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Multiage classrooms: setting up a quality program

Jan Lindeman
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Abstract
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Implementing a multiage classroom takes time and patience. Educators need to take time to examine the best way of implementing a quality program.
Multiage Classrooms: 
Setting up a Quality Program

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Jan Lindeman
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July 15, 1997
Date Approved

Charles R. May
Graduate Faculty Reader

Peggy Ishler
Graduate Faculty Reader

Greg P. Stefanich
Head, Department of
Curriculum and Instruction
Abstract

This study reviews the literature on multiage classrooms for setting up a quality multiage program. In the 1990s schools are returning to multiage classrooms. Both benefits and disadvantages of multiage classrooms were discussed. Benefits of multiage classrooms are the following: children work at their own levels, children work collaboratively with other students, and children learn to work with students of different ages. Disadvantages of multiage classrooms include the following: extra workload for teachers, parents suspicious about the effectiveness, and students compare themselves with older students. In setting up a quality multiage classroom there are six instructional dimensions that need to be incorporated in it: (1) Instructional organization/curriculum, teaching theme based curriculum; (2) Classroom organization, classrooms need to be flexible; (3) Classroom management/discipline, students need to be involved in the management plan; (4) Instructional delivery/grouping, instruction needs to be varied; (5) Self directed learning, using strategies to learn independently; (6) Peer tutoring, students helping other students learn. Implementing a multiage classroom takes time and patience. Educators need to take time to examine the best way of implementing a quality program.
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CHAPTER 1
INTRODUCTION

In the early 1800s many students were educated in one room school houses. In these schools several children, who were at different age levels, were educated together. Grouping several age levels together in one room is called multiage grouping.

There is, however, another way of organizing schools. In 1843 Horace Mann, Secretary of the Massachusetts Board of Education, visited Prussia. From that visit, he returned with the notion that our one room school house was inefficient in light of Prussia's very progressive graded system of education (Hallion, 1994). Mann liked the organization of the German schools for the following reasons: they operated efficiently; teachers received training in how to teach; there was central control of curriculum; teachers used modern methods, and classrooms were well organized (Hallion, 1994).

Legislation in the United States was then passed in order to standardize an age of entry and to establish sequential grade levels and curricula (Pratt, 1986). In 1918 the standard deviation of age in American Grade 9 classrooms was 14.1 months; in 1952 it was 8.6 months (Pratt, 1986). As a result, mid-twentieth century classrooms were more narrowly segregated by age than ever before.
Textbooks helped to influence age segregation. In 1836 the first *McGuffey Eclectic Readers* were published. They were the first textbooks that were graded through six levels (Hallion, 1994). In time, textbooks became the central focus for curriculum in schools. Teachers and parents alike came to equate pupil performance with ability to work through these grade level books.

The push for age segregation did not come without critics. These critics felt there was too much structure and that it placed too many demands on children in the graded system (Hallion, 1994). Frederick Froebel, *the Father of the Kindergarten*, urged a greater freedom for children to investigate and experiment (Hallion, 1994). Maria Montessori (1914), wrote that the freedom to explore led naturally to purposeful learning, and that the child’s own strength of personality and sense of competence was essential in the early years. Anna Freud was also opposed to the graded schools (Hallion, 1994). She contributed significant insights into the beneficial effects of grouping children in more diverse age groups than were found in the graded school.

The best known critic of the graded schools in the early part of the century was John Dewey. He was known as the *Father of Progressive Education*. He thought that graded schools had become too *machine like*, he also believed that children should be active
participants, not passive listeners (Dewey, 1916). Schools should nurture and value creativity and should also use projects or units rather than lessons (Hallion, 1994).

In 1959, John Goodlad and Robert Anderson, introduced the modern notion of the non-graded elementary school. This notion included pupil progress reporting, homogeneous grouping, and cooperative teaching and learning. They also emphasized an environment where children could progress at their own pace and in varied ways (McClay, 1996). Many of these experimental non-graded programs and closely related open education programs were tried in the 1960s and early 1970s. However, most of these failed because they lacked administrative and community support, and many were poorly planned and implemented (Gaustad, 1992). However, many educators believe that they have learned how to improve on this situation, for multiage classrooms are being widely implemented today in order to achieve educational reform.

**Purpose of the Study**

The purpose of this study is to review the literature concerning how to set up a quality multiage classroom. To achieve this purpose the following questions will be addressed:

1. What are the forces that are promoting multiage grouping in schools?
2. What are the benefits of multiage classrooms?

3. What are the disadvantages in developing and implementing multiage classrooms?

4. What are the instructional dimensions that are needed in setting up a quality multiage classroom?

Need for the Study

In the 1990s school districts around the country are returning to multiage classrooms. Kentucky, Oregon, and Mississippi are even mandating their schools to have multiage classrooms for early learning. Consequently, professionals in education need to seriously examine multiage classrooms in education today. When thoughtfully planned and implemented, the multiage classroom can allow children of various ability and age levels to work and learn at their own ability and interest level (Daniel & Terry, 1995). This review of literature on multiage classrooms will examine the best ways to incorporate and improve the multiage classrooms.

