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2005

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CREATING AND TEACHING THE ARTS-INFUSED CURRICULUM: A CASE STUDY OF ART, MUSIC, AND DRAMA IN AN EXEMPLARY ELEMENTARY CLASSROOM

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by

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Dedication

This dissertation is dedicated in memory of my sister, Charla Wheat, whose life was taken prematurely at eighteen years of age.

And in memory of Dr. Oscar Mink and Dr. Donald Phelps, both who began this process with me and did not see it completed.

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There was a time when this day was unimaginable. Completing this dissertation has been a long and difficult journey and certainly could not have happened without the support of those around me. My participant, "Patty Smith" is an incredible teacher and I have learned more from her than I ever anticipated. This project could not have been completed without her insight, inspiration, and cooperation. My chair, Dr. Sherry Field, has guided and mentored me in more ways than can be imagined throughout the last years. Her support and encouragement has been invaluable. The members of my committee have also profoundly influenced my professional growth and the completion of this dissertation: Dr. Mary Lee Webeck, Dr. Elaine C. Gore, Dr. Linda K. Voges, and Dr. Lisa S. Goldstein.

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CREATING AND TEACHING

THE ARTS-INFUSED CURRICULUM:

A CASE STUDY OF ART, MUSIC, AND DRAMA

IN AN EXEMPLARY ELEMENTARY CLASSROOM

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The purpose of this study was to develop a case study of teaching and learning through an arts-infused curriculum in an exemplary elementary classroom. In particular, the aim was to examine and describe how and why art, music, and drama were used in a self-contained second grade classroom. A qualitative case study methodology was employed to describe the various activities used within the classroom and to investigate the reasons the teacher uses this particular approach to instruction. Data was collected from classroom observations conducted over one semester, multiple interviews with the participant, and documents from the classroom.

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The teacher was identified as an exemplary educator by her professional recognitions, including Marine Educator of the Year, National Teacher Training Institute Teacher of the Year, Texas Marine Educators Association Educator of the Year, and a Presidential Award for Elementary Science Teaching, as well as special recognition from the Texas Medical Association and the Association for Texas Professional Educators. The classroom was a self-contained second grade classroom located in a suburban, Central Texas district rated as exemplary by the state.

The findings conclude that art is used in this classroom to reinforce content learning, to help the children organize their ideas, and to create an experience. Music is used to reinforce thematic units, to help the children memorize information, and as a creative writing activity. Drama is used for expressive communication, as a means of conveying content information, and as a stimulant for critical thinking. Three themes were consistently present in the art, music, and drama activities: 1) the activities were open-ended, 2) the teacher helped the children to pay attention to detail, and 3) all of the activities were grounded in content learning.

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Chapter 1 Overview of the Study



If I could paint the flower exactly as I see it no one would see what I see because I would paint it small like the flower is small. So I said to myself-I'll paint what I see - what the flower is to me but I'll paint it big and they will be surprised into taking time to look at it - I will make even busy New Yorkers take time to see what I see of flowers. — Georgia O'Keefe http://www.artcyclopedia.com/artists/okeeffe georgia.html

Georgia O'Keefe is known for her paintings of large flowers. Her images are not of flowerbeds, or fields of flowers, or even individual plants, but of single flower heads in bloom. Rather than painting the entire plant, she chose only the most beautiful portion and examined it carefully, absorbing the nuance of each blossom and capturing the natural beauty with her brush. Seeing the flower as she saw it means noticing the many subtle shades that create a 'red' or a 'white,' the delicate curve of each petal, or the tiny pistons that shoot from the center of the blossom. She noticed the beauty in small things and wanted to share them in a way that would force others to really look at them – by

painting the tiny blossoms on a large canvas to emphasize the beauty that each detail brings to the flower.

Observing in an elementary classroom is much the same way. Some classrooms are more beautiful than others, and some are beautiful in different ways, just as the poppy and the orchid are beautiful in different ways. We become so accustomed to seeing certain behaviors and activities that we don't really notice them, or when we do, we don't pay attention to the subtle differences that create their beauty. These subtle differences distinguish exemplary classrooms from good classrooms, and good classrooms from mediocre ones. The only way to appreciate the beauty in teaching and learning is to stop and notice the nuances that create the classroom – details that cannot be seen through a checklist of traits or a standardized test score, but are a very real part of the teaching and learning.

To illustrate this point, consider this portrait of an award-winning elementary arts magnet school in Charleston, South Carolina.

Welcome to Ashley River! Our school supports the philosophy that all children learn best when taught using the arts. The arts not only affect the process of learning, but also promote lifelong learning in the arts. All Ashley River students participate in visual arts, music, physical education, drama and Spanish classes. In addition, students are given the opportunity to attend classes in ballet and Suzuki violin. Our South Carolina Arts Commission Grant and Project Artistic allow all students to work with a resident artist during the school year. Classroom teachers utilize opportunities to teach state standards using the arts as a catalyst to promote learning. Ashley River is truly an arts-infused curriculum. If you want to know more about our school, please contact us. We are proud of our accomplishments for children. (Ashley River Creative Arts Elementary School, 2004)

On reading the description, one could easily make an instant inference about the goals of this particular elementary school, and view it as either a positive learning environment or a negative one. The mission is seemingly clear, and from the brief description most readers will form an image of the types of instruction and activities that would be found at Ashley River. On closer examination, we really know very little about the school, except that it is based on an 'arts-infused curriculum' and it offers instruction in some of the core arts areas, including music, visual arts, drama, ballet, and Suzuki violin. Many of the specific details are left to our imagination or preconceived notions about an arts based curriculum. For instance, what exactly is in the music curriculum if it is separate from Suzuki Violin? Does the music program offer a choir? piano/keyboard program? A drumming ensemble? An emphasis on music appreciation and history? Are there performance opportunities for all children, or only selected groups? Are dance classes other than ballet offered? Is dance included in or in place of the physical education classes? What is included in the visual arts curriculum? Drawing? Painting? Pottery? Weaving? What is taught in the drama classes? Improvisational drama? Dramatic reading? Musical theatre? Does the drama class perform frequently? Do students audition for parts in performances? Do all students take courses in each of the arts?

All of these questions pertain only to specialized classes offered in art, music, drama, and dance, but if the general classroom curriculum is 'arts-infused' as well, we are presented with another set of questions about how the arts are integrated within the general classroom. Are all of the arts used in all classrooms on a regular basis? Are

some art forms used more frequently than others? Do all teachers receive training in the art forms? Why are specific activities chosen? Do students participate in the arts? Do students watch or listen to performances in music, drama, or dance? Do students participate by memorizing songs or rehearsing lines? If so, how are materials chosen? Do students participate by creating original products? Is performance a regular part of the general classroom curriculum? Are materials chosen because they are related to early childhood units, such as communities? Are the major concepts of each arts discipline explored in the general classroom? Do classroom teachers emphasize historical and cultural connections?

When all of the questions about *how* the arts are used at Ashley River have been addressed, we are left with another series of questions related to *why* they are used this way in the curriculum. Each of these questions leaves us wondering about the school climate at Ashley River, what precisely is meant by the term 'arts-infused' and perhaps more importantly, if an 'arts-infused' curriculum is a good thing. In order to visualize the activities that make any arts-infused curriculum a dynamic learning environment and to evaluate the program as good or bad, each of a number of complex issues must be considered.

When individual classrooms are considered, the questions become more specific. What is the background of the classroom teacher in art, music, dance, and drama? Why does she use the arts in the classroom? For motivation? For content area learning? For enrichment? How does she connect arts activities to the core academic subjects? What are the specific activities in which the children participate? Do the children observe the

artwork of others or participate in the arts themselves? Do they create original products or mimic the work of artists? Does the teacher provide direct instruction in the skills necessary for growth in an art discipline? How often are the arts used within the classroom? Are arts activities isolated or taught as part of a larger unit? Are some art forms privileged over others? How does the teacher introduce each activity?

Statement of the Problem

The academic debate between scholars and advocates is strongly divided between those who support arts-infused curriculum (J. S. L. Catterall, 1998) and those that believe arts classes should be taught as discreet disciplines by arts specialists. (Eisner, 1998a) (Brewer, 2002) Each of these philosophical arguments holds insight into the complexity of the issue. However, it is difficult to judge an arts-infused curriculum as either 'good' or 'bad' based on opposing theoretical arguments. Real classroom environments are complex and cannot be easily assigned to clearly defined categories. In most instances, a single classroom will exhibit a range in quality of activities. It could also be argued that choosing between specialized or arts-infused instruction is not always the best or most likely option. Ideally, schools would offer both specialized classes in the arts and an environment suitable for incorporating the arts throughout the academic curriculum.

All classroom environments are unique and are shaped by a multitude of factors that contribute to the quality of the environment. To name a few, the teacher, the students, the administration, the community, the school setting, State and National standards, and the available resources all influence teaching and learning in the

classroom. Even with similar curricular activities, the learning experience will be unique to the teacher and students in a particular classroom. An intellectual discussion arguing for or against the arts-infused curriculum holds little value without insight into a specific classroom context. Even within a particular classroom, all arts-infused activities are not necessarily of equal quality or value in the curriculum and they may be included for many reasons. In order to understand the complexities of the arts-infused classroom, a holistic study of the classroom and the specific activities found within the curriculum must be conducted.

Purpose of the Study

The purpose of this study is to examine teaching and learning through an arts-infused curriculum in an exemplary elementary school classroom. To examine teaching and learning in this sense, the subtle details of the classroom must be scrutinized to understand the unique characteristics that distinguish this particular classroom from any others that are arts-infused. The perceptions of the researcher cannot be shared unless the details are explicitly brought to the attention of a larger audience. Just as Georgia O'Keefe chose to paint the blossoms on a full canvas so that others might share her appreciation of their beauty, the distinctions between classrooms must be enlarged for the novice observer to appreciate them. I have chosen narrative inquiry, (Clandinin & Connelly, 2000) or the telling of stories, to 'paint' the subtle details of teaching and learning in an elementary classroom infused with the arts.

The art of critiquing an educational environment lies first in becoming a connoisseur, or developing "the ability to make fine-grained discriminations among complex and subtle qualities." (Eisner, 1998b) (pg. 63) Becoming a connoisseur means becoming an expert through perception, awareness of details, and the ability to place those details into a larger set of experiences. Becoming an educational connoisseur implies becoming an expert by gaining access to many classrooms and developing the ability to distinguish between the subtle differences among them, first by perceiving the relationships between the many factors that create them, then by becoming aware of and noticing details through both overt and covert signals given within the context of the classroom, and finally by using experience to place the qualities into a larger classification. He emphasizes that a connoisseur not only experiences the subtle qualities of the case, but is also sensitive to the many factors that influence those qualities.

Using Eisner's notion of connoisseurship, I conducted a qualitative case study examining teaching and learning through an arts-infused approach in an exemplary elementary classroom. Over the course of one semester, I immersed myself in the classroom and absorbed the subtle details that distinguish the ways an exemplary teacher used art, music, and drama in her self-contained second grade classroom. These subtle details are shared with the reader in descriptive narrative accompanied by analysis that draws attention to the important details that distinguish this classroom from other classrooms that incorporate art, music, and drama. This descriptive and analytical text allows the reader to notice the subtle details that distinguish teaching and learning in this

classroom. In particular, it draws attention to *how* and *why* the teacher uses art, music and drama in her classroom.

Both scholarly research and professional experience have shaped the direction of this study, but experience triggered my initial interest in arts-infused curriculum and ultimately shapes my perceptions of the classroom. All qualitative research is shaped by the experiences, perceptions, and beliefs of the researcher, or in this instance, the *connoisseur* of the classroom. (Eisner, 1998b) This lens through which the researcher views the world allows her to see certain things, and in other instances, may prevent her from noticing other things. When assuming the role of *educational connoisseur*, my own experiences shape my perception of the classroom environment, and for this reason, it is necessary to provide an overview of my interest and personal background in arts infusion before beginning the case study.

