALIA

In 1991 the Education Department of South Australia published a monograph as an example of current practice within its schools. It was entitled *Multi-Age Groups: A Teaching and Learning Perspective* and was essentially a resource which included four case studies of schools that had classes structured with multi-age groups.

For a brief history of multi-age groupings in South Australia see Freda Biggs' *Multi-Age Grouping: It Shouldn't Be An Issue*.

NORTHERN TERRITORY

In 1994 the Northern Territory published the findings of the investigation/research report on *Multi-age grouping for*

effective teaching and learning. The report was commissioned by the Deputy Secretary, Schools Policy and Operation, Northern Territory.

The researchers found that multi-age grouping based on educational grounds is one approach to flexible school organisation and that, where schools are considering the approach, the needs of each individual school should be taken into account.

As a result of the Report, the Northern Territory Department of Education endorsed the philosophy of multi-age grouping for effective teaching and learning and approved the establishment of a multi-age network and the appointment of a full-time project officer.

Department of Education, Northern Territory (1994). *Multi-age grouping for effective teaching and learning*.

Contact:

Helen O' Sullivan, Investigation/ Research Officer, Curriculum Advisory Support Unit, Northern Territory Department of Education.

Jan Senior, Multi-age Project Officer, Northern Territory Department of Education.

CASE STUDIES AND SURVEYS

The case studies were conducted primarily to identify successful practices in the areas specified in the terms of reference:

1. the forming of multi-age classes
2. the teaching of multi-age classes.

The survey was designed to allow principals to identify successful practices in the above areas as well.

In addition, participants in the case studies and the surveys were asked to identify the reasons why multi-age classes were working well in their schools.

1. SUCCESSFUL PRACTICES IN FORMING MULTI-AGE CLASSES

(In this focus area the matters canvassed included the rationale for forming classes, the selection of students and the involvement of teachers and parents in the planning process.)

From the information gathered from the surveys, case studies and enrolment data, the Working Group identified three categories of schools where the formation of multi-age classes was influenced by varying factors:

- * the small primary school where, because of insufficient enrolments, the forming of multi-age classes had been the normal and accepted practice
- * the primary school where the forming of classes on the basis of age was the normal and preferred practice, unless uneven numbers in sections of the

school caused the formation of multi-age classes

- * the primary school where, irrespective of enrolments, multi-age classes were formed because of a belief that such an organisation led to improved learning outcomes.

An analysis of the information confirmed that the dominant reason for forming multi-age classes was administrative necessity, although there were indications of a growth in the number of multi-age classes formed primarily or solely for educational reasons.

Although the initial reason for forming classes across two or more years in the first two categories above was administrative necessity, the differences in how these classes were formed reflected diverse educational philosophies.

In the third category the particular philosophy which initiated the multi-age classes was reflected in the manner in which the classes were formed.

Multi-age classes initiated for administrative necessity

Most schools in NSW form multi-age classes because either the total *number* or the *spread* of students within schools have compelled them to do so.

The majority of schools large enough to form homogeneous classes based on age would have preferred to do so.

The reasons given included:

- * Composites were unpopular with parents.
- * Teachers preferred “straight” age classes.
- * Students preferred to be with their peers.

- ★ There was a perception that the workload was less with “straight” age classes.

The dominant pattern of multi-age classes in these schools is the traditional composite, where students mostly from two adjacent years are placed in a combined age class (for example, a Year 3/4 composite, a Year 1/2 composite).

In these cases uneven numbers occasioned by either a fall or an increase in enrolments in a section or sections of the school resulted in the forming of composites. Those interviewed, however, acknowledged that much of the unpopularity of composites was attributable to a perception in the community that composites were caused by falling enrolments alone and therefore associated with the loss rather than the gain of a teacher.

A number of schools reported forming composite classes to provide the flexibility necessary to accommodate future enrolments during the year. In these situations the total enrolment at the beginning of the year was close to the number which would entitle the school to an additional teacher. A compelling reason for this practice was to prevent the disruption to students, teachers and parents caused when classes had to be reorganised later in the year.