Limitations of the Study

The first limitation is the difficulty in defining multiage classrooms. There are many definitions about multiage classrooms and this lack of agreement has presented problems concerning this topic.
The second limitation concerns the lack of research articles that are available on this topic. A total of sixty experimental studies were located. These studies were conducted between 1938 and the present in the United States and Canada (McClay, 1996). Research was difficult to locate from those states mandating multiage classrooms in their schools.

Definitions

The terms used in this study are defined in the following ways:

**Active learning**-learning that involves the whole child and acknowledges the need for hands-on experiences, exploration, and discovery.

**Age appropriate**-experiences and learning environment that match a predictable stage of growth and development-physical, social/emotional, and cognitive.

**Authentic assessment**-the evaluation of a child’s learning within the context of his or her daily work.

**Cooperative learning**-learning that takes place in groups and involves several children working in cooperation to accomplish a task.

**Cross-age tutoring**-students working with other students who are of a different age level.

**Developmentally appropriate practices**-those practices which
match what we know about how children grow and develop with what we know about how children learn; they are age appropriate and individually appropriate.

Heterogeneous grouping - grouping of children based on differences (age, sex, race, achievement, etc.).

Homogeneous grouping - grouping of children based on similarities (age, skill level, interest, etc.)

Integrated curriculum - learning that combines subjects such as reading, art, math, science, into a single unit, most often theme-based.

Learning centers - areas of the classroom set aside for certain activities and containing materials and instructions for those activities.

Multiage classrooms - the practice of blending two or more grades, four or more chronological ages, staying with the same teacher for more than one year.

Multiage grouping - heterogeneous groups of children that span a minimum of at least a year's age difference.

Non-graded/mixed-age groupings - heterogeneous grouping children, without regard to the number of years that they may have been in school, placed in a classroom setting that provides a developmentally appropriate curriculum and a learning environment
based upon each child’s individual needs.

**Portfolio**-a collection of work samples by students that demonstrates the accomplishments of a student.

**Theme-based instruction**-instruction in which the core curriculum subjects are taught in the context of integrated theme units.
CHAPTER 2

REVIEW of the LITERATURE

Educators are becoming aware that age is a crude indicator of appropriate learning experiences for children (Katz, 1995). Some educators have reorganized schools by ability, rather than age. This was done because of the assumption that differences within a group of children can be a source of intellectual and social benefits (Katz, 1995). Multiage settings allow children of different ages to learn about a common topic by having a variety of experiences with other children of different ages.

The intention of multiage grouping is to increase the heterogeneity of the group. There is also the need to capitalize on the differences of experience, knowledge, and abilities of children (McClay, 1996).

Graded education assumes that students of the same age are at the same level of cognitive development. It also assumes that they can be taught in the same way, and that they will progress at the same rate (Gaustad, 1992). Goodlad and Anderson (1987) found children entering the first grade differ in mental age by approximately four full years. Multiage classrooms are a way that allow each student to develop at his or her own rate, regardless of one's age.
Kentucky, Oregon, and Mississippi are realizing multiage classrooms are important for children in the primary years of education. As mentioned earlier these three states have mandated multiage classrooms in their state.

Kentucky revolutionized elementary education in June of 1990. The Kentucky Education Reform Act mandated multiage classrooms for Kindergarten through third grade. In 1993 multiage classes were implemented in all schools (Bridges, 1993). Privett (1996) wrote that the Kentucky legislation gave administrators and teachers permission to build a program that supports the young learner.

After the implementation of the Kentucky Primary Program in 1990, researchers returned to Kentucky in 1993 to observe classrooms and determine the progress of the primary program. The Progress Report (1994) stated that every school had implemented multiage classes in their schools. The few weaknesses found by the researchers focused on the lack of learning centers in classrooms. This indicated the teacher's misunderstanding about learning centers, for teachers were devoting most large blocks of time to reading and math and were not integrating other content areas. The major weakness observed was the lack of authentic assessment, for teachers did not seem to have the knowledge of assessment techniques, and this fact indicated that they needed more training.
The Progress Report (1994) also revealed that teachers didn’t have enough time for collaboration and planning in the beginning. Although teachers stated that they had opportunities to participate in training sessions, they stressed more time for planning and implementation was needed. According to Privett (1996), the Kentucky Primary Program has been a success. If teachers are given time to learn and to plan, their multiage classrooms will succeed.