My interest in arts-infusion can be traced to my first year in the classroom over thirteen years ago. Because I have a background in music, some of this interest is personal, some of it is triggered by a need to teach creatively, and some of it is perpetuated by the positive responses I have seen from my own students. At an intuitive level, I know that using the arts throughout the elementary curriculum is a good idea, and my own classroom practice reflects this philosophy. However, the complexities of a larger system make this somewhat difficult to implement. My own conflict over this issue stems primarily from the need to teach the skills and concepts of a discipline within a limited time frame, versus integrating curriculum in a way that adds depth but also means taking time away from the study of one particular discipline.

Perhaps a turning point in my own inner debate occurred after a particularly frustrating day in the classroom when it seemed as though none of my music students were 'getting it.' I began to think about the emphasis on literacy that dominates contemporary elementary curriculum. In Texas, elementary students receive two or more hours of instruction in reading and language arts daily. In addition to this direct instruction, there is frequently an emphasis on reading and writing across the curriculum, reading contests throughout the school or district, and initiatives to encourage parents to read with their children at home. Most schools also offer both remedial and enrichment instruction through special education and gifted programs. The drive in literacy includes specialized instruction in reading and writing as well as a large-scale initiative to include reading and writing throughout many aspects of the curriculum.

By contrast, most art and music classes are offered once or twice per week for a shorter period of time with few opportunities for remediation or enrichment beyond the group instruction. If an emphasis on reading and writing across the curriculum could improve literacy, why couldn't a focus on arts integration improve arts skills? Shortly after, I began to notice that the children in one particular second grade classroom consistently demonstrated superior ability in my music classroom. The students in this particular class enjoyed singing and were better able to maintain pitch and memorize songs than the other second grade classes. This was true year after year, and I consistently placed the classes of this particular teacher on center stage to support the other classes during the annual music performances. The gap became most evident when the combined second grade classes worked to write and perform an original opera. I

knew that the students spent a great deal of time singing in their classroom and I became curious about the specific types of activities that occurred in instruction in this classroom. The second-grade teacher in this classroom is the participant for this case study.

Research Questions

This case study will examine teaching and learning through the arts in an exemplary elementary school classroom. The researcher will use qualitative methods to investigate the following research question and sub-questions:

- How do teaching and learning occur in an exemplary, arts-infused elementary school classroom?
 - o How is art used in the classroom?
 - O How is music used in the classroom?
 - o How is drama used in the classroom?

Significance of the Study

The only way to examine the complex environment that creates an arts-infused classroom is to avoid the polarized philosophical opinions that dominate the academic discussion and to consider the subtle details that create the arts-infused curriculum. Examination of these details and telling the story of a single classroom will open a discussion about the complex and subtle differences that make arts-infusion curriculum part of the classroom environment. Specialized arts programs have begun to develop around the nation, and studies are beginning to emerge that assess their impact on

instruction, motivation, attitudes, and student learning. (Burnaford, 2001) (Arts Education Partnership & President's Committee on the Arts and the Humanities, 1999) (E. B. Fiske, 2001) These studies are limited, and most make attempts only to assess large-scale programs by performance outcomes or attitudes toward arts-infused curriculum. No attempts have been made to examine the subtle details of teaching and learning within an individual classroom.

The proposed study is substantially different from existing studies because it attempts to examine the classroom practice of an exemplary educator. The details of what she does, how she does it, and why she does it will be examined. The participating teacher is identified as exemplary because of her professional accomplishments, including a Presidential Teaching Award. Although she is an exemplary educator, she is not a leader in the field of arts-infused curriculum. She is a leader in science education and also has a strong background in whole language and integrated curriculum. Her use of art, music, and drama in the primary classroom stems from her personal interest in the arts, her knowledge of early childhood pedagogy, and her expertise in curriculum. She incorporates the arts as she sees them from a practitioner viewpoint and in a manner that she deems to be appropriate for her classroom. It is important to note that she does not work in collaboration with an arts organization, collaboration, or any other specialized arts program, but functions as an outstanding primary educator within a traditional elementary environment. As an exemplary educator with over thirty years of teaching experience, her story holds a great deal of practitioner knowledge about using the arts in the elementary classroom that has been discussed little in the formal academic literature.

Assumptions

This study is based on the following assumptions:

- The arts play an ongoing and important role in the classroom community selected for study, and observation in the classroom will also include some activities involving art, music, drama, or dance.
- The teacher has expertise in early childhood education, and will have specific
 reasons for using various types of arts activities in the classroom, and will be
 willing and able to discuss them either formally or informally.
- 3. The teacher is somewhat aware of how she uses the arts within the curriculum and is able to discuss them either formally or informally.
- 4. The researcher will perceive the subtle differences in how the arts are used within this particular classroom and distinguish them from arts-infused lessons in other classrooms.

Delimitations

The study is delimited by the following criteria:

- This case study will describe the uses of the arts as well as their intended purposes within an exemplary elementary classroom.
- 2. Qualitative data will include observation in the classroom twice per week for one semester, semi-structured interviews with the classroom teacher, and data

- collected from classroom documents, including lesson plans, websites, student work, etc.
- 3. The district examined is unique to the Central Texas area and findings are not intended to be generalized to other districts. Because the district has a history of exemplary performance for all students on state mandated standardized tests, the district curriculum emphasizes test preparation and benchmark assessment to a lesser degree than other schools in the immediate area. This increased freedom over curriculum allows the teacher more opportunities to include the arts and other thematic units in her classroom.
- 4. The classroom examined is unique and the findings are not intended to be generalized to other classrooms. The classroom is located in an upper socio-economic status, suburban elementary school in Central Texas. The majority of the students come from two-parent homes in which both parents hold college degrees, and at least one parent does not hold full-time employment outside the home. The school is rated "exemplary" by the state of Texas, and was awarded the "National Blue Ribbon Award" in 2001.
- 5. The teacher studied is unique and her classroom practice is not intended to be generalized to other elementary teachers. She has over thirty years of teaching experience in the elementary grades, has received a Presidential Teaching Award, has been recognized as Teacher of the Year at both the school and District Level, is an active clinician in elementary science methods, and teaches elementary science methods courses at a small college in Central Texas.

- 6. This study is intended to provide a holistic look at the use of the arts in an exemplary elementary classroom. Although the teacher has some background in the arts, she does not have specialized training in arts integration for the elementary classroom, and does not consider inclusion of the arts to be her specialization.
- 7. The use of the arts in the selected classroom does not represent discipline based arts education, and is not intended to cover state and national standards for the arts. The use of the arts is supplemental to the self-contained classroom curriculum. In addition to the exposure to the arts received in the general classroom settings, students receive 55 minutes of art instruction from an art specialist five times every three weeks, and 55 minutes of music instruction from a music specialist five times every three weeks. Dance instruction is incorporated into the Physical Education classes offered by a Physical Education specialist five times every three weeks.

Limitations

The study is limited by the following conditions:

- The honesty of the classroom teacher, as well as her ability to verbally articulate
 her intentions will directly impact the quality of the data collected from
 interviews.
- 2. The collection of qualitative data is limited by the ability of the researcher to accurately record and analyze data. Although use of qualitative data is intended

to provide deeper insight into a single classroom phenomenon, it is also subject to researcher bias.

3. The findings and conclusions from this study are drawn from a unique case study, and cannot be generalized to other elementary classrooms.

Definitions

The term *arts-infused* is a general term that could be interpreted in a variety of ways, as are many of the other terms used throughout the study. For clarity of discussion, an overview of terms is provided:

- Arts The four arts disciplines with articulated national standards: art, music,
 drama, and dance (Consortium of National Arts Education Associations, 1994)
- Arts-Infusion using the arts throughout the curriculum
- Discipline Based Arts Education Arts Education that serves the primary purpose of teaching the skills and concepts specific to an arts discipline
- Developmentally Appropriate Practice practices resulting from professional decisions based on knowledge of child development and learning, needs of individual children in a group, and knowledge of social and cultural contexts in which children live. (Bredekamp & Copple, 1997)
- Curriculum The interaction of all the forces, both hidden and explicit that shape learning, including curriculum as political text, phenomenological text, autobiographical text, aesthetic text, etc. (Pinar, Reynolds, Slattery, & Taubman, 2002)

- Core Academic Curriculum Language Arts, Math, Science, Social Studies
- Early Childhood Children from birth through age 8 (Bredekamp & Copple, 1997)
- Thematic Unit A unit designed around a topic of study (Erickson, 2001)
- Interdisciplinary involving two or more academic, scientific, or artistic disciplines (Mish, 1999)
- Elementary School The elementary school in this study includes kindergarten through fifth grade
- Exemplary deserving imitation because of excellence (Mish, 1999)
- Self- Contained Classroom A classroom where a single teacher has soul
 academic responsibility for all of the children in the room for each of the core
 subjects: Language Arts, Math, Science, and Social Studies.
- Texas Essential Knowledge and Skills The published Texas standards for content knowledge at each grade in each subject(Texas Education Agency, 1998)
- National Standards for Arts Education The published National standards for each of the identified Arts Disciplines: Art, Music, Drama, and Dance.
- Multiple Intelligence Theory A theory of intelligence that identifies seven distinct types of intelligence, including: Verbal, Spatial, Musical, Kinesthetic, Logical, Interpersonal, and Intrapersonal (Gardner, 1983)

Organization of the Study

In summary, the purpose of this study is to examine teaching and learning through the arts in an exemplary elementary classroom. Drawing from Eisner's notion of connoisseurship, a qualitative case study methodology will be employed to capture the nuances of instruction in a second grade classroom infused with the arts. In particular, the case will examine the types of activities the teacher uses, how she presents them to the students, and why she makes the choices that she does. Chapter 2 provides an overview of the literature relevant to understanding arts-infusion in the elementary classroom, including philosophical rationales for the arts, curriculum standards, current research on the arts and learning, and the stories of teachers. Chapter 3 explains the research methodology and the parameters of the study. Chapter 4 presents the story of the teacher accompanied by discussion and analysis of the ways she uses art, music, and drama in her classroom. Chapter 5 is a discussion of the contributions for the field of arts and learning, and possible implications for teacher education.

Chapter 2

Literature Review

Before the art-infused curriculum can be examined, we must have an understanding of the context in which it exists. Chapter 2 will provide an overview of the literature relevant to this study. First, an overview of arts education, including rationales for arts education based on their intrinsic value as well as the benefits of both arts education and the arts infused curriculum. Next, a brief overview of teaching and learning, including the contemporary public school climate, views of curriculum, and existing studies on using the arts as pedagogy in the classroom is provided. Finally, the literature relevant to teachers, including teacher knowledge and the stories of teachers will be discussed.

I. Arts Education

The arts have a long-standing presence in American education, and have been rationalized within the curriculum for a variety of reasons. Most rationales of intent can be categorized into two broad categories: 1) the intrinsic value of the arts, and 2) the benefits of including the arts in education. Justifying education in the arts based on their intrinsic value may include acknowledging their importance in daily life or experience, recognizing their ability to create aesthetic encounters and stimulate the imagination, recognizing them as rigorous academic disciplines, and understanding them as alternate forms of representation. Some of the more practical outcomes include a variety of functional purposes, such as character development, community building, and vocational

training, and more recently, the arts have also begun to be acknowledged for their usefulness as effective instructional tools within a general classroom setting, and because there is increasing evidence that study in the arts increases overall academic achievement.

Intrinsic Value of the Arts

Art as Experience

The writings of John Dewey expanded the philosophy of education during the early twentieth century, and have had lasting influence on the practice of teaching and learning in the public school system. The primary tenets of Dewey's curriculum included the child-centered curriculum, the integration of subject matter, and the necessity of building from and connecting to real-life experiences. (Dewey, 1938, 1998) Many of these tenets are still reflected in contemporary philosophies of education, and can be applied not only to arts education, but also to the arts-infusion or integrated approach to general education. The child-centered curriculum and the integrated curriculum will be addressed more extensively in other portions of this discussion, but Dewey's notion of the arts as experience is directly relevant to intent and inclusion of the arts in education.

