IMPLEMENTING MULTI-AGE EDUCATION PROGRAMS

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IMPLEMENTING MULTI-AGE EDUCATION PROGRAMS

by

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Abstract

This project presents research findings regarding multi-age education and practical ideas for the implementation of a multi-age approach to teaching and learning. This project grew out of a need in School District # 3 for a handbook outlining material on multi-age education. A committee was struck to draft policies, guidelines and procedures for multi-age classrooms within the District. The committee completed this task in draft form. This project is intended to support the work of the District committee and to be a resource for teachers interested in teaching in a multi-age setting. The data for this project was collected from four primary sources: a comprehensive review of literature, document analysis, surveys, as well as observations and personal experiences of the author. The surveys were developed and administered to teachers, principals and parents involved with multi-age education within the District. The results of these surveys confirm the research findings from prominent researchers as well as personal experiences of the author that indicate guite clearly the value of a multi-age approach to teaching and learning. Once compiled, the results of the surveys were incorporated into a multi-age handbook outlining research findings, implementation, and day-to-day practices for the use of teachers wishing to learn more about the multi-age approach to teaching and learning.

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Dedication

For the patience, understanding

and support of my

husband. Gerard Hatcher:

my daughter. Catharine:

and my parents. Margaret and David Elder

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Chapter 1

Introduction

How best to educate students has long been debated by educators. Amongst the questions asked are those that relate to methods of grouping students. Although the graded system has appeared to dominate the education system since its inception in the 1800's, multi-age groupings have also played a significant part. Famous educators such as Rousseau. Pestalozzi. Dewey and Montessori have recognized the importance of valuing the needs of individual learners. The philosophies of such educators and research in the field of education have had an impact on education systems throughout the world including that of the province of Newfoundland and Labrador. Thus, school boards in Newfoundland and Labrador have not escaped the debate of whether to implement multiage education or continue with the well-established graded system.

Although the graded system is still very dominant amongst school boards in Newfoundland and Labrador. multi-age education has been growing in popularity. More educators are recognizing some of the benefits of multi-age education which have been documented in research. One such benefit is the positive effect multi-age education has on the intellectual and social development of all students, regardless of their ability. Goodlad and Anderson (1987) have found that "The nongraded school provides for the continuous, unbroken, upward progression of all pupils, the slowest and the most able" (p. 219). The multi-age approach to education has also been shown to have significant positive effects on the social development of students. Kasten and Clark (1993) cite the findings of Schrankler (1976) and Milburn (1981) that students in multi-age classrooms have "more positive attitudes towards school than students in more traditional classes" (p. 22). This positive attitude is in part attributable to the collaborative environment of a multi-age classroom which gives students the opportunity to work with others and provide support and encouragement. Charbonneau and Reider (1995) note that

The very nature of cooperative learning requires that children work together in groups. It is through these experiences that children are motivated to develop a sense of responsibility to and for others and to the attainment of the group's goal. Children in these groups tend to be more supportive of their peers, providing not only feedback and encouragement, but help in the creation of new ideas for their projects and tasks. (p. 15)

Students in a multi-age classroom also benefit from a multi-dimensional environment that embraces diversity and individuality. McClellan (1994) states that "Multiage grouping is a key strategy for ensuring that children receive a full range of social and cognitive experience" (p. 160).

Purpose

District #3 has accumulated a vast amount of information on multi-age pedagogy as part of its policy development in this area. The purpose of this handbook is to supplement already available information by filling one identified need; that being the need for a handbook which presents the philosophy behind multi-age education and information pertaining to the organization of multi-age classrooms. Since this project has been developed for School District #3, particular attention has been given to supporting the practices and policies that are being developed by this District for multi-age classrooms under its jurisdiction (see Appendix A for Policies, Guidelines and Procedures from School District #3; *Multi-age Education Policy Handbook draft*). Furthermore this project was developed in partial fulfillment of the requirements for the degree of Master of Education. Thus, it was developed in accordance to the guidelines specified by Memorial University of Newfoundland's School of Graduate Studies. These guidelines are found in Appendix B.

Background

As an experienced multi-age teacher, I agreed to develop a handbook for teachers within School District #3 regarding multi-age pedagogy. The resulting handbook would be the focus of a project designed to fulfill partial requirements for the degree of Master of Education.

District #3 has been involved in multi-age education since 1989 and is actively developing resources for new multi-age teachers. In the development of a Board policy on multi-age pedagogy, the District has accumulated hundreds of pages of information which are available to teachers. They also have a small collection of other resources such as books and videos.

Using an instructional development model. I agreed to develop a resource to fill an existing gap in the information available to teachers. This resource, a handbook for teachers, was not meant to be a stand-alone resource but rather one to be used in conjunction with the currently existing resources from the School Board.

I worked with the personnel at the school district office to determine the needs of the intended users - new multi-age teachers in District #3. Working with a second graduate student who was also producing a resource handbook, we developed and administered surveys to the four schools that are actively engaged in multi-age pedagogy. Relevant information was extracted from these surveys.

In collaboration with the school district personnel, I agreed to develop, as a project for my Master's in Education degree, a handbook which would fulfill the following criteria:

- present the philosophy of multi-age pedagogy
- present information pertaining to the organization of multi-age classrooms to supplement and enhance the information already available through the policy development handbook
- present local views including those of parents teachers and principals who are involved in multi-age education so that teachers newly immersed in the multi-age classroom setting will be aware of the existence of a core group of supporters

Throughout the development of this handbook, there were continuous meetings and discussions with School District #3 personnel who have approved and accepted the resulting handbook.

In developing this handbook. I worked closely with another graduate student who had undertaken a similar task. Our work, although based on the same policy and written for the same users, dealt with different content. The process we followed was the same in that we worked with the school district personnel and we collaborated on the survey used to assess teachers' views and needs. We also consulted with each other to ensure a complementary format for the handbooks as we felt it would benefit the intended user group. Both handbooks are intended to be used as supplementary resources for teachers who are using multi-age pedagogy for the first time.

Composing the handbook after completing the literature review and document analysis, enabled me to analyze, synthesize and reflect upon research findings, theories and practices related to multi-age pedagogy. The two research questions which guided the literature review are:

- 1. What are the benefits to the multi-age approach to teaching and learning?
- How can the multi-age approach to teaching and learning be incorporated into the classroom?

Transferability

This project was designed to meet the specifications and needs of School District = 3. It assumes that teachers have been introduced to multi-age pedagogy, that they have access to the policy documents, and that they have access to the program specialist whose expertise is in multi-age pedagogy. It is not intended for other users although other districts and teachers still may find it beneficial.

Definition of Terms

For the purposes of this project. School District #3's definition of multi-age grouping as found in *Multi-age Education Policy Handbook (draft)* is used. It is defined as follows:

Multi-age continuous progress education is a classroom organizational structure in which children of two or more age levels work together. In their veryday lives, children interact with people of all ages. Their lives are enriched by the many experiences they have and by the relationships they develop. Multi-age education is a natural and logical extension of children's home environments. Multi-age education is based on a belief that children will benefit from a learning environment that values diversity. In a classroom in which there is a wide range of ability. children's contributions to classroom life strengthen both their academic and social experiences. (p. 2)

Design of the Study

This project is the result of a collaborative effort of the developer and several other people. The initial collaboration was with the Primary Program Specialist (now retired) in School District #3 who recognized and supported the need in the district for additional resources for multi-age teachers. The Program Specialist K-4, Multi-age Continuous Progress acted as a liaison between the developer and School District #3. The Assistant Director of Programs was also involved. He approved the development of two handbooks: A Multi-age User Guide: From Theory to Practice, found in this project, and a second complementary handbook completed by another graduate student. Together, they would help fulfill the need within the District for information documents for teachers involved in multi-age education. The Director of District #3 gave final approval of the surveys to be conducted. As already mentioned, the developer of this project collaborated with another graduate student to develop and conduct the surveys.

The following four sources were used to collect data for this project: a comprehensive review of the literature, document analysis, surveys, as well as participant observations and personal experiences as a multi-age teacher.

Surveys

The surveys were designed to be completed by principals, teachers and parents involved in multi-age education in the immediate Corner Brook area. The purpose was to establish the parents' views on multi-age education as well as to reveal strategies and practices used by principals and teachers. The surveys were based upon an evaluation and self-assessment tool entitled School Program Study Guide...The Multiage Classroom - A Self Study Instrument for Schools (Fox. 1996). A pamphlet developed by School District #3 entitled Multi-age Continuous Progress Education-Information for Parents was also used as a source of information.

With the approval of the Director of District #3, the surveys constructed by this developer and another graduate student. Elizabeth Elder, during the 1999-2000 school year were administered to principals. teachers and parents involved with multi-age education in four schools within the immediate Corner Brook area. Rather than surveying all schools in the District, surveys were sent only to the four schools in which authentic multi-age classrooms were located. The survey findings were analyzed and used in the development of two projects. this one and another developed by another graduate student. Copies of the surveys are found in Appendix C.

Document Analysis

Documents pertaining to instruction which were examined include The Primary/ Elementary: Levels Handbook (draft) and Learning to Learn produced by the Department of Education of Newfoundland and Labrador. Also examined were Multi-age Continuous Progress Education-Information For Parents and the Multi-age Education Policy Handbook (draft) produced by School District #3 and Cheryl Fox's evaluation and selfassessment tool entitled School Program Study Guide...The Multi-age Classroom - A Self Study Instrument for Schools.

Participant-Observer

In my teaching experience it has become evident that the philosophy of multi-age education is rooted in good teaching practices - practices which are not limited to the multi-age setting. Whenever possible in my graduate courses, I have chosen to research multi-age education and have participated in various in-service sessions regarding multiage education. I taught for one year in a multi-age setting with students who were 7 - 8 vears old.

My early work with School District #3 as a substitute teacher in multi-age classrooms allowed me to explore the varied strategies and techniques utilized by lead teachers in multi-age education. Although currently teaching in a single-graded classroom. I maintain a strong interest in multi-age pedagogy. School District #3's support of my efforts to develop a handbook is recognition of the expertise I have accumulated in this area.

Limitations/Delimitations of the Study

This is a complete project but the handbook component is designed to be one of a number of resources available to multi-age teachers in School District #3. The handbook. *A Multi-age User Guide: From Theory to Practice*, is intended as a resource for teachers interested in establishing a multi-age classroom. It also takes into consideration School District #3's specific requirements for such a resource. The Program Specialist K–4, Multi-age Continuous Progress. for example, stressed that she did not want to have sample curriculum units as she feared they would be used as templates and reproduced. The School District's policy is that primary classrooms, both multi-age and single-grade. foster and develop an holistic approach to learning. It sees the curriculum and instructional planning as the joint responsibility of the children, the teacher and the parents. There is no "one best way." according to this policy. Therefore, District #3 personnel vetoed the inclusion of sample floor plans or sample curriculum units, viewing them as inconsistent with their policy.

The handbook produced in this project is, therefore, sharply defined. It does not include discussions regarding advantages and disadvantages of multi-age pedagogy nor does it debate School District #3's multi-age policy. It assumes that multi-age classrooms are pedagogically sound just as single-grade classrooms are, but does not attempt to compare them.

Organization of the Project Description

Chapter 1 presents a brief introduction of the study including its purpose. background information. transferability. definition of terms. its design. its limitations and the organization of the project. Chapter 2 describes the design of the project. and includes the results of the surveys that were conducted. Chapter 3 reviews the research literature related to this study. It outlines the philosophy of multi-age education and presents various benefits which have been put forth to support multi-age education. Chapter 4 is the handbook which was developed for this project. It provides practical strategies that lend themselves to the implementation of the philosophy of multi-age education so that the benefits cited by the research are attained. Since it is designed for teacher use, its style and presentation differs from the first three chapters. The final version of the handbook will be contained in a binder and distributed by School District #3 to local multi-age teachers. Chapter 5 contains a brief summary and concluding comments

Criteria for Project Evaluation

This project has been developed in accordance with the guidelines laid down by Memorial University of Newfoundland. It is important to note that this work is a project as opposed to a thesis and, as such, the requirements for evaluation are different. One reason for this difference is that graduate students who choose to complete projects are required to complete additional course work. Memorial University of Newfoundland's Graduate Studies Project Guidelines (Appendix B) state that:

The purpose of a project is to provide a graduate student with an opportunity to translate theoretical knowledge into practice by:

1. recognizing and articulating an educational need to which current and relevant theoretical and pedagogical knowledge can be applied:

2. developing and justifying an alternative approach to address the educational need based on theoretical and pedagogical knowledge; and

3. creating a product that could be used to implement this alternative approach, (p. 1)

It goes on to state that, "The project report would consist of the product plus the articulated need, theoretical basis, justification of the approach used, and or complete description of the product... The average length of a project report would be sixty (60) pages ... ". (p. 1)

The development of the handbook in this project required the application of theory to a practical project. This process allowed me the opportunity to analyze, synthesize and reflect upon the theory and research findings presented in literature and documents addressing multi-age pedagogy as well as on my own personal experiences. It was limited, however, by the agreement made with School District #3 regarding the handbook they wished to have produced.

The project can be viewed as successful in that it satisfies the need within School District #3 for a supplementary handbook. The Program Specialist, K-4. Multi-age Continuous Progress, acknowledges in the Preface of the handbook that it meets with her approval.

Chapter 2

Project Design And Survey Results

The completion of this project entailed literature review and survey research as the principle type of research. The literature review provided an overview of multi-age education including its foundation. its development, and philosophy as well as its benefits. The information in the handbook is presented as a resource outlining research findings, implementation, and day-to-day practices for the use of teachers wishing to learn more about the multi-age approach to teaching and learning.

This project grew out of a need within School District #3 for a practical handbook for teachers interested in establishing a multi-age classroom. As part of the project, surveys were developed and conducted by this developer and another graduate student during the 1999-2000 school year. They were administered to principals, teachers and parents involved with multi-age education in four schools within the immediate Corner Brook area. The findings of the surveys were then used in the development of *A Multi*age User Guide: From Theory to Practice.

The Survey Sample

During the 1999-2000 school year, the surveys were sent to four schools offering multi-age education in the immediate Corner Brook area. These four were selected rather than all schools in District #3 since it was important to ensure that the surveys were completed by participants involved with authentic multi-age classrooms. The principal of each school and all teachers who were currently teaching in a multi-age classroom were requested to complete a survey. In addition, the teachers were asked to randomly choose three parents to complete the survey. The greatest response to the surveys came from the principals. Three out of four of the principals surveyed completed and returned their survey. Five of the eleven teachers surveyed completed and returned. Bince each teacher was asked to randomly select three parents to whom to give a survey, it is probable that only the five teachers who completed the survey themselves distributed the surveys to parents. The lack of response may be attributed to the timing of the surveys which were administered late in the soring of 2000.

Data Collection and Analysis

Completing the literature review and document analysis enabled me to further expand the knowledge of multi-age pedagogy which I had gained from my experience as a multi-age teacher. This enabled me to construct the surveys with another graduate student based Fox's evaluation and self-assessment tool.

Three different surveys were developed: one for principals which focused on procedures for initial set-up of multi-age programs; one for teachers which mainly focused on the changes that occur to teaching practices when teachers switch from teaching a single graded class to teaching a multi-age class; and one survey for parents which focused on the perspectives of parents whose children had already been a member of a multi-age class. They were then distributed to principals, teachers and parents involved in multi-age education in four schools in School District #3.

While the surveys for each group were different, each began in the same manner by asking the respondents to indicate by a check mark whether they perceived each item listed in Table 1 to be an advantage or a disadvantage of multi-age education. Space was also provided for written, open-ended comments concerning what they saw as additional advantages or disadvantages of multi-age education.

Table 1

Survey Items Concerning Multi-age Education

	Advantage	Disadvantage
Children of different ages and abilities learn together.		
Children stay with the same teacher for more than one year.		
Children are familiar with the routines of the classroom at the beginning of a new school year.		
Siblings are encouraged to learn together in the same classroom.		
Because grade level boundaries are blurred, children's learning is not confined to grade level expectations.		
In the second or third year of a multi-age classroom, children have opportunities to be leaders and mentors.		
Additional Advantages	Additional	Disadvantages

Survey Results

Survey results are presented separately here. Understandably, all results must be

considered in order to obtain a clear understanding of multi-age education.

The Principals' Responses

All three of the principals were very supportive of multi-age education. All viewed the characteristics of multi-age continuous classrooms which were listed on each of the surveys developed as being advantageous to student learning. One principal viewed it as advantageous that multi-age classes ensure more focus on curriculum outcomes than reliance on textbooks. Another principal stated as an additional advantage that the students in multi-age classes display a greater tolerance for differences and are more cooperative. There was only one disadvantage stated on the surveys received from the principals: that is, it is disadvantageous to students who leave the school before they complete the program, especially if the student has not been given the opportunity to be amongst the oldest in the class.

When questioned why their schools decided to implement multi-age classes, one principal responded that "multi-age classes have certain advantages and the element of choice should be available for parents." Another principal stated that the school decided to implement it simply because they liked the philosophy behind it. Two of the principals who responded also mentioned that multi-age classes help to "address the "numbers" crunch", but that they see a broader value in multi-age grouping. While the latter two principals did not offer any further explanation to their statements, it is possible that their statement refers to the practice of using multi-age onfigurations to address situations where small numbers force combined classes. These principals suggested that they value multi-age classes for the potential social and academic benefits and not only because it is a solution to problems of declining enrollment.

The Teachers' Responses

The five teachers who responded to the survey also indicated that, like the principals, they view the characteristics of multi-age classrooms as being beneficial to student learning. Two cited the additional advantage of already knowing about half of their students each September. Another listed an additional advantage as being the fact that teaching in a multi-age class requires teachers to be familiar with a broad range of outcomes, rather than just one grade level. The teachers who responded to the survey also indicated that since they had changed from being a single grade classroom teacher to a multi-age classroom teacher they continued to use most of their methods to the same degree or more often. None of the respondents suddenly began to employ completely new methods.

Teachers who responded to the survey gave the following suggestions for teachers who are considering teaching a multi-age class:

- talk with teachers, students and parents involved in multi-age education programs
- visit a multi-age class that is already in progress
- remember that the role of any teacher is to take each individual child from where they are to as far as they can go in all areas

The following are activities which teachers who responded to the survey found particularly successful in their classes:

- · creating the daily agenda with the students
- giving children responsibilities

- having a daily sharing time
- having a "Reading Chair" where one student per day sits to read to the class

The teachers surveyed also indicated that there had been a multi-age chat group which previously had met once a month. but currently there is no multi-age support group organized in the immediate Corner Brook area.

The Parents' Responses

The largest response was from parents. Unlike the principals and teachers surveyed, the fifteen parents were not unanimous in viewing the characteristics of multiage classrooms as being advantages. However, their overall support for the characteristics of multi-age classrooms was clear.

Fourteen of the parents surveyed viewed four of the characteristics of multi-age continuous progress classrooms listed on each of the surveys as advantages. The four characteristics are:

- children of different ages and abilities learn together.
- children stay with the same teacher for more than one year
- children are familiar with the routines of the classroom at the beginning of a new school year
- because grade level boundaries are blurred, children's learning is not confined to grade level expectations

Ten of the parents surveyed viewed the fact that siblings are encouraged to learn together in the same classroom as an advantage. All of the parents who responded viewed it as an advantage that in the second or third year of a multi-age classroom, children have the opportunities to be leaders and mentors.

The following are additional advantages described by some parent respondents:

- more time is taken with children who are not at their grade level
- relaxed atmosphere
- usually a smaller class

The following were cited as disadvantages by some parent respondents:

- the older children see some repetition in curriculum
- children become very attached to the teacher and, therefore, should only spend a maximum of two years with the same teacher
- individual desks are not used; children sitting at tables with five children per table cause problems with children not paying attention
- students in multi-age classes cannot go out for help: the teacher is expected to give the extra help and most of the time they do not have time to do it

The following reasons were cited by parents for their decision to put their child in a multi-age class:

- children knew the teacher
- social reasons
- there is small class size
- early introduction to concepts above expectations
- older children develop their leadership skills

- · older students can help the younger ones when needed
- the student had met with success in a multi-age class
- students learn at their own pace and can go ahead of their grade level in areas where they excel
- it is challenging for the children
- a relaxed atmosphere is observed in multi-age classrooms
- their child would have the same teacher for more than one year
- one parent had no choice when they relocated

Of the parents who responded to the survey, nine out of fifteen said that they would prefer to keep their child in a multi-age class: three out of fifteen said they would prefer not to keep their child in a multi-age class; and three out of fifteen were undecided.

The following are suggestions from parents for schools that are considering setting up a multi-age class:

- class size must be kept small
- teachers assigned to teach a multi-age class should be a supporter of multiaging
- parents need to have an orientation to multi-age education
- care needs to taken to ensure that the teacher assigned to teach the multiage class will remain in this position rather than often changing teachers
- · when class size is set, it should be kept; not added to
- children should not be randomly selected

- multi-age must be supported for the benefit of the students. not for teacher allocation
- teachers assigned to teach multi-age classes must have training in this area

Summary

The surveys provided valuable information for the creation of the handbook *A* Multi-age User Guide: From Theory to Practice which is presented in Section Four of this report. They supported the view that multi-age education has many advantages for students. The surveys also showed that there is support within the immediate Corner Brook area among the teachers, principals and parents who are involved in multi-age education and that they perceive the multi-age philosophy as providing many benefits to the development of their children. Particularly interesting were the responses from parents. When they were asked to provide suggestions for schools considering setting up multi-age classes, parents recognized that teachers assigned to teach multi-age classes should be supporters of multi-age and must have training in this area. These suggestions indicate great insight among parents. In fact, these two points are well documented in literature.

Chapter 3

Review of The Literature

The challenge of developing educational programs which provide maximum learning potential for students is on-going. A key component has been, and continues to be, related to the grouping of students. One such lesser known but significant approach to the grouping of students is the multi-age approach to teaching and learning.

The purpose of this paper is to present research findings regarding the multi-age approach to teaching and learning. This chapter will first define multi-age education for the purpose of this project. Second, this chapter will focus briefly on the history of placing students of various ages together. Third, the philosophy of multi-age education will be presented through reflection on three solutions proposed in 1968 by the Anglican School Board in St. John's. Newfoundland. These solutions were proposed in order to respond to problems experienced in their school board district at that time. Fourth, benefits of multi-age education will be presented.

The definition, philosophy and benefits of multi-age education presented in this review of the literature serve to provide the background necessary for the development of the handbook *A Multi-age User Guide: From Theory to Practice*. This background is of utmost importance since a firm grasp of the theory behind the multi-age approach is needed before it can be put into practice. Interestingly, the importance for teachers of having a good knowledge base of the multi-age philosophy was recognized by parents in the surveys. Therefore, the handbook, focuses on the actual set-up and structure of multiage classrooms along with activities practised in the multi-age setting. It also reflects the definition, philosophy and benefits of multi-age education discussed in this review of the literature.