Benefits of a Multiage Classroom

The first benefit of multiage grouping is that it is acceptable for a child to be ahead of his or her same-age peers in one subject and to be behind in another (Katz, 1995). The multiage classroom does not expect each child to be ready to learn the same skills at the same time, nor to learn by the same method of instruction. In an important study comparing the scores of children, Milburn (1981) found that the youngest age group of children in the multiage class scored higher on basic skills tests than their same age mates in single grade classes. Tanner and Decotis (1994) observed that students in multiage programs had higher mean scores in school subjects than students who were in traditional classrooms. Although this was not true in all subjects, it was true in listening skills, writing, mathematics, problem solving, and citizenship.
The second benefit of multiage grouping is social participation and nurturance (Katz, 1995). Multiage settings help children develop a tolerance for children of different ages. Young children who are encouraged, comforted, and nurtured by older children will be able to emulate their older classmates when they themselves become the older ones in a group (Katz, 1995). Studies reveal that competition and aggression are increased within same-age groups, while there is increased harmony and nurturance within multiage groups (Pratt, 1986). Younger children as a group are not always able to start or initiate complex games or activities. In mixed-age groups, younger children are capable of participating and contributing to far more complex activities because of the help and knowledge of the older children (Katz, 1995).

The third benefit of multiage is interdependence (Klein, 1994). Multiage grouping allows students to work cooperatively with others. It also encourages collaboration; it guides decision making, and it promotes effective communication. Experiments have shown that when groups of children in multiage classrooms, who ranged from seven to eleven years of age, were asked to make decisions, they went through a process of reaching a consensus with far more organizing statements and more leadership behaviors. When children of the same age dealt with the same kind of tasks in same-age
groups, there were more reports of bullying behaviors (Katz, 1995). Cooperative learning in a multiage classroom builds a sense of community as children form educational bonds. These bonds are made by sharing diversity, interests, and goals, rather than the exclusionary tradition of age or ability (McClay, 1996).

The fourth benefit of a multiage classroom is that it provides multiple models of learning for younger students and varied opportunities for leadership for older students (Klein, 1994). Students learn from each other through cross-age tutoring as they become *teachers* to other students (McClay, 1996). Piagetian research documents that interaction between individuals at different levels of maturity will stimulate cognitive growth in the less mature partner (Pratt, 1986). With this in mind, multiage grouping helps younger students learn. In conventional classrooms, younger members suffer a disproportionate incidence of failure (Pratt, 1986). Hanmack found that three, four, and five year old children made more progress in self-concept in multiage groups than in single age groups (Pratt, 1986). Students are able to enhance their self-esteem by seeing themselves as experts in areas of interest (McClay, 1996)

**Summary of Benefits**

Benefits of a multiage classroom are the following: children are able to learn at their own rate; students learn to nurture and tolerate
children of different ages; interdependence is also developed while students learn to work cooperatively together and learn from other students using peer tutoring.

Disadvantages of a Multiage Classroom

Disadvantages concerning multiage classrooms can be grouped into four different categories. These categories involve the effect on teachers, students, parents, and community.

Disadvantages for Teachers

The first disadvantage is the extra workload for teachers. Teaching students of more than one age level require teachers to have more resources and materials than those in a graded classroom (McClay 1996). Because of wider ability levels, more curriculum preparation time is required for teachers in a multiage room (Gaustad, 1992). Teacher burnout is high if teachers are mandated to incorporate multiage classrooms without knowledge and enough time to implement the program effectively. (Gaustad, 1992).

The second disadvantage appears when the teacher has to change his or her role. The teacher can no longer be the featured speaker dictating knowledge to his or her students, for he or she must become the facilitator by managing the classroom and allowing for learning opportunities. Lack of preparation in teacher training concerning how teachers would work with different ages of students
is a common problem in a multiage program (Lolli, 1994).

The third disadvantage is that the teacher must educate the school district, parents, and other staff members (Lolli, 1994). Many school districts are locked into the traditional graded curriculum and grade levels. The teacher needs to convince the district and parents that multiage is a good program, even if it goes against tradition. If the entire staff is not in agreement with multiage grouping then isolation can occur for multiage teachers from single grade teachers.

Disadvantages for Students

The first disadvantage to students in a multiage class is that students may be unsure of their current grade level (Tanner and Decotis, 1994). This feeling occurs when a student comes from a previously graded placement.

The second disadvantage occurs when students compare themselves with older, more able students. Students who are shy or younger, may be overwhelmed by the older, bigger students (Grant and Johnson, 1994).

