Observations From a Multiage Art Classroom

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Abstract

Multiage education, characterized by the intentional grouping of students from multiple grade levels, is receiving growing attention in Australia. Despite this growth, the subject has rarely been examined in art education. This study characterizes qualities of multiage art instruction through the collection of observations and interviews with a selected primary multiage art specialist-teacher. The results detail suggested organizational changes that may be necessary when structuring multiage art curricula, as well as the effective use of thematic instruction and cooperative learning in the multiage art classroom. The article concludes with implications for organizing multiage art education at other school sites.

Multiage classrooms are broadly characterized by a purposeful grouping of students from two or more grade levels with the intention of creating an educational community of learners (Coyne, 2000; Kasten & Clarke, 1993). The goals of multiage education include the accentuation of a collaborative, rather than competitive, atmosphere (Elkind, 1993) and the freedom for students to learn at a pace that is not strictly defined by their grade level (Hoffman, 2003).

While literature on multiage education has existed for roughly five decades (Ball, 2006) and often includes observations from educational generalists (Chase & Doan, 1994; Connell, 1987; Coyne, 2000; Fu et al., 1999; McCarthey et al., 1996; Miletta, 1996), the topic has rarely been addressed through the lens of art specialists and art educators, with a few exceptions appearing only over the past 15 years (Broome, 2009; Heid, 2004; Serig, 1995). As a way to rectify the scant attention given to mixed-age groupings in this context, I formulated a two-part research project on the subject of multiage art instruction, with the first phase gathering broad foundational data through questionnaires sent to select primary art specialist-teachers instructing multiage classes in Florida (Broome, 2009).

This article examines the results of phase two, involving observations and interviews conducted with a selected multiage art specialist-teacher that yielded insight into her practices during reallife instruction. The overall purpose was to characterize qualities of multiage art education at the selected school site and to provide the study with qualitative depth. Based on the findings, I discuss the implications for organizing multiage art education at other potential school sites.

Background

Traditionally, the dominant method of structurally organizing students in industrialized Western societies has centered on the use of grade level groupings (Anderson, 2008), a model that was heavily influenced by the factory assembly line method popularized during the second half of the 19th century (Kasten & Lolli, 1998). Although the graded system has remained entrenched in some school systems for over 150 years, that is not to say that it has remained in place because it is working well (Anderson, 2008). In the 20th century, scholars began to note flaws in the logic used to justify grade level groupings. Theories and research now suggest that there are great developmental differences in children of the same age (Eisner, 2003; W. Miller, 1996) and that treating, say, all 8-year-olds as uniform parts on an assembly line is irrational (Broome, 2008). Furthermore, the policy of retaining students in the graded system appears to have no positive impact on student achievement levels (Shepard & Smith, 1990; Wiles & Bondi, 2000). Critics of the graded model suggest that segregating students into same age groups offers an unnatural view of life (Dewey, 1938/1997; Miletta, 1996) and the only benefits of such groupings are at the organizational level for adults, rather than to students (Ellis, Rogoff, & Cromer, 1981).

Interest on multiage education as an alternative to the graded system became prevalent throughout the 1960s and early 1970s (Heins, Tichenor, Coggins, & Hutchinson, 2000) and showed a major revitalization of attention beginning again in the 1990s (Nishida, 2009). Those who have compiled the results of numerous studies conducted on multiage education conclude that students in mixed-age groupings perform equally well in academics as their same-age peers, but that multiage groupings offer significant affective advantages: multiage students consistently indicate higher levels of self-esteem and a better perception toward school (Anderson & Pavan, 1993; Jurkovic, 2001; B. Miller, 1990; Pratt, 1993).

Multiage education is currently receiving widespread attention from the Australian Association of Multiage Education (Anderson, 2008; Nishida, 2009) and the National Multiage Institute in the United States (NAU College of Education – Multiage Institute, 2009). Overall, the multiage movement has persisted for about 50 years, while many other school reform initiatives have come and disappeared over the same time period (Tyack & Cuban, 1995), and continues to be practiced as a healthy option for educators seeking alternatives to traditional graded instruction (Hoffman, 2003).

Results from Phase One

The questionnaire results from phase one of the study (Broome, 2009) showed that most of the responding multiage art specialist-teachers worked with classes that consisted of two or three consecutive grade level combinations that were typically co-instructed by general education team teachers when the students were not in art class. The art specialists most frequently reported the use of cooperative groupings and peer assistance as advantages presented by multiage configurations. In terms of disadvantages, the respondents most frequently described the difficulties presented by teaching students with widely varying developmental levels.