Definition

Before discussing the multi-age approach to teaching and learning, it is important to first clarify the term "multi-age," The term multi-age is used interchangeably with such terms as non-graded, ungraded, vertical grouping, continuous progress, mixed-age, etc. However, as Katz (1992) points out "Although the distinctions between the grouping practices implied by the terms defined above may seem slight, they have significant implications for practice" (p. 2). Yet, it should be noted that "nongraded" is a term used by Goodlad and Anderson (1987) whose work has played a significant role in the evolution of multi-age education as it is known today. Even within education circles, multi-age is also sometimes confused with the terms combined-graded and multi-graded. In fact, multi-age is quite different. To see them as equal is to misunderstand the multiage approach itself. Although combined-graded classes and multi-graded classes both result in classrooms with more than one age level, an important distinction separates them from multi-age classrooms: Veenman (1995), a researcher at the University of Niimegen in the Netherlands, (as cited in Moen, n. d.) notes that in multi-grade classes students from two or more grades are taught by one teacher, solely out of administrative and economic necessities (p.1). Katz (1992) defines combined-graded classes as those which:

usually include the required curriculum for each of the two grades represented. although some activities may be conducted with children of both grades combined. This kind of grouping occurs frequently in small schools, and occasionally in larger ones when the number of children in different age cohorts fluctuates. The main goal of these kinds of classes appears to be to maximize personnel and space resources rather than to capitalize on the diversity of ability and experience in the groups with mixed ages. (p. 2)

Joan Gaustad (1997) defines multi-age education as follows:

Multiage education involves placing children of different ages. abilities, and emotional maturity: in the same classroom. Students are frequently regrouped for different learning activities rather than being consistently segregated by chronological age, and they often remain with the same teacher or teaching team for more than one year. (p. 1)

This definition is reflective of the definition of multi-age education as found in

School District #3's Multi-age Education Policy Handbook (draft):

Multi-age continuous progress education is a classroom organizational structure in which children of two or more age levels work together. In their everyday lives, children interact with people of all ages. Their lives are enriched by the many experiences they have and by the relationships they develop. Multi-age education is a natural and logical extension of children's home environments. Multi-age education is based on a belief that children will benefit from a learning environment that values diversity. In a classroom in which there is a wide range of ability. children's contributions to classroom life strengthen both their academic and social experiences. (p. 2)

History

Contrary to what many people would believe, the concept of a multi-age

approach to teaching and learning is not a new one. It is, in fact, a concept which has

enjoyed a long and varied history. According to Moen (n. d.)

The early Jews developed schools for boys from ages six to thirteen and taught them in the synagogues. In ancient Greece, young boys, age 7-18 were brought together to receive physical and mental training. In medieval trade guilds, students studied with their teachers until they were ready to be on their own. Some would finish their apprenticeship soon: others might take a longer time. Each was considered as good as the artisan who had taught him. In the monasteries of the 1500s, 'a sixteen year old and a six year old were likely to be sended side by side in the same class'
(Longstreet &Shane, 1993). Our earliest American schools were multiaged. They included all the children of the village, from ages 6 to 16. Even the rural school rooms of 25 to 50 years ago contained children of a wide variety of ages with just one teacher. (p. 1)

The idea of placing students of various ages together in the same classroom and focusing on the needs and abilities of the students as individuals has been seen as beneficial by various prominent educators throughout the history of education. Indeed, much has been written about this topic for the better part of two centuries, a point made by Charbonneau and Reider (1995): "As early as the middle of the eighteenth century there were educational philosophers, such as Rousseau and Pestalozzi...., who espoused the importance of a curriculum emphasizing the needs of the learner" (p. 4).

The Influence of John Dewey

John Dewey (1959) was another educational philosopher who recognized the importance of basing the curriculum on the specific needs of the learner: "The child's own instincts and powers furnish the material and give the starting point for all education" (p. 20). Charbonneau and Reider (1995) reported that "Dewey's philosophy was a major force in the progressive education movement" (p. 4). Saylor, Alexander, and Lewis (1981) (as cited in Charbonneau and Reider, 1995) summarize the following characteristics which are derived from Dewey's philosophy:

- 1. Children have the freedom to develop naturally.
- 2. Interest is the motive of all work.
- 3. The teacher is a guide, not a taskmaster.
- 4. There should be scientific study of pupil development.

- Greater attention should be paid to all that affects the child's physical development.
- There should be cooperation between school and home to meet the needs of child-life.
- The progressive school is a leader in educational movement (p. 241). (p. 4)

Anderson and Pavan (1993) use John Dewey's work in a discussion of the

negative effects of competition in the traditional classroom:

As early as 1900. John Dewey in *The School and Society* lamented the use of competitive measures of success in schools, which created an atmosphere within which 'for one child to help another in his task has become a school crime' (pp. 15. 16). 'Munual assistance,' he noted, 'instead of being the most natural form of co-operation and association, becomes a clandestime effort to relieve one's neighbor of his proper dutes.' By contrast, in schools where active work is going on. 'helping others', instead of being a form of charity which impoverishes the expinet. Is simply an aid in setting free the powers and furthering the impulse of the one helped.' Dewey's views are consistent with these of Kohn. who, in similar spirit. Laments the prevalence of schools in which there are winners and losers, and where there is emphasis on 'triumphing over others'. Messages sent to the home (report cards) focus you he dimension of success (or failure) rather than upon the personal progress and accomplishments that deserved to be noted and celebrate(. (p. 155)

As this reveals, both Kohn and Dewey endorse classrooms where children help each

other.

Local Influences

On a more local note, as far back as the 1960's educators in Newfoundland were looking for ways to improve the quality of education provided to primary and elementary students. In fact, at least one school board. The Anglican School Board in St. John's, felt that the graded system did not meet student needs: The need for the study of a more productive school organization has been prompted by the complaints of teachers and administrators. From time to time serious miggivings have been expressed about the ability of our present system to provide for the basic needs of all children under our care. (p. 2)

In 1968 this school board recognized that children learn at different rates and in different ways. This was not taken into consideration by the graded system, they contended:

The graded system, as we know it, was first instituted in North America in 1848 at the Quincy Grammar School in Boston. Ease of administration has resulted in its continuing for as long as it has. However, in the last decade people are beginning to question its merits. Educators are talking more of individual differences but so far we are doing very little about them. We expect all children to be ready for school at five years of age. and. 'if normal', progress through school at a set speed and behave identically academically. Certain topics arouse interest in some students but because of our present curriculum and examination requirements we must move on. The top students become bored and the bottom students become fustratared.(p. 2)

The findings from the Anglican School Board study (1968) stressed the

importance of focusing on the individual needs of each student at their particular level.

The case was made that the graded system does not serve all students well:

It must be obvious to all teachers, that, because of different intelligence and interest levels in the same grade, all children cannot progress at the same rate through all phases of the school curriculum. It must therefore follow that many children who are eager to learn when they enter school soon have their enthusiasm dampened because they cannot keep up within the class. These students soon are identified by the teacher as <u>slow</u> <u>learners</u> or <u>lazy</u>: they quickly fall by the wayside, are forced to repeat grades and become early drop-outs (p. 3)

It is interesting to note that in the same study. The Anglican School Board's

committee asked questions which are still being voiced around the province today by

teachers. For example, the committee reported that "At our second meeting we decided

to attack the problem by looking at the following question. 'What is wrong with our

present organizational plan'? Answers were then summarized as:

- 3. Limitations. due to formal examinations.
- 4. Repeating grades because of failure in one or two subjects
- 5. Text-book teaching all compelled to finish book.
- 6. Mediocrity is fostered.
- Child is under pressure to compete with others, rather than with himself.
- 8. All children are expected to progress at the same rate.
- 9. Children are led down the road to conformity." (p. 8)

These are observations that could be made in many schools today, forty years later.

The Philosophy of Multi-age Education

Three of the proposed solutions in the Anglican School Board study conducted in

1968 reflect the philosophy of multi-age education. These three are:

- Solution #1. That the present system of promotion and non-promotion be abandoned and children be allowed to progress at their own rate in all subject areas.
- Solution #2. That the progress of a child who is developing intellectually. emotionally, and socially at his own natural rate not be compared with that of any other member of his age-class. The rate of his development, however it may be expressed, should give cause for neither disgrace not distinction.
- Solution #5. That curriculum be so arranged as to allow teacher and student freedom to go beyond prescribed text book material to provide enrichment in areas which students wish to pursue. (p. 9)

These three solutions overlap and reflect three basic themes in the philosophy

behind multi-age education. Solution #1 is the theme of continuous progress for every

child. Solution #3 is about the importance of raising a child's self-esteem. Solution #5

calls for active learning which extends beyond the textbook. Each of these themes will be discussed and it will be shown that each is supported in the research literature.

Continuous Progress

The above stated Solution One reflects the philosophy of multi-age education. It is based on the premise that the limitations imposed by a graded structure will be eliminated. Buffie (1967) contends that the nongraded school "is organized so that the individual student may develop his academic and creative talents as rapidly or as slowly as his abilities permit" (p. 21).

It should be noted, however, that a multi-age classroom is not simply a classroom of mixed-age children. As Banks (1997) cautions, multi-age education requires more than simply placing different aged children together:

Just putting children in mixed-age classes, does not make a multi-age classroom. Multi-age education involves a belief in a philosophy that all children can learn, but they learn at different rates. Therefore, they should be placed in multi-age classrooms and allowed to make continuous progress, without fear of failure. Changes in organization, curriculum, instructional strategies, and assessment all need to be considered, in order to meet these developmental levels. (p. 1)

Anderson and Pavan (1993) point out that time is a key part of the equation, that it

is important to keep in mind that students must be permitted to learn at their own pace.

They quote McLaughlin, who in 1969, argued for more flexible use of time:

Not all students in grade one will master the first grade curriculum. However, if students are allowed three years to demonstrate the achievement expected at the end of third grade, many more students will be able to do so than if evaluated at the end of each grade. (Anderson & Pavin. 1993), p. 35)

Self-Esteem

Solution 3 proposed by the Anglican School Board Committee is very much a part of the philosophy of the nongraded school. from which has evolved the concept of multiage education. This solution is well supported by research. It refers to one of the most important tenets to remember when considering how best to educate students: the fact that students are individuals and, as such, will develop intellectually, emotionally and socially at their own individual rate. Noseworthy (1970) quotes D. M. Mclead who points out "Basic to the concepts of the nongraded school is the recognition that human beings are profoundly different from one another, so much so that these individual differences cannot be accommodated within the graded structure of school organization"" (p. 4). This focus on individual differences and their effects on learning is reiterated by Anderson and Pavan (1993) who note that "The true philosophy of nongradedness is the belief that individuals are unique and need different treatments to reach their maximum growth potential" (p. 43).

Since the multi-age approach takes into account the emotional as well as social aspects of learning. Goodlad and Anderson (1987) see this approach as being of added benefit to learning, especially since "Nongraded structure simply creates the setting in which instructional practices clearly reflecting modern theories of sound mental health and personality development may find a hospitable reception" (p. 206).

This fundamental tenet of multi-age education-that all children have very individualistic differences in terms of their social, emotional and intellectual development-is further supported by the research of Bruner (1966), another well-known educator who wrote "There is no unique sequence for all learners, and the optimum in any particular case will depend upon a number of factors, including past learning, stage of development, nature of the material, and individual differences" (p. 49).

Goodlad and Anderson (1987) cite from the work of Benjamin Bloom. In his Taxonomy, which promotes a hierarchy of reasoning. Bloom stresses the importance of success in the learning process. According to Bloom's work, students, especially in the initial grades, need to see themselves as successful learners. This is best accomplished when, as in the multi-age model, children are allowed to progress at their own levels.

The work of the pupils in these early years must be one of constant success. This will probably mean that great care must be taken in planning learning tasks which children can successfully complete. Failure of curriculum and instruction rather than as a failure of the children. It is likely that some children will need more time and assistance to complete appecific learning task than will others. However, the repeating of a grade or year of work at this level would seem to be an inappropriate procedure. In contrast, the ungraded school has much meri 1 this plan is accompanied by teaching methods and curriculum programs which encourage each child to move to his highest level of capacity and continually rewards him for his accomplishments. (Goodlad and Anderson. 1987, p. xxv)

The point being made is that students should be allowed to progress at their own rate and not to be pigeon holed in grades. This helps increase self-esteem since children meet with some success yet their curiosity can be sparked and develop into further learning experiences: "Success raises self-esteem, thereby increasing the willingness to work, which then raises the level of achievement. The tasks accomplished, however, must be challenging and perceived as valuable and not trivial to gain this sense of personal efficacy" (Anderson and Pavan, 1993, p. 36). Further to this. Anderson and Pavan found that there is a high correlation between raising self-esteem and increased academic performance. Especially for the early years, based on Bloom's work, they recommend that learning tasks be planned so that children will succeed. This also is a common theme in the work of Maria Montessori (as cited by Lillard, 1996):

Maria Montessori concentrated upon the goal of education, rather than its methods. She defined this goal as 'the development of a complete human being, oriented to the environment, and adapted to his or her time, place and culture. This adaptation involves the capacity to meet new situations and to have the intelligence and courage to transform them when change is needed. Today we might define this goal as the preparation of children to live successfully in *their* world, by which we mean the future, rather than to live primarily in ours, which is the present and the past. (Lillard. 1996, p. 3)

The evidence suggests that, in order for children to be successful in the future,

they need to experience success in school. They need to know that their efforts will pay dividends. If they experience this success, they will continue to achieve, even in the face of adversity. To this end, according to Barker (2000), in a multi-age classroom, test results and report card marks are replaced by performance-based assessment: "Children don't fail in multiage classrooms. They 'continuously progress,' and they participate in assessing their progress. They are made to feel that they are responsible for their learning and are always winners in the attempt" (p. 2).

Daniel and Terry (1995) sum up the value of multi-age education as a response to the individualistic nature of students by stating that "Multiage grouping, when thouchtfully planned, can allow children of various ability and age levels to work and learn in an environment that is intended to optimize (a term coined by Lilian Katz) their learning potential" (p. 1).

In 1987, the National Association for Education of Young Children (NAEYC) published Developmentally Appropriate Practice in Early Childhood Programs Serving Children From Birth Through Age 8 which dealt with two aspects of developmental appropriateness: age appropriateness and individual appropriateness. As Daniel and Terry (1995) explain, age appropriateness refers to the "universally predictable sequences of growth and change that occur in children during the first 9 years of life. These changes occur in all domains of development - physical. emotional. social, and intellectual" (p. 1). Individual appropriateness, on the other hand, "refers to the fact that each child is unique with a very individual pattern and timing of growth as well as an individual personality, learning style, and family background. Learning will occur as a result of interaction between the child's thoughts and experiences with materials, ideas, and people" (p. 2).

To meet the needs of every child in the classroom, both age appropriateness and individual appropriateness have to be given careful consideration. According to Daniel and Terry (1995):

Developmentally appropriate practice (DAP) means providing curriculum and instruction that address the physical, social, intellectual, enotional, and aesthetic needs of young learners and permits them to progress through an integrated curriculum at their own rate and pace. The Knowledgeable teacher in a developmentally appropriate program will honor the development of the whole child. These teachers understand that children learn through active involvement and play. Teachers who practice DAP understand the social nature of learning and the role of language in mediating thought, communication and learning, (p. 2)

Active Learning

The fifth solution proposed by the Anglican School Board called for the enrichment of the curriculum by both the teacher and the student in areas of interest. This is also very prominent in the multi-age approach to education.

It is certainly not realistic to try to fit everyone into the same mould. Not everyone will share the same interests. Some students will find certain topics of interest while others will not. This is a very important point and one which is often overlooked. Anderson and Pavan (1993) note that "The true philosophy of nongradedness is the belief that individuals are unique and need different treatments to reach their maximum growth potential" (p. 43).

It stands to reason that there is a positive correlation between the individual interests and experiences that a student possesses for a particular topic and that student's effort and learning. As such, these individual interests and experiences need to be taken into account. According to Anderson and Pavan (1993);

The better the match between an individual's learning dispositions and the learning experiences, the more likely the student will progress. Gordon (1998) states that educational programming based on characteristics such as social/economic status, sex and gender, ethnicity, culture: and language have been suscessful due to the variation within each designated group. Instead, more emphasis on individual differences in functioning such as interests. cognitive styles and rates, motivation, work habits previously developed skills and temperament all need to be considered within the environmental context. (p. 35)

Therefore, the teacher and the student need to go beyond the prescribed book

material and provide enrichment in accordance with the interests of the student. This

recommendation is supported by the research of Montessori (1967): "An interesting piece

of work. freely chosen, which has the virtue of inducing concentration rather than fatigue, adds to the child's energies and mental capacities, and lead him to self-mastery" (p. 207). In other words, all learners retain best that which interests them and is important to them. That which children are forced to learn without any regard for individual interests, will not be retained for long. Brain research supports this:

Modern technology shows us that our brains are physiologically changed in the process of interacting with our environment. As our brains develop, we can manipulate ever more abstract concepts, but their basis remains in our original sensorial impressions through their own activity. The adult cannot do this for them. Equally important, children cannot do this for themselves if they are forced to sit in a chair and only watch or listen to others. They must act for themselves. (Lilland. 1996, p. 20)

This action occurs when the interests of the students are met. According to Montessori. "The essential thing is for the task to arouse such an interest that it engages the child's whole personality" (p. 206). Thus, students need to be active participants in their own learning, a fundamental principle of the multi-age philosophy of education. This is also the conclusion of Gardner (1983) who defined intelligence as "to include not only the verbal (linguistic) and mathematical constructs, but also musical, spatial, bodilykinesthetic, interpersonal, and intrapersonal intelligences. These intelligences (which may be modified through experience) require more active performance than paper and pencil exercises for both learning and assessment" (Anderson and Pavan, 1993, pp. 35-36).

Benefits

The three themes examined above are characteristic of multi-age classes and are supported by prominent educators. Yet what does the research say about the multi-age education program? Is it beneficial? Goodlad and Anderson (1987) state that "There is simply no research that says a graded structure is desirable"(p. xxvii). There is, however, a great deal of research to support the conclusion that the overall multi-age program is indeed very beneficial. From this review of the literature, a number of benefits was identified. Each will be discussed.

Beneficial to All Students

One of the most important benefits which has come from the research is that a multi-age program is beneficial to all students, whether they be of low, medium, or higher ability. Goodlad and Anderson (1987) report that "The nongraded school provides for the continuous, unbroken, upward progression of all pupils, the slowest and the most able" (p. 219).

Positive Attitude

This upward progression is due in no small part to the positive atmosphere of cooperation and support that characterizes the multi-age classroom setting. Children enjoy being members of these classes. Kasten and Clark (1993) cite the findings of Schrankler (1976) and Milburn (1981) that students in multi-age classrooms had "more positive attitudes towards school than students in more traditional classes" (p. 22). Certainly, the value of a positive attitude toward school cannot be underestimated.

Inclusive Classroom

Part of this positive attitude stems from the atmosphere of a multi-age classroom which is inclusive rather than being exclusive as is often the case in graded classrooms: Some research suggests that children experience greater isolation in sameage than in multiage classrooms (Adams 1953; Zerby 1961). Other research findings suggest that when classrooms are made up of children who are highly similar to one another, there are more social 'stars' in the classroom, but also more children who are rejected and/or neglected by their peers (Rosenholtz and Simpson 1944). Thus a few popular children may experience more friendship bids than they can reciprocate. while other children are actively rejected or left out of the loop allogether. McClellan (1991) compared multiage classrooms composed of preschool children and found similar tendencies. (McClellan, 1994, p. 152)

Therefore, in the multi-age classroom, students are less likely to be isolated.

Rather, they are more likely to feel comfortable and are more likely to take part in the

classroom activities and attain success.

Cooperative Learning Environment

Compared to the graded system, the nongraded system has been shown to yield better results. According to Charbonneau and Reider (1995), "The extensive research on cooperative, competitive, and individualistic approaches to learning indicate that cooperative learning experiences promote overall higher achievement than the other two approaches. These results hold true across age, subject, and task content" (p. 15). The authors also add that "The discussion process, inherent in cooperative models, promotes self-discovery and the development of higher-level cognitive strategies for task analysis. Opportunities for sharing ideas, problems, and other solutions help children to understand academic tasks as well as interpersonal issues from multiple perspectives" (p. 15).

Charbonneau and Reider (1995) go on to say that:

The very nature of cooperative learning requires that children work together in groups. It is through these experiences that children are motivated to develop a sense of responsibility to and for others and to the attainment of the group's goals. Children in these groups tend to be more supportive of their peers, providing not only feedback and encouragement, but help in the creation of new ideas for their projects and tasks. (p. 15)

This cooperation and sharing of ideas which is so much a part of the multi-age

philosophy has. therefore, the added benefit of helping students develop a sense of

responsibility, mutual respect and support. Because of the cooperative nature of multi-

age classrooms, students are exposed to the ideas, thoughts and feelings of others. This

has important ramifications not only for the social development, but also for the cognitive

development of the student:

There is evidence to suggest that cognition in higher level mammals, including humans, may have evolved to a significant extent as an evolutionary adaptation to social complexity (Humphrey 1976). Further, there is evidence that the growing child's social interaction is important in the development of his or her cognitive abilities (Tizard 1986). Social cognition may, in other words, lay the foundation for cognition in general within both the development of the individual person and the genetic heritage of the species (Chance & Mead 1953: Humphrey 1976; Jolly 1966; Tizard 1986). If this is the case, we might look at mixed-age grouping as providing the child with a rich and complex social environment that contributes to greater social facility, as well as to greater cognitive facility.

Pinget (1977) and, in a more developed form, Vygotsky (1978) have provided a context for understanding cognitive development initimately linked to the brain's active construction of knowledge within a social context. Recent findings in neuropsychology on brain development and learning in childhood (Hteunchcher 1990) confirm an organic basis for many of the theories put forth by Piaget and Vygotsky, as well as the educational approaches that have developed in response to these theories. Several central concepts within Piagetian and Vygotskian thought relate to the multiage grouping of children. (McClellan, 1994, pp. 154 - 155)

Different Roles and Relationships

The social context is further enhanced in the multi-age classroom setting because

the children are able to experience different roles and relationships with others which

lends itself to the cognitive development of the students. Anderson and Pavan (1993)

note the following:

When elementary children go through two or more cycles of multi-aged classes on their way to secondary school, they have recurring opportunities to be for a while at the 'bottom' (youngest cohort), for a while in the 'middle', and for a while at the 'top' (oldest cohort) and thereby to have different kinds of relationships with children older than, the same age as, and younger than themselves. (p. 101)

The intrinsic value of collaboration among students and the building of

relationships instead of a focus on competition is not lost on those in the business world.

Anderson and Pavan (1993) explain that:

Kohn's observations are consistent with a growing view, even in the presumably feroious world of business, that competition and collaboration need to be placed in better perspective. No less industrial guru than W. Edwards Deming, the American largely responsible for the revolution in Japanese management practices, has taken a strong position in favor of reducing competitive strategies in education. Schools, he says, should abolish such approaches as traditional grading and merit pay. He states his greatest concern is that 'there should be joy in learning' (AASA. 1991, p. 1). (p. 156)

Positive Effects on Older Children

Another benefit of multi-age education is the very positive effects on older children. A common misconception about multi-age among parents is that older children will not learn as much and will not be challenged. Research has shown these fears to be unfounded. These older children are not disadvantaged because they are the oldest. To the contrary, there is evidence to show that they do as well as or better than their graded counterparts.

People sometimes fear that if a child of five gives lessons, this will hold him back in his own progress. But, in the first place, he does not teach all the time and his freedom is respected. Secondly, teaching helps him to understand what he knows even better than before. He has to analyze and rearrange his little store of knowledge before he can pass it on. So his sacrifice does not go unrewarded. (Montesson: 1967, p. 227)

Therefore, older children benefit from a multi-age classroom environment through

the positive experience of mentoring younger classmates. Tutoring brings with it, among

other benefits, the opportunity to better understand concepts. This view is shared by other

researchers as is evidenced below:

As teachers have often noted, in the process of teaching one also consolidates and deepens one's own understanding. Likewise, children who tutor another child have been found to increase the depth and organization of their own knowledge (Bargh& Shul 1980). Kaze et al. (1990) suggest that a similar phonomenon occurs as older children help instruct younger children in the social conventions of community life. (McCiellan, 1994, p. 159)

This has been shown to be true for high school students as well as those at the

primary level. Mattern and Yates (1995) cite one study done in the 1960's which reveals

that "underachieving high school students who acted as reading tutors for younger

students improved their reading scores by an equivalent of two years in just six months'

time (Educational Leadership, November 1994 ed., p.58)" (p. 1).