The third disadvantage is that some children may be distracted in a multiage classroom (Grant and Johnson, 1994). In multiage classrooms cooperative learning and learning centers are implemented. These types of instruction may be difficult for some children because cooperative learning and learning centers require
children to maintain greater concentration and be more self-reliant in a multiage setting (Gayfer, 1991).

**Disadvantages for Parents**

The first disadvantage is that some parents are not always willing to adjust to a multiage classroom. Parents are used to the normal graded classroom, in which their child progresses to a new room, teacher, and grade level every year (Daniel, 1996). In a multiage classroom, children stay with the same teacher and do not advance to a new classroom every year.

The second disadvantage appears when parents show a concern that subjects are not treated deeply enough in a multiage classroom (Lolli, 1994). Some of these parents believe older children are wasting their time and the slower students are getting less support and children’s subject knowledge is suffering, as a result.

**Disadvantages for Community**

The community may view the multiage class as education that allows students to do as they want as opposed to the tough, graded programs they have experienced (Lolli, 1994). They may feel students in the community will not get the education they think students need.

**Summary of Disadvantages**

Disadvantages of a multiage classroom are the following:
teachers have more work to do and have to adapt their teaching role to become a facilitator of learning; teachers have to convince the staff and community to change to a multiage program; students find multiage difficult when they do not know what grade they are in; younger students might compare themselves with older students; students may find it difficult to concentrate in a multiage classroom; parents who are not used to a multiage program think multiage will not challenge their students enough.
Setting up a multiage classroom takes much thinking, planning, and implementing. In order to begin, an educator needs to review the following four need statements (McClennean, 1995).

First, educators need to believe that changing to a multiage classroom is in the best interest of students. Educators must believe that multiage practices will produce benefits and allow children to develop at their own rate.

Second, educators need a solid base of support. Community, parents, teachers, and administrators need to believe in the benefits that the multiage classroom offers children.

Third, educators need to build a climate of open communication and trust throughout the school and community. They need to make sure to include people from the school and community in their plan for a multiage program. In addition, educators need to take the time to explain changes that will take place in the school setting.

Fourth, educators need to realize that developing a multiage program takes planning, patience, time, and an understanding of the process of change. Staff development to prepare teachers for this change is important.
After reviewing the previous statements, educators who believe they want to start a multiage program need to read as much research material as they can on multiage classrooms. Professional development workshops and seminars also need to be attended. Educators need to locate and visit schools where multiage classrooms are already in place. Educators need to examine what works best for their school district (McClay, 1996).

While doing their research, attending seminars, and visiting schools, a school and community wide task force should be organized. The task force will explore funding, personnel, and prepare a proposal to present to the school board (Merrick, 1996). During this time, the task force will also lead an outreach program which is to educate teachers, administrators, and parents about the advantages and disadvantages of having a multiage program in their district.

If the plan created by the task force for a multiage program is accepted by the board and community, it is time to work on implementing the structure and curriculum. Through research, six key instructional dimensions that need attention when setting up a program’s structure and curriculum have been identified (Miller, 1991): (a) classroom organization, (b) classroom management and discipline, (c) instructional organization and curriculum, (d) instructional delivery and grouping, (e) self directed learning, and (f)
peer tutoring. Each instructional dimension will be discussed below.

Instructional Organization and Curriculum

When teachers are teaching in a traditional graded classroom, they usually have to prepare for one grade level to teach. Multiage teachers, however, must be prepared to teach to several learning levels and meet the needs of a diversity of students (Daniel, 1995). Teachers in a multiage classroom need to remember that they are teaching one curriculum to their class, not a mix of every grade level (McClay, 1996). Multiage teachers need to create a curriculum that will meet the needs of all ages in their room.

Daniel (1995) has found using an integrated curriculum approach is a way that can meet all of the students' needs. The integrated curriculum theme brings skills beyond the traditional "three R's." The skills of observing, asking questions, searching for answers, thinking critically, organizing material problem solving, working together, evaluating, developing computer skills, presenting information-- orally, pictorially, graphically, in writing, with models are all part of the curriculum (Bingham, 1995).

With an integrated curriculum a teacher selects a broad theme (McClay, 1996). This theme will dictate all areas of the curriculum. The content of the theme spills over into the entire school day and becomes integrated into almost everything children do (Bingham,
1995). Many multiage teachers, however, believe the task of planning for an integrated curriculum is one of the most difficult aspects of teaching in the multiage class (Daniel, 1995).

When working on a choice of a theme for an integrated approach, the teacher must consider whether the theme is broad enough to lend itself to compare, to contrast, and to permit extensive investigation into concrete situations, materials, and resources (Daniel, 1995). The teacher must consider if their theme is developmentally appropriate and of interest to students (McClay, 1996).