Because of uneven numbers, several schools formed gifted and talented classes with students drawn from three or four years (for example, a Year 3/4/5 or a Year 4/5/6). The reasons advanced included the following:

- ★ The stigma of composite classes was eliminated.
- ★ The school needed to market its capacity to meet the needs of the gifted and talented students.

- ★ Academically gifted students were missing out in the “straight” age classes because the teacher needed to concentrate on those students experiencing learning difficulties.
- ★ A member of staff was trained and committed to the education of gifted and talented students.

Some principals and teachers reported negative effects of such classes on the Year classes from which the students were selected. In addition to a “residue” effect on both students and teachers, the absence of academically able students had a negative effect on the expectations of achievement within the class.

Small schools, where multi-age classes were the usual form of organisation, reported that such arrangements were accepted as a logical and normal way to operate. The stigma of composite classes was not an issue in school communities where a “straight” age class would be an unusual arrangement. Generally these schools were positive about the family atmosphere of the small school and pointed to such attributes as flexible progression, longer-term relationships between students and students, students and teachers, and teachers and parents as educational advantages.

Multi-age classes initiated for philosophical reasons

Schools of the third category (primary schools where, irrespective of enrolments, multi-age classes were formed primarily because of the belief in the benefits to learning) reported these reasons for moving away from the norm in regard to the organisation of classes:

- ★ multi-age philosophy
- ★ Board syllabuses arranged in Stages with associated outcomes
- ★ gifted and talented provisions.

The majority of these schools, where the multi-age form of class organisation was operating, placed equal value on the development of non-cognitive and cognitive skills. Structures needed to be aligned with a developmental learning curriculum based on the principle of individual growth through recognisable stages of development.

Some relatively small schools described a 3-module form of multi-age organisation which accommodated elements of vertical grouping, team teaching and integrated learning centres.

Some large primary schools have introduced a form of multi-age class organisation which reflects a vertical grouping approach.

Reports from these schools have highlighted the flexibility gained to:

- ✦ allow students to develop at their own pace
- ✦ match teachers to either homogeneous classes or multi-age groupings, depending on their experience and dominant teaching style
- ✦ reduce negative interactions between students
- ✦ offer a variety of options to parents when they seek to enrol their children.

Other primary schools have based their organisation on stages. Students are grouped into three broad stages to align with the stages of the English Syllabus. (Some schools maintain Kindergarten as a discrete group; others include Kindergarten in Stage 1).

Selection of students

Differences in philosophies become apparent in the way students are selected.

Most schools adopting the stages model have maintained the mixed ability element. In these circumstances the classes could be formed as follows:

- ✦ Stage 1 class or classes, composed of students from Kindergarten, Year 1 and Year 2
- ✦ Stage 2 class or classes, composed of students from Year 3 and Year 4
- ✦ Stage 3 class or classes, composed of students from Year 5 and Year 6.

Although there is a reasonable expectation that the majority of students in each stage class will be at a certain stage of development in aspects of English, individual differences will result in some students achieving higher or lower outcomes, as specified in the English syllabus. Of course, special consideration would need to be given to ESL students.

Importantly, the students are not taught “a Stage 2 program” on the assumption that they are a homogeneous group. Teachers are expected to provide teaching and learning experiences which meet the needs of a diverse range of learners. The key motivation in organising the classes as stage classes was to dismantle the limits of classes organised on a single year basis to provide structural support for a developmental learning approach and to derive the benefits of multi-age grouping.

Some schools surveyed are using the same mixed ability selection principles to broaden further the class groupings by forming overlapping stage classes, selecting students whose development ranges over the three stages of English K-6.