Dewey believed that the arts offer insight into the culture and thinking of mankind, and are to be appreciated as an integral part of community life, and as experiences in the lives of common people. In essence, the arts are part of the human experience, and their intrinsic value comes from experiencing them in daily life. He distinguishes between the intellectual study of the language and symbols of the arts, and the actual qualitative experience of art, concluding that the intrinsic value of the art is in

the experience. In his words, "It is one reason why the strictly intellectual art will never be popular as music is popular." (pg. 38) (Dewey, 1934) The arts have the ability to make us feel and experience life, and because Dewey valued education that was organized around real-life experience, he believed the arts were a necessary part of real-life education.

Art as Aesthetic Encounter

The reconceptualist curriculum focuses on the complex interaction of many competing forces. In this sense, curriculum is not so much what is taught directly in terms of content, but what is learned within a social context shaped by political text, racial text, gender text, phenomenological text, postmodern text, autobiographical text, aesthetic text, theological text, institutionalized text, and international text. (Pinar et al., 2002) Of particular interest to this study, is the notion of curriculum as aesthetic text, or the importance of aesthetic experience in cultivating the intellect and triggering imagination. Because the arts are aesthetic in nature, study of the art disciplines is a necessary portion of the curriculum.

Maxine Greene writes that the intrinsic value of art lies in the aesthetic experience. The aesthetic experience that Greene supports is separate from the community experiences that Dewey mentions. The aesthetic experience is not a practical part of daily life, nor is it inherent in the actual, physical work of art, but by the interaction between the subject and the art, in an aesthetic space, or art world.

Consciousness and reflection focused on the experience are keys to imagination and transformation, and through this process of "wide-awakeness," students are allowed to

express their feelings, perceptions, and imaginations as they find their own voices. For this reason, training in the various art forms is important in the development of children, specifically to cognitive, perceptual, emotional, and imaginative development. The following quote summarizes her belief that the arts stimulate authentic learning:

... we need ourselves to tell stories and allow the young to tell their stories, to draw them, to dance them, to shape some of the stuff of their lives. We want them to tap their image stores, to remain in touch with their memories. I believe that, when consciousness is opened to the appearances and to the sounds of things, when children are encouraged not simply to perform correctly, to demonstrate sets of skills or competencies, but to perceive and name dimensions of their lived worlds, they are far more likely to pose the questions in which authentic learning begins. (pg. 62) (Greene, 2001)

Art as a Discipline

Discipline-based arts education (DBAE) was envisioned and articulated by the Getty Center for Education in the Arts during the 1980s, and developed as a reaction to the emphasis on "creative self-expression" in visual art that gave art education a marginalized place in the school curriculum. DBAE is a comprehensive approach to art education, built on the premise that the arts should be core academic subjects with a written curriculum and taught to children of all abilities, rather than a select group of talented students. This approach to art education expands the traditional product-oriented focus, to include education in aesthetics, history, and criticism. (Walling, 2001)

More traditional forms of music training were designed to advance skill in the performance of western classical music, with emphasis on training individuals that showed natural ability and promise. This philosophy of talent education is still evident in

the Suzuki string and piano methodology designed to develop advanced performance ability by beginning instruction in the preschool years. Educators of music, drama, and dance responded to the comprehensive approach of discipline-based art education, and began exploring the possibilities for application within the performing arts. Music education has also been restructured during the past decade to incorporate education in aesthetics, history, and criticism in addition to the more traditional performance-oriented skills of the past. (Patchen, 1996) The National Standards for Arts Education, include standards for dance, music, theatre, and the visual arts, and were developed in the 1990s on many of the principles of Discipline-Based Art Education. Many states have adapted standards based on them, just as local districts have revised curriculum guides to include the four branches of product or performance, aesthetics, history, and criticism. (Southeast Center for Education in the Arts, 2004)

Art as Communication

If all meanings could be adequately expressed by words, the arts of painting and music would not exist. (pg. 74) (Dewey, 1934)

The seemingly simple idea – that thoughts can be communicated in a variety of forms – is particularly important to arts education. The arts represent different forms of perception, thought, representation, and communication, and developing the ability to receive information, think, and communicate in those forms expands the capacity of our minds. Eisner argues that the human mind is shaped by the interaction between the biological brain and cultural influences, or the mind. In a sense, our minds are products of culture and are shaped by the various ideas and symbols to which we are exposed. If

we are exposed only to the basic curriculum of the 3 R's, we are not fully developing the capacity of our minds. He reasons that many mediums of expression, including the various arts, as well as language, math, and science, exist to cover the range of possible expressions. Some ideas can be expressed quite well in one form, such as painting, that may be lost or hidden when represented in another medium, such as poetry.

Understanding the structure of various art forms is essential to communicating and receiving information through them, and allows us to use the full potential of our minds. (Eisner, 1997)

Benefits of Arts Education

Each of the previously mentioned rationales for arts education; art as experience, art as aesthetic education, art as a discipline, and art as a form of representation; is based on the intrinsic value of the arts and their intrinsic value in education. The academic discussions surrounding rationales supporting the intrinsic value of the arts are far less controversial than those surrounding rationales based on the outcomes of arts education, or the practical reasons to include the arts in the curriculum. Many arts researchers have cautioned against rationalizing arts education for utilitarian purposes, such as increasing performance in other academic areas, but increasingly references are made to the advantages of using the arts for various functions, including increasing academic achievement and as instructional methodology within the general elementary curriculum.

Historical Perspectives

Historically, the arts have had a strong presence in many cultures and have been included in formal education for a variety of reasons, but up until the twentieth century, most of the discussion related to the utilitarian or functional purposes of study in the arts, rather than the more contemporary philosophical positions based on the intrinsic value of the arts. The ancient Greeks are well known for an educational system that emphasized development of the mind, body, and soul, and relied heavily on education in the arts, particularly for character development. (Abeles, Hoffer, & Klotman, 1994) Both the ancient Greeks and the ancient Chinese believed that music had a strong power to shape character and could be used effectively as a tool for maintaining harmony and governing or controlling bodies of people. It was not the text alone that was believed to govern character, but the actual rhythm, melody, and tonality of the music. (Wang, 2004) The Universities of the Middle Ages included music in the core liberal arts curriculum both because it was believed to be an intellectual pursuit, and also because music played an important role in the services of the church, and it served as vocational education in the training of priests. (Abeles et al., 1994)

Many rationales for arts education based on functional, utilitarian purposes exist in the early years of American education. Among these purposes were included the development of the individual child morally, intellectually, or through vocational training and the contribution of the child to the community through service or entertainment. An early example of using music as a means of serving the community can be seen with the establishment of a singing school in Boston in 1717, intended to improve the quality of singing in the churches. Numerous other singing schools developed afterward, with the

clear intent that quality singing would benefit worship services and the community at large. (Mark, 1986)

As early as 1838, Lowell Mason was employed by the Boston school board to teach singing in the elementary school. The rationale for including music in the elementary curriculum was considered and approved by a special committee, and the final report declared that vocal music instruction was appropriate for the elementary school on the premise that it would benefit the child intellectually, morally, and physically. (Abeles et al., 1994) Not only was music considered appropriate for personal development, but it was believed to be beneficial to the community as a whole, and for that reason, could be justifiably supported by local taxation. The committee report stated: "human life must and ought to have its amusements. Through vocal music you set in motion a mighty power which silently, but surely, in the end, will humanize, refine and elevate a whole community." (Birge, 1966)

During the nineteenth century, secondary education in particular, was dominated by the belief that education was primarily for mental discipline and the curriculum should be comprised of strenuous academic subjects. For this reason, the arts were not included in the secondary curriculum recommended by the Committee of Ten on Secondary School Studies. However, the Committee of Fifteen on Elementary Education, also sponsored by the National Education Association, recommended in 1895 that vocal music and drawing were included in the first through eighth grade elementary curriculum on a weekly basis for sixty minutes each. (Ornstein & Levine, 1993)

This period marked a gradual shift to a time when educators began to consider the "child's interest as a member of society" and music and art appeared more regularly in the public elementary schools. Rather than taught by specialists, they were included with many other subjects to be taught by the elementary generalist. In addition to the traditional academic curriculum, "drawing, clay modeling, color work, nature study, sewing, cooking, and manual training" were incorporated in the elementary curriculum. (Birge, 1966) This transition to a philosophical belief that education was not solely for the purpose of intellectual discipline, but also for serving the needs of the child and the society became evident with a report published in 1918 by the National Education Association's Commission on the Reorganization of Secondary Education. The committee listed seven Cardinal Principles of Secondary Education that included: health, command of fundamental processes, worthy home membership, vocation, civic education, worthy use of leisure, and ethical character. (Ornstein & Levine, 1993)

One underlying assumption expressed in the Cardinal Principles is that training in the arts helped individuals become productive members of society, and for this reason, they become increasingly present in the school curriculum during the first part of the twentieth century. Mason's originally justification of music on the premise that it would benefit the child intellectually, morally, and physically, is echoed in the principles of command of fundamental processes, ethical character, worthy use of leisure, and health. During the early part of the twentieth century, art and music instruction continued to gain a presence in the public elementary schools, and expanded into the secondary schools with the addition of instrumental programs and vocational education. The arts could

legitimately be considered vocational education, due to the allocation of federal grant money to fund arts programs during the Great Depression. A number of projects, including the Federal Writers' Project, as well as some WPA sponsored orchestras and public artwork, were funded by the New Deal. (Walling, 2001)

Historically, education in the arts has been used in a multitude of ways for functional purposes, including moral development, general contribution to society, entertainment and leisure, and vocational training. However, as the structure of society changes, many of the functions that the arts play in society also change. The public schools no longer hold the responsibility to improve the quality of singing in churches, and the United States Department of Education is not attempting to stimulate employment in the arts through federal grant programs. The contemporary discussion of using the arts for functional purposes has shifted towards studying the arts to increase academic performance in schools, and integrating the arts in the general curriculum as instructional methodology.

Contemporary Perspectives

During the past decade, there has been an exponential increase in the discussion of the influence of study in the arts, particularly discipline-based study, and academic performance. The Critical Links Report (Deasy, 2002) and the Reviewing Education and the Arts Report (Hetland & Winner, 2001) contribute to the steadily growing body of research that is not yet substantial enough to make broad generalizations about the arts and academic achievement. The topic has generated a whirlwind of debate among arts

researchers, not only about the validity of the various findings, but also about the fundamental philosophical difference in providing a rationale for arts education based on the outcomes, rather than the timeless, intrinsic value of the arts themselves. Nevertheless, there is a growing body of research that supports the positive impact that study of the arts has on overall cognitive development, and in some instances, academic performance in other areas. Research on cognitive growth and cognitive transfer is beginning to shed some insight into the connection between studying the arts and cognitive development. (See appendix A for a discussion of the research on Cognitive Growth and Cognitive Transfer

Although there is no indication that study in the arts *causes* high academic achievement, there is evidence that students who study the arts also perform well in school. This correlation between study in the arts and academic achievement has become increasingly popular among local arts advocates, educators, and the media. A letter from former Secretary of Education, Rod Paige, included the following remarks about students that were involved in the arts:

Based on a review of data from the National Educational Longitudinal Study (NELS: 88), University of California-Los Angeles researchers determined that students who were highly involved in arts instruction earned better grades and performed better on standardized tests. They also performed more community service, watched fewer hours of television, reported less boredom in school, and were less likely to drop out of school. These findings were also true for students from the lowest socioeconomic status quartile of the 25,000 students surveyed, belying the assumption that socioeconomic status, rather than arts engagement, contributes to such gains in academic achievement and social involvement. (Paige, 2004)

The study also found statistically significant correlations between math achievement and involvement in music, and involvement in theatre arts with reading proficiency, gains in self-concept and motivation, and levels of empathy and tolerance. The results were more pronounced over time, with scores higher for 12th grade students involved in the arts, than for 8th grade students. (J. S. Catterall, Waldorf, Lynn, Chapleau, & Iwanaga, 1999)