Multiage teachers have found topics for a thematic study usually come from three sources: one, interests demonstrated by the class; two, teacher identified curriculum needs or subjects known to be of interest to children; three, school-mandated curriculum (Bingham, 1995).

Once the teacher has created an idea or topic for the theme, he or she needs to work on the areas of curriculum to be covered (see Appendix A). Bingham (1995) has found there are seven steps for teacher preplanning for a thematic unit:

1. Start brainstorming on paper. Teachers need to jot down their initial ideas for activities, projects, special events.

2. Gather materials. Gather books, pictures, film, etc.
3. From the materials found on the topic, choose a few to read and study.

4. List basic concepts and attitudes the children should gain from this theme. These are the goals for the theme.

5. List sources of information to use with the entire class.

6. List possible projects for individuals or groups through which the students will show in concrete way that they have acquired the knowledge as defined by the goals.

7. Think up a culminating activity that will be a vital group experience and give a feeling of closure and accomplishment.

Once a theme has been thought out and planned, it is important to incorporate students in all areas of the theme. To do this, students will bring things related to the theme to class. These items will be examined and appreciated by the whole class. Bringing students' ideas and objects to class is a function of their involvement with the class and their learning. They are making the theme their own (Bingham, 1995).

The amount of integrated themes during a year will vary; however, four or five themes a year is workable. This allows some flexibility in length, and some opportunity to pursue a few other subjects more briefly (Bingham, 1995). It is common to develop curriculum theme cycles over a three year period, because teachers
have the same students in his or her class for up to three years. This means the teacher will teach a theme unit every three years.

Classroom Organization

Classroom organization is something that needs to be thought out before starting a multiage classroom (McClay, 1996). The environment must provide space for students to work together in small groups (the workplace), room for an entire class meeting (the gathering place), and an area in which a child can work alone (Daniel, 1995).

The room needs to be arranged between noisy areas (blocks, art, dramatic play), and quiet areas (library, computer, listening center) (Merrick, 1996). Children learn best when the environment is responsive to their needs (McClay, 1996).

The multiage classroom needs to be planned with many different areas in mind (see Appendix B). The following areas need to be thought out and placed appropriately in the room when planning a multiage class (Bingham, 1995):

1. Traffic in and out: A basic question is where the door is and where the children will store their coats, lunch boxes, and other personal items. This predicts the traffic flow of the room.

2. Water: Many art projects and cooking activities need to be close to the sink.
3. Storage areas: The open storage areas are for materials the children will use. The closed areas are for the teacher materials that the children would need to check out from the teacher.

4. Electrical outlets: The computer and listening centers need to be in an area of the room with outlets.

5. Work spaces: Because so much work in a multiage classroom is collaborative, and because conversation is a useful part of this process, children need to be seated where they can work together, often facing each other or sitting side by side. If you have to work with desks, cluster them together in pairs or small groups.

In addition to the items previously listed, a key element of multiage classroom organization is learning centers. Multiage programs require setting up centers in the classroom that enable students to work in depth on self initiated projects (Merrick, 1996). These centers allow the teacher to work with one group at a time or with individual students at their different centers (McClay, 1996).

When designing these centers, Daniel (1995) has found that one must 1) make directions clear; 2) make the purpose obvious; 3) contents should include manipulatives, media, books, etc.; and 4) activities for all levels.

The teacher can structure these centers effectively three different ways (McClay, 1996). 1) Daily rotation- every student goes
to every center every day. 2) Weekly rotation– students are divided into five groups and go to a different center each day of the week. 3) Daily subject rotation– students are divided into four groups and rotate through the centers every 30 minutes. The structure and amount of time spent at centers is up to the teacher’s discretion. It depends on what the teacher wants students to get out of learning centers.

Centers take a lot of planning and manipulatives and can be overwhelming for teachers, so it is important in the early stages of a multiage classroom to start small on the number of centers and increase over time (Daniel, 1995). These centers are important to think about in the development of the teacher’s classroom and will play a key role in the design of the room.

The final note on multiage classroom organization, is that the room should be displayed with student work. This display should show signs of student ownership, as students work together for a common goal (McCay, 1996).

Classroom Management and Discipline

Multiage classrooms tend to require an active learning environment for children (Daniel, 1995). Keeping this in mind, the teacher needs to carefully think out a management and discipline plan that works with this learning environment.
Successful teaching in a multiage classroom will depend on the teacher’s ability to plan classroom schedules, routines, and procedures. These schedules and procedures will promote clear, predictable, instructional patterns, while enhancing the students’ responsibility for their own learning (Daniel, 1995).

Classroom procedures are necessary for students to know how things operate in the classroom and to help them figure out what the teacher expects. Children want to know the rules and limits for their behavior and to feel secure when rules and procedures are clear and enforced (Daniel, 1995). In order to explain what is expected of students, the teacher must have a clear idea of what he or she expects from them (McClay, 1996).