Not only do the tutors benefit from the act of tutoring by having a better

understanding of the concepts they are teaching other students, but they also learn

positive leadership skills. This was noted by Stright and French (1988) as cited by

McClellan (1994):

Stright and French (1988) observed the leadership behavior of mixed-age groups of children seven to eleven years old who were given the task of accurately ordering sets of pictures. Older children in the mixed-age groups demonstrated sophisticated leadership capacities by soliciting individual and group preferences and organizing the statements and behaviors of the younger children. The leadership of the older children was skillfally facilitative rather than crudely dominating or bullying. Others have reported similar findings (Graziano, French, Brownell, & Hartup 1976; French, Waas, Stright, and Baker 1986) (p. 153)

Student tutors as well as tutees in multi-age classrooms also come away from the

experience with an improved self-image because the chance of being embarrassed is

lessened greatly. They see themselves as being 'smart' when they are tutoring younger

students and those being tutored are spared the embarrassment of being perceived as

'slow' by their classmates.

In most studies where benefits were researched, both the tutee and the tutor improved their academic achievement, and the tutor's level of selfesteem rose (see also their Harvard Education Letter, March 1989 and Cohen, Kulik, and Kulik, 1982). Several studies noted that students experiencing academic problems are able to deal with lower-level materials without embarrassment when they have the 'excuse' of tutoring somene younger. Peer tutoring may cause some discomfort if it makes it more evident that some students are experiencing great difficulty and their tutors are not. The problem is removed in a multiage classroom, where different ages work together on a regular basis. The at of tutoring or teaching helps a child to better understand the social skills needed by the learner. (Anderson and Pavan. 1993, p. 13)

Positive Effects on Gifted Children

An additional benefit of multi-age education is the very positive effects on gifted

children. Research has shown very favorably that gifted children are not held back

because they are part of a multi-age classroom.

Comparisons of gifted students reported by Slavin (1991) found higher test scores for the gifted students in the cooperative learning situation for all reading and math subtests exceed language metchanics. Process writing was the instructional strategy in the cooperative learning school which doesn't stress mechanics out of context. Slavin concludes that skills grouping within heterogeneous classes may be used to differentiate instruction and that enrichment benefits all students. The research does not support ability grouping or non-usage of cooperative learning as beneficial to higher achievers or the gifted. (Anderson and Pavan. 1993, pp. 41–2)

In reality, studies have shown that all students are able to benefit from being

members of a multi-age classroom. This is so because the students are learning together.

They are working cooperatively, not competitively, which makes all the difference. The

gifted and older students benefit from tutoring and enrichment and, on the other end of

the spectrum, the students of lower ability benefit from being tutored, working

cooperatively, and from having more time to meet the objectives of the curriculum.

The research evidence on these points is very strong: when children of all ability (or achievement) levels learn collaboratively, not only do those of lower and medium ability benefit substantially, but so do those of higher ability (including the gifted). We are aware of no research in which gifted children have been shown to suffer any disadvantage whatsoever: and so on the other hand there is an abundant evidence to support the notion that the advantages are many. Kulik (1987) has made some claims for the gifted students that it is more beneficial for them to be in separate classes, but Slavin (1991) has disputed these claims. (Anderson and Pavan. 1993, p. 100)

Seamless Retention or Acceleration

Another positive aspect of multi-age education deals with the more seamless

retention or acceleration of students. Because there are different ages and grade levels

represented in the classroom, the divisions between each grade become blurred, such that

if retention or acceleration were necessary, it would be less obvious to the students.

There is yet another "plus" in multi-age groupings that could benefit at least a few pupils. Although the research evidence against "retaining" children is overwhelming, there may still be rare cases where a student might in fact benefit from remaining in the elementary school setting for an "extra" year. Worth noting is that when the environment is non-graded an "extra" year. and multi-aged, remaining in the three-year unit for a fourth year might actually go relatively unnoticed by either the "retained" child or his/her classmates, since everyone's focus will be on continuous progress and academic success, rather than upon who passed, and who failed. In any case, when children are in a nongraded primary rather than a graded classroom, they are less likely to need to remain an extra year. The same argument would apply in those relatively rare cases where it makes sense to "accelerate" a pupil. Spending only two or two and one-half years in one unit before moving (McLoughlin, 1970). (Anderson and Pavan, 1993, p. 101)

Better Prepared for Junior High School

Studies have shown that students who come from multi-age elementary

classrooms also face less difficulty making the adjustment to a junior high environment as

compared to students coming from graded classrooms:

Data from a number of multi-age team teaching projects over the years including the Lexington experience, confirm that the former elementary school pupils adjust very easily and quickly not only to the social environment but to the routines and expectations that characterize a junior high or middle school operation. By contrast, pupils emerging from a selfcontained single-grade classroom often face a rather awesome challenge. (Anderson and Pavan, 1993), p. 101)

Individualism Embraced

A final benefit of multi-age education is that a multi-age classroom is a multi-

dimensional environment in which individualism is not suppressed, but is embraced.

Students in this environment are permitted the freedom to explore their interests, share

their thoughts and experiences, collaborate with one other and to progress at their own

individual rate.

Bob Steere (1972), who compared nongraded and graded secondary schools in his doctoral dissertation. used a similar approach to Pavan's and reported on twelve studies which he concluded 'clearly indicate(s) that a nongraded school organization has the potential for breaking the shackles which wantonly bind children of the same chronological age and force a lockstep movement of youth through a rigid curriculum'. (Goodlad and Anderson, 1987, pp. xxi-xxii)

McClellan (1994) puts into clear perspective the importance of diversity in education in

comparing education to a child's diet:

No one would argue the importance of protein in the child's diet. And yet few parents willingly feed their children a one-dimensional diet composed exclusively of meat. for example. A variety in the nutrients is critical to the health and survival of the physical organism. The research reviewed here suggests that a multidimensional social, emotional, and cognitive environment is no less critical to children's social and intellectual health. Multiage grouping is a key strategy for ensuring that children receive a full range of social and cognitive experience. (p. 160)

The effectiveness of multi-age education is evident in the findings of the above

mentioned researchers. Its effectiveness is also indicated by the fact that it is being embraced more frequently as a favorable alternative to the graded system: "Three states have already conducted extensive research of nongradedness and as a result have mandated that the primary schools become multiaged. Kentucky. Mississippi and Oregon have mandated multiage groupings at the primary level (Gutloff, 1995). Several other states are exploring the idea" (Moen. n. d., p. 2).

The decision to mandate multi-age primary schools in Kentucky grew out of a system of education which was seen as failing to meet the needs of students. After much research, the Department of Education of Kentucky issued the following primary school position statement:

An appropriate primary progress for all children recognizes that children grow and develop as a 'whole' not one dimension at a time or at the same rate in each dimension. Thus, instructional practices should address social, emotional, physical, aesthetic, as well as cognitive needs. The primary program flows naturally from preschool programs and exhibits developmentally appropriate educational practices. These practices allow children to experience success while progressing according to unique learning needs and also enables them to move toward attainment of the educational goals and capacities of the Kentucky Education Reform Act in an environment which fosters a love of learning. (Steffy. 1993) (as cited in Moen. n. d., p. 2)

From their research, the Kentucky Education Board decided that the needs of all students would be best met through a multi-age program of education. A study by the University of Louisville's Center for Gifted Students validated this view: "Their study found that 20% of the students in the Kentucky classrooms significantly outscored the out-of-state students on the standardized tests in four areas: word identification, reading comprehension, mathematical calculation, and mathematical problem-solving (Viadero, 1996)" (Moen, n. d., p. 2).

Conclusion

As is evident from this review of the literature, fundamental to a multi-age philosophy of education are the three main themes of continuous progress, self-esteem, and active learning. More specifically:

- <u>Continuous progress</u> eliminates graded boundaries and permits students to learn at their own pace. Children do not fail in multi-age classrooms: they continuously progress.
- <u>Self-esteem</u> is fostered as students develop intellectually, emotionally, and socially at their own individual rate. Teaching needs to reflect these individual differences in student in order to maximize learning. Experiencing success in learning fosters interest and confidence which

promotes further learning. Success in school translates to success in the future.

 <u>Active learning</u> results when the curriculum is enriched by being based upon the interests of the teacher and the students. A student's effort and learning is positively correlated to his or her interest and experience. Students learn what interests them and what is important to them. They need to be active participants in their learning and not simply passive recipients of information.

This philosophy of education has been shown to have far reaching effects not only on the intellectual development of all students, whether they be of low, medium or high ability, but also on their social development. Students in multi-age classes have more positive attitudes towards school: they exhibit a greater sense of responsibility: they learn to work collaboratively and to interact with others of varying ages: they learn leadership skills and the value of being supportive to others. Students in a multi-age classroom are viewed as individuals with different abilities and interests. These individual differences are not suppressed by forcing the students to fit a mould. Rather, in a multi-age classroom, these differences are welcomed. Lastly, in a multi-age classroom, students are given time to attain success and meet the objectives of the curriculum. Certainly, these are all very positive attributes that clearly demonstrate the value of multi-age education.

The statistics support these findings:

Research studies published between 1968 and 1990 most frequently favored nongradedness on standardized measures of academic achievement and mental health. The results on academic achievement demonstrate that 58% of the studies have nongraded students performing better: 33%, the same: and only 9% worse than graded students. As to the mental health and school attitudes. 52% of the studies indicate nongraded schools as better. 43% similar, and only 5% worse than graded schools. (Anderson and Pavan. 1993), p. 53)

The final word on the value of the multi-age philosophy of education comes from Pratt (1986), who states that "The evidence on multiage grouping appears to confirm the basic principle that diversity enriches and uniformity impoverishes" (p. 112). In making that statement, Pratt did not mean to infer that single-graded classrooms lack diversity. The point being made is that with a wider span of age groups, the potential for greater diversity is enhanced. Pent views this as an advantage.

Based upon the analysis and research findings of Pratt and many other researchers and educators, it is clear that there is overwhelming evidence to support the view that multi-ase nhilosonhy is indeed a viable anormach.

Chapter 4

The Project Handbook

This chapter contains, in its entirety. A Multi-age User Guide: From Theory to Practice, the handbook which is to be presented to School District #3. The handbook differs in presentation from this report because the aim is to make the handbook more appealing for its readers.

A Multi-age User Guide: From Theory to Practice

A Handbook for Teachers in Multi-age Classrooms in School District #3, Corner Brook-Deer Lake-St. Barbe



Developed by

K. Marie Hatcher

Preface

Some schools in School District #3 have been implementing multi-age education since 1989 when these schools were part of the now defunct Western Integrated School Board. Implementation of multi-age education continuous progress programs has continued to grow in District #3 since its inception in 1997. District Office has been steadily accumulating resources related to multi-age education, yet there has existed a need for a document such as *A Multi-age User Guide: From Theory to Practice* which presents a summary of the philosophy of multi-age education and an overview of what encompasses the initial set-up of a multi-age classroom. This handbook is a wonderful starting point for teachers initially implementing a multi-age class.

It is practical in that it includes concrete examples and stories from authentic multi-age classrooms. It is an excellent resource from which to draw as teachers endeavor to set up and establish routines for their own multi-age classrooms. The developer, however, has not included specific samples of curriculum units or floor plans because School District #3 personnel did not want a document which would result in teachers using the samples exactly as they are written. Instead, the District Office wanted a document which, as this handbook does, presents a framework upon which teachers may draw as they become familiar with and confident using a method of teaching which fosters collaborative working relationships between teachers and students. I am pleased to endorse the use of this handbook in School District #3.

> Renee Sherstobetoff Program Specialist, School District #3 September 2001

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A firm grasp of the theory behind the multi-age approach is needed before it can be put into practice.

The purpose of A Multi-age User Guide: From Theory to Practice is to provide a reference for teachers of multi-age classrooms. While it may prove to be particularly useful for teachers who are beginning to teach in a multi-age setting, it should also prove helpful to all multi-age teachers. Section One of the handbook reflects the philosophy of multi-age education and its benefits. This background is of utmost importance since a firm grasp of the theory behind the multi-age approach is needed before it can be put into practice. This is a view which is supported by research and recognized by parents of students in multi-age classes who were surveyed to obtain information for the development of this handbook. The purpose of this handbook is not to debate the merit of multi-age education compared to single-graded classes, but rather

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to present information about multi-age continuous progress programming which would help with implementing it as an alternative to a graded structure. Section Two presents guidelines for establishing the classroom environment. Section Three addresses curriculum planning. Section Four presents the views of local teachers and parents regarding multi-age education. While composing this handbook, the developer remained cognizant of the practices and policies which are being developed by School District #3

In developing A Multi-age User Guide: From Theory to Practice, existing research literature on multi-age groupings was first examined. Surveys were then developed and conducted with another graduate student. The surveys were sent to teachers of multiage classrooms, principals of schools with multi-age classes and parents of students in multi-age classes in the immediate Corner Brook area during the 1999-2000 school year.

Multi-age education is defined in School District

#3's Multi-age Education Policy Handbook (draft) as

follows:



Multi-age continuous progress education is a classroom organizational structure in which children of two or more one levels work together. In their everyday lives. children interact with people of all ages. Their lives are enriched by the many experiences they have and by the relationships they develop. Multi-age education is a natural and logical extension of children's home environments. Multiage education is based on a belief that children will benefit from a learning environment that values diversity. In a classroom in which there is a wide range of ability children's contributions to classroom life strengthen both their academic and social experiences. (p. 2)

Any teacher seeking information further to that

found in this handbook may refer to the following list of

INTRODUCTION

books which are referenced herein or to District #3's Multi-age Education Policy Handbook (draft) for a comprehensive list of websites, books, and other

related resources.

000	Must Reads
	The following books present accounts of significant personal expenences of multi-age teachers:
1	<u>Creating Non-graded K-3 Classrooms: Teachers' Stories and Lessons Learned</u> Hovda, R. A., Kyle, D. W., & McIntyre, E. (Eds.). (1996). Thousand Ooks, California: Corwin Press, Inc.
2.	<u>A Common Sense Guide to Multi-age Practices Primary Level</u> , Grant, J., & Johnson, B. (1995). Columbus, Ohio: Teachers' Publishing Group.
3	<u>Choosing to Learn: Ownership and Responsibility in a Primary</u> <u>Multiage Classroom</u> , Chase, P., & Doan, J. (1996). Portsmouth, NH: Heinemann.
4	The Multi-age Classroom: A Family of Learners. Kasten, W.C., & Clarke, B. K. (1993). Katonah, New York: Richard C. Owen Publishers Inc.
5	<u>A Multiage Classroom: Choice and Possibility</u> Miletta, M. M. (1996) Portsmouth, NH: Heinemann.
6	Building Connections: Multi-age and More, Politano, C., & Davies A. (1994). Winnipeg, Manitoba: Peguis Publishers Limited.
7.	Multiage Classrooms by Design: Beyond the One-Room School Daniel, T. C., & Terry, K. W. (1995). Thousand Oaks, California: Convin Press, Inc.



Underlying Principles and Beliefs of Multi-age Education
Contrary to what many people would believe, the concept of a multi-age approach to teaching and learning is not a new one. It is, in fact, a concept which has enjoyed a long and varied history. According to Moen (n.

d.):



The early Jews developed schools for boys from ages six to thirteen and taught them in the synagogues. In ancient Greece. young boys, age 7-18 were brought together to receive physical and mental training. In medieval trade guilds. students studied with their teachers until they were ready to be on their own Some would finish their apprenticeship soon; others might take a longer time. Each was considered as good as the artisan who had taught him. In the monasteries of the 1500s, 'a sixteen year old and a six year old were likely to be seated side by side in the same class' (Longstreet & Shane, 1993). Our earliest American schools were multiaged. They included all the children of the village, from ages 6 to 16. Even the rural school rooms of 25 to 50 years ago contained children of a wide variety of ages with just one teacher. (p. 1)

SECTION ONE: UNDERLYING PRINCIPLES AND BELIEFS

Multi-age Education

Requires:

☆ belief in philosophy that all

children can learn

S acceptance that

children learn at different rates

changes in

organization.

strategies and

assessment to meet the students' individual needs

curriculum,

Continuous Progress

It is worth noting, however, that a multi-age classroom is not simply a classroom of mixed-age children. As Banks (1997) cautions, multi-age education requires more than simply placing different aged children together:

Just putting children in mixed-age classes, does not make a multi-age classroom. Multi-age education involves a belief in a philosophy that all children can learn, but they learn at different rates. Therefore, they should be placed in multi-age classrooms and allowed to make continuous progress, without fear of failure...Changes in organization, curriculum, instructional strategies, and assessment all need to be considered, in order to meet these developmental levels. (p. 1)

Therefore, in a multi-age classroom, students are

permitted to learn at their own pace. Inherent in the philosophy of multi-age education is the belief that students are individuals, and as such, will develop intellectually, emotionally and socially at their own individual rate. This is the view held by Anderson and Pavan (1993) who note that "The true philosophy of nongradedness is the belief that individuals are unique and need different treatments to reach their maximum arowth potential" (p. 43).

...individuals are unique and need different to reach their maximum growth potential. Anderson & Pavan This fundamental tenet of multi-age education-that all children have very individualistic differences in terms of their social, emotional and intellectual development-is further supported by the research of Bruner (1966), another well-known educator who wrote: "There is no unique sequence for all learners, and the optimum in any particular case will depend upon a number of factors, including past learning, stage of development, nature of the material, and individual differences" (p. 49).

Goodlad and Anderson (1987) also see the multiage approach as being of added benefit to learning:

Nongraded structure simply creates the setting in which instructional practices clearly reflecting modern theories of sound mental health and personality development may find a hospitable reception. Nongraded structure also creates the setting in which each child may progress at his individual rate of speed and in his unique way. The authors equate high educational standards with children's progressing in the manner best suited to their attainments and potentialities. True standards arise from within the learning process; they are not found outside of it. (p. 206, rev. ed.)





Also inherent in the philosophy of multi-age education is the belief that each and every child is capable of achieving relative to his or her ability. This is to say a belief in one's own abilities is emphasized. It is at the core of reaching one's maximum potential. Children need to experience success in the classroom in order to be successful in life outside of the school. Barker (2000) contends that "Children don't fail in multiage classrooms. They 'continuously progress,' and they participate in assessing their progress. They are made to feel that they are responsible for their learning and are always winners in the attempt" (p. 2).

Active Learning



The philosophy behind multi-age education creates classrooms conducive to the development of self-motivated free thinkers. Children have to be actively involved in the learning process. As recognized by Chase and Doan (1996), "Children learn when they want to learn" (p. 1). They have to feel ownership and a sense of control of their learning. Then and only then will they enjoy learning and challenge themselves to achieving even higher goals. Chase and Doan further contend that students need this ownership and control of their learning as children in order to become independent thinkers as

adults:



Creating autonomous individuals must become the goal of educators and families. The world needs people who can think for themselves. We need people who do not blindly follow others. Members of a democracy must be able to think for themselves in order to govern themselves. When only one person in a classroom has the power to effect decisions, the students are being prepared to accept that others will make all decisions for them. When all the members of a classroom join together in making decisions, these members wirks (p.9)

Multi-age teachers should strive to have their

classrooms encourage such a development of autonomy.



Benefits

Goodlad and Anderson (1987) believe that there are many benefits to multi-age education and state that: "There is simply no research that says a graded structure is desirable"(p. xxvii), but there is a great deal of research to support the conclusion that the overall multi-age program is indeed very beneficial.

Beneficial to All Students

the slowest and the most able" (p. 219).

"The nongraded school provides for the continuous, unbroken, upward progression of all pupils, the slowest and the most able."

> Goodlad & Anderson

One of the most important benefits which has come from the research is that a multi-age program is beneficial to all students, whether they be of low, medium, or higher ability. Goodlad and Anderson (1987) report that "The nongraded school provides for the continuous, unbroken, upward progression of all pupils,

Positive Attitude

positive attitude stems from an atmosphere which is "inclusive" rather than exclusive

his upward progression is due in no small part to the positive atmosphere of cooperation and support that characterize the multi-age classroom setting. Kasten and Clark (1993) cite the findings of Schrankler (1976) and Milburn (1981) that students in multi-age classrooms had "more positive attitudes towards school than students in more traditional classes" (p. 22). Certainly, the value of a positive attitude toward school cannot be underestimated.

Inclusive Classroom

Part of this positive attitude stems from the atmosphere of a multi-age classroom which is inclusive rather than being exclusive as is often the case in

araded classrooms.

Some research suggests that children experience greater isolation in same-age

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than in multiage classrooms (Adams 1953: Zerby 1961). Other research findings suggest that when classrooms are made up of children who are highly similar to one another there are more social 'stars' in the classroom but also more children who are rejected and/or neplected by their peers (Rosenholtz and Simpson 1984) Thus a few popular children may experience more friendship bids than they can reciprocate while other children are actively rejected or left out of the loop altogether. McClellan (1991) compared multiage classrooms composed of preschool children and found similar tendencies (McClellon 1994 p 153)

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Therefore, in multi-age classrooms, students are

less likely to be isolated and more likely to feel comfortable and to collaborate with others in the classroom activities.



Cooperative Learning Environment

This atmosphere of collaboration which is so much a part of the multi-age philosophy has the added benefit of helping students develop a sense of responsibility, mutual respect and support. Because of the cooperative nature of multi-age classrooms, students are exposed to the ideas, thoughts and feelings of others. This has important ramifications not only for the social development, but for the cognitive

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development of the student as well:



There is evidence to suggest that cognition in higher level mammals, including humans, may have evolved to a significant extent as an evolutionary adaptation to social complexity (Humphrey 1976), Further, there is evidence that the growing child's social interaction is important in the development of his or her cognitive abilities (Tizard 1986). Social cognition may, in other words, lay the foundation for cognition in general within both the development of the individual person and the genetic heritage of the species (Chance & Mead 1953; Humphrey 1976; Jolly 1966: Tizard 1986) If this is the case we might look at mixed-age grouping as providing the child with a rich and complex social environment that contributes to greater social facility, as well as to greater cognitive facility.

Piaget (1977) and, in a more developed form, Vygotsky (1978) have provided a context for understanding cognitive development as being intimately linked to the brain's active construction of knowledge within a social context. Recent findings in neuropsychology on brain development and learning in childhood(Huttenlacher 1990) confirm an organic basis for many of the theories put forth by Piaget and Vygotsky, as well as the educational approaches that have developed in response to these theories. Several central concepts within Piagetian and Vygotskian thought relate to the multiage grouping of children. (McClellan, 1994, pp. 154-155)



The social context is further enhanced in the multi-age classroom setting because the children are able to experience different roles and relationships with others which lends itself to the cognitive development of the students. Anderson and Pavan

Different Roles and Relationships

(1993) note that:

When elementary children go through two or more cycles of multi-aged classes on their way to secondary school, they have recurring opportunities to be for a while at the 'bottom' (voungest cohort), for a while in the 'middle' and for a while at the 'ton' (oldest cohort) and thereby to have different kinds of relationships with children older than, the same age as, and younger than themselves. (p. 101)

Positive Effects on Older Children



Multi-age classrooms remove the discomfort of some students experiencing more difficulty than others since varving levels of knowledge are expected from the start in all areas

Another benefit of multi-age education is the very positive effects on older children. A common misconception about multi-age education held by parents is that older children will not learn as much and will not be challenged. Research has shown these fears to be unfounded. These older children are not disadvantaged because they are the oldest. To the contrary, there is evidence to show that they do as well as or better than

their araded counterparts.

People sometimes fear that if a child of five gives lessons, this will hold him back in his own progress. But, in the first place, he does not teach all the time and his Positive experience of mentoring younger children

 Opportunity to better understand concepts freedom is respected. Secondly, teaching helps him to understand what he knows even better than before. He has to analyze and rearrange his little store of knowledge before he can pass it on. So his sacrifice does not go unrewarded. (Montessori, 1967, p. 227)

Therefore, older children benefit from a multi-

age classroom environment through the positive experience of mentoring younger classmates. Tutoring brings with it, among other benefits, the opportunity to better understand concepts. This view is shared by





As teachers have often noted, in the process of teaching one also consolidates and deepens one's own understanding. Likewise, children who tutor another child have been found to increase the depth and organization of their own knowledge (Barghá Shul 1980). Katz et al. (1990) suggest that a similar phenomenon occurs as older children help instruct younger children in the social conventions of community life. (McClellan 1994, p. 159)

Similarly, a child amongst the oldest in the class

having difficulty academically can be boosted by

explaining a routine to a younger child. Student tutors as well as tutees in multi-age classrooms experience improved self-image because the chance of being embarrassed is lessened greatly. They see themselves as being 'smart' when they are tutoring younger students and those being tutored are spared the embarrassment of being perceived as 'slow' by their classmetes.