Benefits of Arts-Infused Curriculum

A rationale for including the arts disciplines in the curriculum could be based on any of the previously discussed intentions, just as a rationale for infusing the general curriculum with the arts could be based on both intrinsic values and external outcomes. However, a growing number of reasons to use the arts as a means of instructing children to learn other content exist. Applying an arts-infused curriculum can based on a number of theories that are often used to rationalize arts-based instructional methods. (See Appendix B for a discussion of Multiple Intelligences Theory and Learning Styles Theory) The following quote was taken from a summary report in *Gaining the Arts Advantage: Lessons From School Districts That Value Arts Education*:

Researchers for this study found that Dr. Howard Gardner's theory of 'multiple intelligences' has deeply affected philosophies and programs in many school districts. One district (Vancouver, WA) rearranged its learning framework to reflect many ways of learning and to include the arts. Another (Redondo Beach, CA) created a technological laboratory which strives to include as many of the different intelligences in its teaching as possible. Superintendents and school board members referred to the Gardner research as a reason for supporting the arts in their schools. Again and again, the research team heard, 'It's been shown, kids learn in different ways, so we need to be giving them the opportunity to do just that.' The arts, this study's researchers observed, provide multiple

ways for students to exercise intellect. (Arts Education Partnership & President's Committee on the Arts and the Humanities, 1999) (pg. 10)

A second rationalization for the arts-infused curriculum is evidence from research literature supporting the hypothesis that learning in and through the arts may increase motivation in students. Catterall reported that in a large scale study by the Chicago Arts Partnerships in Education, students were more highly motivated when the arts were integrated with the academic curriculum. He went on to summarize a growing body of research in motivation and the arts that suggest positive attitudes towards the arts may transfer to attitudes toward school as well. (J. S. Catterall, 2002a) The authors of the REAP report also concluded that although there is little evidence that study in the arts will cause direct transfer of learning, there may be benefits to an arts integrated curriculum, particularly in terms of motivation. The report suggests the need for experimental studies testing student motivation and study in and through the arts. (Hetland & Winner, 2001) (See Appendix C for further discussion of theories of motivation)

Third, conceptualizing the arts as alternate forms of representation leaves a convincing argument for the necessity of an arts-infused curriculum. Eisner has written convincingly that each of the art forms is a different way of perceiving, thinking, and representing the world, and that many forms of representation, including the arts, are necessary to fully understand culture and develop the full capacity of the mind. (Eisner, 1997) If each art form is a different way of knowing, then there are several possible implications for incorporating the arts into the elementary classroom. First, the arts are a

form of expression, just as spoken language is a form of expression. Second, the arts allow us to comprehend the world in a variety of forms not limited exclusively to language. Third, the arts allow us a way to represent and demonstrate comprehension in forms not limited to spoken and written language.

Catterall demonstrated the importance of using paintings in addition to written text in understanding history because each of the different mediums presents a slightly different view, with some relationships clearer in one form, and less clear in others. Using more than one form of representation is essential to complete understanding. (J. S. L. Catterall, 1998) The idea that multiple forms of representation are needed to comprehend culture is echoed in the Texas Essential Knowledge and Skills call for "a variety of rich material such as biographies; folktales, myths, and legends; and poetry, songs, and artworks." (Texas Education Agency, 1998) Ideas can be represented and conveyed in a variety of forms, including the arts, and to be fully understood, they should be examined in each of those forms.

If ideas are both expressed and comprehended through the arts and other forms of communication, then it is reasonable that assessing student comprehension in a variety of forms is also an appropriate venue to explore. Performance based assessment is built on the premise that interpreting what students know and can do is best done through evaluations that are open-ended and allow students the opportunity to demonstrate complex understanding. Furthermore, the open-ended nature of the evaluation allows students to use their strongest intelligences, gifts, and skills to communicate understanding. (Eisner, 1999) Various projects and products from the performing and

visual arts allow students the opportunity to demonstrate complex understanding in content knowledge.

II. Teaching and Learning

Public Education Climate

Public schools are situated within a complex hierarchy, and may be impacted by policy from the federal, state, district, or campus level, much of which both helps and hinders arts education. In an attempt to increase performance and competency in the academic subjects of language arts, math, science, and social studies, federal legislation was recently passed that directly impacts curriculum, staffing, funding, and evaluation at the state and local levels. As a result, states are under extreme pressure to raise standardized test scores, and many face severe consequences for failing to do so, including loss of federal funding. ("No Child Left Behind," 2001) In response to the increased pressure to raise test scores, many local districts have also increased instructional time in areas impacted by standardized testing, namely, reading, writing, math, science, and history, and as a result, reduced arts time spent in arts courses and instructional methods that incorporate the arts into the general classroom. This concern has become so wide-spread that it was addressed in a response from the Secretary of Education, claiming that the "No Child Left Behind" act is in support of the arts, both because they have intrinsic value and because they produce positive outcomes in education. The refute acknowledges the importance of the arts as core subjects in

education, and directs district superintendents to Title I and Title II funding available for arts programs through the "No Child Left Behind" act. (Paige, 2004)

Individual campuses vary greatly in organizational structure and availability of resources for arts education, both of which significantly impact the quality of arts programs at the local level. The range of grades included under the umbrella of elementary school is not standardized, but public elementary schools may serve students as young as preschool, up to students in sixth, and in some cases, eighth grade. A typical public elementary school configuration contains children in kindergarten through fifth grade. Within a single school, groups of about twenty children are assigned to a general classroom teacher who is responsible for instruction in the core academic subjects of language arts, social studies, math, and science. It is not uncommon for teachers in the upper elementary grades to departmentalize content area instruction, with each teacher instructing two or more groups of children in one or two subjects, rather than in all four. Instruction in the arts may be taught by the general classroom teacher in a self-contained environment, or it may be taught by content area specialists with certification in an arts discipline.

Although they have not yet received administrative support, funding, staffing, and time allocation comparable to the more traditional core academic subjects, the arts hold a strong presence in many elementary schools across the nation, particularly in music and visual art, and to a lesser degree in drama and dance. Virtually all public elementary schools provide some instruction specifically designated for music (94%) and visual art

(87%), and some even provide designated instruction in dance (20%) and drama (19%). Even though dance and drama are less likely to be taught as separate courses, they are becoming increasingly present in the integrated curriculum, with dance included as part of the physical education program (48%) and the music program (48%), and drama included as part of the language arts curriculum (30%) as well as in other areas of the curriculum (43%). (National Center for Education Statistics, 2002)

Because many decisions concerning the arts are made at the district, or even campus level, there is great variability in the quantity and quality of arts programs offered. A national poll of three-hundred school districts nominated for their outstanding arts programs, (Arts Education Partnership & President's Committee on the Arts and the Humanities, 1999) found demographic profiles of the arts programs to be similar to the ones mention by the survey for the National Center for Education Statistics. Most of the districts with exemplary arts programs offered instruction by specialists in art and music at the elementary level, and some offered instruction in drama and dance. The central finding of the study, however, was that "the single most critical factor in sustaining arts education in their schools is the active involvement of influential segments of the community in shaping and implementing the policies and programs of the district." (pg. 9) (Arts Education Partnership & President's Committee on the Arts and the Humanities, 1999) In essence, the people involved are critical to shaping the climate for the arts. The report identifies specifically, the community, the school board, the superintendent, the district arts coordinator, a cadre of principals, teachers, and parents, all as key factors in creating an excellent arts program. For several reasons, there is particular emphasis on strong arts programs in the elementary schools at these districts because they 1) provide a solid general foundation for all students, 2) benefit the secondary level arts courses by providing a strong disciplinary foundation 3) play a significant role in the interdisciplinary curriculum, and 4) help to bridge supportive relationships with parents and community organizations. (Arts Education Partnership & President's Committee on the Arts and the Humanities, 1999) (See Appendix D for an overview of the various program structures that harbor arts-infused curriculum)

Curriculum

Curriculum can be defined in a number of ways, but for the purposes of this study, curriculum will refer to *what* is taught in the classroom. Two common, yet opposite approaches to analyzing curriculum can be categorized as the child-centered curriculum, and the content-centered curriculum. Also of interest to the discussion of curriculum, is the idea of an integrated curriculum, which may combine two or more subjects into a unit of study. Each of these positions has implications for arts education.

Child-Centered Curriculum

Incorporating the arts in early childhood education has a long standing precedent. Friedrich Froebel is credited with founding the first kindergarten with a child-centered curriculum in 1837, emphasizing games, play, songs, and crafts arranged in a prepared environment. Many of his ideas are still represented in contemporary kindergartens. (Ornstein & Levine, 1993) The Reggio Emilia preschools of Northern Italy are recognized among early childhood educators for their outstanding arts based preschool

curriculum. The schools are set in an aesthetically pleasing environment, prominently displaying children's artwork, projects, and pictures of the children working. Most importantly, the artwork is not considered a frill or an extra, but as the language the children use to communicate. Rather than relying exclusively on speaking and writing, the children are allowed to communicate through drawing, painting, clay, and wire art projects to demonstrate understanding. The words of the children are often recorded by their teachers to gain insight into development. The role of the teacher is to facilitate growth from the knowledge the child already possesses, rather than to teach predetermined objectives. (Davilla, 1998)

The National Association for the Education of Young Children has developed guidelines for developmentally appropriate practices for children from birth through age eight. Developmentally Appropriate Practice is defined as practice resulting from professional decisions based on knowledge of child development and learning, needs of individual children in a group, and knowledge of social and cultural contexts in which children live. (Bredekamp & Copple, 1997) The focus of early childhood education is not just on cognitive growth, but also on social, emotional, and physical growth, and for this reason, content is treated as one of many important issues. In addition to recommendations for appropriate content area curriculum, the guidelines emphasize the need for an integrated curriculum that nurtures the development of children in the content areas of language and literacy, mathematics, science, social studies, health, physical education, art, and music. It is recommended that specialists in art, music, and physical education work with classroom teachers toward ensuring integration throughout the

curriculum. In addition to the general emphasis on curriculum integration, the social studies guidelines specifically address the need for relevant art, music, dance, drama, games, and other activities to be integrated into the classroom.

The arts are included in the core academic curriculum as defined by the National Association for the Education of Young Children, and both the need for explicit focus and integration into the other content areas is addressed. In addition to receiving direct instruction in fine arts skills, all children should be encouraged to represent their ideas and feeling through the arts, and the school climate should value the artwork of children by displaying it and offering opportunities for performance. The following quote clearly demonstrate an organizational position in favor of integrating the arts in the early childhood curriculum. (Bredekamp & Copple, 1997)

Appropriate Practice – 6 through 8 year olds

Art, music, drama, dance, and other fine arts are the explicit focus of children's study at times. On other occasions when relevant, the fine arts are integrated in other areas of the curriculum, such as social studies or mathematics. Children are encouraged to express themselves physically and aesthetically, represent ideas and feelings, and acquire fundamental concepts and skills in the fine arts. (pg. 174) (Bredekamp & Copple, 1997)

The Arts Education Partnership has also established guidelines for the arts curriculum in early childhood. There are three guiding principles for developmentally appropriate arts education, including focus on the child, the arts experience, and the learning environment and adult interactions. The focus on the arts experience has the most relevance for the discussion of the child-centered arts curriculum. The recommendations clearly suggest the need for a wide variety of arts experiences, including "words, gestures, drawings, painting, sculpture, construction, music, singing,

drama, dramatic play, movement, and dance." The position on integrating the arts throughout the curriculum is evident in the following quote: "Children learn more through meaningful activities in which the arts are integrated with other subject or content areas." (pg 2) (The Task Force on Children's Learning and the Arts: Birth to Age Eight & Goldhawk, 1998)

Content-Centered Curriculum

It is unfortunate that the resource-rich environments that characterize good preschools and kindergartens are typically neutralized as young children move up into the grades. We would do better, I believe, to push the best features of kindergarten upward into the grades than to push the grades into the kindergarten. In many ways the good kindergarten displays features that could serve as a model for the rest of schooling. pg 352 (Eisner, 1997)

In contrast to the child-centered curriculum that adjusts to the needs of individual children and plans instruction around the skills, background knowledge, and development of children, a discipline-centered curriculum organizes instruction around the major principles of an academic discipline. This philosophy is evident in the pedagogical techniques of Suzuki Violin. Although, the methodology was designed for preschoolaged children, instead of an emphasis on creativity, exploration, and self-expression, emphasis is on developing talent and competency on an instrument. Preschoolers attend private lesson instruction on child-sized stringed instruments, and learn to master the instrument by listening and imitating the instructor, with emphasis on ear training, tone quality, intonation, and good posture. In addition to private instruction, children are expected to listen extensively to recordings of western art music, and to practice with

their parents between lessons. The music is selected from an established repertoire, always beginning with *Twinkle*, *Twinkle Little Star*, and incorporating a great deal of review, drill, and practice at all levels. (Mark, 1986)

As recently as the 1990s, each of the major disciplines articulated written, National Standards for Arts Education, (Consortium of National Arts Education Associations, 1994) outlining the major concepts of the discipline for students in grades kindergarten through twelfth grade. In addition to the National Standards, many states have established their own set of standards for each subject area, based on a spiral curriculum that teaches the same concepts with more complexity at each level. Each of these sets of standards defines themes and concepts to be explored within the discipline, as well as connections to be made between disciplines. The content standards written at both the national and state levels for art, music, dance, theatre, and the social studies, in particular, emphasize the need to make connections across disciplines.