The results also showed that the responding art specialist-teachers shared only two main common traits: (a) most of them received no training specifically related to multiage education, and (b) most of them were assigned multiage art classes without being consulted on their willingness to participate in mixed-age programs. In spite of this lack of autonomy and training, most of the respondents expressed their overall support for multi-age art education. Such expectation-defying results suggested much promise for the inclusion of art education within multiage programs and the need for further investigation into its real-life application.

Methodology

Using the data collected from the questionnaires in phase one of this investigation, I purposefully selected one art specialist-teacher from all survey respondents as a subject for qualitative field research. The use of such a single-site approach to qualitative investigations allows other educational practitioners to vicariously experience specifically unique instructional situations and individuals that they may not have encountered on their own, as well as the opportunity to integrate new or unique instructional strategies into their own teaching repertoires (Donmoyer, 1990). In the case of this research project, the single subject for qualitative research was purposefully chosen based on the degree of her school's *nongradedness* (Anderson & Pavan, 1993), and the unique presence of typical characteristics cited in multiage literature within her program (see Table 1). The research subject has been assigned a pseudonym and is referred to in this article as Ms. Pratt. Her school has been renamed Rexrode Elementary.

I used naturalistic observation (Bogdan & Biklen, 2003) to collect fieldnotes in the multiage art specialist's classroom for approximately 26 hours during a three-week period. I also conducted and recorded three interviews (Seidman, 1998) with Ms. Pratt that provided insight into her perceptions toward multiage instruction and the purposes behind her actions.

Data analysis began with the creation of predetermined codes, or representative phrases that identify text content (Bogdan & Biklen, 2003), to be applied to my typed fieldnotes and transcribed interviews. These predetermined codes were derived from a review of multiage literature and my own survey results. Next, I used an open coding approach where I sorted through the data again in search of regularly occurring patterns that unexpectedly emerged within the data.

The coded data from all qualitative sources (fieldnotes, interviews, and open-ended survey responses) were compiled onto qualitative data category cards (see Table 2). This organizational strategy and repeated analysis of data helped me to inductively formulate themes that provided cohesive focus when reaching qualitative conclusions (Eisner, 1998). The qualitative findings were corroborated with the earlier survey results to reach conclusions of both qualitative depth and descriptive breadth. The results are presented in order of the research questions that were addressed, and include excerpts from my interviews and fieldnotes as a way to interweave data with analysis (Emerson, Fretz, & Shaw, 1995) and to provide readers with opportunities for their own interpretations (Eisner, 1998).

Findings

How are Multiage Art Classes Organized and Structured at the Selected Observation Site? Rexrode Elementary publicly describes itself as a multiage school site characterized by the inclusion of eight different primary and intermediate *houses*, rather than classes. All eight multiage houses have chosen a medieval-themed class name as a nod toward the school's mascot, the Rexrode Knights. Multiage advocates (Coyne, 2000; Kasten & Lolli, 1998) recommend that multiage classes be given a community name and that teachers can foster a team atmosphere by banishing all use of grade level distinctions when referring to their students. At Rexrode Elementary, the names of the primary houses (consisting of students commonly labeled as kindergarteners, first, and second graders) are the Knowledgable Knights, the Resourceful Sorcerers, the Castle Guard, and the Knights of the Round Table. The four intermediate houses (consisting of students traditionally labeled as third, fourth, and fifth graders) are Excalibur, the Royal Family, King Arthur's Court, and the Scholarly Squires.

The transition from planning for graded instruction to multiage instruction was not easy for Rexrode Elementary School's art specialist at first. "When the school first switched to a multiage format, we drove ourselves crazy doing multiple lessons for each mixture of children that came in," admitted Ms. Pratt. "I was worried about third graders doing a different project from fourth graders, and so on. It kind of shook our world a little bit." But after this initial frustration, Ms. Pratt decided to design lessons that targeted the broader developmental zones (Vygotsky, 1934/1986) within multiage houses, rather than writing lessons for each grade within a specific pod. As a result, her planning load was reduced

from six distinct preparations a week (for grades K-5) to a lesser load that addressed the developmental levels established by her school's multiage groupings (K-2 and 3-5) with allowance for differentiation at her own discretion.