In most studies where benefits were researched, both the tutee and the tutor improved their academic achievement, and the tutor's level of self-esteem rose (see also their Harvard Education Letter, March 1989 and Cohen, Kulik, and Kulik, 1982).

Several studies noted that students experiencing academic problems are able to deal with lower-level materials without embarrassment when they have the 'excuse' of tutoring someone younger. Peer tutoring may cause some discomfort if it makes it more evident that some students are experiencing great difficulty and their tutors are not. The problem is removed in a multiage classroom, where different ages work together on a regular basis. The act of tutoring or teaching helps a child to better understand the social skills needed by the learner. (Anderson and Pavan, 1993) p. 133)

Positive Effects on Gifted Children





by being members of a multi-age classroom. As

Anderson and Pavan (1993) point out:



The research evidence on these points is very strong: when children of all ability (or achievement) levels learn collaboratively not only do those of lower and medium ability benefit substantially, but so do those of higher ability (including the gifted). We are aware of no research in which gifted children have been shown to suffer any disadvantage whatsoever; and so on the other hand there is an abundant evidence to support the notion that the advantages are many. Kulik (1987) has made some claims for the gifted students that it is more beneficial for them to be in separate classes, but Slavin (1991) has disputed these claims. (p. 100)

Seamless Retention or Acceleration Another positive aspect of multi-age education deals with the more seamless retention or acceleration of students. Because there are different ages and grade levels represented in the classroom, the divisions between each grade become blurred such that if retention or acceleration were necessary, it would be less obvious to the students

Remaining for an "extra" year might go unnoticed when the focus is placed on continuous progress and academic success

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There is yet another "plus" in multi-age aroupings that could benefit at least a few pupils. Although the research evidence against "retaining" children is overwhelming, there may still be rare cases where a student might in fact benefit from remaining in the elementary school setting for an "extra" year. Worth noting is that when the environment is nonaraded and multi-aged, remaining in the three-year unit for a fourth year might actually go relatively unnoticed by either the "retained" child or his/her classmates. since everyone's focus will be on continuous progress and academic success, rather than upon who passed, and who failed. In any case, when children are in a nonaraded primary rather than a graded classroom,



they are less likely to need to remain an extra year. The same argument would apply in those relatively rare cases where it makes sense to "accelerate" a pupi. Spending only two or two and one-half years in one unit before moving (McLoughin, 1970). (Anderson and Pavan, 1993, p. 101)

Better Prepared for Junior High School



Studies have shown that students who come from

multi-age classrooms also face less difficulty making the

adjustment to a junior high environment as compared to

students coming from graded classrooms:

Data from a number of multi-age team teaching projects over the years including the Lexington experience, confirm that the former elementary school pupils adjust very easily and quickly not only to the social environment but to the routines and expectations that characterize a junior high or middle school operation. By contrast, pupils emerging from a selfcontained single-grade classroom often face a rather awesome challenge. (Anderson and Pavan, 1993, p. 101)



SECTION TWO: BENEFITS

Individualism Embraced

A final, important benefit of multi-age education is that a multi-age classroom is a multi-dimensional environment in which individualism is not suppressed, but is embraced. Students in this environment are permitted the freedom to explore their interests, share their thoughts and experiences, collaborate with one other and to progress at their own individual rate.



Bob Steere (1972), who compared nongraded and graded secondary schools in his doctoral dissertation, used a similar approach to Pavan's and reported on twelve studies which he concluded 'clearly indicate(s) that a nongraded school organization has the potential for breaking the shackles which wantonly bind children of the same chronological age and force a lockstep movement of youth through a rigid curriculum'. (Goodlad and Anderson, 1987, p. xxi:-xxii)

McClellan (1994) puts into clear perspective the

importance of diversity in education in comparing

education to a child's diet:



No one would argue the importance of protein in the child's diet. And yet few porents willingly feed their children a onedimensional diet composed exclusively of meat, for example. A variety in the nutrients is critical to the health and survival of the physical organism. The research reviewed here suggests that a multidimensional social, emotional, and cognitive environment is no less critical to children's social and intellectual health. Multiage grouping is a key strategy for ensuring that children receive a full range of social and cognitive experience, (b. 160).



A final word on the benefit of the multi-age philosophy of education comes from Pratt (1986), who states that "The evidence on multiage grouping appears to confirm the basic principle that diversity enriches and uniformity impoverishes" (p. 112). This is not meant as a criticism of single-graded classrooms. Diversity is also characteristic of the single-graded setting although to a somewhat lesser extent. It is an inherent characteristic of the multi-age classroom due to the wide rance of the students' ages.

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The Classroom Environment

The classroom environment encompasses much more than merely the physical environment and has far reaching effects on the quality of learning experiences. A variety of characteristics is evident in a multi-age classroom setting. The multi-age teachers featured in *Creating Nongraded K-3 Classrooms: Teachers' Stories* and Lessons Learned all came to the same conclusions about appropriate settings and instructional practices which would be found in effective classrooms, both araded and multi-aged:

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🗢 warm, caring atmosphere

respect for children

careful observations of children

daily read-aloud time

extensive self-directed learning time (i.e., learning centres, reading and writing 'workshops')



active, hands-on activities (e.g., using manipulatives for mathematics)

large blocks of time for intensive study

thematic teaching

reading literature and writing for authentic purposes

inclusion of music and art as a natural part of the day

attention to each "critical attribute" of the primary program (Hovda, Kyle& McIntyre, 1996, pp.184-185)

This next section will address how to establish a

classroom which reflects the above mentioned

characteristics.



Furniture and Decor

Consideration of the physical arrangement of any

classroom is important. As Charbonneau & Reider

(1995) recognize:

It is not possible to understand children's behaviour or the outcomes of curriculum without considering the effect of the physical space. The physical environment 'nulls' children to certain activities and behaviours and not to others. It is almost as if physical environment has a 'voice' that children hear above the voice of the adult in the classroom. A large open space tells children to run and tumble Shelves that are disorganized where it is difficult to know where to replace an item or where materials are not clearly displayed and marked invite children to take materials haphazardly and to return them in a careless fashion, (pp. 53-54)

The following questions, which summarize those

Important Questions to Ask Yourself suggested by Charbonneau and Reider (1995) and Hart-Hewins and Villiers (1997), can be kept in mind when setting up a multi-age classroom and may also be applicable to setting up a single grade classroom. They are of utmost importance for the setup of multi-age classrooms where individual as well as group work and

ownership of the environment is valued:

Do I have an appropriate number of chairs at each table? Will this number encourage the

gathering of enough children to work together, yet not too many to encourage some students to be off task while one or two stay on task and do all the work?

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Are there enough centres for small group activities?

■ Is there a space large enough for everyone to gather without sitting on top each other yet, not so large a space that it invites running, gymnastics, wrestling, or like behaviours? Is this space in the centre of the room where Charbonneau and Reider (1995) say it "tends to become dead space" (p. 63).

Does the furniture accommodate the various physical sizes of the students?

Are there any quiet spaces?

What area is well lit and conducive to a reading area? Is there an area which is near a window affording the use of natural lighting and also enough space for adequate bookshelves of appropriate heights?

Where are the outlets for computers, listening centres, VCRs to be set up?

Do the computer monitors face into the work station space or corner space rather than into the classroom so passerbys won't be distracted and drawn in by intriguing pictures or activities?



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■ Is there adequate space for traffic flow?

Is there a place where students can keep their personal belongings? (boxes or baskets or cubby holes are possibilities for this)

How will the children know where they should work? What is needed at each centre? A chair? An easel? A carpet? A chalkboard? A pocket chart?

♥Where will I conference with the children?

Students Get Involved

Even if the teacher prefers to do the initial setup

Even if the teacher prefers to do the initial setup of the room opportunities should be provided for the students to help decorate and re-evaluate the arrangement in the classroom

of the room, opportunities should be provided for the students to help decorate and re-evaluate the arrangement in the classroom. This helps create a feeling of ownership amongst the students which is characteristic of multi-age classrooms. Chase and Doan (1996), who have worked closely together teaching multi-age classes in adjacent rooms, give an example of how one spring, while enjoying Charlotte's Web for their





theme, their students decided to decorate an area

which they refer to as the Little Room.

The spring weeks that we enjoyed Charlotte's Web for our theme spawned some wonderful collaborations. We had voted to turn the Little Room into Zuckerman's Barn, After conducting the initial brainstorming ideas for how we could achieve this transformation. Jane and I gathered some supplies, and then we let the children sign up four at a time for "Make Zuckerman's Barn" as a choice The next week various groups of children worked on the room during Choice Time. They made paper fences, barn doors, the hay loft, and the manure pile. They produced a box for Wilbur's trough, masks for all the animal characters and Charlotte's web up in one corner. The children worked collaboratively to create the barn. The day came when it was finished. Serene, Cassie, Susan, and Kyla were the first to sign up for the Little Room. Their first job was to tidy up; then they could play in there. They were all busy, one with a broom and a dustpan. two of them stuffing scraps of paper into a plastic garbage bag. Serene made signs for the doors: ZUCKERMAN'S BARN. She checked her spelling from the Charlotte's Web book. She came to me wondering where the tape was, so she could hang up the signs. She whispered loudly. "There's





a snake in the barn trying to steal Charlottel' The playing had already begun. Another day three of the youngest kids, Carter, Rebecca, and Erin, added to the *Charlotte's Web* Bulletin Board at Choice Time. They made a big barn and various figures to go on the board. They were very self-sufficient as they made their cutouts, but they relied on Larry, who was playing with bricks right below the bulletin board, to staple their things up. He commented to me at the end of Choice Time, "I was the only tall one around. I had to help out;" (pp. 30-31)

Students Take Ownership

feelings of pride and ownership foster a sense of community

In order to further establish a learning environment where students take ownership for their learning, materials must be made easily available to the students. In letting the students know where things are, the teachers' workload is somewhat lessoned since the students can help gather materials needed. Each September, students returning to the classroom may need some reminders about where to find certain items



and it may be necessary to rearrange some of the materials, especially if there are major physical changes to the layout of the classroom. Yet, since at least half of the students are returning to the same class, it does not take long for students to learn where everything is. This cuts down on the interruptions the teacher has when conferencing with individuals or small groups. It helps in the flow of routines in the classroom. Chase and Doan (1996) explain that:

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Keeping materials easily available to students can cut down on interruptions.

In our classrooms the materials that we will need to do the work of reading, writing, drowing, and figuring are placed on aur shelves within easy reach of everyone. The first two weeks we spend a great deal of time making sure that the children know where to locate everything. We end those two weeks with a scavenger hunt, the children need to be aware of our complete inventory of school materials, (p. 78)

To further help the students feel ownership of

their learning environment Chase and Doan (1996)

permit the students to decorate the walls and bulletin

boards of the classroom on a regular basis. They

explain:

The children often design the bulletin boards themselves, choosing to work on these boards at Choice Time.

When the children are making choices, they are aware that they can choose where to do that activity, that the materials they need will be readily available to them, and that they will be working in an environment that belongs to them. (p. 78)

When trying to establish a feeling of ownership

amongst the students, it is helpful to assign to specific

students daily and weekly tasks such as the following:

tidy the listening centre

- tidy the reading corner
- check library books returned
- take recess orders
- © empty pencil sharpener

Different students are assigned the various tasks

each week. The student responsible for each area also

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assign

various tasks to different students on a

daily and weekly

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is expected to encourage classmotes to take ownership and to remind other students about maintaining order in the area.

Activities such as these help encourage students to work together and to take pride in how their classroom looks. As a result, it may be easier to encourage the students to put their things away neatly, put all their garbage in the garbage can, and hang up their coats neatly in the area allocated for their class. The pride and ownership they feel for their classroom while working together helps foster a feeling of community.



When children do put in efforts to decorate their classroom and keep their area of the school clean and tidy, it is a good idea to ask other teachers and the administration to compliment the students on their efforts. This praise may help not only to keep the school clean, but also to increase some of the children's confidence. This, in turn, can have a positive impact on

their learning.

Curriculum Materials

In addition to creating a good physical

environment, consideration must be given to curriculum

materials. Ask yourself:

→Is there sufficient literature on a variety of topics and at varying levels of difficulty?

→Are there non-print as well as print materials? Are there, for example, video and audio tapes and visuals such as posters or pictures?

→Is there a variety of games, puzzles, scrabble, word games?

Are there sufficient science materials to meet curricular outcomes?

➡Is there a good collection of art and writing materials including different kinds of paper, paint, brushes, pencils, markers, scissors, poster board...?



While these questions need to be asked by single grade teachers who teach children with diverse abilities, they are even more pertinent for teachers of multi-age classrooms in which the diversity of abilities is much broader.

Children need access to a good classroom library, in addition to the school's central library, so that they

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Print and Non-Print Materials



are immersed in a literate environment. This includes both print and non-print material that can form the basis of research, motivate reading, or inspire written or other forms of response. One example of an activity that encourages children to read different kinds of materials and that helps them develop language skills across the curriculum is writing a class book. These books can be based upon a variety of topics and incorporate all subject areas. As an example,

incorporate

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mathematics can be the focus for writing a number book depicting various compositions of numbers. For example, story problems can be elaborated into book form:

A family living in a certain community decided to

- A 1



take a trip. They got out their map to see what communities they were close to, which provinces they were close to, and which countries they were close to. The family, which was made up of X number of people decided to go to place A on the first day and try to get to place B by the end of the first week.

The storyline may continue like this and incorporate how much gas is used, how much money is spent, what food is eaten, how differences of opinions among family members are resolved (eg. where the family decides to eat). Thus, all subject areas are represented in what would end up to be an interesting

Interesting projects cause students to become interested.

project which could help stir up interest in students-even those students that may be hard to reach.



Games

If you do not have many games in your classroom, one way to solve the problem is to create some. The inherent big buddy system in a multi-age class facilitates this activity which results not only in a lot of games for the classroom, but also much learning and pride. The inventors' excitement is usually contagious as they explain how to play their came.

Science

Some teachers have asked parents and other community members (for example, from telephone companies, computer stores, repair shops) for old equipment which may be considered garbage. The teacher then may set up 'A Take Apart Centre' where
students can actually take apart equipment to see what is inside and how the equipment works. Of course it may be too much of a challenge to try and place the pieces back together!

Art





Even if your classroom has plenty of bought materials, it does not hurt to ask students to bring in supplies which could be used for art projects. Supplies such as paper towel rolls, buttons, yarn, and old fabric can be used for a variety of projects. Some classes set up an inventions centre which may be used by students of all academic levels and also incorporate learning across the curriculum. Asking children to bring in supplies such as these is another way to help instill ownership. It should be noted that no matter what financial situation of the students' family, all children may participate by bringing in something, since empty

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cereal boxes, tissue boxes, and toilet paper rolls could be used to help create a variety of inventions.

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Manipulatives

If you do not have a variety of manipulatives for each of the grade levels you are teaching you can begin a class project to create some. For example, when studying the concept of place value, children can use popsicle sticks and beans to create tens and ones manipulatives. When studying the concepts of geometric solids, children can bring in an assortment of geometric solids from home - for example, an empty coffee can will do nicely as an example of a cylinder or an empty cereal box for a rectangular prism.



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Planning the Curriculum





The philosophy of multi-age education promotes active learning. Thus, within the parameters of existing curricular outcomes, students need involvement in constructing their own curriculum. For example, at the beginning of the year students and the teacher compile a list of topics and auestions they would like to learn

more about. Teachers usually explain to students that there are certain curriculum objectives which must be taught and ask for ways in which to incorporate the objectives in topics of the children's choice. It is amazing how simple ideas can blossom into wonderful learning experiences when teachers look to their students for ideas when curriculum planning.

Poore and Armstrong (1996), primary level multi-

age teachers, strongly promote empowering students.

They state:

Another essential element of our program is that we provide a safe environment that enables the students to make choices involving their own learning. This respect for students' ideas and feelings empowers the students to initiate their own learning and cultivate a respect for others in the room. We provide the safety for ideas, reinforce progress and allow students to make mistakes and self-evaluate those mistakes. The following questions are often heard in our classroom: "How would you like to show what you learned?" "What materials would you like to work with?" "What materials would you like to work with?"



Ideas Blossom !

you think you did well on that project?" "What did you learn when you did this?" "What could you do to improve?" "How could you make this better?" (p. 87)

Questions to Guide Instructional Design





questions to guide their decisions about how they design

instruction:

- What experiences do I need to plan for (curriculum requirements)?
- What do my students know? What can they do? What are their interests?
- How can I broaden activities to meet the needs of children with varying understandings and skills?
- What have I done to provide challenges?
- Have I provided children with ways to learn about the curriculum as well as given them opportunities to use processes and strategies? (p. 69)





They also point out that "You cannot determine how successful instruction has been until students show what they have learned" (Politano & Davies, 1994, p. 69). Politano and Davies (1994) also refer to Howard Gardner's 1985 work on multiple intelligences which showed that "there are more ways to view and show intelligence than through the traditional tests used in schools. By creating areas that allow individuals to display their strengths we, as one child said. 'Let more kids be smart!"



View and show students' learning by engaging in the following activities to reflect knowledge gained:

- ~ creating and presenting informative plays
- painting murals
- writing books. poems, and songs
- creating diaramas
- presenting speeches



Miletta reveals that when teaching in a 4-5-6 multi-age setting, one of her concerns was that from the beginning of the school year the children should be involved in decision making; thus, she and her teaching partner explained to their students at the beginning of the year that they would be involved in making important choices about what they wanted and needed to study and that they would be given the opportunity to act involved and explore subjects in which they had special interests. Believing that when you learn to teach others, you learn to teach yourself. Miletta and her coworker hoped that, once their students pursued a special interest, they would want to share and teach others about their interests and what they had learned. Miletta and the teacher with whom she taught. endeavoured to help their students understand that

... when you learn to teach others, you learn to teach yourself ...

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With the privileges of being able to make choices also comes the responsibility to be purposeful. with the privileges of being able to make choices about the curriculum, also came the responsibility to be purposeful -- to take their studies seriously. They also wanted the children to understand that they would be studying what other students their age would be according to the state curriculum guidelines, but that the organization may be different.

Miletta describes how she and her colleague helped empower their students by providing them with the opportunity to teach an instructional unit on a topic of their choice. They decided to break down the academic year into six week modules: therefore, students would have the opportunity to choose to study a topic presented by their classmates for a period of six weeks. The multi-age classroom environment was very conducive to the success of this activity since one of the bigoest advantages of a multi-age classroom is



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the teaching and learning relationship which exists amonast the various age levels.

Planning the Year



At the beginning of the year, when introducing the topics of study which had been planned by Miletta and her teaching partner for the first six week module. the older students would caution the newcomers to listen carefully to the descriptions and not to be influenced by what their friends were choosing. Miletta

(1996) further explains that:

All groups were open to everyone, but there were some that demanded greater skill and knowledge than others...In most cases, however, the adjustment for age and experience was made as the children worked in the group. The teacher would quide each student toward an appropriate topic, study or exploration within the aroup so that while they were all having a common instruction period, individual projects reflected individual aptitudes and attitudes. In a sense, that's not very

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Older students contioned newcomers to listen carefully.

students ouided

by the teacher

towards an

appropriate topic. study or

exploration



different from what a regular classroom teacher does every day. The difference here was that the children chose to study a topic and were relieved of the burden of group conformity. The limits were not defined by grade level but by each child's own interests. (p. 22)

During the year, Miletta (1996) and her teaching

partner

. . . .

...students invited to join study groups to remedy certain gaps in learning...

. . . .

retained decision-making power by issuing "invitations" to children to join study groups that were designed to remedy certain gaps in learning. If we found for example, that some students needed special help in reading strategies, place value capitalization or any number of hundreds of subskills in content areas, we would form a group to address those needs and ask certain students to join them. These were invitations that could not be refused. Interestingly enough, students never resisted joining them; our students actively sought help whenever they needed it and welcomed the opportunity to receive it in a regularly scheduled group I think this was a by-product of the seriousness of purpose that developed because they were involved in selecting their curriculum. And since these particular aroups were genuine thematic units of study, they were often chosen by other "uninvited" students

who thought they sounded interesting. (pp. 22-23)

After each unit of study, the students reflected

Students reflect on their own work...



on their own work to see if they had tried their best and produced their 'best work' during the unit of study. If not, they had the opportunity to endeavour to do better during the next unit.

Contrary to how it may first appear, a lot of

teaching and learning went on during the preparation of

the modules taught by the students. As Miletta (1996)

who was one of these teachers, explains:

We regularly encouraged our students to take on the responsibility for researching and planning an instructional unit on a topic of their choice. Most students elected to do this at least once in the three years they were with us.

We had two main reasons for encouraging them to do so. First, teaching provides opportunities for learning... As we encouraged our students to teach, we wanted them to experience the same excitement we felt when we prepared to teach, and we wanted them to realize how



Students as teachers seem to become better listeners. much one could learn in undertaking these investigations.

The other lesson to be learned was more subtle, and we discovered it after listening to students talk about their teaching experiences. Not until they had the responsibility for organizing and instructing their fellow classmates did they truly understand and appreciate the process of teaching and, therefore, the process of learning. They seemed to become better listeners because they understood what it was like when someone didn't pay attention. They were conscientious about their own assignments after they'd experienced the frustration of receiving unfinished homework. Most important, we felt they gained a broader understanding of the differences among their classmates and a heightened awareness of their individual needs. (pp. 86-87)

We taught them to respect the different levels that they would find in their classes and helped them to understand the importance of having each student set realistic goals for the six weeks. They knew that their job was to help their students choose projects and reach their objectives. It was their responsibility to provide the kind of support that would enable their group to achieve success (p. 88)







Encouraging the students to research and plan an

instructional unit to teach to their fellow classmates did

not mean less work for the teachers since:



Some youngsters, especially those new to the program, were anxious to teach but didn't know where to begin. For these and for some of the older students too, we organized a study group called "How To Have A Study Group." This was basically an independent research seminar. Students thought about their interests and their questions, decided upon a topic, made a list of possible resources, gathered books and articles from both school and the public libraries, shared their findings with the group, and made an outline of the topics they would cover in each session. In effect they became experts.

While they were pursuing these investigations, the group as a whole would discuss methadology and management. ...Some preferred to work alone: others welcomed shared responsibility. We shared our own organizational tips with these students, such as keeping all the materials for a particular mini-ourse in colourful plastic dishpans and keeping records of attendance and completed homework on special class lists. (Miletta, 1996, pp. 87-88)

Conducting a Study Group: decide on a topic list resources share findings with group outline topics for each session discuss methods and management Miletta and her teaching partner also permitted students to teach mini-courses based on a book they wanted to share. Not all plans for teaching units of study or books were automatically approved by Miletta and her team teaching partner. Sometimes students were asked to revise their plans and submit them again before commencing to teach. As Miletta (1996) explains, she and her team teaching partner

> Emphasized questioning techniques whenever we were teaching others to teach. We discussed the difference between the questions intended to help children recall the facts and events in a story or the steps in an experiment and the in-depth questions that required analysis and evaluation and might have more than one right answer. More often than not, we asked students to write and answer their own questions as a follow-up to a lesson. (p. 90)

Miletta and her team teaching partner were very

satisfied with the process they had developed of acting



Emphasize questioning techniques whenever teaching students to teach.

as facilitators who were guiding students to teach other

students. According to Miletta (1996):



The process of students teaching other students was very satisfying to us as teachers. In some modules we would schedule all the student taught groups during one period. For us to stand in the middle of the room and see as mary as six groups huddled around the student leaders, interthy discussing a topic without a teacher, was most gratifying. I still can feel the electricity in that air and can remember vividly the sense of personal satisfaction that comes when you are able to step aside and let students learn independently. (p. 91)

As teachers, Miletta and her co-worker helped lay the

groundwork for their students to develop into life-long learners

I have found that holding a class meeting to compile an interest inventory in the beginning of the year is quite an effective activity. Children are given an opportunity to contribute to a list of topics in which they would be interested in studying throughout the



year. This is also a good time to discuss with the students objectives that need to be covered and how they can be met while incorporating the topics which students are interested.