In these circumstances the arrangement could be:

- ✦ a class or classes made up of Years 2, 3 and 4 students, most ranging developmentally from Stage 1 to Stage 2, as described in the English K-6 syllabus
- ✦ classes made up of Years 4, 5 and 6 students, most ranging developmentally from Stage 2 to Stage 3, as described in the English K-6 syllabus.

Once again such arrangements were motivated by developmental learning principles to break away from primarily homogeneous age classes to derive the benefits of multi-age grouping.

A minority of schools surveyed is forming classes which resemble the examples described above. However the way in which the students are being selected makes them markedly different. The desire to form classes as homogeneous as possible, on the basis of cognitive development, is evident in the selection of students for “stage” classes.

Students are being sorted or “streamed” using the outcomes aligned to Stages 1, 2 and 3 of the K-6 English syllabus.

The Working Group was informed of variations to the homogeneous ability type. Some schools organised their classes in the normal parallel and/or composite manner, then “staged” for English and mathematics in sections of the school or across the whole school. Some multi-age gifted and talented classes were formed on the basis that academically gifted students needed to interact with students of similar ability and needed a teacher trained or experienced in the education of the gifted and talented.

The majority of schools participating in the case studies, as well as those surveyed, indicated that parallel selection was the dominant process. As with parallel classes across a Year, the goal was to form classes as cross-representative as possible. These schools explained that some balancing criteria were applied, such as gender, ethnicity, Aboriginality, academic ability and social skills. Generally, however, for this group of schools, the selection of students for multi-age classes did not differ from selection for parallel “straight” age classes (apart from the requirement that the representative group be drawn from two or more year levels).

A number of schools, where total numbers or uneven numbers were the prime reasons for forming multi-age classes, reported special selection of students to facilitate a successful operation and to minimise the concerns of parents and teachers. The criteria included:

- ✦ ability to work independently
- ✦ behaviour likely to disrupt others
- ✦ degree of parental support or resistance
- ✦ age and maturity, e.g. placing the older Kindergarten students with the younger Year 1 students
- ✦ parent nomination for preferred class organisation
- ✦ academic ability, based on standardised tests, the Basic Skills Tests and achievement of outcomes of the English syllabus
- ✦ special ability, as indicated in profiles for gifted and talented classes
- ✦ student choice
- ✦ class placement history (has the student been placed in a composite before?)
- ✦ placement of siblings
- ✦ sociometric reasons, where teachers indicate which students work well together.

These schools generally operated from a deficit view of across-age classes. Given the “stigma of composites”, it made good sense to minimise parental concerns by selecting not only a capable teacher but students who were independent workers. This had the added benefit of attracting the teacher to the class, particularly if the “difficult” students were to be allocated to a “straight” age class. The homogeneous principle is reflected in many of these selection criteria, the aim being to group children of similar ability or work habits.

The involvement of teachers in school planning

The extent to which teachers were involved in the decision-making largely depended on the significance of the change to the class organisation being contemplated.

- * In small school situations, where multi-age classes were accepted as the normal form of organisation, the focus of teacher involvement was on training and development activities, in which the pedagogical issues of addressing diverse student needs and achieving syllabus outcomes were considered.
- * In situations where a multi-age class organisation was needed because of uneven student numbers in sections of the school, schools reported that the options for forming classes were canvassed at meetings of staff and executive staff members. In many cases, teachers were asked for advice on the placement of particular students.
- * The allocation of teachers to multi-age classes varied from no

involvement, where the principal nominated the most suitable, to full involvement, where the teacher volunteered to teach a multi-age class.

- * Some principals nominated teachers on the basis of their reputation, to overcome parental anxiety about the proposed multi-age class.
- * Most schools advised that the allocation of classes was a negotiated decision, which took into account such factors as preferred teaching style, experience with multi-age classes, interest, training and personal choice.
- * In schools where a major reorganisation of classes on a multi-age basis was proposed, information gathered from the case studies and surveys revealed major thrusts in training and development for teachers and a high degree of participation in the decisions to trial, review and proceed to implementation.