Team Teaching. While some multiage classes are led by individual homeroom teachers working alone in single classrooms, the groupings at Rexrode Elementary, like most of the responding schools to the initial survey (86.11%), were led by teams of teachers who worked together in adjoining classrooms that formed multiage houses. Although more than one classroom is in use, the entire house still meets regularly for whole group instruction or family time. Since the multiage houses at Rexrode Elementary consisted of several combined classes resulting in large numbers of students, there was no possible way for an entire house to fit into Ms. Pratt's art specialist classroom at one time. As a result, each multiage house was sent to art, music, and physical education (P.E.) class in smaller multiage pods each led by just one of their homeroom instructors. Ms. Pratt explained that, "The whole multiage house goes to special areas (music, art, and P.E.) at the same time, which allows the house's team of teachers common planning time." So, while one pod from the Royal Family was in the art room, then the other pods of the Royal Family would have had music or P.E.

In the team-taught model, the presence of additional teachers and class space provides more opportunities for the flexible regrouping (Alessi, Hoyne, & Stewart, 2006) of students by developmental or interest levels. Students are often moved from instructor to instructor or classroom to classroom in order to meet their changing needs (Cushman, 1993). This movement from one classroom to another often results in inconsistent artroom rosters for multiage art specialists with the possibility of such switching occurring even in the middle of ongoing art projects (Broome, 2009). Since such interruptions in the continuity of lessons could present potential problems, I explored this issue further with Ms. Pratt. The interview excerpt below illustrates her response to my inquiries.

Ms. Pratt: A lot of kids will move to different classes within the same multiage house, especially at the end of quarters. Maybe a student will need more work with math and they'll transfer him to whichever teacher is focusing on the appropriate skills. And we [the special area teachers] get them however they are grouped before they come to specials. So then we just have to be on our toes and ready for new kids. Some homeroom teachers are very good about letting us know if they have transferred a student. Some don't, so then we have to go and find their artwork from the other homeroom class, and that's cumbersome. But we deal with it. It's not really that big a deal and it's for our kids.

Me: So when new kids come with a different teacher from the same house, the main adjustment is in putting their artwork in a new place and giving them a new seat, but they are already doing the same project?

Ms. Pratt: Right. Because I create lesson plans around developmental levels, and not grade levels, they're pretty much doing similar projects.

Looping. The multiage practice of *looping* (Ball, Grant, & Johnson, 2006), or students staying with the same multiage house and teacher(s) for a prescribed period of years, also impacted the way Ms. Pratt organized her art curriculum. An incoming kindergarten-aged student who entered a multiage classroom consisting of the traditional grade levels of kindergarten, first, and second grade, would usually remain with the same multiage teacher(s) for a three-year cycle until he or she would traditionally be ready for third grade (Bozzone, 1996). The interview excerpt below reveals how Ms. Pratt handled the impact of looping on her own planning of art lessons from year to year.

Ms. Pratt: If you're using the same lessons with third graders every year, then looping presents its own challenges. You can't do that with a multiage class because that would be repeating their instruction.

Me: Because one student could be with a multiage house for three years, you wouldn't repeat a lesson until a three-year period was up?

Ms. Pratt: Right. Because I don't repeat things every year, it works.

Me: So during a week you're teaching less lessons than you might if you were writing separate lessons for each grade, but you couldn't repeat these lessons until a three-year cycle is over?

Ms. Pratt: Right, you have to get through a cycle. That's the adjustment that a lot of teachers have to make. Some of them are used to doing the same thing every year. That doesn't work anymore, so you've got to look at it as a three-year process instead of a one-year process. After we've gone through a cycle, then we have a huge collection of resources that we can reuse or revise in the next cycle.

What Instructional Practices Did the Selected Art Specialist Use with Her Multiage Classes?

Lolli (1998) described the content of multiage instruction as utilizing broad based thematic units that focus on topics of interest to students' lives. This approach is meant to be interdisciplinary in nature (Bredhauer, Davidge, Cockburn, Gallagher, More, & Thompson, 2006) with teachers facilitating links between chosen themes and various subject areas across the curriculum. As such, I was curious to find the extent to which thematic integration was implemented in Ms. Pratt's art curriculum.

Ms. Pratt explained that her school district actively encouraged teachers to use thematic instruction, and even had created and disseminated a suggested cluster of classroom themes designed for use over a three-year time span. This three-year approach was carefully synchronized with the structure of state instructional standards, and also suited the needs of the three-year looping cycle used by multiage houses at Rexrode Elementary. The suggested themes for the school year focused on the following guiding questions: (a) *Why do people work?* (b) *How do living things interact with their environment?* (c) *Why is it important to make contributions to my community?* (d) *How is Florida unique?* (e) *How do the processes that shape the Earth affect our lives?* (f) *Why should I make healthy choices?*

Ms. Pratt indicated that multiage homeroom teachers at Rexrode Elementary tended to follow the district's suggested themes and explained her approach in making connections to these themes. "The special area teachers try to integrate our activities into the classroom themes at least once during each quarter of the school year," said Ms. Pratt. "I think that is a reasonable goal because sometimes the theme doesn't fit in as well with our curriculum. We have our own curriculum that we are supposed to accomplish too. And if you're smart, you can figure out ways to do both at the same time." Ms. Pratt's efforts in this regard were noticeable as I observed art lessons that connected to three district suggested themes during my brief time at Rexrode Elementary.