Daniel (1995) developed a three step approach to help students understand what is expected from the teacher. First, explain the procedure and demonstrate and model the correct way. Second, have children rehearse the procedure. Third, reinforce the procedure throughout the school day and year as needed.

An example of procedures would be, *Stop, look, and listen*. Using a bell or light to get the attention of the whole class. Matten and Yates (1997) used a noise meter that indicates the level of noise permitted in the room. If the meter is on three- it means a classroom voice; two- table voice; one- buddy voice; zero- no voice. The teacher
must explain this procedure to the class before it is used.

McCay (1996) stated that it is important to remember that strong management skills in the classroom lead to few discipline problems. These management skills will involve students in the rule making process for the class. If students are involved, they are more likely to see the need to follow rules (Daniel, 1995).

However, behavior is never perfect and sometimes problems do arise. If the rules are broken it is important to have consequences. Merrick (1996) has found these discipline consequences to work in a multiage classroom:

- Remove the student from the area and sit in time out. Do not interrupt other activities to negotiate.
- Students who do not sit quietly in time out must sit next to you until dismissal, or another designated time.
- Repeat offense requires a phone call to parents.
- If behavior does not improve the principal is brought in to handle the situation.

The teacher needs to empower the students to be a part of the management process. Merrick (1996) said,

Remember behavior is controlled by freedom. This may sound like a contradiction, but it is not. Children behave better when they are able to act like children. They must be able to talk and play. Forcing adult standards of behavior on children results in rebellion. This does not mean that there are no standards of
behavior, just that children are expected to act like children (p. 138).

**Instructional Delivery and Grouping**

Multiage classrooms are rich in diversity and methods for providing instruction to such a wide range of ages and abilities and cannot be decided on the spur of the moment (McClay, 1996). Teaching in a multiage class involves a combination of whole group, small group, and individual instruction (Daniel, 1995).

The multiage teacher (as with any teacher who believes in the necessity to meet the needs of each student) cannot use whole class instruction all of the time. The plan for instruction should be eclectic (see Appendix C). It should combine the best of the individualized, small group, and whole group (McClay, 1996).

Whole group instruction can be used when teaching a concept related to the thematic study or in a situation where there is an open task activity to be introduced to all of the students (Daniel, 1995). Whole group instruction is also a time for students to share and learn from many other students in the class (McClay, 1996).

In a multiage classroom the teacher needs to think of all of the specific needs of each student when grouping them. It would be detrimental to the individual progress of each student if the teacher only uses one method of grouping (McClay, 1996). When using
grouping for specific tasks it is important to have students of different ages, abilities, gender, etc. in each group (Merrick, 1996).

Daniel (1995) has found there to be several groupings that are appropriate for any child:

- Problem solving- learners are grouped around a common unsolved problem or topic.
- Instructional needs- students are grouped for instruction in a concept or skill.
- Reinforcement- learners who need more practice in a specific area are grouped together.
- Interest- students who are working on a common activity can work together.
- Cooperative learning- children can be grouped to participate in a clearly designed and assigned task. This grouping would require the students to be instructed in cooperative learning strategies.

Self Directed Learning

Miller (1991) defined student self-directed learning as students' skills and strategies for a high level of independence and efficiency in learning individually or in combination with other students. The multiage classroom creates a climate where children are collaborators in their own learning and also learn from their
peers (Daniel, 1995).

Because of the various levels of learning, groupings, and learning centers in a multiage class, students have the opportunity to learn how they can help themselves and others in the class (Daniel, 1995). In order for students to learn from each other, they need to be taught how. The teacher needs to have discussions about where students can go for help, the importance of helping, and how they can give help to their classmates (Bingham, 1995).

Daniel (1995) observed many teachers who said, "Ask three before you ask me," in the multiage classroom (p. 30). This means to check with three other students for a solution to their problem or question before they ask the teacher. This idea encourages the students to seek information from their peer and not always rely on adults for their knowledge.

Peer Tutoring

Peer tutoring can be defined as the one to one teaching process in which the tutor is of the same general academic status as the tutee (Daniel, 1995). Peer tutoring research reveals that both tutors and tutees benefit academically from their interaction. Tutors' self confidence and attitudes toward school will be improved (Gaustad, 1992).
The peer tutoring strategy in a multiage classroom is used when children, who have mastered content and processes, help other children who are still in the beginning learning stages (Daniel, 1995). By tutoring children at a younger age, the older child develops a sense of responsibility. On the other hand, the younger child feels more secure as he or she gets to know a bigger kid better (Grant and Richardson, 1996).