The Consortium of National Arts Education Associations established National Standards for Arts Education built on a discipline-based arts education model, and made the following recommendations for what students should know and be able to do in the arts: 1) communicate in all four arts disciplines and communicate proficiently in at least one, 2) analyze works of art, 3) recognizing exemplary works of art, and 4) make connections among the various arts disciplines. (Consortium of National Arts Education Associations, 1994) The standards articulated for each of the four arts disciplines, art, music, dance, and theatre, include the concepts necessary for performance or production

in the art form, as well as standards for criticism, history, and evaluation of the art form.

The guidelines particularly relevant to the discussion of integrating the arts into the general classroom curriculum include:

Dance # 5 – Demonstrating and understanding dance in various cultures and historical periods.

Dance #7 – Making connections between dance and other disciplines

Music # 8 – Understanding relationships between music, the other arts, and disciplines outside the arts.

Music # 9 – *Understanding music in relation to history and culture.*

Theatre # 5 – Researching by finding information to support classroom dramatizations.

Theatre # 6 – Comparing and connecting art forms by describing theatre, dramatic media (such as film, television, and electronic media), and other art forms.

Art #4 - Understanding the visual arts in relation to history and cultures.

Art # 6 – Making connections between visual arts and other disciplines. (Consortium of National Arts Education Associations, 1994)

In addition to the Arts Standards, the Curriculum Standards for Social Studies (National Council for the Social Studies, 1994) articulate ten major conceptual themes for curriculum in the social studies, which all hold implications for using the arts in the social studies classroom. Social studies is the "integrated study of the social sciences and humanities to promote civic competence." The Standards are organized into ten interdisciplinary concepts, including culture; time, continuity, and change; people, places, and environments; individual development and identity; individuals, groups, and institutions; power, authority, and governance; production, distribution, and consumption;

science, technology, and society; global connections; and civic ideals and practices. (National Council for the Social Studies, 1994) Each of these themes include opportunities for enriching the social studies curriculum with the arts, but the arts may be particularly useful in thematic units on culture and cultural diversity because the arts are ways that people express themselves and their cultures. A quote from the National Council for the Social Studies on the nature of studying culture in the elementary grades reads: "the exploration of the concepts of likenesses and differences in school subjects such as language arts, mathematics, science, music, and art makes the study of culture appropriate." (pg. 21) (National Council for the Social Studies, 1994)

At the state level, Texas has developed the Texas Essential Knowledge and Skills, or TEKS, which articulate content standards for kindergarten through twelfth grade in all subject areas. The elementary TEKS have written guidelines for curriculum development in language arts, social studies, math, science, art, music, theatre, and physical education, which includes dance. (Texas Education Agency, 1998) The TEKS for art, music, and drama are built around the disciplined-based arts education model, but have been slightly altered to include five basic categories: perception, creative expression (performance or production), historical/cultural heritage, and response/evaluation. Each of these strands holds several possibilities for integration within the general classroom, either for perceiving elements of culture through works of art, by comparing cultures, or demonstrating comprehension through artwork.

An examination of the required academic areas within the Texas Essential Knowledge and Skills at the 2nd grade level, the grade at which this study takes place, reveals sixteen references just within the Language Arts and Social Studies TEKS to the arts. Some are recommendations for resources such as "participate in rhymes, songs, conversations, and discussions;" (2.1C) others are suggestions for expression through the arts, such as "present dramatic interpretations of experiences, stories, poems, or plays;" (2.3D) others are for identification of major works, such as "identify selected stories, poems, statues, paintings, and other examples of the local cultural heritage;" (2.15A) and another asks that students be able to "identify the musical elements of literary language such as its rhymes, repeated sounds, or instances of onomatopoeia." (2.1C) (Texas Education Agency, 1998)

Curriculum Integration

The concept of the integrated curriculum can be traced back to John Dewey and the progressive schools movement at the beginning of the twentieth century. Dewey believed that subject matter should be derived from ordinary experiences and relevant to the student in the present, rather than strictly in the future. Subject content, when learned in isolation of other subjects rather than integrated into experience, was difficult to access and apply to the real conditions of life. For this reason, Dewey supported the integration of subject matter. (Dewey, 1938, 1998) Similar philosophical rationales for the integration of curriculum have been made in more contemporary times by Jacobs.

Despite strong support from advocates for the child-centered curriculum, and the ideal of making connections between disciplines, the concept of curriculum integration is controversial at many levels, and perhaps even more so within the arts. Arts educators have offered substantial arguments for the inclusion of arts education in the core academic curriculum of the public schools, but integrating the arts within the acknowledged core subjects of Language Arts, Social Studies, Math, and Science remains controversial. Many advocates for arts integration argue that many of the disciplines overlap naturally and should be integrated to foster deeper understanding of content. Others argue that inclusion of the arts is developmentally appropriate for young children and allows them to learn and express themselves through a variety of intelligences. Critics of integration generally take the position that one discipline, and usually the arts discipline, takes a secondary role so that often the underlying concepts and rules of the discipline are ignored.

In short, we have broken Humpty Dumpty and cannot put the parts back so that they all fit together as they once did. Integration is, on the one hand, an aspiration and on the other hand a problem when one tries to maintain the 'integrity' of a discipline. (pg. 156) (Eisner, 2002)

Although a case for using the arts in the elementary classroom can be made from a child-centered perspective or a discipline-centered perspective, the issue that typically stirs debate among the opposing parties is the issue of quality. Child-centered approaches tend to favor using the arts in ways that allow children to personally express themselves and to study content in an integrated curriculum. Discipline-centered approaches emphasize the skills and concepts of the discreet disciplines as the primary importance,

with connections to other areas taking secondary importance. The National Association for the Education of Young Children identifies inappropriate practice as one in which "art, music, and physical education are taught only once a week and rarely integrated into the regular curriculum. Specialists who teach these subjects operate independently of the classroom teacher." (pg. 169) (Bredekamp & Copple, 1997) The opposite criticism from advocates for discipline-based arts education is summarized well in the following quote:

'Integrated' curriculum often becomes more and more 'instruments,' serving as a means to bring about greater knowledge in history or social studies. Art produced under this rubric tends to be merely illustrative or a form of untutored child art devoid of instruction in aesthetic issues. When integrated art is used in this fashion, student learning in the arts does not fulfill requirements set forth by national or state standards for visual arts. An overemphasis on integration used instrumentally may in fact subvert on those standards unless art is studied as a distinct discipline. (pg 31) (Brewer, 2002)

To examine the quality of integration present in a curriculum, a discussion of terminology and levels of integration is necessary. There are many conflicting terms circulating throughout the literature, but a brief discussion of the terminology is applicable to assessing the depth and quality of the arts-infused curriculum. Many practitioners that use the arts to teach the core academic concepts of the elementary curriculum of Language Arts, Reading, Math, Science, and Social Studies, (Texas Education Agency, 1998) would define their own instructional methods as interdisciplinary, integrated, or thematic. Each of these terms holds many subtle meanings, and each has been widely disputed throughout the literature. A standard dictionary definition of the term "interdisciplinary" yields the following: "involving two

or more academic, scientific, or artistic disciplines." (Mish, 1999) The term "integrate" shows a slightly different meaning, and refers not just to involving more than one discipline, but "to form, coordinate, or blend into a functioning or unified whole." (Mish, 1999)

A summary from the National Standards for Arts Education, which established content standards in Music, Art, Dance, and Theatre, explains that although the standards themselves call for connections among disciplines, actually making the connections does not happen automatically, and must be done through instruction. It further divides connections into two types: *correlations*, or finding similarities and difference between two disciplines, and *integration*, or using "the resources of two or more disciplines in ways that are mutually reinforcing." (Consortium of National Arts Education Associations, 1994)

Authentic Connections: Interdisciplinary Work in the Arts, published by the Consortium of National Arts Education Associations, defines interdisciplinary instruction as one that enables students to "identify and apply authentic connections between two or more disciplines and/or to understand essential concepts that transcend individual disciplines." (pg 3) The publication identifies three different models of integration: parallel instruction, cross-disciplinary instruction, and infusion. Parallel instruction is characterized by the synchronization of instruction in two separate disciplines, with most of the instruction focusing on the disciplines separately, and any connection made between them as accidental. Cross-disciplinary instruction involves common planning

time among teachers of the different disciplines, and two or more subjects are integrated around a theme, concept, or problem. The most sophisticated model, infusion, focuses learning around an in-depth discussion of two or more subjects, and extensive knowledge on the part of a single teacher or extensive planning by a collaborative team is required. (Consortium of National Arts Education Associations, 2002)

Erickson offers yet another position on the integrated curriculum, rather than organizing curriculum around the development of the child, or the principles of the disciplines, she organizes the integrated unit around major concepts. Teaching thematically is a popular practice in the elementary school, and once again, depth of learning is a controversial issue that often prevents quality integration from occurring. identifies Erickson three levels: interdisciplinary, multidisciplinary, and intradisciplinary. Multidisciplinary integration is also referred to as a thematic unit, and typically several disciplines contribute to the study of a single study, such as Russia. Interdisciplinary integration is more sophisticated, and focuses the theme through a conceptual lens, such as extinction, that offers more depth to understanding of the topic. Finally, intradisciplinary integration involves conceptual study within a single discipline, such as the theme of 'freedom' in a history class. (Erickson, 2001)

Many curricular rationales support inclusion of the arts in the general elementary classroom, as well as for their intrinsic value and for the potential outcomes of their use. Even when issues of intent have been clarified, identifying the depth of integration of the arts into the core curriculum can be problematic. Determining the quality of curriculum

and instructional practices within the 'art-infused' curriculum that remains true to the principles of Developmentally Appropriate Practice, Discipline-Based Arts Education, conceptual teaching, and the needs of the student within a larger social context can only be established through scrutiny of teaching and learning as it occurs in the classroom. The following discussion of instructional methods provides a brief overview of specific classroom instructional practices that have been effective in using the arts to teach non-arts subjects.

Pedagogy

A preliminary search in the Educational Resources Information Center (ERIC) for the terms 'elementary' and 'arts education' revealed over 16,000 entries. The search becomes more complex when an attempt to isolate combinations of the impact of each of the arts, including music, art, drama, and dance, on each of the core elementary subjects, language arts, social studies, science, and math. In 2002, *Critical Links: Learning in the Arts and Student Academic and Social Development* was published by the Arts Education Partnership, and was established as the seminal work in the field of arts and learning. The report was compiled by leading researchers in the field of arts and learning, Catterall, Winner, and Hetland, all commissioned through a competitive process to review recent research on arts learning. (Deasy, 2002) The collection of studies draws heavily from recent research in arts and learning, including a number of meta-analyses.