Empowering students by enlisting their input, not only in the area of curriculum planning but also in the area of rules and routines, helps foster an atmosphere which is conducive to learning and student ownership. The following section addresses this.



Routines and Scheduling

² Curriculum planning goes hand in hand with scheduling. As an alternative to the teacher establishing schedules alone, students feel greater ownership for their learning when they help the teacher establish daily agendas. Often, in multi-age classrooms during the class morning meetings, the teacher and

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students together establish priorities for the day and create the time frames and order for the day's work. This helps children reflect on the previous day's accomplishments and build links with new plans for learning.

One of the benefits of multi-age classes is the fact that most of the students in the class are familiar with the teacher and the class rules and routines. Rules and routines, however, need to be reviewed and revised each year. It is beneficial to ask the older students to explain any rules and routines which they remember from the previous year that would still be needed the following year. This will refresh their memories and at the same time familiarize the new students with their new classroom set-up. This helps endorse the fact that, in the multi-age setting, students' opinions are valued and they each have responsibilities.

According to Grant and Johnson (1995):

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Foremost important thing for a primary teacher to do is to empower the children.



One of the first and perhaps most important things a primary teacher has to do is to empower the children, to give each child a sense that s/he can be responsible: s/he can be in control of this aspect of his or her life.

Empowering children does not mean turning over control of the classroom to them. It does mean helping them build on their natural inclination to want to make sense of the world and to gain some control of their environment and themselves. (p. 79)

Holding a class meeting in September to establish

a list of classroom rules is an effective method of

developing a sense of empowerment amongst students.

The list is positive in that it contains things

students will do rather than things they should not do.

When classroom rules are initiated from students' ideas

they are meaningful to them and, therefore, are more

likely to be respected. Since everyone should try to

work together to keep 'our classroom a nice place to be'

the consequences in the event of 'somebody forgetting'

one of the class rules should also be student initiated.

When classroom rules are initiated from students' ideas they are meaningful to them and, therefore, are more likely to be respected.

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Thus, if someone does 'forget' a rule the consequence

will more likely be viewed as fair.





Large Group Meeting (LGM) Probably the most important area in a multi-age classroom is the area where the class meets which is sometimes referred to as the LGM area or the Large Group Meeting area. Miletta (1996) explains the importance of this area by statina:



As we've mentioned briefly the forum for the exchange of ideas information and perspectives was called the Large Group Meeting. It was here we gathered to give voice to all the members of the community We discussed the ways in which the ideas of service and self-direction were in evidence, we participated in democratic government, we shared our collaborative endeavours and celebrated their successful achievement and we handed down our accumulating history. The LGM. as we called it, became the heart of our program. It was vital to the agreement of principles we could live by and essential for the sharing of ideas and the exploration of our diversity

The LGM wasn't simply for rule formation and disciplinary action. We also needed to determine how well our community was functioning. We discussed the decisions our students were being





asked to make and the rights and responsibilities that choice making and risk taking entailed. We often asked if anyone had seen a classmate helping another student in some way or if anyone had been helped by a classmate. We were also careful to stress the importance of service to the whole school community as well as our own.

The LGM also provided the opportunity to discuss themes and concepts that were emerging from our studies or from current events. ...

The LGM was the time for sharing completed projects, for summarizing work that had been done in the study groups and for performing plays and skits. We held "news broadcasts" on Fridays. These were patterned after network newscasts and provided weather, sports, commercials and information about international and national and local events. (gn. 75-76)

If discipline problems and children's concerns are

discussed in this setting, then discipline problems are

decreased and this set-up or routine usually helps

students take ownership for their actions.



How To Approach Various Subject Areas These days there is much emphasis on an integrated approach to teaching and learning. The curriculum for the Newfoundland Department of Education, however, is laid out by subject and by grade. When planning the curriculum for a multi-age class, it is important to keep in mind that children, as do adults, learn best when new knowledge can be linked to prior

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Tell me, I forget: show me. I remember: involve me. I understand! knowledge. Interactive, hands-on activities help promote meaningful learning experiences that help build children's working memory.

No matter which subject area is being dealt with, teachers should try not to rush their students through material just so all objectives are covered, since students do not retain much knowledge from materials presented in this way. When students question or show interest in knowing more about a given topic, valuable learning may take place since the students' interest is captured.

It should be recognized that similar teaching strategies can be used in single and multi-age classrooms. Surveys conducted in the immediate Corner Brook area revealed that multi-age teachers did not drastically change their teaching strategies when they changed from teaching a single grade classroom to teaching a multi-age classroom. It should be noted.



...evervone is at different levels because the class is made up of different age levels these teachers kept up with current teaching practices such as classroom workshops. In the sections which follow, the suggestions are directed at multi-age teachers, but many of the ideas are equally applicable to a single grade teacher. When teaching in a multi-age setting, it is a given amongst students that everyone is at different levels because the class is made up of different age levels. During my experience in multi-age classrooms, students have accepted this and have not been concerned with who is at which grade level as adults may be when observing the students. Thus, it is easier to maintain motivation and self-esteem among all students, including the less able. As well, older students will have more opportunity to lead other students. whereas in a single grade class the opportunity for everyone to participate in this is greatly lessened and.

however, that when teaching in single grade classrooms

for some students, the opportunity may not exist.

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The following methods, which have been used in multi-age classrooms, can also be used in single grade classrooms. They involve addressing curriculum requirements as well as the individual needs and abilities of students.

Language Arts

According to the draft copy of The Atlantic Provinces Language Arts Curriculum document, teachers need to consider activities which may help their students develop skill in listening, speaking, reading, writing, and other ways of representing. In doing so, all teachers, including multi-age teachers, must reflect on the question of how best to address the needs of their students. The range of ability may be greater in multiage classes, but this broad range need not be seen as negative. Rather, it adds to the dynamic learning atmosphere. It is significant to note that as Hovda,



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Kyle, and McIntyre (1996) recognize during the latter

part of the twentieth century

...literary experts such as Holdaway (1979), Graves (1983), Calkins (1986), Cambourne (1988), Harste (1989), Au (1993), and Goodman, Goodman and Hood (1989) have suggested that teachers put their basal readers on the shelves and their correcting pens in their desks. Instead, taking a cue from how children develop oral language, teachers should approach children's learning to read and write in a similarly developmental manner. Children should have many "real" literary experiences - listening to stories, reading good books, and making early attempts to use writing (even if it's scribbling) to convey meaning. (p. 2)

A literature based approached to language arts

instruction is inherent in the multi-age approach to teaching and learning. This is not to say that there is no place for basal readers: they may serve as one of the many resources upon which teachers and students may draw.



This approach is reflective of the multi-age approach to teaching and also a classroom workshop approach. It is practised by Poore and Armstrong (1996) who teach a multi-age, multi-abilities primary

program. They explain that:



Someone asked us how we are accountable for writing skills. In our multi-age, multiability class, writing skills are individualized. When students write a response of any kind, they know they are to write to the fullest extent of their ability. Each individual's plan is based on where that person was the last time he or she wrote. For example, a special needs student may respond verbally while an assistant records his or her thoughts. Often students might be working on putting their thoughts on paper, learning to trust themselves to write the sounds they hear in the thoughts they have. They are practising listening to their own voices. not spelling every word conventionally. Other students are putting words together to make sentences (complete thoughts) that make sense. Those who are adept at writing complete thoughts begin to capitalize and punctuate, and they see the benefit of knowing where one thought ends and another one begins. Capitalization and punctuation become useful only after the children are able to put complete thoughts on paper. Still other children work on combining sentences with a common idea to form paragraphs. They ask, "How do I let my reader know this is a new idea?" We tell them to indent the first line to show that a new idea is coming. At that point, those students see the benefit of knowing how to indent. Therefore, they are more likely to remember to use that knowledee.

This is also a time when Bobby may share his ideas with a general education student, and the two of them may write a piece together. The general education student initially does the actual writing, and Bobby will later tell the class about it. (p. 89)

Poore and Armstrong (1996) also explain their

accountability when teaching reading in their multi-age,

multi-abilities primary classroom. They state:



Accountability for reading skills is handled during Sustained Silent Reading with individual conferences and when students are in skills groups for a short period. We use literature books and poetry during these group times. We use poetry a great deal because it provides a small chunk of reading that is more comfortable for many students to attack and grasp. They are not overwhelmed by leacht. (a. 89)



Poore and Armstrong (1996) describe a

reading/writing activity which they find helpful. They

state that in a reading/writing activity:

...we read The Cat in the Hat by Dr. Seuss aloud to the whole group. Then we had the students work in aroups to think of as many rhyming words as they could for cat. The students shared their lists with the entire class. Then we had them choose a word from their list with which to make a sentence. The only stipulation was that the word that rhymed with cat had to be the last word in the sentence. We wrote six of the students' sentences on the board. They noticed that two of the sentences were about the same topic and that three others were about a similar topic. We wrote the two sentences together and the three together and talked about how the two groups could be poems because the sentences were about the same topic and told a story. We discussed the rhyme in these poems but also noted that rhyme is not necessary in a poem

Our idea was to continue this process of sentence making and have the groups create their own poems. Because we used cooperative groups for this activity, all the students were able to participate regardless of their

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instructional level. One group member was the recorder. Everyone in the group was a contributor. All were actively involved in making the list of rhyming words and creating the sentences. (p. 91)

It is important to offer children meaningful



opportunities for writing. As one example, I am in the habit of involving my students in creating invitations to classroom activities. This is a very beneficial activity since, not only is it an authentic experience, but also the students must be very conscious of their audience. Attention must be paid to the information that must be conveyed: the person to whom is the invitation addressed, the time and place of the activity, directions to the location, any special dress code, or an RSVP, Another such activity is the process of writing thank you letters to classroom visitors and volunteers. Such activities also help to further foster a sense of community within the classroom. Classroom and school

newspapers or newsletters and home journals are also ideal mediums for developing a sense of audience.

Activities such as simple movement to the rhythm of a poem or song also can be used across the curriculum. Writing a poem or a song may be a response to a classroom event or outing, or a more personal response to something outside of school. Poetry and song are also often used as a 'cluing-up' activity to a unit of study. Poetry and song are also excellent media for expressing what has been learned.

Music can enhance creativity. Often, during creative writing activities, classical music can be played quietly.

Involving children in the creation of their own books is another very beneficial and enjoyable experience which allows students to work creatively at their own level. Students can read their finished





products to other classes. The published form can then be displayed in the school resource centre.

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Painting murals depicting the beginning, middle and end of a story read in class can help to further develop skills in the area of plot development. Students must think about such elements as characters, setting, problem and solution and then depict them in the appropriate sequence on the mural.

Establishing an Author's Chair helps to develop self-confidence. Children are given a chance to read their work to their classmates. It is meant to be a positive experience. A Reader's Chair could also be established. The children practise reading a book at home and then read to the class. Afterwards they are given three compliments by their classmates. The children could also be given the opportunity to talk about a book that they recently read. These book talks are a great way to faster enthusiasm for reading as well



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as to promote the development of communication skills. The establishment of an Author's Chair and Reader's Chair offers an opportunity for children to share some of their personal writing as well as books they have read. Setting aside a few minutes every day for this type of activity proves to be very rewarding. It auickly becomes a much anticipated part of classroom routine. As stated previously, because students know that their multi-age classroom consists of various ages they are more accepting of the range of abilities amongst themselves. Therefore, emergent readers even if they are the age of students in grade three, still will volunteer to read and feel proud of their accomplishment.

Mathematics

When teaching math in any classroom today it is important to keep in mind that, as stated in

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Mathematics Grades 1-2-3: A Curriculum Buide (Interim Edition): "Mathematics curriculum reform in Atlantic Canada is shaped by a vision which fosters the development of mathematically literate students who can extend and apply their learning and who are effective participants in an increasingly technological society" (p. 3).



Further to this, the curriculum guide also states that publications by the National Council of Teachers of Mathematics "embrace the principles of students learning to value mathematics and of being active 'doers,' and they advocate a meaningful curriculum focussing on the unifying ideas of mathematical problem solving, communication, reasoning and connections" (p. 3). Ostrow is a proponent of this view. She holds the belief that children need to develop their own strategies for problem solving. Ostrow (1995) cites the work of Marilyn Burns, a well-known educator in the

field of teaching mathematics, as stating that:



It's important for children to understand that algorithms are procedures that have been invented by people to carry out calculations that are done repeatedly. It's important for them to learn how algorithms are based in the structure and logic of our number system. Also it's important for children to understand that no one particular algorithm may be no better or more efficient than another and that many methods, including ones they invent themselves, are equally valid. There is no need for all students to do arithmetic calculations in the same way any more than it is essential for all children to develop identical handwritings or writing styles. (pp. 65-66)

It is necessary to give children time to work



pattern blocks, a variety of sizes of graph paper and



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link blocks. Using manipulatives can help students present and explain how they find solutions to problems. Oral and written explanations are important since they show not only if the students understand the problem but also how they solved it. Some people may question how young children who cannot write can do this: yet, it is not necessary to separate writing in words and writing in pictures.

When Ostrow (1995) is questioned about what



the youngest children who can't write yet do, she points aut "that sometimes it is easier to explain a problem using drawings" (p. 66). Ostrow makes up problems for her students based on what the class is studying. The problems she makes up are usually complex and difficult since in attempting to solve them she wants them to experience concepts with which they may or may not be familiar. Sometimes she will try to present a problem that will turn into a project.



In Math Workshop children experience a wide range of concepts.

Ostrow (1995) states that:

Because the children learn about choice, challenge, and independence through the problems I make up, they are quick to think up their own games, problems, and activities during choice time in Math Workshop. In Math Workshop children experience not just addition and subtraction, but a wide range of mathematical concepts, including measurement, probability and statistics, geometry, patterning, place value, multiplication, division, fractions, design, and problem-solving, throughout the year.

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I often begin Math Workshop with a specific mini-problem. I do this to make sure the children explore all the concepts important to their understanding over the course of the year. It would be foolish for to believe that I could monitor all of the children's progress in math by doing projects. Through the mini-lessons and these mini-problems, I am confident we touch on all the concepts children need to learn... (p. 66)

Politano and Davies (1994) point out that:

Managing mathematics in a multi-age classroom is similar to planning for a single-age class. We ask ourselves:



- What experiences do I need to provide (for example, measurement, geometry, numbers)?
- What do my students know? What can they do? Am I meeting my students' needs?
 - How can I "open up" activities to meet the needs of children with varying understandings and skills? For example, give younger children one die and older children two or three dice. Instruct them to "coll and record." The younger children get practice rolling one die and recording the corresponding digit: the older ones get practice adding or multiplying the numbers on two dice. (o. 55)

A key question to keep in mind when planning math activities is "What could this activity look like for beginners, for those with developing understanding, and for children who are ready for challenges?" (Politano and Davies, 1994, p. 65).

Politano and Davies state:

We have found it useful to organize math time into three sections: the mini-lesson, guided practice, and independent practice. During mini-lesson time, talk about what learners need to do to gain knowledge and achieve skill with a particular concept, for example, subtraction with regrouping. Provide quided practice with the concept



Through problem solving children learn about choice. challenge, and independence through problems. and then encourage students to work at activities appropriate for their current understanding. Because assessment is an integral part of classroom activity, both you and your students need to be aware of what they know and what they need to be doing to learn more. Such information guides students to practice at their own level and refines and extends their understanding.

....Students select appropriate activities given their developing skill with a particular concept. Regardless of the activity chosen students receive practice with the concept being currently focused upon. (p. 66)

Alexander (1996), who teaches a primary level

multi-age class in the United States, explains how she

addresses the variety of levels at which the children

Students work at activities appropriate for their current understanding.

are working. She explains:

Math textbooks on a variety of levels are available for the children's use. With my guidance, the children select a math concept on which to focus for a while and then find a chapter in the text to help them organize their study. Sometimes the children get together to choose their focus concept, since their selection is based on interest and need. As the students are, involved in practice and

application work, I hold conferences to provide direct instruction to individuals or small groups. Conferences may introduce new concepts, provide remediation, or check progress of individual work. Math workshop concludes with a whole class activity emphasizing problem solving or "real-life" math skills.

The children keep a weekly math log to record the activities in which they participated and the assignments they completed. These logs are sent home every Monday so that the parents can be kept up to date on their child's progress. When the log is returned, it is filed along with work samples and conference notes to be used as a part of the assessment process. (p. 15)

Whole Class Activities

The following activities may be very open-ended

and may be expanded upon according to the needs of any

given class.

Telling Time: Math is so prevalent in the world

that surrounds us that it is easy to think of a couple of

simple ways to reinforce certain math concepts as part



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of the daily classroom routine. For example, time concepts can be introduced and reinforced when the class reviews the daily agenda. Not only can the skill of telling time from the clock be addressed, but also the skill of counting by five if the students determine that there are five minutes between each number on the face of a clock. Discussing the agenda is an excellent way to help students become aware of the passing of time and of how much time it should take to complete certain tasks.

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Date Equations: An interesting activity, and one which provides many 'teachable moments', is to ask the students to make up math equations which have today's date as the answer. This activity is very conducive to a multi-age setting since there is such a wide range of possible answers. Answers may include equations representing one operation or a combination of the operations. Usually, as the students get accustomed to



this, the commutative and associative properties come into play. Blocks and illustrations help all students challenge themselves to find more of the endless possible answers using as many operations as possible. Once students get hooked on this, it may be necessary to set a certain number of equations as a cut off point for any given day. It is noteworthy that older students can still feel comfortable when they give simple equations since the range of various abilities is expected as the norm in multi-age classrooms.

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Counting to see:

- the total number of days in each week and month
- how many days we were in school during the month

Subtracting to calculate:

the difference between the number of days in the month and the number of days we spent in school to verify that we counted correctly

Adding to calculate:

- the total number of days in the months that we have been in school
- the total number of days we have actually been in school this year

Ordinal and Cardinal Numbers: A quick and easy



way to reinforce the use of ordinal and cardinal numbers is to ask students when lining up to name their position in the line. This can be done as the children are lining up if the teacher calls one person at a time to line-up. It

may also be done once everyone is in line by asking the

first person or last person in line to name their position and working your way forward or backward.



Problem Solving: Involving students in the process of writing story problem books can work very well to help further develop skills in the area of problem solving. Students formulate their own problems. In order to do so, they must think about what information must be presented in order for the reader to be able to solve the problem properly, so the writer is forced to develop his or her analytical skills. After each child has completed his or her story problem, the problems are compiled into a book. The problems can then be solved by individual students or as a small or large group. The problems are meaningful and interest in problem solving grows. A variation of this is to develop story problems together as a class depicting various students as characters in the story problems. The process of acting



out problems has proven to be a great method of developing enthusiasm for problem solving.

When problem solving, the teacher may choose to post three problems of various levels of difficulty and ask the students to choose one to solve. Tell them that if they have trouble with one to try another.

If the teacher reads out the problems first, it will help the students know which one is at their level. Tell students that once they have completed one to try another. Then correct the three together as a class. Act out when possible to make it more meaningful and fun. Again, this activity may also be practised in a single grade classroom: however, the fact that some children can easily solve the three problems and others only one, will be viewed more acceptable and normal in a multi-age classroom



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Activities for centre time may be written on paper that is colour coded. The teacher may be the only one who knows the colour code: for example blue is the easiest level, yellow is the middle level and red is the highest level. She may tell the class that she has a lot of activities related to the math concept which they are studying and that she has written them on cards. So that all the activities are completed, she can explain that she will divide the class in groups and assign a colour to each group. At other times, some activities will lend themselves to exploring. Teachers can then let the students choose their groups rather than assigning children to groups.

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<u>Cooking</u>: Cooking is an excellent activity to develop skills in the area of measurement This lends itself well to being a Big Buddy activity. Write the recipe on chart paper and divide the students into

partners or small groups. The older children can then help the younger ones with the reading and the following of directions. The children learn the importance of exact measures and following directions carefully

Money Matters: Establishing a 'store' in the



classroom is a great way to reinforce money skills. The children can go through the democratic process of choosing a name and, for example, prices. Weekly specials can be posted. Problem solving activities can also be incorporated. For example, 'Oranges cost two cents each. How much will six oranges cost?' Establishing a classroom bank is another effective way to reinforce money skills. Deposit and withdrawal slips can be printed. Both of these activities are also excellent ways to practise addition and subtraction skills.

Geometric Construction: When working on developing skills in the areas of geometric shapes,



children can create entire neighbourhoods using geometric shapes, figures, solids. This can then be expanded to include such problems as 'How many triangles are there are on Main Street?' 'Are there more sources than circles on Water Street?'

Homework Activities



Homework activities in mathematics can also be enjoyable and open-ended.

<u>Mathtotes</u>: Mathtotes are math activities developed by Addison-Wesley that serve as an excellent homework package. They reinforce a variety of math concepts and also help to strengthen home/school communication. Mathtotes are containers, such as Pringles chips cans, that contain a single home activity on a given topic. The instructions and materials are contained in the tote and students sign them out for home use. Each tote is labelled with the title of the

0 X X 0 X 0 activity. Contact Addison-Wesley or School District #3's Program Specialist, K-4, Multi-age Continuous Progress, for more information regarding Mathtotes.

<u>Games Invented</u>: Students can be asked to invent a game that will reinforce a certain math skill. These games could be played in the classroom and/or at home.

How to Teach Content Areas (Science, Social Studies, Health and Religion)

When planning instruction for multi-age classes in these subject areas, it is important to recognize that there are different approaches to instruction and that you must feel comfortable with any approach taken. Kasten and Clarke (1993) explain the following two approaches:

> One teacher reported that when she taught a group of five-to-seven-year-olds, she simply concentrated the first year on the content required by the district for kindergarter. the second year, the content for first arade: and the third year. the





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content required for second grade. The following year she started over again. All children, therefore, were exposed to all required content, and there was no overlap. Another teacher selected content required for all levels of children within her class, combined and selected broad areas, and tought similar content each year, going into more depth and breadth each succeeding year.

Using an integrated curriculum, and trying to involve all different subject areas and the content from those areas into one topic, seems actually to lessen the effort the teacher has to make to reach all the different content areas. Keep in mind that content subjects are simply the modes or means of teaching the processes the students need. After all all children in one grade level do not come with the same experiences and are, therefore not going to leave any content with the same information. This is similar with any collection of children, regardless of the arouping pattern, (pp. 54-55)

If following a three year plan, it is important to

decide whether you will start by focussing on the content of the lowest, middle, or highest grade level. Some teachers choose to focus on the content of the highest arade level they have and work their way down



to the lowest, since the oldest students in the startup class will only be in the class for one year and they would already have covered the content of the two lower levels. When developing such long-term plans, it may be helpful to use a chart divided by months for year one, year two and, if applicable, year three. Teachers may then copy the outcomes to be covered each month into the appropriate boxes. When completing this chart it is important to refer to the outcomes set by the Department of Education for each grade level. This helps to keep programming in focus and give direction to the teacher to ensure that all outcomes set by the Department of Education will indeed be met over the course of the duration of the two or three year cycle. Samples of these charts, as well as ones for planning themes or other units of study, are found in Appendix 1.

Based on her own experiences as a teacher of 9-

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12 year old children, Miletta (1996) comments that:

Reading was something we did all day long, and the study of social issues helped define our program. Both simply permeated the curriculum When I look back at the group offerings of a particular year. I am hard pressed to define which are social studies and which are reading groups. There was time set aside after lunch for reading, but there was no subject ("group") specifically labelled Reading or Social Studies. Yet our students realized they were studying geography, history, or cultures and soon recognized that the primary way to gain information about their world and about themselves was through literature....