If multiage teachers are going to use this peer tutoring, they need to train students on how tutors can help their peers. Also, the teacher needs to train them in questioning and guiding the tutee instead of the tutor just giving them the answer (Merrick, 1996). It is important to educate students with tutoring strategies in order for peer tutoring to work effectively.

Assessment

In many schools, a quiet revolution in assessment is taking place, as grade books are being replaced with portfolios of student achievement (Merrick, 1996). Portfolios are a part of authentic assessment. Authentic assessment looks at the process of learning and less at the product (Grant and Richardson, 1996). Authentic assessment shows what the child knows.

Strategies for authentic assessment involve the teacher, student, and parents. McClay (1996) has found seven authentic
assessment tools to work in a multiage classroom.

1. Writing samples: allow the student to demonstrate progress and the teacher to gather the information.

2. Tape recorded reading samples: allow the teacher to share information with the students and parents.

3. Video samples: recording students working, sharing, reading, and conferencing.

4. Teacher observations: making observations on a daily basis using anecdotal records.

5. Anecdotal records: writing notes on what the student is doing.

6. Checklists: teachers use a checklist to evaluate an assignment or behavior.

7. Student reflection: provides information about the student's self esteem.

Another popular authentic assessment tool is the portfolio. The portfolio represents the accomplishments of each child (McClay, 1996). Portfolios allow students and teachers to keep projects and papers that show improvement and are evaluations of the student’s work (see Appendix D). It is important to date the materials to show progress over time (Merrick, 1996).
McClay (1996) observed that portfolios compliment the multiage philosophy. Portfolios respect individual differences, involve the student, encourage self esteem, and develop responsibility in the student.

Along with authentic assessment and portfolios, many school districts are using progress reports instead of report cards (see Appendix E). Using all three methods of assessment give clear understanding of the student's abilities and not stressing any failures (McClay, 1996).

**Parent Involvement**

There are many parents who are uncomfortable about coming into their child's school. Because of this, it is important for teachers to open dialogue with parents and make them feel welcome and comfortable about participating in the teaching/learning process of their child (McClay, 1996). In the beginning of the year it is important for teachers to explain their philosophy, expectations, and instructional programs (Merrick, 1996).

When people think of parent involvement they think of volunteering. When parents volunteer in the room the teacher needs to be prepared for volunteers. The teacher needs to trust the volunteer to do the job, and most of all thank the parents for being involved (McClay, 1996).
If the teacher does not desire help in the classroom he or she can ask for parent assistance at home (McClay, 1996). There are many activities parents can do at home and most are willing and able to help.

When the school district is just beginning a multiage program, it is important to educate parents about what is happening in their child’s room (Merrick, 1996). The teacher needs to be willing and available to answer parent’s questions, for parents are partners in their children’s education (McClay, 1996).
CHAPTER 4
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to review literature concerning how to set up a quality multiage classroom. To achieve this purpose the following questions were addressed.

1. What are the forces that are promoting multiage grouping in schools? Educators who are looking at setting up a multiage class believe multiage is best for the students (McClennean, 1995). Teachers who believe this is true, need to do a lot of research, attend workshops, and visit many multiage classrooms (McClay, 1996). In some schools a task force has been set up to lead an outreach program to educate teachers, administrators, and parents about the advantages and disadvantages of a multiage program.

2. What are the benefits of multiage classrooms? The multiage classroom does not expect each child to be ready to learn at the same time nor learn by the same methods of instruction. Multiage settings help children develop a tolerance for children of different ages. Also, multiage classes encourage interdependence by encouraging students to work together. Multiage groupings also allow younger students to learn from older students. The older students in turn learn leadership skills.
3. What are disadvantages in developing and implementing multiage classrooms? When undertaking a multiage classroom the teacher has a bigger work load while creating a new curriculum. The role of the multiage teacher is to facilitate learning not just to dictate knowledge. Students in a multiage classroom struggle with what grade they are in, especially when they are just beginning a multiage program. Younger children in a multiage class may compare themselves with older students. Also, parents have difficulty with multiage classrooms because it is not what they are used to, and they may believe their older children are not learning enough. The community may view multiage grouping as a less effective education and may not feel it is worth implementing.

4. What are the instructional dimensions that are needed in setting up a quality multiage classroom? Research has identified six key instructional dimensions for setting up a multiage classroom (Miller, 1991): (a) flexible classroom organization; (b) child-centered classroom management and discipline; (c) theme-based approach to instructional organization and curriculum; (d) large and small group instructional delivery; (e) independent, self directed learning; and (f) peer tutoring. Each of these elements needs to be implemented for a multiage program to get started successfully. Authentic assessment in a multiage class is important to see what the students know, not
what they do not know. Parental involvement is also a key to development of a multiage class. Educators want parents to be involved in their classroom and also in their child’s education.