A growing number of studies suggest that learning in and through the arts may be beneficial for students, and the *Critical Links* report provides an overview and

commentary of over sixty recent studies related to learning and the arts, including peerreviewed publications as well as unpublished dissertations, theses, conference papers, and
evaluative summaries. The range of studies included under the umbrella of arts and
achievement is quite large, and in many instances there are too few studies of a specific
pedagogical approach to make broad generalizations, particularly about visual art and
dance. The chosen studies represent research on the effectiveness of discipline-based
instruction in the arts as well as pedagogical strategies for including the arts in the
classroom, and are divided into five categories: multi-arts programs, music, drama, dance
and visual art. (See Appendix E for summaries of the relevant studies in each category)

In the summary report, Catterall suggests the findings support two broad generalizations: 1) study in the arts has a positive impact on the learning environment, and 2) integrating the arts into the curriculum may increase motivation and engagement. The report does not attempt to prove transfer of learning from study in the arts to increased performance on reading and math assessments. However, the research on music and drama suggest specific positive outcomes for classroom performance. Several studies support the use of classroom drama as a means of increasing performance in story processing, reading comprehension and topical writing, while studying music is linked to increased spatial ability and performance in math, and some evidence exists that studying music may contribute to language development. (J. S. Catterall, 2002a)

The Critical Links report generated a variety of responses from researchers in the field, ranging from hopeful to outrage. In a follow-up to her overview of dance research

published in the Critical Links report, Bradley views the report as an exemplary introduction to continued research in the field. She comments that the publication of the Critical Links report has sparked discussion among dance researchers about the purpose of both qualitative and quantitative research and how the two methodologies might best be used in dance research. The publication also prompted the national Dance Education Organization to compile a database of almost 2,500 articles, dissertations, and theses. The availability of the database will make further summative reports easier, but a common language or lexicon of terms within the field is still necessary. Bradley also rejects categorical thinking, or choosing between intrinsic and instrumental rationales for arts education. (Bradley, 2003)

Winner and Hetland refute the claims implied in summaries by Deasy and Catterall that the established links between the arts and learning are causal rather than correlational. The authors express concern that "casual readers may come to believe that a small dose of the arts is all that is needed to improve students' thinking skills, social skills, school retention, and academic self-concept." (pg. 13) In addition to an insistence that in most instances links did not establish causality, the researchers cautioned against drawing generalizations based on the small number of studies, particularly in the visual arts, dance, and multi-arts programs. (Winner & Hetland, 2003)

Miron claims an imbalance of research attempting to promote transfer of learning, and that researchers that conduct such studies do not fully support arts education rationalized for intrinsic purposes. Instead, an argument for examining the role of

aesthetics within the classroom is presented, and the author notes that poor and minority students are most likely to benefit from those strategies. (Miron, 2003) Perhaps the most critical response comes from Gee, who claims that the report is a bureaucratic attempt to divert funding in arts research and influence public policy. She asserts: "Dressed up as serious research, Critical Links is in actuality just one more item in a long line of publicly funded federal arts advocacy reports and public relations packets." (pg. 17) This claim is supported with assertions that none of the reports are republished in their entirety, making it difficult to evaluate the original study. Excerpts were frequently retyped in larger font, and the persuasive writing might lead the casual reader to believe in causal rather than correlational links. Of particular concern is the lack of attention to the quality of the arts used in the study and the learning that occurred within each art form. (Gee, 2003)

III. Teachers

Teachers have a voice in the journals of practitioners and they rely on their colleagues for insight, ideas, strategies, or advice. There is evidence that individual teachers make efforts to integrate the arts into the curriculum, particularly in the elementary grades. Many individual teachers have incorporated the arts into the elementary curriculum as a means to engage children and enrich classroom instruction. Their ideas and wisdom from experience can be found in the many practitioner journals written by and for other elementary teachers, such as *Teaching Children Mathematics*, *Reading Teacher, Journal of Reading*, and *Teaching K-8*. Among the titles found in these journals are *Motivating Students Through Music and Literature*, (Towell, 1999-

2000) Learning Through the Arts, (Elliot, 1999) Music, Dance, Drama and Learning, (Elliot, 1998) The Coach Teaches Reading through Music, (Gibbs, 1970) When the Principal Asks: "Why are your kids singing during reading time?", (Harp, 1988) and It worked! Readers Theatre in second grade. (Forsythe, 1995)

Although much can be learned from the wisdom of peers, some suggestions are arguably more useful than others, just as some teachers are more exceptional than others. Understanding how and why teachers teach in certain ways requires a deeper investigation into classroom practice and beliefs. Clandinin and Connelly (2000) suggest: "to understand what happens when teacher and student meet in teaching-learning situations, it is necessary to understand their stories. The stories these narratives are built on are both personal, reflecting a person's life history, and social, reflecting the professional contexts in which teachers live." (pg. 317) In this sense, teacher knowledge is a combination of "teachers' professional knowledge landscape" "teachers' personal practical knowledge." They further suggest that teacher knowledge is continually changing within a three-dimensional narrative inquiry space, constantly influenced by the temporal, the personal, and the place in which it exists. Teachers draw from teacher knowledge when they make decisions and plan curricular activities, and understanding their stories offers insight into how and why they make decisions.

Teaching and Learning through Opera

Although there is a growing body of literature surveying various ways that the arts are used in the general classroom, many with a great deal of success, there are fewer

qualitative inquiries that examine teaching and learning through the arts from a more holistic perspective. To begin to fill this need, Wolf offers a qualitative study examining what children learn when they create an opera. She focuses on the narratives of both the students and the teachers to determine what the students learned that might be distinctive to opera. Her research reveals a number of principle findings concerning learning through an opera, particularly in terms of collaboration with peers and attention to quality of work. She uses narrative and analysis to examine more carefully the exact activities, discussions, and outcomes of the learning process as students work collaboratively in the arts. Her work serves as a model for qualitative inquiry into the arts-infused classroom. (D. P. Wolf)

Vivian Paley

Early childhood educator, Vivian Paley has written extensively about the stories of her classroom. She uses the art of story telling in her kindergarten classroom to both teach and learn powerful lessons with her students. She explains that storytelling allows children to put their play in narrative and to talk about the issues that concern them.

Amazingly, children are born knowing how to put every thought and feeling into story form. If they worry about being lost, they become the parents who search; if angry, they find a hot hippopotamus to impose his will upon the world. Even happiness has its plot and characters: Pretend I'm the baby and you only love me and you don't talk on the telephone. (Paley, 2000) pg. 4

In Paley's classroom, storytelling is an important part of the communication between the teacher and the students and it occurs in the classroom every day. The children dictate their stories to the teacher as well as act them out to both express their concerns and learn

important lessons. Paley's writing is composed of rich, descriptive detail that allows the reader to participate in her classroom as she investigates the voices of her students on important issues. In *You Can't Say You Can't Play* she combines dialogue, insight, and story telling to share the journey of her class as they implement a new rule. (Paley, 1992) In *White Teacher*, (Paley, 2000) *The Girl with the Brown Crayon*, (Paley, 1997) and *Kwanzaa and Me*, (Paley, 1995) she deals with the difficult issues of race within her classroom. Paley's own story serves as a model for qualitative research that allows the reader to see the subtle details of the classroom that make storytelling and dramatic play an important part of the curriculum.

Karen Gallas

Less present in the literature, are qualitative inquiries into what, how, and why individual teachers use the arts in their elementary classrooms. The work of teacher-researcher Karen Gallas provides some insight into the purpose behind using the arts in her classroom as she examines the many ways that children express themselves through forms other than written or spoken word. (Gallas, 1994) In a qualitative inquiry of her own classroom, Gallas chronicled the importance of the arts as a way that children communicate their understanding of the world. She expanded the term narrative from meaning speaking and writing, to include each of the many ways that young children naturally communicate, including dancing, drawing, singing, and dramatic play.

Children's narratives are not naturally confined to the spoken or written word. From early childhood on they tell stories in dramatic play, in their drawings and paintings, in movement and spontaneous song. As they move further into the adult world of signifying, spoken language does

begin to take precedence, but in essence children do not naturally limit the forms that their expressions take. Because adult communication relies so heavily on spoken and written language, however, schools necessarily reflect that orientation and channel children's narratives into a very narrow realm of expressions, in effect limiting rather than broadening the child's expressive capabilities. (pg. xv) (Gallas, 1994)

As a primary school teacher, she explores arts outlets like painting, singing, and dramatic play because she believes that children are instinctively capable of expressing themselves through art, drama, and music. Her work is rich with the qualitative details of the daily teaching and learning in her classroom. Field notes, personal reflection, and transcripts and pictures from the children are used to recreate the story of a unique classroom in which the arts play an important role. Gallas focuses her inquiry on three different ways the arts contribute to her classroom. First, in what she calls "Epiphanies of the Ordinary," she presents case studies of individual children in her classroom that express themselves through talk, play, and drawing. The second section, "Stories about Science" explores through science journals and talks, the ways that children express scientific understanding. The third section, "Art as Story," discusses the way the arts "enable children to think about new knowledge in more complex and meaningful ways by transforming their understanding of difficult concepts into metaphoric language and acts." (pg. 112) The story that Gallas tells explores the many possibilities that the arts offer to elementary education through the rich, detailed descriptions of the children in her classroom.

Chapter 2 provides an overview of the literature relevant to this study. The first portion on arts education outlined some of the important philosophies and rationales for

arts education, historical and contemporary perspectives on arts education, and an introduction to the benefits of the arts-infused curriculum. The second section on teaching and learning provides an overview of contemporary public school climate, various approaches to curriculum, and an introduction to the research on using the arts as pedagogical practice. Section three introduces the importance of teachers and their stories through narrative inquiry. The next chapter explains both the framework and the methodology for qualitative research in this study.

Chapter 3

Methodology and Research Design

The concept of an 'arts-infused' curriculum is not a new one, and many classroom teachers have likely used art, music, drama, or dance in the classroom in some way at some time. Each of the organizational models for arts programs described earlier provides some insight into the philosophy and structure of the growing number of specialized arts programs, but relatively little about the curriculum and pedagogy used in them. Although many speculations can be made about the types of activities included in an arts-infused general elementary classroom, there are no case studies offered that examine the nature of the activities used in the classroom or the teaching and learning that occurs through the arts within an elementary classroom environment. Gallas (1994) provides a case study of her own elementary classroom and the importance of allowing her students to communicate through the arts. The focus of her study is primarily on the development of the children and the social interactions among them, and offers little insight into the actual arts activities. Wolf, the researcher who analyzed the opera created by elementary students, offers more insight into the types of activities that occur, and what exactly the children learn from creating the production. (D. P. Wolf) Neither fully explores the many different ways the arts are used in the elementary classroom, the multitude of reasons they might be used, or the teaching and learning that occurs around them.

Leading arts researchers, Hetland and Winner, and Eisner have set a priority research agenda that establishes a need for qualitative studies about teaching and learning

in the arts, particularly of exemplary cases. Project Zero's Reviewing Education and the Arts Project (REAP) report executive summary identify a major need in arts research as "ethnographic studies of exemplary schools that grant the arts a serious role in the curriculum" (Hetland & Winner, 2001). Eisner also calls for priority research agendas in arts education that involve teaching and learning, and more specifically, studies of what teachers do, including the types of curriculum activities they introduce and to what content they are related (Eisner, 2002). An introductory address in the *Gaining the Arts Advantage* report also gives a clear direction on the type of research needed in arts education: "We must show, plainly and simply, that an arts education improves teaching and learning" (Arts Education Partnership & President's Committee on the Arts and the Humanities, 1999).

Framework for Qualitative Inquiry

A qualitative case study is particularly useful in developing a profile of teaching and learning through the arts because it provides greater insight into the particular arts activities used in the classroom as well as how and why they are used. The selection of an exemplary classroom allows the focus of the study to remain on the arts and away from the many additional and often problematic classroom factors that prevent quality teaching and learning from occurring. The purpose of this study is to construct a qualitative case study examining teaching and learning through an arts-infused curriculum in an exemplary elementary school classroom.

Methodology and Research Design

This case study is the story of an exemplary elementary teacher who routinely engages her students in classroom activities involving music, art, and drama. She, like Gallas, is not trained as an arts specialist and has not received extensive training on arts integration through grants or partnerships, but has found that the arts play a significant role in her classroom. The primary purpose of this study is to describe teaching and learning through the arts in her elementary classroom. In this context, "exemplary" is defined as "deserving imitation because of excellence" (Mish, 1999).