Peer Interaction.

The multiage approach emphasized mixed-age cooperation, as older or more developmentally advanced students are encouraged to assist or collaborate with less experienced students (Elkind, 1993). Considering this emphasis, I wanted to know how such cooperation might manifest itself in Rexrode Elementary's art classroom. The following excerpt from my fieldnotes serves as a representational sample of the cooperative behavior that I observed regularly in Ms. Pratt's art class. The vignette comes from my observations of a primary multiage house as they painted abstract washes of cool colors. Students who finished the assignment could complete a paper kite activity from a previous lesson.

The students are busy and discussing the effects of mixing cool colors while they work. One boy, Lee, dashes through his painting quickly and is off to the drying rack while the girls at his table continue to paint and talk about the project. "Guys, you should mix the blue with the purple! Look how it comes out!" says one girl as her friends stretch across their table to take a look.

Meanwhile, Lee has come back and he's already finishing up his paper kite too. The final step is to staple a set of colorful streamers to serve as the kite's tail. Ms. Pratt is on the other side of the room working with three girls who have also moved on to the kite activity. The girls nearest to me are still experimenting and learning from each other as they continue to paint. "If you want dark blue, you should do this," one girl says to another.

But now Lee is up out of his seat and wants to see if his streamers really work. There's no better way to find out than taking his kite for a little jaunt around his table. One thing is for sure, Lee's streamers certainly work well!

Ms. Pratt's head whirls around as if it was on a swivel and she calls out Lee's name. Lee stops dead in his tracks, his face freezes, and he looks up. The tails of his kite flutters for a moment before coming to a rest too. "Lee, why don't you help your friends with stapling," says Ms. Pratt. She nods toward one of several girls clustered around her. "She could use some help. I know that you already staple well."

Lee's frozen face cracks and now he's grinning from ear to ear. As he trots off to lend a hand, there's a noticeable bounce in his step. He's in charge now in this neck of the artroom, so Ms. Pratt works her way out of the crowd surrounding her. As she attends to students elsewhere, a tiny blond girl who has been working with her streamers for a while calls over to the new resident expert in class. "Lee, I need some help too," she says as she carries her kite in his direction

During clean-up time, Ms. Pratt privately praises Lee for being a good helper, and rewards him with a token from a school-wide incentive program. As Lee heads back to his seat, the bounce in his step and his smile have raised yet another level.

Meanwhile, the tiny blonde girl has walked over to my outpost in the corner of the room. She's holding her kite face down around her waist level. She doesn't say much, but she wants my attention just the same. She stands flat-footed, smiles, and holds up her kite with both hands right under her chin. The stapled streamers of her kite wave gently underneath.

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"That's beautiful," I say. "Did Lee help you?"

"Yes," she says quietly as she nods her head. Her smile grows even wider for a moment; she pivots and heads to the door where her classmates are lining up.

And now there's a bounce in her step too.

While the above narrative illustrates a case of peer assistance initiated by Ms. Pratt's reaction to a student who finished work early, this was not always the catalyst for the types of cooperation that took place in her artroom. Sometimes peer assistance occurred as a result of the way Ms. Pratt designed lessons or arranged activities in her artroom, as I observed during a plaster mask activity that involved students applying gauze to each others' faces and assisting one another at carefully placed decorating stations. Ms. Pratt also shared evidence of instances where students worked collaboratively on a stage design for a school musical (see Figure 1) and also during an art criticism activity that utilized cooperative learning groups.

An Emerging Opinion. A subtle pattern emerged in a small cluster of interview responses related to Ms. Pratt's opinion that, at times, teaching art to multiage classes did not seem that different from instructing age-specific classes because varying artistic levels exist in both kinds of groupings. "If you have a class of just first graders," Ms. Pratt told me, "you're going to have a tremendous artistic range anyway. So what's the difference, you know?" During a completely different interview session, Ms. Pratt returned to this notion by expressing, "Even in a grade specific class you're going to have a wide developmental range. So, for the most part, it doesn't have much of an impact."