Teachers valued opportunities to:

- * visit other schools
- * interact with guest consultants
- * be briefed on the latest research findings
- * plan collaboratively with colleagues
- * reflect on teaching and learning
- * be members of collegial teams specialising in particular key learning areas
- * teach cooperatively with one or more colleagues.

Most principals emphasised the importance of gaining the commitment of teachers to at least trial and evaluate the proposed change.

Involvement of parents in school planning

As with teachers, the extent to which parents were involved in the decision-making depended largely on the significance of the change to the current organisation of classes.

In small-school situations where multi-age classes were accepted as the normal form of organisation, no specific strategies to involve parents were reported.

In situations where a multi-age organisation was needed because of uneven student numbers in sections of the school, parents were informed of the intentions through:

- * newsletters
- * meetings of the Parents and Citizens Association
- * meetings of the School Council
- * letters to the parents of students who were likely to be involved
- * individual meetings with the parents of students likely to be involved.

In schools where a major reorganisation of classes on a multi-age basis was proposed, information gathered from the case studies and surveys revealed that the following strategies were employed successfully:

- * referral of the issue to the School Council
- * special day or night meetings in addition to the regular Parents and Citizens Association meetings to explain the rationale to as many members of the school community as possible
- * visits to other schools where multi-age classes were operating successfully (in some cases parents travelled interstate)

- * engaging outside consultants to raise awareness
- * dissemination of research on the effects of class organisation
- * surveying parents to ascertain preferences
- * guarantees given to pilot, then review the organisation before proceeding to full implementation
- * extending invitations to parents to vote on the proposals.

In one school, parents received a brochure in Term 4 of each year asking them to nominate which form of class organisation they would like for their children. A number of options were described, with a brief commentary on the advantages and disadvantages. An indication was given of which class forms were operating at the school and in what section of the school. If sufficient parents nominated a particular form of class organisation, the school undertook to introduce it or maintain it the following year.

At one of the schools surveyed, the School Council initiated a change to form classes on a multi-age basis. In this case it was members of the School Council who set about researching the issue before securing the commitment of the principal, the teachers and the parents to implement the change.

2. SUCCESSFUL PRACTICES IN TEACHING MULTI-AGE CLASSES

(In this focus area matters canvassed included organising the classroom and grouping students for learning, programming for multi-age classes and the assessment of student progress.)

Organising the classroom and grouping students for learning

The ways in which the classrooms were set up and the students grouped for learning reflected differences in philosophical principle and preferred teaching styles.

In schools which had a positive view of a class organisation representing a broad range of ages, backgrounds, interests and stages of development, the following practices were reported or observed.

- ✦ The classroom is arranged so that chairs, tables and floor space facilitate whole-class, small-group and independent learning:
 - Resources are organised for easy access and are clearly labelled. These arrangements allow for flexible groupings and ease of movement from whole-class to small-group activities and independent learning. Where available, activity areas, such as wet areas and shared class cooking areas, are used extensively during the school day.
 - Where there is an excess of classrooms, the additional space is used to establish KLA resource areas and quiet areas for independent learning.
 - Some classrooms are organised into three learning centres which students use on a rotational basis.

- Ongoing access to the library provides opportunities for independent and small-group research.

- ✦ Students were grouped in a variety of ways to suit the particular activity. The range of groupings included:
 - whole class
 - twos, threes and fours
 - teams within the class, based on fractions of the class working in different KLAs or on different activities within a KLA.
- ✦ The allocation of the students to the above groupings varied according to the purpose of the activity. The criteria for allocation included:
 - ability and age for peer tutoring
 - ability for extension and remediation
 - interest in project work
 - friendship for a variety of activities
 - expected role within class teams: leadership, research skills, writing ability and other presentation skills
 - special needs, such as ESL support
 - learning centres in the classroom.