Because the intent is to provide an in-depth analysis of a single classroom, a qualitative case study methodology was employed. The case study methodology involved "systematically gathering enough information about a particular person, social setting, event, or group to permit the researcher to effectively understand how it operates or functions" (Berg, 2001). More specifically, Merriam (1998) characterizes interpretive case studies as those that contain "rich, thick description" yet attempt to recognize, illustrate, and analyze themes as they occur. The themes may be grounded in existing theory, or developed as patterns emerge. Because this case study is not representative of a typical second grade classroom and only one classroom will be studied, the sample or case chosen is one that Merriam would describe as "unique" (p. 62).

Research Participants

Eisner argues that qualitative inquiry leading to educational connoisseurship is a product of intelligence, and requires judgment on the part of the researcher. The connoisseur perceives the setting, both through the literal meaning of the spoken words and through the details perceived through the other senses. A narrative of the experience

should reveal certain details to draw attention to them, while leaving out details that are not essential to the evolving themes. As an educational connoisseur, the researcher should have some expertise in what to neglect, approaching perception as an expert rather than as a novice. Also of importance to the researcher is insight into the history of the situation, or knowing something about the school that will help to interpret the details. (Eisner, 1998b)

The researcher has the crucial role of interpreting the activities of the classroom, and because her lens will ultimately shape the outcome of the narrative, some insight into the background of the researcher is necessary as well. In this study, the researcher is a former teacher with eleven years of experience in grades kindergarten through eight, employed at various times as a classroom generalist, a music specialist, and teacher of the gifted and talented. Seven of those years included work with children in the second grade, the age of the children in the classroom studied, and four years were in the same school in which the study was conducted. In addition to classroom teaching experience, the researcher is a doctoral candidate in curriculum and instruction, and has three years of experience instructing, observing, and evaluating pre-service teachers.

The researcher became interested in arts infused curriculum while employed as a sixth grade teacher on a team that structured interdisciplinary curricular units around the social studies. As a certified music specialist, her interests leaned toward integrated curriculum, particularly including dance, drama, children's literature, social and historical perspectives, and visual art into the general music curriculum. In addition to smaller scale projects, her personal teaching experience included several larger scale productions

such as the production of over a dozen musical plays that involved music, drama, and choreographed movement, guiding a small group of gifted and talented second and third grade students to write and produce a movie, and on another occasion, collaborating with a librarian to guide three classes of second grade students to write and produce an original opera. The experience of writing the opera involved collaboration with a second grade teacher that was later chosen as the participant in this study.

The participant was a former colleague of the researcher, and was chosen for her professional reputation and accomplishments as an exemplary teacher. Her professional accomplishments identify her as an exemplary teacher, and in fact three other researchers have completed dissertations on her classroom. Her classroom was identified for research during the time period the researcher was employed as a music specialist in the same school. Consistently over a period of four years, the students in this particular classroom enjoyed and performed substantially better in music class than students from the other second grade classes in the same school. The teacher was recruited through professional interaction, electronic messages, and follow-up phone calls. Because this is a case study, no other subjects were interviewed.

The primary participant in this case study is a teacher that has been identified as exemplary by many standards. She is a white female, employed as a second grade teacher in a suburban, Central Texas School District. Her experience includes over thirty years of elementary teaching experience in grades kindergarten through fifth grade. She has been the recipient of the district level Teacher of the Year Award, and was the recipient of a Presidential Teaching Award. In addition to her employment as an

elementary teacher, she teaches science methods courses at a local college, is a frequent clinician, consultant and writer of elementary science curriculum, served as the President of the Texas Marine Educators Association, and is on the board of directors for a local musical theater group.

Research Setting

The School District is a suburban, upper-middle-class school district in central Texas. The student population is 88% white, with 2.1% classified as economically disadvantaged (Texas Education Agency, 2002). The annual dropout rate is .2%, and the district claims to serve "a constituency of highly educated professionals and actively involved parents" (Central Texas Independent School District, 2004). The district is small, consisting of six elementary schools, two middle schools, an eighth-and-ninth-grade center, and one high school. Total enrollment is estimated to be 7,100.

The selected classroom contained eighteen children, ages seven and eight. The gender distribution was approximately equal, including eight girls and ten boys. The majority of the children came from white, upper-middle-class socioeconomic backgrounds. The class was heterogeneously mixed, including children that receive services in special education and gifted and talented enrichment. The class was occasionally divided into three leveled reading groups, with the lowest reading on grade level at the second grade level, the middle group at a third grade level, and the highest at a fourth grade level. Two children were pulled from the room daily for resource services in special education, and did not receive language arts instruction in the classroom.

Data Collection

Because this is a qualitative case study, the primary method of data collection was observation within the classroom setting, with the researcher assuming the role of "observer as participant." Merriam defines this role as one in which "the researcher's observer activities are know to the group; participation in the group is definitely secondary to the role of information gatherer" (Merriam, 1998). Because the researcher was employed as a music specialist in the school when the children were of kindergarten age, approximately one-third of them have some memory of the researcher as a teacher. This relationship likely assisted the researcher in gaining insider status in the classroom, although she did not attempt to directly intervene in classroom activities.

This case study utilizes several data sources including classroom observations, interviews, and documents. **Observations** were scheduled approximately two times per week from February until May of 2004, for a total of thirteen weeks. All observations were recorded in field notes written by the researcher, and contained both descriptive text about the classroom settings and events, as well as reflective memos about the thought process of the researcher, questions to be asked later, or connections that were made during observation.

Eisner (1998b) identifies four specific areas of focus for qualitative observation in educational settings: 1) quality of the content taught, 2) variety of forms of representation, 3) incentives employed in the classroom, and 4) student engagement. He notes that quality of content is "frequently neglected in classroom observation," (pg. 178) which he attributes to lack of content knowledge on the part of the researcher. Quality of content is particularly important to this particular case study, not only because it is central

to learning, but also because much of the debate about integrated curriculum and arts integration specifically, centers on maintaining integrity in content. The reference to variety in forms of representation mentions not only visual, auditory and kinesthetic, but also the visual arts, music, dance, science, poetry, literature, and mathematics. He summarizes the importance of using a variety of forms in the following quote:

It is important to attend to the array of forms of representation employed in a class because of the different kinds of meaning that each provides and different kinds of thinking skills each develops, and because educational equity is likely to increase as the diversity of forms grows (p. 179).

In a case study concerning the arts, certainly a variety of forms represented are crucial to understanding both the curriculum and the classroom dynamic. The third focus, incentives employed in the classroom, is less relevant to this particular case, unless the arts themselves are used as an incentive in the classroom to inspire children to perform. The fourth, student engagement, is not only an important aspect of the classroom setting, but was particularly noticeable in a classroom that employs a strong arts based curriculum. Although observation was not limited to the four focuses identified above, they played a role in shaping the types of data the researcher pursued, and observation in these areas contributes to knowledge of the curricular, pedagogical, and evaluative dimensions of the classroom.

Interviews also played an important role in the collection of data, and are expected to contribute to understanding of the teacher's perspective on teaching and learning within the classroom. In a case study, the voice of the teacher and her purposes for choosing or omitting activities are a major portion of the story to be told.

Additionally, her voice was used to clarify misunderstandings about information gathered, to obtain background information on activities observed in class, and to validate Informal interviews with the teacher were conducted throughout the observations. semester, taking the form of conversations between the researcher and the teacher to clarify specific events in the classroom. Topics for informal interviews included: purpose for selection of activities, teacher's reflection on the success of various activities, benefits of various arts activities, perceived reaction of students to various arts activities, selection of resources, relationship between learning styles and arts activities, relevance of arts activities to curriculum, relevance to community building within the classroom, and personal insights about teaching with and through the arts. In addition to the frequent unstructured interviews, the researcher conducted one ninety minute, semi-structured interview "guided by a set of questions and issues to be explored" (Merriam, 1998) to gain greater understanding of key issues. Semi-structured interviews were scheduled not only with the teacher herself, but also with the art and music specialists and the librarian in the school. Interviews were taped with an I-Pod digital audio recorder and transcribed for further analysis.

Documents were a third source of valuable data collected throughout the course of the study. Photographs of student work, particularly visual artwork, was documented and analyzed throughout the course of the semester. Additional documents that were collected and analyzed including: handouts given to students, newsletters written to parents, information available on the website, and the resume of the teacher.

Data Analysis

The analysis of the findings is intended to represent the story of this particular classroom in a written narrative form. Clandinin and Connelly argue: "Experience happens narratively. Narrative inquiry is a form of narrative experience. Therefore, educational experience should be studied narratively" (Clandinin & Connelly, 2000). The field notes and reflective memos from my own observations will be combined with data collected from interviews and documents to craft a single story told in what these researchers define as "narrative inquiry space," a three-dimensional space that allows the narrative to explore interaction, continuity, and situation (p. 50).

Analysis of data began with "open coding" (Mertens, 2005) where all field notes, reflective memos, photographs, audio recordings and documents were filed by date. Photographs were sorted and labeled and field notes were printed on white paper, interviews on lavender paper, and classroom transcriptions on yellow paper. Brief descriptions were hand-written in the margins of key lessons or events. Second, they were reread and sorted into categories or "analytic files" (Glesne, 1999) and "axial coded" (Mertens, 2005) with colored pencils as common themes emerged. These categories were "selectively coded" (Mertens, 2005) as the data was reviewed multiple times and the notes were cut into blocks and paper clipped together according to their relevance within each theme, identifying more specific themes and patterns. The final narrative text was crafted from the themes that emerge in data analysis.

Validity

Always of concern in qualitative research, is the concept of validity or trustworthiness that the story told is true and correctly represents the people and place it

was intended to represent. I employed five "verification procedures" summarized by Glesne. (Glesne, 1999)

- Prolonged engagement I spent one semester in the field conducting observations and returned a second semester to complete follow-up interviews with the classroom teacher. The extended period allowed time to become familiar with the classroom setting and to learn the culture of the classroom. A final interview was scheduled after the completion of data collection from classroom observation, in an attempt to clarify understanding and provide additional information about the classroom and the teacher.
- Triangulation Data will be collected from three major sources: observation, interviews, and analysis of documents.
- Peer review and debriefing As a doctoral student, my work was reviewed many times by a committee of more experienced researchers.
- Member checking The researcher frequently asked the teacher for verbal clarification about her intent for instruction as well as background information on specific activities. The teacher was given hard copies of the initial drafts and asked to read and comment on the narrative.
- Rich, thick description Rich description is one of the hallmarks of qualitative research, and is necessary to help the reader experience the setting and gain a deeper understanding of context.

Conclusion/Implications

The case study selected is not a typical second grade classroom. Quite the opposite; it was chosen because the teacher was identified as an exemplary early childhood and science educator and was employed in a school that has been identified as exemplary. Her case is also quite different from most of the existing research on the contribution of the arts to teaching and learning, because she is situated in a traditional public school classroom rather than in a specialized arts school or arts education initiative. She represents the very best of an elementary school educator within a traditional setting. Because her setting is representative somewhat of the larger public school system, many of the exemplary practices she employs and the intuitive ways that she incorporates the arts into her classroom may have application for teacher education and professional development.

However, it is expected that a great deal of obtained knowledge about infusing the arts in one exemplary classroom may be offered as a model of instruction. While Eisner asserts that "All learning involves generalization. Since the test of someone's learning is the person's ability to display what has been learned in new situations, and since no two situations are identical, generalization must occur" (Eisner, 1998b). Generalizations are not meant to be a primary outcome of this research. Instead, the telling of her story highlights the actions of this exemplary teacher so that other educators might learn from her example.

Just as specialized arts integration programs have begun to develop at a national level, so have studies that assess their impact on instruction, motivation, attitudes, and student learning. Although these studies exist, they are limited, and typically make

attempts only to assess programs funded through arts agencies or initiatives. The study is substantially different from each of the studies mentioned above, because it attempts to examine the classroom practice of an exemplary educator of young children that is in no way connected to a specific training methodology or sponsored arts agency. The teacher does not define herself as an arts integration specialist, but as a primary teacher with a strong emphasis in science and whole language methods. She incorporates the arts as she sees them from a practitioner viewpoint and in a manner that she deems to be appropriate for early childhood education. As an exemplary educator with over thirty years of teaching experience, her story holds a great deal of knowledge about the contribution of the arts to the elementary classroom that has been discussed little in the formal academic literature.