Conclusions

Based on an analysis of the literature, the following conclusions were determined.

1. Multiage is continuing to gain more attention in education.
2. Research has shown multiage programs to be a big undertaking.
3. While they do not change the content of what students learn, multiage classrooms do focus on how students are taught.
4. Multiage classrooms are not for just anyone.
5. Parents know their own children and because of this they have valuable information for teachers.
6. Multiage programs recognize individuality in each child and seek to capitalize on the strengths of each student.

Recommendations

The following recommendations are made as a result of a review of literature concerning multiage programs. Additional research needs to be done on the effectiveness of the already state mandated multiage programs in Kentucky, Mississippi, and Oregon. Research needs to look at student achievement and self esteem
compared to graded classrooms. Also, because of the heavy workload in the beginning years, teacher burnout needs to be examined.

School districts need to remember changing to a multiage program takes time. It is important for school districts to research, visit classrooms, and attend seminars together to learn about multiage grouping. A key to multiage classroom success is to work as a team (both administrators and teachers) and help support each other.

Educators teaching in a multiage classroom need to be trained in a theme-based curriculum approach to meet the wide range of needs for each student. Teachers also need to be taught how to use learning centers effectively.

Schools need to educate their parents about multiage and what their child will be doing in school. Parents need to be a part of their child's multiage classroom experience.

Multiage classroom teachers need to recognize individual differences of each child because the multiage philosophy does not expect each child to be ready to learn skills at the same time or by the same method of instruction (McClay, 1996).
References


Theme Planning

**Reading**
- Books for in-depth projects
- charts
- poetry
- read-a-loud(s)
- Author study

**Writing**
- correspondence?
- literature writing projects

**Theme**

**Cooking • Food**

**Special Events**
- culminating event
  - field trips
  - speakers
  - local resources
  - audio visual
  - materials

**Science**
- project oriented
- charts/graphs
- investigations, experiments

**Social Studies**
- Multicultural - Geography

**Math**
Grouping Patterns

Skill Group
- reteach concepts
- reteach needed skills
- extend concept
- introduce new skills (enrichment/remedial)

Small Group
- discuss new resources
- discuss new ideas
- refine questions/create questions
- research/share
- respond in discussion log

DEAR Time
- read theme books individually
- record information in journals/response logs
- self-evaluate participation

Whole Group
- evaluate progress
- status of group projects
- teach study skills, reference skills
- develop research writing/notes

Student Small Group
- work on project
- discuss concepts
- peer evaluate
- research together
- share new information
- share prior knowledge
- interact, interact, interact

Group Response
- project presentation
- project evaluation
- group response in form of group self-evaluation

= Whole Group
= Cooperative Group
= Needs Group
= Child-initiated Group
= Individual Group
= Small Group
Portfolio Chart

Student Work

Teacher

Collection Portfolio
Almost everything goes in here.

Sort and put in the following:
1. Best work
2. Work that shows growth
3. Original projects

Student Portfolio
This is intended for display.

Put in the following:
1. Best work
2. Tests
3. Evaluations and checklists
4. Documentation
5. Selected examples

(Merrick, 1996)
Primary Progress Report
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Student: _______________________
Grade: _______________________
S - Secure, D - Developing, B - Beginning

School: _______________________
Principal: _____________________
Teacher: _______________________

Mathematics:
Understands and uses number sense.
Understands and uses place value.
Displays an understanding of the different mathematical processes.
Computes accurately.
Can verbalize problem solving strategies.
Can record problem solving strategies.

Science and Health:
Displays an understanding of curriculum in assignments and projects.
Shows enjoyment and excitement about this subject.

Social Studies:
Displays an understanding of curriculum in assignments and projects.
Shows enjoyment and excitement about this subject.

Visual & Performing Arts:
Displays an understanding of music curriculum.
Displays an understanding of art curriculum.
Shows enjoyment and excitement about these subjects.

Physical Education:
Participates in activities.
Displays mastery of skills.
Demonstrates good sportsmanship.
Large motor coordination.
Fine motor coordination.

Personal Responsibility:
Works independently.
Responsible for completing assignments.
Responsible for completing and returning homework.
Productive and involved during work periods.
Cooperates with others.
Contributes to group work.
Appreciates and demonstrates that hard work results in achievement.
Displays sensitivity and respect towards adults.
Displays sensitivity and respect for other children inside the classroom.
Displays sensitivity and respect for other children outside the classroom.

Teacher Comments - 1st Trimester

Parent Signature

Teacher Comments - 2nd Trimester

Teacher Signature

Teacher Comments - 3rd Trimester

Teacher Signature

(McClay, 1996)