In those schools and classrooms where homogeneous grouping was believed to benefit teaching and learning, the following practices were reported or observed:

- ✦ Class furniture was arranged in Years (for example, Year 3; Year 4).
- ✦ Students had their own seats and home tables.
- ✦ Students moved to different rooms for different KLAs.
- ✦ Students were graded on ability in English and mathematics within the classroom.
- ✦ Students were graded on ability in English and mathematics across the

whole Year or two or more Years (for example, Years 4, 5 and Year 6)

- ★ Students were grouped in ability groups in all the KLAs.

Many schools reported practices which included variations of all the above arrangements. There is a degree of overlap and some variance attributable to teacher preference and whole-school policy, such as “stage groups” for literacy, English and mathematics. For example, a teacher of a multi-age class, with students from Years 4, 5 and 6, may favour flexible and varying sized groups across the curriculum but be required by school policy to “stream” the students for reading groups across the primary section of the school.

Programming for multi-age classes

From the case studies and surveys, the Working Group concluded that most of the good programming practices described would apply to homogeneous age classes as well.

Highly valued was collaborative programming involving class teachers, support teachers learning difficulties, support teachers ESL, integration support staff and relief-from-face-to-face teachers.

Many responses emphasised the need to plan theme-based units of work within which the activities were of sufficient range and flexibility to address individual learning needs.

The good programming described contained the following elements:

- ★ the identification of students’ abilities, interests and special needs across the KLAs
- ★ the identification of available resources, both material and human

- ★ the selection of learning outcomes appropriate for a range of abilities, interests and special needs across the KLAs

- ★ the planning of whole-class and flexible group activities to enable students of differing abilities, interests and special needs to achieve the set outcomes across the KLAs

- ★ provision for evaluation of the effectiveness of the planned activities in achieving student learning outcomes.

In some schools, forms of specialised programming were operating. For example, where teachers are allocated responsibility for a particular KLA, that responsibility involves programming.

Similarly, in situations where sections of the schools “ungrade” for particular KLAs or aspects of KLAs, such as literacy, teachers allocated to the ability-based groups plan and implement the program for each group. This involves planning activities for students in groups of theoretically homogeneous ability.

The strategy of implementing a two-year curriculum cycle was regarded as especially important in programming for multi-age classes. This cycle is applied to the theme-based units of work planned across the KLAs. The purpose is to minimise the repetition of themes to students progressing through multi-age classes. For example, a Year 3 student placed in a Year 3/4 class in one year could be presented with an integrated KLA unit on *Our Neighbourhood*. Without some form of monitoring, the student could well be presented with *Our Neighbourhood* the next year if placed in a Year 4 class.

Assessment of student progress

As with programming, the Working Group could not identify any strategies which pertained to multi-age classes alone. A variety of practices were described, including:

- ✦ individual profiles, including date-registered work samples, teacher observation, results of BSTs, standardised tests and checklists based on syllabus outcomes
- ✦ three-way interviews involving the student, the parents and the teacher
- ✦ negotiated assessment, with a strong element of student self-evaluation.

REASONS WHY MULTI-AGE CLASSES ARE WORKING WELL

In small primary schools where the forming of multi-age classes had been the normal and accepted practice, positive and regular interaction with parents, continuity of teaching and the provision of individualised attention were perceived as strengths of multi-age classes in the small school setting.

Opportunities for peer tutoring, peer counselling and student leadership in family group settings were characteristic of successful operations.

A number of members of small school communities emphasised the importance of teachers and parents holding high expectations of student performance to counter the negative effects of isolation.

When formed primarily for administrative reasons

In primary schools where uneven numbers in sections of the school caused the formation of multi-age classes, reasons advanced for success were

framed in terms of gaining the support of the parents and teachers involved.

Multi-age classes worked well where teachers and parents accepted that the quality of the teaching and learning taking place was far more important than whether or not the classes were formed on an age basis. The understanding of parents was enhanced when their children's progress was reported in terms of outcomes associated with stages, as could be done in English, for example.

In some schools successful operation was attributed to compensatory strategies.