Discussion

When the findings of the field research presented in this article are corroborated with the survey results from phase one of the study, several topics of focus emerge for elaborated discussion. These topics include (a) thematic integration, (b) cooperative learning, (c) functional *sameness* with graded structures, (d) developmental organization and flexible regrouping, and (e) repetition of lessons. Each topic will be discussed below, along with implications for implementing multiage art education at other potential school sites.

Thematic Integration

Both phases of the study point to the use of thematic instruction as a method that resonates equally well in multiage art specialists' classrooms as it does in multiage literature. Overall, 72.22% of the

survey respondents reported using thematic integration during the course of an academic year (Broome, 2009). Ms. Pratt also used thematic integration, most notably through her efforts to make curricular connections to relevant themes suggested by her school district. Because all teachers in the district were provided with a list of recommended themes before the school year began, Ms. Pratt could choose those themes that had the strongest connections to the visual arts and integrate those topics into the art curriculum at her own discretion. The use of open-ended thematic units in the artroom allows students to explore such broad topics at their own developmental and readiness levels (Serig, 1995). In this aspect, theme-based instruction may offer a solution to multiage art specialists struggling with the presence of differing developmental levels within their artrooms.

Cooperative Learning

Both phases of research also reveal that the nature of multiage art education supports cooperative learning strategies just as effectively as in multiage homerooms. The most frequently reported instructional methods and resources used by the survey respondents focused on the use of space that allowed for the grouping of students (83.33%), cooperative learning strategies (77.77%), and peer tutors and assistants (69.44%).

Similar strategies were used in Ms. Pratt's artroom, where the cooperative atmosphere offered advantages on multiple levels. Related studies characterize the benefits of cross-age cooperation as being bi-directional, or beneficial to both younger and older students involved in such interaction (Kelehear & Heid, 2002). During my observations, as depicted in the vignette of the paper kite activity, I often saw the benefits of student cooperation as being tri-directional, or beneficial to both students giving and receiving assistance and to the teacher as well. The students who received assistance were able to complete tasks that they might not have been able to accomplish on their own. The students who provided assistance seemed to experience a boost in self-esteem and, perhaps, a crystallization of their own knowledge as they shared concepts with others. Ms. Pratt seemed to benefit too, as the peer assistance freed her to address other tasks and management issues in her artroom.

Functional Sameness with Graded Structures

There is some indication in both the results of the surveys and qualitative analysis that instructional experiences in multiage art education may not have to be significantly different than in graded art classrooms. During survey analysis, a pattern emerged when a handful of respondents suggested that differences between the organizational structures are minimal because both models feature students with wide artistic developmental ranges. This overall sentiment is summed up by a respondent who

wrote: "I think I teach multiage classes the same as I would straight grade levels. Both kinds have high and low students." Another respondent stated: "In art, each person is going to develop at his/her own rate. You will have those with advanced skills mixed with novice skills even in self-contained classes." Ms. Pratt expressed similar opinions in her interviews: "Within a regular kindergarten, you've got some kids who are at a first grade developmental and social level and some at a pre-K level. So we already had a mixture of levels anyway." Indeed mental age data shows that a typical first grade classroom can have up to a four-year gap in students' readiness levels (W. Miller, 1996) and some maintain that this gap grows wider over each successive school year (Eisner, 2003).

As the primary instrument for interpreting my qualitative data (Eisner, 1998), I also felt as if there was a certain *sameness* to the art instruction I observed in Ms. Pratt's multiage artroom with progressive instruction delivered in any artroom. I could certainly see her multiage lessons being equally effective in many graded situations. Interdisciplinary thematic instruction, peer assistance, and collaborative activities are all possible in single grade situations (Serig, 1995), and many of these strategies are considered good principles of effective instruction in any classroom (Anderson & Pavan, 1993). On a purely functional level, then, multiage art instruction might not have to look that different than instruction offered by some in graded schools. On a conceptual level, however, art specialist-teachers who were to explore the full potential offered by multiage art education, such as emphasizing scaffolding opportunities and giving students choices in materials or in working together in groups or individually (Serig, 1995), could begin to create dynamic art programs that look quite different from that found in many traditional graded programs.

Developmental Organization and Flexible Regrouping

While multiage art education doesn't have to look that different than graded art instruction on a functional level, significant changes are needed on an organizational level when preparing for multiage art classes. Rather than organizing the content of her lessons by individual grade levels, Ms. Pratt organized her art classes around broader developmental zones established by Rexrode Elementary's primary (K-2) and intermediate houses (3-4). In this process she established a structure in which each developmental group worked on a similar theme in her artroom.