From the moment we started the program, we had control of our classroom's budget. Instead of ordering a basal reading series, we chose to buy multiple copies of trade books. Instead of purchasing social studies texts, we ordered beautiful books from the Smithsonian Institute, the Metropolitan Museum of Art, and the National Geographic society. These were all distributed on open shelves throughout the rooms and could be borrowed at anytime. (ob. 27-28)

Miletta (1996) also explains that:









Most of the social studies units were thematic in nature. We wanted our students to love history and geography as much as we did. We all enjoyed regrouping our books in new ways and investigating issues that would help both students and teachers make new connections between the past and the present We studied American and world history. We explored cultures and countries, civilizations and conflicts, often focussing on individuals who had an impact on their time. We investigated discrimination immigration and environmental problems. We discussed the use of land, poverty, homelessness, diversity, and power. Students particularly enjoyed groups on the Civil War the Revolutionary War, and ancient civilizations (p. 35)

Miletta and her team teaching partner promoted

the active involvement of their students in social

studies. Their students engaged in a wide variety of

activities such as:

- dramatizations, simulations, and constructions
- writing narratives from the point of view of historical figures, dialogues between adversaries, news accounts, editorials, and historical journal entries



- press conferences, news broadcasts, and panel discussions
- writing poetry
- drawing political cartoons
- making matrices, Venn diagrams, maps and time lines
- giving oral reports

In assessing their students' work, Miletta and her team teaching partner, would ask the students to demonstrate the understandings they had gained from their studies. Miletta (1996) explains that "Because culminating activities were often shared with the entire class at LGM (Large Group Meeting), they also served as a teaching and a motivating device for the students who had not participated in the particular unit of study" (p. 36).

Miletta and her partner did not make long range plans for which themes they would cover. They were guided more by their students' interests, yet ensured



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... guided by students' interests to achieve specified curriculum outcomes ... covered. Their practice of allowing students to teach others about topics which are of interest to them is discussed in the section of this handbook entitled "Planning Units of Study Together: Teachers and Students"

that content specified by the curriculum outcomes was

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Politano and Davies (1994) also prefer to go with

students' interests while making sure any specified

content objectives are covered. They suggest:

Begin by identifying students' interests and finding a focus that is broad enough to encompass many individual areas of interest. When there are state or provincial requirements for covering particular topics, share this information with the students and invite their suggestions for meeting these reaurements.

Traditionally, teachers often had to drag students through the curriculum. The simple act of giving children a voice in how and when topics are to be covered creates energy that *propels* them into each subject.

When a plan and time line have been established, involve children even more by





having them build connections between the way they investigate the interest area, topic, subject, or issue and the other instructional activities that are a part of their daily classroom life. (p. 68)

According to Politano and Davies (1994):

Integrating learning themes provides ways to:

- identify and build on students' interests
- use relevant topics to extend the curriculum
- foster development of knowledge, skills, and attitudes
- give students opportunities to represent and share their learning
- encourage students to use reflection and self-assessment to refine their work (pp. 68-69

An Imaginary Planet Project enjoyed by a 1-2 multi-age class during the course of a full school year was an interesting way to integrate the curriculum objectives of the content areas. Upon introduction, the teacher showed the students the curriculum objectives



outlined by the Department of Education. Through brainstorming and recording ideas through webbing, the students in the 1-2 multi-age classroom realized that many of the assigned curriculum objectives are related to everyday living. The students were very enthusiastic and excited when the teacher asked if they would like to reflect on their own customs and habits related to these areas and then work with a partner to invent an imaginary planet and explain the customs and habits of this new place. The logical place to start was to determine from what materials imaginary planets might be made. While first reflecting on what actually exists on our own planet, this incorporated the grade one objectives of the water cycle, where we live and with whom, and also the grade two objectives related to rocks and soil. As the year progressed, students learned about their own planet and applied their knowledge in a creative way to an imaginary land. At the





Suggested Reading

end of the year, the students reflected on the webs, write-ups and pictures they had made about their planet. Implementation of the Imaginary Planet project can actually integrate aspects of all subject areas at various levels.

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The following is an excellent book to read regarding the complete transformation of a classroom into a theme setting conducive to integration of curriculum objectives in all subjects: <u>A Room With A</u> <u>Different View A Practical Framework for Learning in a</u> <u>Multi-age Classroom</u> by Jill Ostrow. (Published by: Pembroke Publishers Limited, 538 Hood Road, Markham, Ontario L3R 3K9)



Assessment

Assessment in a multi-age classroom is similar to

that in any classroom. The biggest difference may be

that the students are more involved in their own assessment and learning needs. The fact that students often have input into the various topics studied in a multi-age classroom promotes a classroom where students have active roles in the learning process. Teachers can assess their students' knowledge about a certain topic in a variety of ways including, for example, oral presentations, dramas, recording in picture form or written form knowledge about certain topics and questions about the same topic. At the beginning of studying a topic the teacher can ask students how they plan to learn more about the topic and how they can present the information they gather. This can help teachers determine students' knowledge of research skills

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Self-Evaluation by Students



Setting Goals: Four primary level multi-age teachers in Anderson County, Kentucky initiate several different ways for their students to evaluate themselves as learners. One way they do this is by helping their students set reading goals for themselves. These four teachers have found that "when students set their own reading goals, it encourages them to take responsibility for their learning and to set direction for themselves" (Birdwhistell, Cann, Combs & Richey, 1996,

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p.103). They explain that:

During conferences students are asked to set a goal. This allows them to reflect on themselves as readers and puts some of the responsibility on the student. For example, Christopher decided that he needed to look at pictures to become a better reader. Tate's goal was to read a chapter book." (Birdwhistell, et al., 1996, p.103)

The use of self-evaluation sheets is a very

valuable experience for students. Such an activity helps

to keep the students on track and focussed on their



work. It helps motivate them to do their best possible work and also to foster a sense of pride and accomplishment.

Choosing Best Work: Another method these four teachers use to help their students to self-evaluate is by asking them to look over several of their own writings and choose their best work. This helps indicate to the teachers their students' abilities to understand and communicate what is valued in writing. They give the following examples:





Brian said, "I worked real hard and people learned from my story." Brian knows that stories teach us things. He also knows the value of working hard. Jimmy commented. "I like it and it makes me feel like I am on a beach." Jimmy takes writing personally and knows that it can make him have different emotions. Shea said. "I think it is my best because Mrs. Cann read us a book called Dinner Time and this is like it." Shea values what other authors do and sees herself as an author as well. (Birdwhistell, et al., 1996, p.103)



Portfolios

The following is a list of items which are kept in

these Anderson County students' portfolios:

- student work samples from the beginning of the year to the end (student chosen and teacher chosen)
- conference sheets
- anecdotal observations
- assessment tools such as Clay's (1982) Running Records
- audiocassette of a child reading
- parent questionnaires
- copies of progress reports
- student self-evaluation forms
- reading log entries
- student-chosen "best work" of any kind (Birdwhistell, et al., 1996, p.109)

The above mentioned teachers in Anderson County,

Kentucky, point out that:

While each portfolio has the some components, each one looks different because of the student's uniqueness. Some will have more of one item than another, according to the learner's individual needs and our instructional purposes. Some students may have more conference sheets because of our need to guide and assess them more often ...Our portfolios are not a final product but an ongoing collection of



Videotaping

Videotaping students is another method of monitoring students progress. If done at the beginning, middle and end of the year, videos can be used to reflect students' progress. When first using the video camera in the classroom teachers may wish to use it a few times to help themselves and their students to become at ease with it. A volunteer may be available to help out for those teachers who have large classes or who may not be comfortable using a video camera. For example, one year a parent, who is a fine arts student, invented a hat which she said was for Mme Fleur because of the flowers she put on it. She wrapped











newspaper around the students' heads to form a cap which she asked them to decorate with a wide variety of materials which she had gathered and brought into the classroom. Once the hats were finished, the students were divided into small groups to describe their hats and explain for whom they were designed. The parent then took the students in groups of five to the school's resource centre and videotaped them wearing and describing their hats. The class decided on a title for the video and put in publisher information. It turned into a project similar to writing a big book as a class project.



Anecdotal Observations

Chase and Doan are constantly observing their students. Students aren't even aware of this. Students view it as part of their daily routine. They explain that:



Our day begins and ends with a circle time. In the morning it is Talking Journal, during which the children bring their home into the classroom through their sharing. At this time we take note of the frequency and nature of the children's talk as well as their comments and questions. In the afternoon, during End of the Day Circle. the children often reflect on their school day, answering a particular question such as "How did you help yourself become a better reader today?" We often construct these questions in response to a need on which we want the children to focus The questions are posted on the board. The children are aware all day of what we will be asking. During End of the Day Question Time we listen to the children's answers, noticing the types of questions they respond to as well as the thought they put into their responses. Both of these circle times tell us much about each child's ability to express thoughts clearly and audibly as well as each child's willingness to express himself verbally. The information we gain here is shared with the children during a literacy Goal Conference, (Chase & Doan, 1996. p.73)

Helpful Assessment Hints

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The multi-age teachers in District #3 who responded to the survey developed for this handbook, indicated that they use nine of the eighteen assessment techniques listed on the survey to the same degree as they had when teaching in a single grade classroom.

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These teachers also indicated that more often they:

relate progress in terms of the continuous growth and development of the whole child in noncomparative ways

keep a positive tone in a written record of a child's regress based on milestones particular to all aspects of a child's development

s use conferencing and portfolios

allow children to make choices and be in charge of their learning

Additional information on assessment and

evaluation practices and procedures may be found in

Appendix 2 which consists of Section D of District #3's

Multi-age Education Policy Handbook (draft). Also,

since the principles that guide assessment and evaluation for all students in the District guide the assessment and evaluation of children in multi-age classes, additional information about methods of evaluation and evaluation tools useful in multi-age classrooms can be found in the curriculum documents from the Department of Education and student evaluation documents from both the Department of Education and School District #3

A key point to keep in mind when assessing students is that assessment and curriculum planning should be linked. Assessment results should be used as a guide when curriculum planning. Activities need to be developed to help strengthen skills and build knowledge in areas in which the students are weak. Children enjoy successful learning experiences when they are given opportunities to be interactive, hypothesis driven learners.



A key point to keep in mind when assessing students is that assessment and curriculum planning should be linked.

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Local Views

A sindicated in the Introduction, while developing A Multi-age User Guide: From Theory to Practice, surveys were developed and sent to four schools which have authentic multi-age classrooms in the immediate Corner Brook area. The surveys, which were developed by Marie Hatcher and Elizabeth Elder, are included in District #3's Multi-age Education Policy Handbook (draft).

Views of Local Multi-age Teachers

The teachers who responded to the survey conducted indicated that when they changed from being a single grade classroom teacher to being a multi-age classroom teacher, there was a minimal degree of change in their instructional strategies and their approach to curriculum planning, classroom organization,

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rules and routines, assessment, and parental communication. It is noteworthy that these teachers were already accustomed to using such approaches as whole language and workshopping, which are inherent to the multi-age approach.



The following is a list of activities which multi-age teachers in the immediate Corner Brook area find useful:

- creating the daily agenda with the students
- giving children responsibilities
- having a daily sharing time
- having a "Reading Chair" where one student per day sits to read to the class

After having taught in a multi-age setting, all

teachers who responded to the survey indicated that

they view the following characteristics of multi-age

continuous progress classrooms as being advantages:

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- children of different ages and abilities learn together
- children stay with the same teacher for more than one year
- children are familiar with the routines of the classroom at the beginning of a new school year
- siblings are encouraged to learn together in the same classroom
- because grade level boundaries are blurred, children's learning is not confined to grade level expectations
- in the second or third year of a multi-age classroom, children have the opportunities to be leaders and mentors

No teachers indicated any disadvantages for

teaching in the multi-age setting. The following is

additional advantage indicated by teachers who

responded to the survey:



teachers are already familiar with many of their students in September
Multi-age User Guide: From Theory to Practice



Views of Local Multi-age Parents The majority of parents with children in multi-age classes in four local schools who responded to the survey sent to them indicated that they also view the following characteristics of multi-age continuous

progress classrooms as being advantages:

- children of different ages and abilities learn together
- children stay with the same teacher for more than one year
- children are familiar with the routines of the classroom at the beginning of a new school year
- siblings are encouraged to learn together in the same classroom
- because grade level boundaries are blurred, children's learning is not confined to grade level expectations
- in the second or third year of a multi-age classroom, children have the opportunities to be leaders and mentors



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Additional advantages described by some parent

respondents include:

- ~ more time is taken with the children who are not at their grade level
- ~ the relaxed classroom atmosphere of multi-age classrooms



usually a smaller class size

The disadvantages of multi-age classrooms, which

some parent respondents added to the survey, include:



- ~ the older children see some repetition in curriculum
- ~ children become very attached to the teacher and, therefore, should only spend a maximum of two years with the same teacher
- individual desks are not used: children sitting at tables with five children per table cause problems with children not paving attention
- ~ students in multi-age classes cannot go out for help: the teacher is expected to give the extra help and most of the time they do not have time to do it

Multi-age User Guide: From Theory to Practice

Despite the four views mentioned above, nine out of fifteen parents who responded to the survey indicated that, given the choice, they would prefer to keep their child in a multi-age class; three out of fifteen said they would prefer not to keep their child in a multi-age class; and three out of fifteen were undecided

Thus, locally, the majority of those involved in multi-age classrooms are happy with multi-age continuous progress programming and classrooms.



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Now it's your turn to embark on the multi-age experience. As you begin the process, do not forget that setting up a multi-age classroom need not be overwhelming. Many of the strategies and techniques are not that different from those in any studentcentered classroom. Initial organization may require more time, but once routines are established you will find that student input will help lessen teacher workload. Team work, not only between teachers and students, but also between students of various age levels will no doubt enrich the teaching experience.

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APPENDIX 1

Curriculum Planning Charts from School District #3's Multi-age Education Policy Handbook (draft) Curriculum Planning Charts from School District #3's Multi-age Education Policy Handbook (draft)

YEAR PLAN

Student: Year	Class	_
September		
October		
November		
December		
January		
February		
March		
April		
May		
June		

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	What I have learned		
	Where I am going to get Information		
is studying	What I would like to know		
	What I stready know		

K-W-L-CHART

K-W-L-CHART

TOPIC

STUDENT'S NAME:

What I learned	
How I can go about finding out	
What I want to find out	
What I already know	

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Theme:

Possible Outcomes:

Language Arts Activities	Math Activities	Science
Social Studies/Health/R.E.	Art/Music Activities	Special Events
	Resources (print and other)	

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.....

TWO-YEAR PLANNER

	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY
	Theme / Unit/ Topics				
Year 1					
Year 2					

	FEBRUARY	MARCH	APRIL	MAY	JUNE
	Theme / Unit/ Topics				
Year 1				1	
Year 2					

THREE-YEAR PLANNER

	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY
	Theme / Unit/ Topics				
Year 1					
Year 2					
Year 3	200 Arm 140 Arm				

	FEBRUARY	MARCH	APRIL	MAY	JUNE
	Theme / Unit/ Topics				
Year 1					
Year 2					
Year 3					







Theme		
Grade(s)	Dates & Duration	
Overall Goals		

Curriculum Areas Integration - Overview			
Language Arts	Mathematics		
Science	Social Studies		
RE	Art	PE/Health	
Books	Learning Skills/C	omputer	

CURRICULUM OBJECTIVES

	LANGUAGE ARTS	
Objectives:	Activities & Resources	
Listening		
Speaking		
Reading		
Writing		
Library		

	SCIENCE			
Objectives:	Activities & Resources			

MATH		
Objectives:	Activities & Resources	

SOCIAL STUDIES		
Objectives:	Activities & Resources	

RE		
Objectives:	Activities & Resources	

HEALTH/PE		
Objectives:	Activities & Resources	

ART		
Objectives: Activities & Resources		

APPENDIX 2

Section D of School District #3's Multi-age Education Policy Handbook (draft)





Assessment and Reporting

Authentic Assessment in a Multi-Age Classroom

Many teachers express concern that assessment in a malti-a classroom might be difficult. With students working on m concepts at a variety of levels, isn't assessment of each made progress almost an impossible task? The answer is a res "No!" Most unchers of multi-age classes find the multi-age cl room to be the perfect environment for authentic assessment. In addition, they find that assessment is easier in a multi-age ch room than in a traditional environment. The multi-age class is alive with learning and activity, and the opportunities to an students individually or in small groups are readily available. Teachers of multi-age classes tend to know more about their students' learning because classroom focus is on each child as an individual rather than all children as a group. Rather than wathing a lesson to thirty students and then giving the same test to each child, the multi-age teacher, provided the classroom is sevenued and organized to maximize student learning, has the opportunity to watch, conference, and understand how each student processes information

Most machers of multiage classes find the multi-age classroom to be the perfect environment for authentic assessment.

This "watching" of students provides the teacher with incredible opportunities to assess how makens work together and independently (Goodman, 1978). It allows the teacher to ruly study the children to them: more about and one as an individual.

Organized Environment

Is order to assess medants as individuals and spend a prote deal of time conferences and warking, the clearators, any viscoment near be structured to accompandene both an individualized assessment approach and maximum interning for all moderss. If the tracker is bary with "philoi shapening" tasks, solving behavioral problems, or alluing with a volument valuable instructional and assessment into is varant; if the uncher is working with one moders while the other children we not support in instruction, there is a vanad! However, if the nucle-age classroom succher facilitates a strutured program where expensions are clear and includes are activatly learning, the opportunities for assessment are almost unitarized.

Continuous Assessment

Another definite advances of the multi-age classroom is that is provides for assessments on a constant basic continuous progress equals contanuous evaluation. Students in multi-age programs means on the environment for there was to four years. As a reads, hery spend very listic of their learning time lawring to become familier acquarant? One. The multi-age sucher can assess moleans on a require hauss and have more take to focus on specific.

In our enducation successes disasses, the tracker speak the first few encodes assessing end child's successive, enduced and social seeds. It is not small the year's well under very that the executor has a cite preture of the child and his or the minoreau, strangent, and areas of send. Unformately, just as the teacher becomes familiary with the matter as a laterate, it is almost time for the child to begin the cycle again with a sew teacher. The autiage program, benever, gives more time to the matchers, and the teacher. It respects additional differences and affords the opportances to predice one time programming and assessing. After all, curriculum and statution thend the developed after clear assestants, subvoction can be better tailored to meet the exact model of each statest.

Another definits advantage of the soulti-age classroom is that it provides for assessment on a continual basis: continuous progress equals continuous evaluation.

Examples of Amenument

As discussed carries, each of-the-said was not an ideal assumment tool for any daid. While they may help the macher evaluate his or her planning and waching stranging, these units do as useasarily accurately measure a molecu's knowledge or program. These was simply demonstrate how a submit is doing in comparion to his or her parts (Rys. 1994).

The preferred approach is that of authentic automatume, which highlights each moder's program over time and focuse as process as well as product. Strategio and is authentic assotement facilitate comparison of a standard's accomplications with his or here previous work not the work of domanane, and include information on how the moder taken and works, here mills wising anopies and uper recorded ranking mappies are poppier authentic assessment, as the yillow the moders to domanane progress and the tacher to gain worky adformation about the share with the child and has or her parents. Most midden and age classrooms, they often ask to review there portfolion from previous wars. The multice works are modes.

Teacher observations are a popular form of wathernic assessment, as well. Many mathern make observations on a daily basis is the form of annotabal records. Some choose to focus on a small group of students each day to ensure each child has been wiewed by the end of the weak, while observations to watch as many a possible during a given day or une period. The sample observation form on oage 66 is a pocular choice among onnany weakers.

Videouppet samples are also an option. One tracher has a top for each child and morest them working, chang, meaning, conformering, and describing the contents of their portfolios. Sustains and parents micro watching and saving the upper share the children "graduate" from the program. The tracher also enjoys the Denty of showing particular segments at conference same if the parents need more description as to need rule is the new ore program.

Many trachers also use checklists and inventiones to assess student progress. These tools provide a unput and clear way to demonstrate growth over time. Using the same checklist or investory throughout the program (i.e., rwite such year) provides a consistent description of the child's diversionment. The preferred approach is that of authentic assessment, which highlights each student's program over time and focuses on process as well as product.

Oral Language Observation

Grade .

Student's Name	
Ace	Grade

SOCIAL CONTEXT				
	Pair	Small Group	Clean Friends	Large Group
Reading Discussion				
Writer's Workshop				
Dramatic Play				
Free Time				
Playground Time				

	OTHER OBSERVATIO'S		
Date	ate Observation		

Reprinted from TCM 773 Language Arts Assessment: 1-2. Teacher Created Materials, 1994

Portfolios

Perfolies are a common method teachers of multi-age classes are correctly using to document student program. While teachers und to fill grade books with percentages and later grades, dey are now attempting to assess madents more authentically by building a portfolio to represent the accomplicitants of each child.

Perditions complement the multi-app philosophy in many ways. Fors, they respect individual differences by viewing the child as an individual, and associating his or her mands regardless of the work of others. Second, they vieworks the child in the vertamizon and planning processes (Genves & Susantin, 1992). There, they encourage risk-taking, respect cooperative work, and enhance staff-esteme. Finally, they develop a sense of responsibility as midents take prior in oversehup and eccomplications.

Student Involvement

A key element in assessment, especially when using portfolios, is involving students in the process. The use of numeric influences provider valuable atformation about the child's stiff-integer wrisent reflections can be placed in the portfolio to they program. While some trackness singly ask for a "free-write" stiff-valuations provide a clear potent so. Bits the promays and appergrade meating reflections like the promays and appergrade meating reflections located on pages 68 and 69. These stiffvaluations provide a clear potent of how the child inves his or her programs, and they assure such student a building reflection stills and stiff-confedence.

One extremely shy student deveload beautifully during her threeyear multi-agt program. She evolved into a classroom inder and brought many smiles to ber classmasts and uzeter. As part of her end-of-the-year reflexion, she was asked the following question: How have too done in math this year.³ Her response:

"In my 'ipinun' I think I did very good in math. Licenned my times tables, division, and some other good stuff that makes me think.

P.S. I'm very proud of myself "

Lindsay Robinson, age 9

Portfolios complement the multi-age philosophy in many ways.

Reading Reflections



Reprinted from TCM 773 Language Arts Assessment: 1-2, Teacher Created Materials, 1994

Reflections on Reading— Upper Elementary Form

Run off copies of this form for your **mutatum** to that they start the process of reflecting on their over progress in reading. Teacher/mediat conferences affect a good opportunity for this. At that time, the succher can help the randoms decide on the boots they will read acct.

Reflections	n Realing
NameDate At the beginning of the year I was reading	
Now 1 am reading	
When I look at the difference in what I can read i	sow, 1 fed
Now I can	
I am really proud of	
The next book I plan to read is	
because	

Reprinted from TCM 504 Portfolios and Other Assessments. Teacher Created Materials. 1993 147

Parent Involvement

Autor by development is measurement is involving parents in the process by reporting/communicating programs with them on a repatch runts. Prevents may particular to detection and sense to pays a sigsificant role in the descrimination of pasks and expressions for their chaldress. By summing parents "block and compositional frequently, workness can include parents in the most procision experience of their defaultion" block-and involution that the response of their defaultion blocks.

Parent reflections an wonderful anexament mote and set excernary valuable is moting the mote of the child. Most matiage teachers many mores at the hepithing of each years to find out when parents' goals are for their children. Teachers also means informally on a duby basis via parent meetings and showe calls. Whether is to manding in the particip for an andmant larve each whether is to manding in the particip for an andmant larve each year examp spacefic tamos for spacements, meccan-til mechang requers successful communication. Parents and to be involved in order to be sum in the deductions of their children.

A sample parent assessment can be found on the following page. This particular assessment can be used at several points during each year.

Parents need to be involved in order to best assist in the educations of their children.

Parent Questionnaire

- QP.	ient's Name Grade Date
	ne of adult completing form:
1.	What is going well for your child this year?
2.	What progress has your child made since the beginning of the achool year?
3.	Do you have any concerns about your chât?
4.	Do you have any suggestions for working with your child?
5.	What are your goals for your child this school year?
	Additional Commerns

Thank you for your time!