- ✦ The allocation of the teacher was reported as the critical factor. Some schools advised that parental concerns about "composites" receded when a teacher with a good reputation within the school community was allocated to the class. This was especially the case when the teacher presented a positive view of teaching a multi-age class to the parents, and demonstrated the capacity to address the needs of a broad range of students.
- ✦ The selection of students was another important factor. Teachers who were reluctant to teach a multi-age class were more positive when students were selected on the basis of "positive" criteria. Criteria cited included independent work habits, academic capacity, and behaviour.

Sometimes, gifted and talented multi-age classes are formed as a strategy to avoid the negative response to "composites". Teachers, parents and students not associated with the class can to some degree resent being overlooked, and the loss of the academically able from each

class in the Year restricts the extent to which peer modelling can be used.

In all cases where there is special selection of students, variations of the “leftovers” syndrome may appear. For example, all the students with behaviour problems may be left in one “straight” Year class. The practice of mixing the academically able younger students with older students experiencing some learning difficulties may exacerbate any sense of failure the older students feel.

Where students are selected from two or more Years on the basis of academic achievement, for the purpose of minimising the range of abilities within the class, an over-reliance on whole-class teaching may disadvantage those students requiring extension or remediation.

Where the students were selected to be representative of a broad range of learning needs, irrespective of age, teachers were less likely to operate from fixed assumptions about Year 4 or Year 5 students (for example) but instead adapted their teaching to suit groups of students of varying interests and needs.

When formed primarily for philosophical reasons

In schools where multi-age classes were operating successfully, the following conditions were reported:

- ✦ a high degree of collaboration between teachers to plan, implement and evaluate activities which address the needs of students. In an increasing number of schools, teachers were operating in teams to plan across a syllabus stage or share planning in the KLAs. In many

instances the teams operated as researchers, searching the literature, training together, team teaching and recording progress

- ✦ a high degree of trust in the leadership. Successful principals were able to manage change well. To varying degrees, teachers and parents were part of the decision to organise classes on a multi-age basis. All needed to be shown the benefits to students and the link with quality teaching. Resistance to multi-age school organisation has appeared where the principal has forced the change without addressing the legitimate concerns of teachers and parents
- ✦ an informed and supporting community. All successful multi-age schools had included the parents in training and development programs. Special public meetings with visiting experts, visits to other schools where multi-age classes were operating, dissemination of the latest research, piloting then reviewing, are among successful strategies employed
- ✦ effective training and development programs aimed at ensuring that practices in the classroom were based on a strong research base. Valued practices included joint tertiary/school projects, visits by teams of teachers to other schools and educational centres, and the provision of up-to-date research findings
- ✦ an emphasis on the teaching and learning of core skills. Students who demonstrated leadership, self-discipline and independent work habits thrived in a multi-age environment in which co-operative

learning strategies and technology-assisted learning were regularly employed

- ✦ the introduction of an outcomes-based curriculum. The specification of learning outcomes within stages in English K-6 is providing the means for teachers and parents to recognise the stage of development of particular learners. A clearer view of student progress enhanced by a curriculum set out in stages and supported by effective assessment and reporting procedures, is contributing significantly to successful multi-age operations.

CONCLUSION

Multi-age classes are a necessary pattern of organisation in many government and non-government schools across NSW and Australia, especially in rural areas. They will continue to be a significant proportion of classes formed in NSW schools.

While in larger schools, forming classes by years is the more common practice, multi-age classes are usually formed because of the uneven pattern of enrolments at the school. Sometimes, however, these classes are formed for educational reasons in schools where it is considered that mixing children of different ages is educationally and socially advantageous.

There is an increase in the number of schools choosing to introduce multi-age class groupings on the basis of the belief that they provide a better match structurally with a curriculum grounded in developmental learning principles.

The recent move to arrange the English Kindergarten to Year 6 syllabus in stages

with related learning outcomes has encouraged some schools to arrange their classes on the basis of stages rather than ages.