Students at Rexrode Elementary, like 48.65% of the responding schools to the initial survey, were often flexibly regrouped from one multiage pod to another in order to meet changing developmental needs. In Ms. Pratt's case, this movement had minimal impact on the structure of her art lessons. Since each developmental group or multiage house concentrated on the same project or theme, these minor shifts in the make-up of art rosters caused fewer disturbances. A student from King

Arthur's Court who was moved from one pod to another would arrive to art class with a different homeroom teacher and on a different day of the week, but would still find him or herself working on the same project. Ms. Pratt simply had to assign the regrouped student a new seat and location for storing artwork, and then he or she could resume his or her ongoing project without losing much continuity in the lesson. In cases where the regrouping of students occurred frequently, involved larger numbers of students, or special area teachers weren't notified of upcoming roster changes, then art specialists could be inconvenienced with the additional loss of instructional time on divvying up new seats and storage spaces.

Repetition of Lessons

Ms. Pratt accounted for multiage looping cycles, or students remaining with the same instructors for a set number of years, by simply not repeating the same exact lesson with the same multiage house until a three-year cycle had passed. If she did try to repeat the same lesson, a kindergarten student in the Castle Guard, for instance, could end up making the exact same project three years in a row. That is not to say that certain concepts or skills could not be repeated at all from year to year. Most curricula, whether in art education, general education, multiage or otherwise, has a spiraling tendency in which past concepts and skills are revisited as touchstones and building blocks for new concepts and skills (Stone, 1996).

Conclusions

While attention on multi-age education is growing in Australia and other places in the world (Nishida, 2009), few resources have been provided to aid art specialist-teachers working in multiage contexts. The purpose of this research was to remedy this lack of information through the qualitative characterization of multiage art instruction at a selected school site. The results showed that the use of thematic instruction and cooperative learning resonated equally well in the artroom as it did in multiage homerooms and literature.

Emerging patterns in the data indicate that multiage art instruction, on a functional level, may not have to be drastically different from progressive art instruction in graded programs. However, art specialists working at multiage school sites may find that several changes are required at the organizational level when planning for mixed-age art classes. First, the findings suggest that multiage art specialist-teachers should organize their lessons around broad developmental zones, rather than by specific grade levels. Secondly, multiage art specialists should structure their lesson plans so that all pods within the same multiage house are engaged in similar units of instruction at the same time. If students are switched from one art roster to the other, they will not lose much continuity in ongoing projects and the art specialist will only need to give them new seats and places to store their artwork. Finally, multiage art specialist-teachers should coordinate the repetition of art lessons with the established looping cycles of nongraded classrooms at their school site.

The suggestions offered in this study may provide multiage art specialists with information that could aid them in their planning and decision-making processes. This report may be used by administrators and school personnel to organize multiage classrooms in ways that are mutually advantageous to multiage homeroom teachers and the special area teachers who service their nongraded students. The continued presence of multiage education and the lack of attention given to special area teachers working in that context implies the necessity for future studies on this subject.

References

Alessi, L., Hoyne, P., & Stewart, K. (2006). What are flexible groupings?. In N. C. Lester & L. Constable (Eds.), *Multiage in a nutshell: Your guide to a multiage classroom* (pp. 40-42). Eagleby, QLD: Multiage Association of Queensland.

Anderson, R. H. (2008). Review of the journal of multiage education, vol. 2 no. 1 2006 [Review of the *Journal of multiage education*, *2*(1)]. *The Journal of Multiage Education*, *3*(1), 1.

Anderson, R. H., & Pavan, B. H. (1993). Nongradedness: Helping it to happen. Lancaster, PA: Technomic.

Ball, T. (2006). The nongraded continuum. In N. C. Lester & L. Constable (Eds.), *Multiage in a nutshell: Your guide to a multiage classroom* (pp. 1-8). Eagleby, QLD: Multiage Association of Queensland.

Ball, T., Grant, J., & Johnson, B. (2006). Looping. In N. C. Lester & L. Constable (Eds.), *Multiage in a nutshell: Your guide to a multiage classroom* (pp. 14-17). Eagleby, QLD: Multiage Association of Queensland.

Bogdan, M. L., & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theories and methods* (4th ed.). Boston: Allyn and Bacon.

Bozzone, M. A. (1996). Straight talk from multi-age classrooms: Why these teachers favor nongraded classes and how they make them work. In A. Fredenburg (Ed.), *The multiage handbook: A comprehensive resource for multiage practices* (pp. 8-11). Peterborough, NH: The Society for Developmental Education.