Reprinted from TCM 773 Language Arts Assessment: 1-2, Teacher Created Materials, 1994

Conferences

The reficient prove state malerance is the topicating of the action jeru is an efficient for a meansful unit-spec classroom. A variety of conformants have a meansful distribution is visual in methods and the state of the state of method distribution is visual in methods for market of each stable and methods distribution is visual formations. Second, in impuriture previous in saming, do to reduce it is device the makes in the conformat, as he or the is the key participant.

Most wachers in multi-age satings conference with individual students on a daily basis and hold unchen/student/parent conferences at least once each year. Seads University Elementary School at the University of California, Los Anecles, has shared an approach that is worth maing have. In addition to meeting with individual students on a daily basis. Souds facts it is important to hold conferences throughout the year for parents. The first mosting of each year should be hald during the first week of school to serve as an introduction for both the parent and teacher. This provides an opportunity to describe the program and express expectauons for the child. Mantings throughout the year should focus on the child's accomplishments to date. In addition, goals for the child can be discussed and modified with parent, stacher, and stadent collaboration. Finally, after moting with each child to discuss has or her facings about the year. moving on, staying in the program, and so forth, the uncher mosts with the parent again. Thus funal conference should provide an opportunity to assess the chuld's academuc, social, and cantional growth.

This thoughful approach involves all participants, the teacher, student, and parent, working collectively to make plans and evaluais the progress of each motion. It has been highly successful in mercurg the needs of every child and has maximal many other schools in finding a valuable communication model.

Report Cards

Traduculi), reporting smaller progress has occurred on a specifield care four times a year, ming a standard from filled with letter gates for each stadess. These forms, commonly known as report cards, have commande the systems for years. They represent the hard or compruser education. Understanding for the student, they are not no nest way to report progress or demonstrate development.

Teachers have shown frustration with this issue for years. While some are still mandated to use letter grades and specific forms,

The first meeting of each year should be held during the first week of school to serve as an introduction for both the parent and teacher.
many are now using none materic measures such as examines and constimutes. Normives are just that, a summire measure show the child. Though into comming for the matter to write, such a written report is for more valuable to the persons and the while child. It highlights recepts, and then, instrumt, and such its works child, a the statistic results are person of and while child person for child's work and behavior. It can include the such of pass a people the child is well as how the persons can assis. The servative assesss the whole child as an individual, regredies of the work of pass.

Continuums are also popular among numbers of maki-age classes, and skry our valued by parents because days provide a class description of where the child is anademically and availity, and where the child is going. Tankters in one darkits have written a cost with the response. Keep is much that any change is difficult Most parents prevue on will keep it and that any change is difficult Most parents prevue on with keep radio and and support them. A change in your assessment and reportug process will need to anclude parent solution and sub-viewment.

Coocluding Remarks

Two practicles that form the basis of successful assumers in a subil-age classroom are authenticity of structure. Neal assesment can readily occur in an environment that is organized for structure. Although a multi-age classroom may a first galaxe appear unstructured, it is in fact highly organized and prepared to see the sends of each stadent. When the program non suscoolly, with details worked our and expectations clear, the opportunites for authentic assessment are numerous.

Authentic assessment is the preferred approach in multi-ger classmonts. Stranges works all participant; the under, moder, and parent work collectively to meet specific learning ands. Examples of dworked cassessment works that work worked reading apples, videoparget learning, searce observations, amendeal memoris, checklins and investores, student reflexions, and parent evaluations. The use of portolosis on a treactions method for collecting student work. Portfolios provide an invaluable record and disolator of anduet accomplications.

It is important for the student and partnit to play a role in the assessment process. Both must shart in the experience and be valend as participants. Thus thoughtful, standard, and partner relationship among succhars, parents, and students is a preroquiste for learning and will ensure a busit rate of uccess for madents. Two principles that form the basis of seccontrol assessment in a multi-age classroom are authenticity and structure.

The Importance of Authentic Assessment

"Standardized tests are not congruent with netw research in language training; they are skill, not process, oriented, they are said to not and classify youngests within than to gree direction for learning; they are incomplete, and they have a missasen sure of observany." — Gall Heald-Tavito: The Administrator's Guide to Wheel Language

"At report time, children shou their parents what they can do and have done intrusy on interface tunce, in chief may well be demonstration of chanuesge Trestuaent somitier report os also facemplainments, protects currently understay, and next term gools." — Tervor Calkans. "Off the Track Children Tenve en Ungraded Pannary Schools," The School Assemistrator (May 1992).

It is vital to know how well a child is doing in school. Fachers need to know as a basis for evaluating and adapting their tracking. Administrators want to know to prove that the schools are doing "their bot" and **parents** want to know both to neip their child and to validate the job they are doing as parents.

As eachers prepare report acts most retile anadopacy of letter grades to accurately refere what and now true students are learning. Rather than focusing on the duid's progress all areas of learning, letter grades toous only on where the duid is on an accoents toem pole. The pressure to make "good grades", instead or enourcagns real learning, then creates unproductive stress for more - no grill C's and "D's" as well as shore that ert "A's and "B's".

Learning is a process, not a product. Letter grades are deceptive and dangerous in their simplicity, particularity at the primary level. Educators can acknowledge this inaccoust, out shill enter grades persist and their impact on students' lives is protound.

There are still many people who hang onto the security of grades and an standardized text scores. As one superimendent recently expressed it. "We're in the business of teaching kids and raising test scores."



Authents assessment is not as simple as grades but a is at more accurate and productive. We moving away from inner grades and de-emphasizing rest strong you are not. 45 if might appear, moving not a fig of measuress. To record specific activity and behavior, know what land of progress you expect have actual examples of work, are diverging a progress you exduld and how that child learns, and have suthems observations to share with parents.

Authentic assessment means evaluating that goes on communally. It reflects actual learning experiences that can be documented through such means as observation, anecdotal records, work samples, journals, and conferences.

Changing Report Cards

Is has action Off the Tenck." There Califies, an elemenary property describes how here and his suff "angivenement a highly concernential approach to grading in a misianely implicitional middle class, multicultural community and successful on interving high levels of support. After an excell public memory or notion significant assess, the came explaining practing practices would be an important one. Parmers wand personalized exclassion, but they also appeared to ware level grades that would will them where their chuld stoods a mission to one: chuldren the same area.

Calicos and no secretor worked through the possibilities and concluded busin'insect of resolution works and the possibilities and concluded business areas that needed work, and then set specific goals. We needed to let the calicon above when they were doing that busi. We needed to let antennon to certail. The reports needed to enhance communication through collaboration with students and parents. Finally, the reports needed to encourse that wand "

"Authentic assessment means evaluating that goes on continually." Having worked out their proposal dee work is to the parents' advisory council and their to spress in individual classroom meetings. They saked parents for their induci. After the first of these new report cards went out, they surveyed the transmiss. In January, a thirt merevering the survey results, they came up with strategies for writing still better reports and for meeting the needs to a rew downsmod parent.

The sum-is indicated that community support came because "of the quality of teaching, our openness during the process of making the decision, the return part the decision, was not made allead of time, the willingness to adjust and the willingness to give comparative information in the interview the parent subset. No parent masted."

Observation: Kid Watching Over Time

Over-up of index and seeping an ongoing record of your observations are important components of authentic assistants. A common question is "Where ool get the one in of that" It seems particularly tune consuming at first, our as Core. A Corrength and C. Philip Carrywight point out of ther book. Decremery Decisional Salls: "The antividual who is new to the use of desmananary processes should also comfort in the fact that practice tends to increase efficiency. In general, the more you use observational methods, the more efficient you become, both in their use and in your use of time."

Kid watchung takes time. You need talle when you aren't organizing an activity, answering questions, conducting a muti-tesson, pulling down the blinds, or a dozen other thungs. You also need a few minutes to make notes and time after class to organize your notes.

Mempity times in the day when children are working independently or in small groups. Assign youneli 10 or 15 minutes of kid watching. Some teachers, to help focus that rannon, assign himitaries as gravitatic children act days on that the whole class is covered once a west. That may sound atomary, but it helps statefore watch each child every west. Otherware, it is easy for the atomaton grabbers, the rouble makers and your "problem" children to get more than they it is size of your lid watching marks.

Conferencing with individual children at least once a week is one important opportunity. In a conserence, take time to listen to and watch the child before moving into a "teacting" mode

When teachers collaborate, there can be periods when one teacher manages the classroom and the other wid watches. Sharing these observations helps both teachers get a good fix on individual children.

In addition to time operation is student, you will need use to write down your observations above teaches you exclusion the need helpful where you want to locus on seeing sectors suits or these of behavior. Anecdoral operations and to this in putting banario or in cortex, thereadore sounds that you go and the sector of the sector of the sector and the you calcin what you are in a sectored or into even must appreciate Record the behavior and the important asserts or the setting in which it happens. Designer one endour Do to interest or used in a source or other that you calcin a setting or the setting in which it happens. Designer one source of Do to interest or used in a source or other that you

One time-saving was or taking anecdotal observations is with a dipboard and a sheet of labels stamped with the date and initialed for children being watched. Record your observation on these

You'll also need mere sent sour as sourceanns and an ongoing file for each chaid. If you use the curboard and writingk label system, you can quickly pull off the labers and add them to extract ones. That may be all that you have the energy to risk day. But have time when you can to expand on any observations that you recail the amount of the ling.

Most important, don tim to count on your memory unaided by these quick notes. Unless your memory is prenomenal you will remember only high points and miss recording important information about the child's origoing development.

Describe Specific Behavior

Train yourself as much as possible to describe behavior and the context in which it happens. Behavior is what you can see. Processes and motivations are not seen. You may uncer these out instruction the behavior there of any interpretation or judgment. This allow you to collect a pattern of behavior and over rule you may funct you range or alley our interpretation. "In a conference, take time to listen to and watch the child before moving into a 'teaching' mode." "Like any new good habit, kid watching may be awkward and slow at first. But it becomes easier."

_

By emphasizing description of behavior in your anecdotal records, you will help yourself avoid some of the common biases that sneak into observing children.

One of these to the bia (dete: That is note liably to happen when you are using a shealing which includes a transport to the site of the site of the solute methods and the site of the site of the site of the site of the solute methods are site of the site of the site of the site of the solute methods are site of the site of the site of the site of the solute methods are site of the site of the site of the site of the solute methods are site of the site of th

Another bas to be availed of is the "logical error." If the observer knows the child reads a lot of books, there may be a sindency to rate the child's comprehension huger than s/the desares because of the observer's betief that comprehension and reading a lot are synonymous. Making a logical connection between two knots of behavior may each you up.

We ve mentioned the basis of seeing dampare behavior more often than accessed: "good" contrains a rear encoder thangs basis can color your observations" How about 3 as? "when everyding is going wrong." Being human and sometimes supermaint — weakness are not complicitly observe in their use watching. But being aware of the lands of bases that creep in will help to use interest i matte ow a recorded.

It is also neignal to have audes, student teachers, or volunteers who work with you do some observing and recording of anecdotes. Again, ask them to be descriptive rather than sudgmental.

Things to Look for When Observing a Child: A List

- · degree to which the child attends to the task at hand
- · asks questions or shows curiosity
- · listens and applies new information
- what problem-solving strategies child uses
- how child uses language and to what purposes
- does child favor expressing ideas as visual images, in words, with physical movement?
- how child involves self in reading and writing
- signs of reflective thunking
- · pleasure in learning
- in a mustrating situation, ones or gets angry
- · handles conflict by using force, giving in, or negotiating
- · acts unpuisively
- considers the rectings or others and acts appropriately
- can work or play independently
- · can work or play cooperatively and under what circumstances
- · the peer models and mends chuld chooses
- · how much and what kind of responsibility child can take on
- how much order or what kind of direction child needs
- how much time and what kind of repetition child needs
- how does the chuic respond to making visual images?
- how does the chuid respond to making music and dancing?
- child's imagination is easily imggered
- · whether chuld goes for the big picture or becomes involved in small details
- does chuid sansty hum therselt when creating something?
- . how and with whom does si he like to share a creation?
- how much control is there of physical movement?
- degree of chuld's body and spanal awareness
- child's nutritional and health habits
- how the chuld responds to sports and physical activity
- handles toys, tools, and equipment requiring good eye-hand coordination and small muscle control
- shows an awareness of appropriate safety measures
- . shows sensinvity to other living things
- · can accept differences in people's feelings and ideas
- · can be a leader or a team member as appropriate
- participates in decisions made by the group
- respects others' possessions and classroom equipment



Portfolios

A portfolio which keeps examples of a child's work on an ongoing basis is a valuable and authentic way to document a child's progress.

Some people are now using the word "portfolio" to mean the folder of reports, uses scores, parent comments, etc., about a child that one tracher traditionally passes on to the next tracher. Such a file may be helpful to keep. but that is not what we mean here by portfolio.

This is how a portfolio would be used to assess a child's progress in larming to write. At the beginning of the farty wer, it would include putchers with a softbile or a live larmest understands, perhaps with the distance massing at the hotmon of the pages. A lite later, example in the portfolio would show more larmes and a definite left-to-right programion. By the end of the second year, the child's portfolio will probably include a "published" amory, most of which uses standard punchasion and spelling. Along with the final creation and the the first "measy courd" of the sourd showing how the child created and then was able to exit has or her work. Also in the portfolio might be some of the child's reading top or sourtable.

A portiolio might also include sample drawings, paintings, and math papers. But paper isn't the only thing in a chald's portfolio. There may be audiotapes of the chald's progress in reading aloud as well as snapshots and even videotapes of protects and performances.

These "products" of the child's learning are selected for the portolio nor only as example of the bests the child and obtail also document the proross. Teacner, child, and tanuly can all see how the child has grown and developed. The portolio will also andue nores based on the teacher's observators. These no will be recording the process nor only of writing, reading, and physing, but also of rearning such physical, local, and emotional shifts as developing small: muscle coordination, making itends, and handling conflict.

Another valuable element in a portfolio is the child's own evaluation of whats /> he is learning. This is often in a sample written form, sometimes done alone sometimes as part of a teacher/child conference. Developing ways that alow children to assess their own progress helps to empower them.

A piece of important practical advice: be sure everything that goes into a portfolio is caret. The children can help with this. Keep a large stamp with the current date next to the teacher's box and make it a class rule that everything that is nimed in must be stamped.

A good portion like this gives you material to evaluate the progress a dud is making (ive use relocing at skill, you can judge which the child has mastered, which are suit emerging, which need readorcement, which might be strongued new 15 lib new ond skills, a good portfolio will give signs of understanding, or connections the child has made or might need to make. It can give unsigns on the child has taring style.

We have been describing a working portfolio. Throughout the year it gives you, the child and tamily members when they come for a conference a way to evaluate progress. At the end of the year, working portfolios will

"Teacher, child, and family can all see how the child has grown and developed." probably need to be weeded out. You will want to keep just a few examples and a few evaluations from the year.

A different land of portion is developed would be end of the vactimes and the distance's show portions with the different setters what ancluded. These poets are the coses the differentiations and can be a powerful conting a show portion to a store of a differentiation and can be apowerful motivement. It has the solvening of barrag noncellation and can be apowerful displaying outs, one you'd is a set work is displayed and. None are stringed out for special prace or commendation. Each child has done that the barrage of the solvening noncellation of the solvening of the or has been and receives recognition.

Checklists and Inventories

As trachers move away from standardized tents, all but the most experienced teachers need the help of chars, checklasts, running records, and inventories to feel comfortable that they are teaching what they should, covering all the bases.

We recommend that you collect and look as several different ones and then make your own. The process of creams your own thekalism or memones will help you concenceonversame with or evolopmental partness and provide a good pacepround or your conservations. Keeping aventiones on each child can become overwerkame, and may not be best used your une. But having worked through the aventores and having them for reference will give your and makes

Another reason to become tamular with developmental contanuums is that tamilies want to know where their child stands in relation to other children of the same age both in the school and generally. Continuums can be neiphil in this regard

However, continuums are shill us: an estimation. The important thing is to focus on the individual child, what is the patient of progress for that child, what strengths is s/he developing, what are your expectations for him or her?

Here are a few sources of checkusts and inventories: Portfolio Assessment and Exeluation: Developing and Using Portfolios in the K-6 Classroom by Janune Batzle includes: Emergent Reader Inventory: Early Reader Inventory; Fluent Reader Inventory: Wonten Language Inventory (Emergent and Early Winters) and Winnen Language Inventory (Fiven: Winters) as well as a rubric. Evaluating Creative Winting The Auministrater , Guide to Whole Language by Gail Heald-Taylor includes a Whole Language Benavior Inventory, Kindergarte Grade One and Whole Language Benavior Inventory, Grades Two and Three as well as several checklists. The Primar, Program Foundation Document of British Columbia includes extensive "descriptor" charts arranged developmentally. In the area of language arts there are descriptors of listening, speaking, reading, whong viewing and visual representation. There are also descriptors of learning in social studies science, mathematics, physical education, dance, music, drama, and the visual arts as well as for their "Learning for Living" curriculum that includes such topics as individual awareness, relationships, social awareness, and responsibility.

Talk to the Authors 1 afe Guests khool fairs, end of t 1 Multi age Configuration (c g. 1 2, 1-2-3, 4-5) **VolMiles** (e.) de la celetra Celebra SUMMARY OF THE FEAR September 20 to June 20 Field Trips & Follow-up Address: Acimiles Themes/Topics 1 September 4 : M.S . Name of School: 1 Iracher's Name Ickphone:

	1 hemes/Topics	field Trips & Follow-up Activities	Celebrations & Special Activities (e.g., art shows, school tains, cnd of theme celebrations)	Guests
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February				
March				
1. 1560 - 3				
lune				

PLEASE NOTE: This summary may be copied for a student's the and also may be copied to accompany a student's transfer form

2 after

NOMDUAL PROGRAM SUMMARY FOR TRANSFER PURPOSES

Guden: s Natic	has been in a multi-age continuous progress classroom in
Duality and Address of	during the following year/s:
La te yawati	Chili hand

familiar with the following strategies and has used the resources described below:

-

Curricular Areas	Description of Instructional/Learning Strategies and/or Resources Used
Language Arts	
Math	
Science	
Social Studies	
Otner Curricular Areas (Please Specify)	

Crists Level

Page 2

PLACEMENT:	It a multi-age continuous progress placement	t is not available for
		Out's have

it is recommended that this student be placed in

CHECKLIST OF ACCOMPANYING DOCUMENTATION

- Report Card/s ٦
- Portfolios
- Work Samples
- Record of Observations
- Assessment Records (e.g. Running Records)
- Anecdotal Records
- Checklists
- Records of Conferences
- Video Recording/s
- Audio Recording/s
- Other (Please Specify

Teacher s Signature:

Date:



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THINKING ABOUT WRITING

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One thing my parentiss would really	One thing my teacher would notice
like about this prece	about my writing is

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One reacher, who the criteria for a s children record h students identify some direction fo	an class does a maximum ful proje now their proje what they have or goal actuing.	lot of projects, involves d set. The list is then photox as match the criteria. Th e accomplished and provi	hildren in setting appied and is helps the des them with
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Enidence of Learning 79



Figure 29 Incoming Station

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	remembered that
ction	Non-fiction
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I want you to notice.	
Please give me one read my selection.	compliment and ask me one question after you

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Student Reflection 91



it was hard for me to learn	I wish I had been told more about
:::	A question I am curious about and want to find the answer to is
Three things I want you to notice about my work are	
•	I had some trouble but I solved it by
•	
I was surprised to learn that	I was on the right track with my idea about, but what I didn't know was

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96 TOGETHER IS BETTER



	THE WEEK IN REVIEW	Unit
This week I feel good about .		becaus
		was easy to
me because		
I really had to work on		
I had fun when		
My goal next week is to		
	Signed,	

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226

	PROJECT PROFILE	
What I did		
How I did it		
How I feel		
Who I worked with		
A highlight tor me		
What's next		

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Chapter 5

Summary and Conclusions

The purpose of this project is to provide teachers with an information package which includes the philosophy behind multi-age education as well as guidelines for establishing the classroom environment and for curriculum planning. The two research questions which guided this study were:

- What are the benefits to the multi-age approach to teaching and learning?
- How can the multi-age approach to teaching and learning be incorporated into the classroom?

To this end. I conducted an exhaustive review of the literature concerning multiage education. This background is of utmost importance since a firm grasp of the theory behind the multi-age approach is needed before it can be put into practice. In addition. surveys were constructed and administered to teachers. principals and parents involved in multi-age education in order to ascertain their impressions of multi-age education. Furthermore. I also drew upon my personal experiences and observations as a multi-age teacher.

Discussion of Findings

An examination of existing research literature confirms that the multi-age approach is very beneficial to students in many ways. Further, this approach to teaching and learning provides benefits unique to multi-age education. The surveys suggest that these findings are strongly supported by teachers, principals and parents involved in multi-age education in four schools in the immediate Corner Brook area of School District #3.

Implications for Practice

This study has shown that there is a great deal of support for multi-age education within School District #3 by those directly involved. This study also shows that the multi-age approach has a place in School District #3 and that it provides a choice to parents which many parents perceive as an important choice for the education of their children. More specific implications for practice include:

- Successful multi-age classrooms encourage students to become very much involved in the running of the classroom including curriculum planning.
- Overwhelming research evidence indicates that the philosophy of multiage education reflects a sound pedagogy which is beneficial to all students.
- It is an easier transition to teach multi-age classes if the teacher is already accustomed to using whole language and classroom workshopping approaches.
- A wide variety of resources and manipulatives appropriate for a wide range of ability levels need to be available to multi-age classrooms.
- Successful multi-age classrooms require teachers who embrace a studentcentered approach to teaching and learning.

Implications for Further Research

The benefits of multi-age education have been well-documented in research literature and have been supported by many studies, including the surveys conducted by this developer and another graduate student. Some school districts have made the move in recent years towards mandating multi-age education at the primary level. More extensive research into implementing multi-age education beyond the primary level could be conducted in School District #3 and, indeed, in all school districts of NewFoundland, to learn how the multi-age approach can be implemented to its fullest advantage, and if it should, in fact, be mandated.

It may be beneficial to District #3 if further research resulted in the development of three additional handbooks:

- 1) One addressing administrative issues related to multi-age pedagogy
- 2. One addressing special education issues related to the multi-age setting.
- One addressing issues relevant to parents of children in multi-age classrooms.

Concluding Comments

It is clear that the multi-age approach to teaching and learning is a viable approach which has much to offer our students. Multi-age education has a foothold within School District =3 and continues to receive support from those directly involved: teachers, principals and parents. More education and discussion is needed on the multi-age philosophy by all who have a stake in the education of our students. For many years, this approach has been seen as a step back, implemented mainly for economic reasons. It is time to bring multi-age education to the forefront where this approach can be accepted or rejected on its own merit.

Developing this project provided me with the opportunity to critically analyze and reflect upon my own beliefs and convictions as a teacher. The entire process of researching and completing this handbook helped me to continue to grow as a teacher. It is imperative that we, as teachers, help our students to become independent thinkers who have developed the skills to be life-long learners, who feel good about themselves and who respect individual differences. In order to facilitate this, it is necessary to first focus on the needs of our students. I truly believe that the multi-age approach to teaching and learning is based upon a very sound philosophy. I am aware, however, that change can be very difficult. During the process of compiling this handbook, it became apparent to me how important it is that teachers understand the underlying principles of their pedagogy.

In making suggestions and designing activities. I was always aware that there is no one correct way of doing things. All of us as teachers need to use approaches that meet the needs of students but at the same time are pedagogically sound. While the term multiage can be intimidating, the aim of the handbook produced for this project attempts to dissipate and allav some of these fears.

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Appendix A

School District #3: Multi-age Continuous Progress: Policies, Guidelines and Procedure

Page 2

DEFINITION

Multi-age continuous progress education is a classroom organizational structure in which children of two or more age levels work together. In their everyday lives, children interact with people of all ages. Their lives are enriched by the many experiences they have and by the relationships they develop. Multi-age education is a natural and logical extension of children's home environments. Multi-age education is based on a belief that hidren will benefit from a learning environment that values diversity. In a classroom in which there is a wide range of ability, children's contributions to classroom life strengthen both their academic and social experiences.