More schools are forming multi-age classes, not because they have to, but because they want to.

THE LATEST RESEARCH ON MULTI-AGE CLASSES

Research continues to confirm that multi-age classes do not disadvantage students academically and may benefit them socially and emotionally.

Moreover a growing number of teachers and principals believe that forming multi-age classes on sound educational principles (rather than as just a reaction to administrative necessity) results in academic benefits to students. The difficulty which continues to confront research in the area is the number of variables which could account for improvement or deterioration in student learning.

Researchers have a similar difficulty with the issue of the workload associated with teaching multi-age classes. Some teachers, particularly those teaching a multi-age class for the first time, reported an additional workload. Others who identified as predominantly student-centred in approach did not believe that multi-age classes created more work than a "straight" Year class, where the teacher was balancing whole-class activities with flexible group activities to address a range of abilities and interests. The range of academic abilities in a "straight" Year class could be wider than that in a multi-age class, depending on the criteria for placing students in the multi-age class. The selection of students, individual teaching styles and experience are important influences on the workload of teachers.

There is general agreement that organising classes in a particular way can not guarantee improved learning outcomes. The determining variable is the quality of the teaching and learning provided within that organisation.

SUCCESSFUL PRACTICES ASSOCIATED WITH THE FORMING AND TEACHING OF MULTI-AGE CLASSES

Across all schools, common elements of success included the degree of commitment of teachers, the acceptance and support of parents and above all the quality of classroom teaching.

In organising classes, schools reported successful practices which varied according to the circumstances surrounding the decision to form the class. Where schools form classes primarily because of administrative necessity, considerable attention is given to allaying the concerns of parents and attracting teachers to the proposed class. Where schools are forming multi-age classes across the school primarily for philosophical reasons, success is attributed to managing change strategies, including extensive training and development for teachers and parents, to allow them to achieve a shared belief in the benefits of multi-age classes and a strong commitment to their success.

In regard to successful teaching practices for multi-age classes, schools reported a range of ways in which students were organised in groups and taught, to match the range of teaching philosophies and preferred teaching styles.

Although the strategies recommended in programming, teaching and assessing and reporting apply equally to age-based classes, the multi-age class structure can facilitate student-centred approaches to teaching, including flexible grouping of

students for a variety of purposes, opportunities for student leadership through peer tutoring, cooperative learning and technology-assisted learning.

The key finding of this report is that the type of class organised will not determine either educational advantage or disadvantage. Important success factors for multi-age classes will include the degree of commitment of teachers, the acceptance and support of parents and, above all, the quality of classroom teaching.

Multi-age classes can encourage student-centred learning, widen choices for placing students in classes and facilitate the flexible progression of students through a curriculum organised in stages and associated learning outcomes.

REFERENCES

- Allen, J.P. (1989). Social Impact of Age Mixing and Age Segregation in School: A Context-Sensitive Investigation. *Journal of Educational Psychology*, 81(3), 408-416.
- Anderson, R.H. and Parvan, B.N. (1993). *Nongradedness. Helping It To Happen* Lancaster, PA: Technomic.
- Black, S. (1993). Beyond Age and Grade. *The Executive Educator*, (September), 17-20.
- Carter, J. (1994). Breaking Out The BOX: Learning in the Multi-age Junior-Primary School. *Primary Education*, 25(4), 12-13.
- Hill, P.W. & Rowe, K.J. (1996). Multilevel Modelling in School Effectiveness Research. *School Effectiveness and School Improvement*, 7(1), 1-34.
- Murdoch, K. (1994). Putting the Pieces Together: Puzzles and Purposes in Multi-Age Teaching. *Primary Education*, 25(4), 9-11.
- Roseth, N. (1981). *Evaluation Study of Composite Classes in Primary Schools*. Research Department, New South Wales Department of Education.
- Sundell, K. (1994). Mixed-Age Groups in Swedish Nursery and Compulsory Schools. *School Effectiveness and School Improvement*, 5(4) 376-393.
- Veenman, S. (1995). Cognitive and Non-cognitive Effects of Multi-grade and Multi-Age Classes: A Best Evidence Synthesis. *Review of Educational Research*, 65(4), 319-381.
- Viadero, D. (1996). Mixed Blessings. *Education Week*, (May 8), 31-33.
- Vogel, F.W. and Bowers, N.D. (1972). Pupil Behaviors in a Multi-Age Non-graded School. *Journal of Experimental Education*, 41 (Winter), 78-86.