Bredhauer, M., Davidge, D. C., Cockburn, C., Gallagher, W., Moore, B., & Thomson, N. (2006). Curriculum integration in the multiage classroom: Travel mates. In N. C. Lester & L. Constable (Eds.), *Multiage in a nutshell: Your guide to a multiage classroom* (pp. 67-70). Eagleby, QLD: Multiage Association of Queensland.

Broome, J. L. (2008). Multiage education as an alternative to the McDonaldization of schools: Applying Ritzer's sociological framework to modern education. *The Journal of Multiage Education*, 3(1), pp. 20-23.

Broome, J. L. (2009). A descriptive study of multi-age art education in Florida. *Studies in Art Education*, *50*(2), pp. 167-183.

Chase, P., & Doan, J. (1994). Full circle: A new look at multiage education. Portsmouth, NH: Heineman.

Connell, D. R. (1987). The first 30 years were the fairest: Notes from the kindergarten and ungraded primary (K-12). *Young Children*, *42*(5), pp. 30-29.

Coyne, A. L. (2000). *Creating a year-long theme: A teacher's journey for multi-age and single-age classrooms*. Columbus, OH: Englefield and Arnold.

Cushman, K. (1993). The whys and hows of the multi-age primary classroom. In D. Sumner (Ed.), *Multiage classrooms: The ungrading of America's schools* (pp. 20-25). Peterborough, NH: The Society for Developmental Education.

Dewey, J. (1997). Experience and education. New York: Touchstone. (Original work published 1938)

Donmoyer, R. (1990). Generalizability and the single-case study. In E. W. Eisner & A. Peshkin (Eds.), *Qualitative inquiry in education: The continuing debate* (pp. 175-200). New York: Teachers College.

Eisner, E. W. (1998). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice.* Upper Saddle River, NJ: Prentice Hall.

Eisner, E. W. (2003). Questionable assumptions about schooling. Phi Delta Kappan, 84(9), pp. 648-657.

Elkind, D. (1993). Multiage grouping. In D. Sumner (Ed.), *Multiage classrooms: The ungrading of America's schools* (p. 11). Peterborough, NH: The Society for Developmental Education.

Ellis, S., Rogoff, B., & Cromer, C. C. (1981). Age segregation in children's social interactions. *Developmental Psychology*, *17*(4), pp. 399-407.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnographic fieldnotes*. Chicago, IL: The University of Chicago.

Fu, D., Hartle, L., Lamme, L. L., Copenhaver, J., Adams, D., Harmon, C., & Reneke, S. (1999). A comfortable start for everyone: The first week of school in three multi-age (K-2) classrooms. *Early Childhood Education Journal*, *27*(2), 73-80.

Heid, K. A. (2004). *Aesthetic development through sociocultural learning: A challenge for standards in the elementary art classroom.* (Unpublished doctoral dissertation). University of Georgia, Athens, GA.

Heins, E. D., Tichenor, M. S., Coggins, C. J., & Hutchinson, C. J. (2000). Multiage classrooms: Putting theory into practice. *Contemporary Education*, *71*(3), pp. 30-35.

Hoffman, J. (2003). Multiage teachers' beliefs and practices. *Journal of Research in Childhood Education*, *18*(1), pp. 5-17.

Jurkovic, B. (2001). *Toward a philosophic understanding of multiage education: A Deweyan perspective*. (Unpublished doctoral dissertation). The University of Akron, Akron, OH.

Kasten, W. C., & Clarke, B. K. (1993). *The multi-age classroom: A family of learners*. Katonah, NY: Richard C. Owen.

Kasten, W. C., & Lolli, E. M. (1998). *Implementing multiage education: A practical guide*. Norwood, MA: Christopher-Gordon.

Kelehear, Z., & Heid, K. (2002). Mentoring in the art classroom. Studies in Art Education, 44(1), pp. 67-78.

Lolli, E. M. (1998). Multiage magic. Primary Voices K-6, 6(2), pp. 10-18.

McCarthey, S. J., Corman, L., Adair, M., Barati, M., Bertino, J., McAngus, N., Nordin, A. (1996). Building a community of learners: Team teaching interdisciplinary units in multi-age classrooms. *Language Arts, 73*, 395-401.

Miletta, M. M. (1996). A multiage classroom: Choice & possibility. Portsmouth, NH: Heinemann.

Miller, B. (1990). A review of the quantitative research on multigrade instruction. *Research in Rural Education*, 7(1), pp. 1-8.