DEFINING CHARACTERISTICS

A multi-age continuous progress classroom, while similar in some respects to other classroom organizations, is different in the following ways:

- Children of different ages and abilities learn together, and this replicates the experiences they will have in the world outside of school. The vertical nature of multi-age classroom grouping encourages children to take on leadership and mentorship roles. Furthermore, children have a greater chance of finding outch children who have similar interests and abilities.
- A multi-age continuous progress classroom enables children to experience being in the younger and older - and, quite often, the middle - positions in a classroom community that closely resembles a family.
- Siblings are encouraged to learn together in the same classroom.
- Because grade level boundaries are blurred and children learn at their own rates, continuous progress is possible.
- Where possible, teachers spend two or more years with the same children. Therefore, they come to know a fuller range of the prescribed curriculum. This enables teachers to see progress over the long term for each child and to suspend judgement until the end of a key stage.
- Teacher-parent communication may be enhanced because children may be with the same teacher for more than one year.
- When a teacher is able to be with children for more than one year, the teacher can use knowledge of the child from the previous year s to plan for the following year thereby ensuring that no instructional time is lost and that instruction is appropriate for the child.
- Children become more familiar and comfortable with the routines of the classroom so that there is an easy transition into the new school year: furthermore, older children can help newcomers adapt to the classroom routines.

RELIEF STATEMENT

Based on what we know about children as learners, we recognize the need for learning to be holistic and appropriate for the learner. We believe that a multi-age continuous progress classroom provides for that and of learning. It enables students of varying ages and abilities to develop the self-confidence to become a community of life-long, independent learners.

PRINCIPLES

A multi-age continuous progress classroom is based on the following principles:

- Learning is social; therefore, there should be many opportunities for social interaction and collaboration.
- The classroom should be a community in which children learn to empathize with and help others as well as to accept responsibility for their own actions.
- Children need time to think, to do, and to reflect; therefore, classroom time should be flexible to support these needs.
- Through continuous progress, the classroom learning environment should emphasize success for every student and to encourage children to see 'mistakes' as opportunities to learn.
- The classroom should be a place where students feel valued and where an emphasis is placed on building self-esteem.
- In order for children to become life-long, independent learners and effective communicators, there should be an emphasis on both process and product.
- Children need opportunities to think critically and creatively and to engage in activities that require higher level thinking.
- Children are naturally curious; therefore, learning experiences should begin with children's interests and inquiries.
- In order to facilitate inquire-based, active learning, children require freedom of movement, freedom to interact and collaborate with others, and freedom to make choices about their learning.

Page 3

POLICIES

CREATING THE MULTI-AGE CONTINUOUS PROGRESS CLASSROOM

Policy Statement 1: The multi-age continuous progress class will consist of children of varying ages and abilities, and will span more than one year.

INTRODUCTION

A multi-age continuous progress classroom is a *community of learners* that replicates the world outside of school. In order to establish at new community of learners, children need to be together long enough to develop a sense of security and continuity. This sense of security and continuity is more strongly established when the teacher stays with the children for more than one year.

GUIDELINES

- A multi-age class will function better if the numbers are kept within a range that does not exceed twenty-three (23).
- A multi-age class needs to include children of different ages and abilities.
- A multi-age class should be as balanced as possible in terms of age, gender, ability, ethnicity, and achievement.
- In a multi-age class it is good practice to include siblings.
- While it is possible to have multi-age combinations of two-age two-grade, a multi-age continuous
 progress organization works better with a full primary unit (1-2-3 or K-1-2-3) and a full elementary
 unit (4-5-6).
- Every effort should be made to ensure that school scheduling for special events and for specialist teachers enable the multi-age classroom community to stay together.
- As far as is possible, children should stay together as a group with the same teacher. When the older group of children in the class move from primary to elementary, they should also move as a group.

Page 4
PRACTICES AND PROCEDURES

Information on practices and procedures related to Police Statement 1 is contained in the following sections of the District's handbook, Multi-age Continuous Progress Education:

- Information and awareness for principals, school staffs, and parents: Sections A and B
- Creating a multi-age continuous progress classroom: Section C
- Maintaining a multi-age class for the long term: Sections A and C

CURRICULUM AND INSTRUCTION IN A MULTI-AGE CONTINUOUS PROGRESS CLASSROOM

Policy Statement 2:	Curriculum and instruction in a multi-age continuous progress classroom will foster and reflect the holistic development of the learner.

Policy Statement 3:	Curriculum and instruction in a multi-age continuous progress classroom will respect the uniqueness of each learner and enable each to achieve his/her full potential.
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Policy Statement 4:	The provincial curriculum outcomes will guide an integrated approach to curriculum planning and instruction in a multi-age continuous progress classroom
	curriculum planning and instruction in a multi-age continuous progress classroom

Policy Statement 5:	Curricular and instructional planning in a multi-age continuous progress
	classroom will be the joint responsibility of children and the teacher. Parents
	also may be involved where appropriate.

INTRODUCTION

In a multi-age continuous progress classroom, learners are the focus for instruction. Curriculum and instruction should begin with and build on the child's prior knowledge and experiences. By lifting the grade and disciplinary burriers, children are enabled to make connections between the curriculum and their own lives.

GUIDELINES

- Curriculum and instruction must ensure that learning involves all domains: cognitive, psychomotor, and affective. All aspects of development—personal, social, intellectual, physical, creative-aesthetic, and moral-spiritual—must be fostered.
- Curriculum and instruction are driven by the child's strengths, interests, and needs in relation to curricular outcomes.
- Every effort must be made to create an inter-disciplinary, integrated curricular structure that will enable children to make connections in their learning.

PRACTICES

Information on practices and procedures related to Policy Statements 1-5 is contained in the following sections of the District's handbook, *Multi-age Continuous Progress Education*:

- Child-centered education: Sections A. C and D
- Building the curriculum: Sections C, D, and E

ASSESSMENT AND EVALUATION IN A MULTI-AGE CONTINUOUS PROGRESS CLASSROOM

Policy Statement 6:	Assessment and evaluation in a multi-age continuous progress classroom will follow provincial and district guidelines and procedures. It also will reflect the unique name of curriculum organization and instruction in a multi-age classroom
	classroom.

INTRODUCTION

The principles that guide assessment and evaluation for all children in the District also guide the assessment and evaluation of children in multi-age classes.

GUIDELINES

Refer to curriculum documents from the Department of Education, and student evaluation documents from both the Department of Education and School District ≠3.

PRACTICES

Section D of the District's handbook, Multi-age Continuous Progress Education, contains information on assessment and evaluation practices and procedures.

TEACHER PROFESSIONAL DEVELOPMENT

Policy Statement 7: Teachers assigned to multi-age continuous progress classrooms must understand and be trained in multi-age philosophy and instructional practices.

INTRODUCTION

The Belief Statement and Principles contained in this document (p.) should be the guide for teachers in the application of multi-age philosophy and instructional practices.

GUIDELINES

Teachers in multi-age classrooms should understand:

- that learning is social and collaborative
- the importance of establishing a community of learners
- the value of positive social relationships within the classroom community
- the classroom time and organization should be flexible
- the implications of continuous progress for instruction
- the nature of holistic and child-centered education that is inquiry-based
- the nature of an integrated, inter-disciplinary curriculum
- how to program for individual needs within the classroom
- how to create curriculum with children using provincial outcomes to guide the process
- how to use provincial and district assessment and evaluation guidelines in a multi-age setting

PRACTICES

Sections A and C of the District's handbook, Multi-age Continuous Progress Education, contains information on professional development practices and procedures. Appendix B

Graduate Studies Project Guidelines

Graduate Studies

A project is the creation of a theoretically based product intended for possible use in educational settings and is normally undertaken after on near the completion of course work. The purpose of a project is to provide a graduate student with an opportunity to translate theoretical knowledge into practice by:

- recognizing and articulating an educational need to which current and relevant theoretical and pedagogical knowledge can be applied;
- developing and justifying an alternative approach to address the educational need based on theoretical and pedagogical knowledge; and
- creating a product that could be used to implement this alternative approach.

The project report would consist of the product plus the articulated need, theoretical basis, justification of the approach used, and a complete description of the product. The project report must meet the requirements of academic rigor and be written and presented in accord with the most recent edition of the American Psychological Association (APA) Guidelines. The average length of a project report would be sixty (60) pages or 15.000 words (this may vary given the nature of the product, such as an articulated policy; a CD-ROM: a computer program: a developed unit of work: a kit of learning resources: manipulatives: multimodel text: photographs: a tape: a set of teaching cards: software: or a video). Regardless of the form of the product, there must be a written project report. In some cases, where a product is unsuitable for inclusion with the report, a demonstration of the product may be required.

PHASES

Phase One

 To arrange for a University Supervisor, a graduate student has several options. The student may arrange a meeting with a Faculty member with expertise in the area of Study to inquire about the prospect of working with that individual and to negotiate an interesting plan for a project. Alternatively, a meeting may be arranged with the Associate Dean. Graduate Programmes, to discuss options and potential supervisors. The ultimate reposability to confirm a University Supervisor is that of the student. It is a responsibility to be undertaken when a student feels ready to do so.

- 2) When a graduate student and a faculty member have agreed to work together, each has a responsibility to the other (failure to maintain contact with your Supervisor(s) for more than a three month period, may terminate your agreement). No student should approach a faculty member should have a student's proposal for more than two weeks without an informed response. The best project plan is one that is thought about, planned for, and tecided upon by the graduate student, the University Supervisor, and in due course, the Field Supervisor (if the project necessities working with a field-based person).
- 3) If your project requires you to work in the field (school, hospital, clinic, or agency) you may have to consider the following:
 - permission to have access to a school, hospital, clinic, or agency must be requested well in advance in order to allow time for approval;
 - some school boards stipulate three deadlines: September 15 for a fall
 placement. January 15 for a wrinter placement: and March 15 for a spring
 placement. A copy of the project proposal may be requested for
 examination and approval: and
 - if a school board, school, clinic, or agency has concerns about your proposal, these may be expressed to you and revisions for ethical and professional reasons may be necessary.

Please Note: All arrangements for supervision must be approved by the Associate Dean who will consult with the Supervisor(s).

Phase Two

- 4. A written preliminary proposal for the project must be submitted by the graduate student to the University Supervisor(s) prior to the initiation of the project. Students should submit only the best work possible in a thorough and professional manner even when it is only a draft. The proposal shall include the following:
 - a rationale for the project;
 - objectives of the project: and
 - components of the project.

The project proposal shall be contextualized within current pedagogical and theoretical literature and relevant to the graduate student's program specialization

(citations, references, and other relevant inclusions shall be in accord with the most recent APA Guidelines).

 After discussions about and revisions to the proposal have been completed and deemed acceptable by the University Supervisor(s), a copy of the approved project proposal should be filed with the Associate Dean of Graduate Programmes.

Please Note: The more thorough and clear your proposal, the more thorough and clear your project ceteris paribus.

Phase Three

 The fundamental principles of ethics, integrity, and professionalism must obtain, regardless of the route taken for completion of the requirements of a Master's program.

The University must abide by a Code of Ethics in the conduct of research and scholarship. Any research or scholarship involving human subjects must be approved by the Ethics Committee prior to the conduct of the work. A copy of the guidelines for research involving human subjects, may be obtained from the Office of the Associate Dean, Graduate Programs and Research (In the case of a project, it may not be necessary to seek ethics approval unless objectives of the project require same for the project report).

Students have a duty to maintain integrity and professionalism in all their work. Under the doctrine of fair use, students must acknowledge the work of others: paraphrase accurately to ensure the intent of the work(s) of others: represent the work of others in an honest and thorough manner: and be vigilant and guard against plagiansm.

Please Note: Ethics approval is a statement that the work proposed meets the guidelines established. It is not an approval of methodology, procedures, or practices proposed.

Phase Four

 Responsibility for the ongoing supervision and completion of the project rests with both the graduate student and University Supervisor(s), nevertheless, the project and report is the student's work.

The University Supervisor(s) accepts responsibility to advise and guide in the selection and refinement of the topic; the scope and significance of topic to be developed; the analysis and synthesis of the research on the topic; the generalizations and specifics of the topic; the coherence and consistency of the topic and the topic of the topic; the coherence and consistency of the second secon ideas: the design and development of the product; and the preparation of the project report.

8. Graduate students should be cognizant of the need for many drafts before a project report is thorough and finested enough to be considered finished. During the process of creating the product and project report, students should make appointments to meet with University Supervisor(s) and provide, at least two weeks in advance of an appointment. a copy of the work to be read or examined. Students have every right to expect an informed response to draft sections of their ongoing project work normally within two weeks. A University Supervisor(s) has every right to equire any reasonable rewrites of the project with an agreed upon time frame: to require it to be produced/written in accord with APA Guidelines: and to require it to be consistent with the guidelines for submission from the School of Graduate Studies.

Phase Five

9. Neither the University Supervisor(s) nor the graduate student is to contact potential examiners. When the Office of the Associate Dean of Graduate Programmes is informed that a project report is ready for submission to the School of Graduate Studies, an examiner recommendation form will be forwarded to the Supervisor(s) for completion. School of Graduate Studies regulations governing the examination of graduate student's work will be upheld: "Examiners shall no thread who have completed a graduate degree at the doctoral level. Including a thesis report, in the discipline or cognate area. Those serving as examiners shall no thread been involved in the preparation of the thesis/perort."

Phase Six

10. The University Supervisor(s) reviews the examiners' reports from the School of Graduate Studies and advises the graduate student on any revisions and/or critical decisions that may be necessary as a consequence of the examination. The student must make all revisions in accord with the examination and Supervisor(s)' advice. When the Supervisor(s) is satisfied with the edited and revised report, the student must resubmit the final project report to the Office of the Associate Dean of Graduate Programmes, and the University Supervisor will make a written recommendation for its acceptance.

Phase Seven

 It is the responsibility of the graduate student to deliver an official bound copy of the final project report to the University Supervisor(s), in addition to those required by the University.



Appendix C

Surveys

Dear Principals.

As part of our M.Ed. Program at Memorial University of Newfoundland, we are researching multi-age practices in order to complete a Handbook for Multi-age Classroom Teachers in our School District 3. We would appreciate it, if you could take a few minutes to complete our questionnaire and return it by fax Attention: Liz Elder (709) 639-1496 or in the selfaddressed envelope. If more convenient, please go on-line and complete our questionnaire at http://www.sd3.Rl.nfc.aproject/survey/

We are hoping to have all surveys returned by June 19th, 2000.

Thank you in advance.

Marie Hatcher and Liz Elder

School District:

Community:

Please indicate by checking (N) the appropriate block if you view the following characteristics of multi-age continuous progress classrooms as being advantages or disadvantages.

	Advantage	Disadvantage
Children of different ages and abilities learn together.		
Children stay with the same teacher for more than one year.		
Children are familiar with the routines of the classroom at the beginning of a new school year.		
Siblings are encouraged to learn together in the same classroom.		
Because grade level boundaries are blurred, children's learning is not confined to grade level expectations.		
In the second or third year of a multi-age classroom, children have opportunities to be leaders and mentors		

Additional Advantages	Additional Disadvantages		

Why did you decide to implement multi-age classes in your school?

How does your school inform parents of the multi-age program?

What procedure do you use to decide which students will be placed in the multi-age classes?

How do you decide which teachers are assigned multi-age classrooms?

What suggestions would you make to help others in implementing a multi-age classroom? Please list them below.

Dear Parents.

As part of our M.Ed. Program at Memorial University of Newfoundland, we are researching multi-age practices in order to complete a Handbook for Multi-age Classroom Teachers in our School District 3. We would appreciate it, it you could take a few minutes to complete our questionnaire and return it by fax Attention: Liz Elder (709) 639-1496 or in the selfaddressed envelope. If more convenient, please go on-line and complete our questionnaire at http://www.sd3.Rl.Inf.carproject/survey/

We are hoping to have all surveys returned by June 19th, 2000.

Thank you in advance.

Marie Hatcher and Liz Elder

General Information:

School:

Community:

Please indicate by checking (x) the appropriate block if you view the following characteristics of multi-age continuous progress classrooms as being advantages or disadvantages.

	Advantage	Disadvantage
Children of different ages and abilities learn together.		
Children stay with the same teacher for more than one year.		
Children are familiar with the routines of the classroom at the beginning of a new school year.		
Siblings are encouraged to learn together in the same classroom.		
Because grade level boundaries are blurred, childrens' learning is not confined to grade level expectations.		
In the second or third year of a multi-age classroom, children have the opportunities to be leaders and mentors		

Additional Advantages	Additional Disadvantages		

Please briefly explain why you decided to place your child in a multi-age class.

Would you prefer to keep your child in a multi-age class?

Do you have any suggestions for schools that are considering setting up a multi-age class? If so, please list them below.

Dear Teachers.

As part of our M.Ed. Program at Memorial University of Newfoundland, we are researching multi-age practices in order to complete a Handbook for Multi-age Classroom Teachers in our School District 3. We would appreciate it. if you could take a few minutes to complete our questionnaire and return it by fax Attention: Liz Elder (709) 639-1496 or in the selfaddressed envelope. If more convenient, please go on-line and complete our questionnaire at http://www.sd3.kl.2nf.capprojecusurey'

We are hoping to have all surveys returned by June 19th, 2000.

Thank you in advance.

Marie Hatcher and Liz Elder

School District:

Class configuration (e.g. K-1, K-1-2, 1-2-3)

Community:

Please indicate by checking (x) the appropriate block if you view the following characteristics of multi-age continuous progress classrooms as being advantages or disadvantages.

	Advantage	Disadvantage
Children of different ages and abilities learn together.		
Children stay with the same teacher for more than one year.		
Children are familiar with the routines of the classroom at the beginning of a new school year.		
Siblings are encouraged to learn together in the same classroom.		
Because grade level boundaries are blurred, children's learning is not confined to grade level expectations.		
In the second or third year of a multi-age classroom, children have the opportunities to be leaders and mentors		

Additional Advantages	Additional Disadvantages		

Please indicate why you decided to teach a multi-age class?

- (a) I was assigned the role.
- (b) I was asked if I was interested in having the role.
- (c) I asked if I could be assigned the role.
- (d) I initiated the implementation of a multi-age classroom in my school.

(e)Other:_____

What suggestions do you have for other teachers who are considering multi-age teaching? Please list them below.

Since changing from being a single grade classroom teacher to being a multi-age classroom teacher, what degree of change (if any) has occurred in your instructional strategies and your approach to curriculum planning, classroom organization, rules and routines, assessment, and parental communication?

-

	A D	L	D	E	
	Less Often	To The Same Degree	More Often	Stopped Using	Started Using
I. Instructional Strategies					
 I model reading, writing and listening daily 					
 I introduce reading and writing simultaneously as an integrated part of the curriculum, not just at assigned times 					
3. I schedule independent reading and writing workshops each day					
 I develop in children an awareness of phonics and other skills through interaction with meaningful text (e.g., various genres at varying levels from picture books to chapter books) 					
5. I use basal readers as a resource for multiple copies of stories					
6. I provide activities for creative expression to also be developed through language arts. art. music. drama. dance. and movement					
 I give time for daily journal writing in order to document progress in the writing process, note students' social and emotional development, and practice various types of daily writing 					
 1 use our school library, public library, book clubs, donations. children's published books, etc., to provide a continuous stream of print materials in my classroom 					

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	Less Often	To The Same Degree	More Often	Stopped Using	Started Using
 I use a resource-based approach to teaching 					
10. I give students opportunities to explore, investigate, question and research their environment and lives; this information is used as a foundation for language arts, mathematics, science and social studies					
11. I use questioning and exploring as a daily event					
12. Mathematical concepts of sorting, classifying, ordering/seriation, matching, patterning with concrete materials are fully developed before entry into paper / pencil tasks					
13. Numeration, geometry, measurement and graphing concepts are developed through manipulation of concrete materials and are understood by the children before they move to abstract and symbolic reasoning					
14. Various groupings of students occurs					
15. Roles within the groups change allowing children to experience different responsibilities within different group settings					
 I invite community and field expert representatives to visit the class 					
17. I use the available technology as a tool for learning not as a substitute for work sheets or an electronic textbook					
 18. I use word processing as one means for students to write, edit and rewrite stories, reports, etc. 					
II. Curriculum Planning					
19. I cut across subject matter to teach and reinforce skills					

	Less Often	To The Same Degree	More Often	Stopped Using	Started Using
20. I use broad based themes (e.g. "Beginnings." "Changes") to provide a springboard to develop a series of topical themes (e.g. "Dinosaurs." "Seeds") that connect together					
21. I use topical themes to integrate and guide the curriculum (e.g. the concepts, objectives and skills introduced would revolve around a topical theme such as seeds)					
22. I design and assign projects allowing children to show what they know as well as what they can do with what they know					
23. I allow students' interests to influence the themes and project selection					
24. 1 allow for enrichment and or continued interest by encouraging children to design and complete independent learning activities					
III. Classroom Organization					
25. I provide a print rich environment					
26. 1 provide space where children may display their own work					
27. 1 provide private as well as group spaces to encourage children to create and experience cooperative as well as independent activities as needed					
 1 provide activity areas which have well defined boundaries that are observable 					
29. I make major adaptations in the physical environment when necessary to prevent overcrowding or to acknowledge concerns based on the children's needs					

	Less Often	To The Same Degree	More Often	Stopped Using	Started Using
30. I ensure that children have easy access to teachers and peers as well as learning materials					
31. I provide an orderly, clear arrangement of equipment, materials and supplies which promotes exploration and creativity and which are easily accessible to all children					
32. I promote independence by encouraging children to select, clean up and put away materials needed for chosen activities					
 I offer materials that address a wide range of developmental stages. capabilities and learning styles 					
 I offer materials that are open- ended so children can use materials in a variety of ways 					
35. I use a wide variety of learning tools including teacher-prepared, found objects, materials supplied and created by the children, as well as commercial items					
36. I provide a place for each child to store personal belongings encouraging ownership and responsibility					
IV. Rules and Routines					
37. I involve the children in setting classroom rules and expectations					
38. I organize the daily schedule to allow time for children to plan. implement. describe and assess their own activities					
39. I meet with children daily (individually and / or in small and large groups) to discuss their individual plans and completed activities					

	Less Often	To The Same Degree	More Often	Stopped Using	Started Using
V. Assessment					
40. Progress is related in terms of the continuous growth and development of the whole child in non-comparative ways					
41. A written record is kept in a positive tone of a child's progress based on milestones particular to all aspects of a child's development					
42. In addition to such formats as formal report cards, reporting involves:					
43 Observation					
44 Daily journal entries					
45 Conferencing					
46 Anecdotal records					
47 Checklists					
48 Work samples					
49 Portfolios					
50 Video recordings		\square			
51 Audio recordings					
52. I take time to observe the development of the whole child on a daily basis (I realize I may not get to each child every day)					
53. I use these observations to identify individual strengths as well as needs					
54. I allow children to make choices and be in charge of their learning					
55. I use the results of authentic assessment to set individual, realistic goals so that each child is supported and challenged					

	Less Often	To The Same Degree	More Often	Stopped Using	Started Using
56. I use the insights resulting from authentic assessment to make needed changes in the curriculum and / or environment					
57. 1 report progress to parents by sharing and reviewing his or her child's recorded observations and conferences, portfolio, anecdotal report card, checklist, video and audio tapes, etc.					
 Complete assessment of student progress represents a joint venture between the teacher, student and parents 					
VI. Parental Communication					
59. I encourage informal communication with parents through notes, phone calls, classroom visits, etc.					

Is there any particular activity that has proven to be particularly successful as part of your daily routine or otherwise? If so, please describe it briefly.

Please explain if you are involved in a multi-age support group? (e.g. Do you meet regularly with other multi-age teachers?)