APPENDIX A: SCHOOLS IDENTIFIED FOR SURVEYING

Batemans Bay PS	Kenthurst PS
Bayldon PS	Lake Albert PS
Bellingen PS	Lavington East PS
Belmont PS	Leppington PS
Bidwill PS	Lewisham PS
Blackheath PS	Lucas Heights CS
Blayney PS	Manning Gardens PS
Boambee PS	Minto PS
Booragul PS	Morisset PS
Bourke PS	Mt Annan PS
Brighton PS	Murwillumbah East PS
Camden South PS	Murwillumbah PS
Campbelltown East PS	Nambucca Heads PS
Cardiff South PS	Normanhurst West PS
Chertsey PS	Noumea PS
Cobar PS	Oberon PS
Cooma North PS	Ocean Shores PS
Cootamundra PS	Penrith PS
Dorrigo PS	Raymond Terrace PS
Dulwich Hill PS	Roseville PS
Eastern Creek PS	South Wagga PS
Ellison PS	Southern Cross PS
Frenchs Forest PS	Tanilba Bay PS
Gerringong PS	Tempe PS
Gillwinga PS	The Oaks PS
Glenroi Heights PS	Tolland PS
Grafton South PS	Wagga Wagga PS
Grahamstown PS	Wentworth PS
Gwandalan PS	Widemere PS
Kempsey South PS	Willmot PS

APPENDIX B: SCHOOLS PARTICIPATING IN CASE STUDIES

South Grafton	2 Primary
Bathurst West	2 Primary
Bellingen	2 Primary
Lithgow	2 Primary
McCallums Hill	2 Primary
Nambucca Heads	3 Primary
Ariah Park Central	3 Central
Lismore South	3 Primary
Lennox Head	3 Primary
Yagoona	3 Primary
Clemtown Park	3 Primary
West Wyalong	3 Primary
Uki	4 Primary
Brunswick Heads	4 Primary
Bankstown West	4 Primary
Revesby South	4 Primary
Ulong	5 Primary

Baryulgil	5 Primary
Grevillea	5 Primary
Wilsons Creek	5 Primary
Wyalong	5 Primary
Coopers Creek Upper	6 Primary
Naradhan	6 Primary

- 2 Primary = An enrolment from 451 to 700
- 3 Primary = An enrolment from 301 to 450
- 3 Central = An enrolment from 160 to 300
- 4 Primary = An enrolment from 160 to 300
- 5 Primary = An enrolment from 26 to 159
- 6 Primary = An enrolment of 25 or less

FOCUS AREAS AND QUESTIONS

1. School planning

- overall organisation of classes
- number and type of multi-age classes
- rationale for forming multi-age classes
- the basis for selecting children for these classes
- parental involvement in the process
- the extent of training provided for teachers.

2. Class organisation and pedagogy

- the organisation of students in each multi-age class
- planning and organisation of learning for students
- grouping of students for learning activities
- special needs arrangements
- the assessment of student progress
- structuring of the learning environment.

3. Reasons why the multi-age classes are working so well

- Effective multi-age classes: formed primarily for administrative reasons
- Effective multi-age classes: formed primarily for philosophical reasons.

4. Questions

- What is the rationale? Why were the classes established?
- How were the children selected?
- How were the parents involved?
- What specific training and development were provided?
- How were the teachers selected or allocated?
- How is the school day organised?