Miller, W. (1996). Are multiage grouping practices a missing link in the educational reform debate. In A. Fredenburg (Ed.), *The multiage handbook: A comprehensive resource for multiage practices* (pp. 3-6). Peterborough, NH: The Society for Developmental Education.

NAU College of Education – Multiage Institute. (2009, February 2). Welcome to the College of Education's National Multiage Institute [Web page]. Retrieved from http://coe.nau.edu/mi/index.html

Nishida, Y. (2009). *The challenge of multiage primary education in public education*. Saarbrucken, Germany: VDM Verglag, Dr. Mueller Aktiengesellschaft & Co.

Pratt, D. (1993). On the merits of multi-age classrooms. In D. Sumner (Ed.), *Multi-age classrooms: The ungrading of America's schools* (pp. 83-87). Peterborough, NH: The Society for Developmental Education.

Seidman, I. (1998). Interviewing as qualitative research: A guide for researchers in education and social sciences (2nd ed.). New York: Teachers College.

Serig, D. A. (1995). *Developing a visual arts curriculum for a multiage class*. (Unpublished master's thesis). National-Louis University, Saint Louis, Missouri.

Shepard, L. A., & Smith, M. L. (1990). Synthesis of research on grade retention. *Educational Leadership*, *47*(8), pp. 84-88.

Stone, S. J. (1996). Creating the multiage classroom. Glenview, IL: GoodYear Books.

Tyack, D., & Cuban, L. (1995). *Tinkering toward Utopia: A century of public school reform*. Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1986). *Thought and language* (A. Kozulin, Trans.). Cambridge, MA: The Massachusetts Institute of Technology Press. (Original work published 1934)

Wiles, J. & Bondi, J. (2000). Supervision: A guide to practice (5th ed.). Upper Saddle River, NJ: Merrill.

Table 1

Data Used for Participant and Site Selection for Naturalistic Observations

Respondent #	Prof. Autonomy (Given Choice?)	Theme- Based Integration and Instruction	Space for Student Groupings	Use of Learning Centers	Integrative Curriculum	Cooperative Learning Groups	Peer Tutoring or Peer Assistance	Relevant Training	Willing to be Observed	Total
# 3		Х	Х		Х	X	Х	X	Х	7
# 4	Х	Х	Х	Х			Х		Х	6
#5		Х	Х		Х	Х	Х		Х	6
#6		Х	Х			X	Х			4
#7		Х	Х		Х	X	Х		X	6
#9			X		Х	X	Х	X	X	6
#13		Х	X			X	X	X	X	6
#15		Х	X			X	Х	X	X	6
#20		X	X			X	X		X	5
#23		Х	X	X		X	X		X	6
#29		Х			Х	X		X	X	4
#33						X				1
#36			X			X	X	X	X	5

Note. Of the original 36 survey respondents, only 13 art teachers who reported working at school sites that were completely multiage in design or had worked with 20 or more multiage classes during a school year were considered for participation in naturalistic observations. Respondent #3 was calculated to have the highest frequency of characteristics cited in multiage literature and also indicated willingness to participate in qualitative data collection.

Table 2

Example of Qualitative Data Category Card for the Category of Peer Interaction

Brief reminder of incident/evidence	Retrieval Source				
Peer assistance	Interview 2: pages 23-24				
Paper kite activity	Fieldnotes: page 41				
	Interview 2: pages 16, 31				
Plaster mask activity	Fieldnotes: pages 21-22, 47-48				
	Fieldnotes: page 15				
Weaving activity	Fieldnotes: page 46				
Assistance with management/clean up	Survey Question13: respondent #2, 5, 13, 21, 24				
Collaborative assignments	Interview 2: pages 29-30				
Art criticism activity	Fieldnotes: page 32				
	Interview 2: page 27				
Group projects for stage design	Fieldnotes: page 31				
Collaborative assessment					
Supportive peer interaction/environment	Fieldnotes: page 20, 41				
Seeking/offering suggestions of peers	Interview 2: pages 32-33				
Arrangement of seating	Fieldnotes: pages 20, 37, 45, 49-50				
Supportive of peer success	Survey question 13: respondent #25, 31				
As advantageous aspect of multiage education	Fieldnotes: page 46				
Ms. Pratt's view	Respondent's #: 1, 2, 3, 5, 7, 8, 10, 14, 15, 16, 17,				
In survey results	18, 20, 23, 27, 29, 30, 31, 32, 34, 36				



Figure 1.

Students worked collaboratively to make group projects that were assembled to create a stage design for a school musical performance.