Chapter 4

Data Collection and Analysis

When I sign in as a visitor, I glance automatically at my mailbox for new materials. It's no longer my mailbox. Even though I don't feel like an elementary school teacher anymore, it doesn't seem possible that it belongs to someone else. The dress pants, the heavy leather tote, and the continual presence of the reading glasses on the end of my nose remind me that I am an academic now. Chatting briefly with Cassie, the administrative assistant, I learn that her son Michael is now in first grade. How could that be? He was only an infant when she was hired here. I remember that he liked to peer into the music room after daycare and listen to me play the piano. The hallway is filled with familiar faces, and I casually greet both parents and teachers as I head down Blueberry Street to Patty's second grade classroom.

As I enter the classroom, Patty greets me and introduces me to the class, asking them to raise their hands if they remember me from kindergarten. I was their music teacher. Seven hands go in the air, and I see one of the twins and one of the triplets. I don't remember which ones. A little boy and a little girl at the third table are raising their hands, but I don't recognize them – they have changed so much in two years. Of course I remember the two girls at the first table. Their faces are familiar – too familiar. Both of their older sisters were in my choir. One of the

older sisters is Shelly and I have mistakenly called the younger one that so many times that I can't remember her name. The other girl is from the Westbrook family. This has to be the younger one, but I can't remember her name either. Danny is at the back table. How could I forget Danny? He wasn't much of a singer, but he has such mischievous eyes that I remember him well.

More than anything, I am amazed at the number of children that I don't know at all – almost two-thirds of the class. I taught two of the three kindergarten music classes – where are all my kids? Patty directs me to a spot in the back of the room that will become my home over the next months. In this chair I will sit, hoping to confirm my assumptions that Patty Smith is a remarkable teacher and the arts are an important part of the elementary curriculum. (February 11)



Patty Smith is not a typical second grade teacher; she is not even a good second grade teacher – she is an exceptional teacher - an exemplary elementary teacher. She has thirty-three years of teaching experience in the elementary classroom, and is still

employed full-time as a second grade teacher in a suburban school district. One might never guess that the woman dressed in Birkenstocks and a purple, tie-dyed, dragon fly t-shirt is the recipient of a Presidential Award for elementary science teaching, recipient of the Marine Educator of the Year and President's Award from the National Marine Educators Association, a National Teacher Training Institute Teacher of the Year, a Texas Marine Educators Association Educator of the Year, a campus level teacher of the year, and has received a merit award from the Texas Medical Association and special recognition from the Association for Texas Professional Educators.

Patty has a strong background in math and science, holding forty-five graduate hours beyond the master's degree in math and science education. She is the first elementary teacher chosen to fly with astronomers on the NASA Kuiper Airborne Observatory, participating in two all night research missions over the Pacific Ocean to do "real science," and has spent extensive time in the field working with marine biologists. Each year she spends considerable time conducting professional development workshops for teachers, often teaching as many as fifteen days during the summer and one Saturday per month during the school year. In addition to private consulting for Texas school districts, she is a national consultant for AIMS, [Activities Integrating Mathematics and Science] GEMS, [Great Explorations in Math and Science] and MARE. [Marine Activity Resource Education] She is also an adjunct instructor at a local college and teaches an elementary science methods course one semester per year. As an outcome of her involvement in the field of science education, particularly marine science, Patty was awarded two long-term grants from local school districts to conduct professional

development for elementary science teachers that included teacher in-service workshops, field experience, and demonstrations and observations in the classroom.

Patty's remarkable accomplishments have been well documented, and I am not the first researcher to show interest in her professional practice. In fact, three other dissertations have been written about her professional accomplishments, including one about exemplary science teaching, (Foster, 1998) one about kindergarten and first grade girls gifted in science, (Johnson, 1994) and one about the professional development activities in which she has been involved. (Tinnin, 2000) The portion of her practice that has not yet been examined is the way that she incorporates art, music, and drama into her classroom. In addition to her strong background in math and science, Patty has a love for the arts, and as she explains in the following quote, the arts are an important part of her life.

Just as much as I think math and science, because I love those, I also think the arts, because it is just a part of me, and in my own life, if I'm going to go somewhere, if I go to Chicago, I hit the art museum one day, I'm hitting the theatre one night, and then I'm going to the natural history museum the next day. And I'm not doing it because it is the thing to do; I'm doing it because I'm drawn to those things because I love them so much. It's hard for me to separate between the three, like a lot of people only want to go to art museums, and they really could care less about the history museums and the natural history museums. I really have a passion for all of them. That's just the way I am. (May 16)

Patty attributes her diverse interests to her parents for bringing her the best of both worlds - a mother that took her to art museums and shows, and a father that took her outdoors to examine rocks and nature. This passion for all of them – math, science, history, art, music, and drama – is evident not only in the way she spends her leisure

time, but also in the curriculum she creates for her students. Because she spends a great deal of time traveling, visiting museums and attending performances, particularly in musical theatre, she continually encounters new resources to incorporate in her classroom. Although the core curriculum and objectives are already established, Patty finds ways to include the arts because they are personally important to her. As she explains, "Because I love the art, I would love to figure out a way to sneak it in because it's fun." In fact, many researchers have reported that a curriculum integrated with the arts can be more motivating for students, yet Patty's intent for using the arts is not primarily for motivation; she sees it as a natural connection. In her words, "I don't really use it for motivation. I think for me it's a natural thing to use because it's a natural part of my life. It's not this little inventive thing I'm putting over the top of my lessons. It's the way I think." (May 16)

The combination of Patty's love for the arts and her extensive professional activity makes her a natural for developing integrated curriculum to use in the elementary classroom. In addition to curriculum for her own classroom and workshops, she has served as a contributing author to a McGraw Hill elementary science textbook and developed elementary health and nutrition curriculum for the State of Texas. Her active involvement in the field exposes her to people, resources, and materials not available to the average teacher, and she uses these opportunities to enrich her own work. She says, "I don't ever do it exactly like it's done at the workshop, because I have so much that's already set, but I can figure out a way to work it in." In addition to the workshops and conferences she attends, Patty researches content information from multiple sources,

including encyclopedias, children's books, and the Internet to learn more about the topic or unit she plans to teach. She typically spends three to four hours researching and taking notes before she begins creating songs or activities for a thematic unit.

The context in which Patty teaches is an important part of her story. Berry Creek Elementary is in a small suburban district in Central Texas that may deceivingly appear to be rural at first glance. The school enrolls approximately four hundred students in kindergarten through fifth grades, primarily from white, upper-middle and upper class backgrounds. Berry Creek is a National Blue Ribbon School, and considered high performing, with 99% of the students passing the state math test, and 97% passing the state reading test. During the 2003-2004 academic year, it received a school accountability rating of exemplary from the state of Texas with gold performance recognition in reading, writing, math and science. In fact, the students in the district are so exceptional that an inside joke is "if you're on grade level in Elm ISD, you're behind."

The school sits on a site that was originally a ranch, and the outdoors still maintains much of the relaxed, peaceful setting. There are two playgrounds, one of which is in a quiet wooded valley and the other a traditional playscape; a basketball court and a soccer field are available for use during recess; and two other grassy fields are often used by the physical education classes. A quiet courtyard between the library and the primary hallway harbors a butterfly garden, a small waterfall, and several picnic tables. A second courtyard near the intermediate wing is used as an outdoor science lab, and is equipped with a frog pond, a rain harvesting system, and a garden plot for each class in the school.

Although state education budget cuts have been extreme in recent years, the school is rich with resources; many of which are donated by parents and local businesses, or purchased with funds raised by the booster club. A computer lab complete with Internet access, a color laser printer, scanner, projector, digital cameras, and digital video cameras is staffed by a Campus Technology Coordinator who is available full-time to assist teachers with integrating technology into the curriculum. This coordinator also sponsors an after-school club for children and teaches them how to use multi-media technology, often training them to assist teachers with the sophisticated equipment. A portable lap top lab and a class set of digital cameras are available for checkout, and cameras, scanners, and laser printers are available for each grade level. Each classroom is equipped with three to five computers with Internet access, and a television for magnifying the computer monitor for the entire class.

A certified, full-time librarian staffs the library, which houses a mini-lab of twelve computers, thousands of books, compact discs, videos, science kits, professional journals, and puppets available for use by both students and teachers. The librarian meets weekly with the children, teaching them how to find and use resources, organizing incentive programs like a poetry café and a reading contest, and she often uses puppets and costumes for a dramatic storytelling time. In addition to the main library, there is a literacy library that provides guided reading instruction, and a fully-equipped science lab staffed by parent volunteers and available for use by classroom teachers. The school employs a number of special education teachers, a full-time teacher for the gifted and talented program, a speech specialist, a certified nurse, and a guidance counselor to

support the staff. Full-time, certified specialists for art, music, and physical education offer instruction on a three-day rotation for all the children in the school.

The art teacher has a designated room equipped with specialized equipment, including a sink, large shelves and drawers for oversized artwork and supplies, and a large closet that houses a kiln for firing pottery. Materials for weaving, pottery, painting, drawing, and a variety of crafts are available. Paper of every kind and color is stored on shelves, and many more shelves hold student work. The hallways throughout the school are also lined with student artwork, and a single hallway is designated as a "hall of fame" to showcase the framed artwork of one exceptional piece per grade level each year. Throughout the six years the children are enrolled in the art class, they study art history and a variety of different art mediums and making original artwork to show their understanding of the elements of line, color, pattern, shape and texture. The art class even incorporates the lap top lab on some occasions, allowing students to study digital pictures of famous paintings and using technology to create art.

The music room is adjacent to the stage which is equipped with curtains, lights, a sound system, and a stereo system. The music room is equipped with a piano, a stereo, and dozens of Orff and percussion instruments. Over the course of six years in the elementary music program, the students sing, play recorder and percussion instruments, and use creative movement and dancing to learn the elements of music: melody, harmony, rhythm, form, and the expressive elements. The students have ample opportunity for performance each year. In addition to singing at school assemblies, every grade level presents a performance each year. An extra curricular choir rehearses after

school one afternoon per week for interested students, and performs throughout the community several times per year.

Patty's room has an extraordinary quantity and variety of resources available for use. There are books in the room everywhere and the sheer abundance is striking. Hundreds of children's books are scattered throughout the room - eight overflowing bookshelves at the front of the room, with dozens more placed on the chalk rail, a display shelf, and still more overflow into stacks on the floor. There are several more shelves in the back of the room, with the overflow placed in stacks of plastic storage baskets. A reading nook designated by a carpet and five beanbag chairs, has two more bookshelves, twelve tubs of paperback books, and three large tubs filled with puppets and stuffed animals, many of which connect to thematic units - Texas animals, marine animals, spiders & insects, and fairytale characters.

A Macintosh computer stands alone on a desk at the front of the room, and four DELL computers are clustered on tables in the back of the room, with a television and VCR mounted on the wall above one of the computers. Teaching materials of every kind line all four walls and spill over into the room. A six-tiered bookshelf holds clear plastic boxes filled with math manipulatives – unifix cubes, pattern blocks, base ten blocks. The corner behind the shelves holds more supplies – stacks of children's books, costumes, and boxes filled with miscellaneous items.

It is common practice among elementary school teachers to establish routines for young children, and this becomes clear one morning as the class returns from recess. A substitute teacher from the next room walks the class back to the classroom and instructs

them to "do what you do next," and then returns to her room. After a brief pause, a child says "eat!" and all of the children go quietly over to the cubbies to get their morning snacks – little bags of pretzels and crackers, fruit roll-ups and pudding. Somewhere in the transition, a box of pattern blocks is knocked from a shelf and several students scurry to the floor to clean up the mess. A few moments later, Mrs. Smith enters the room and utters a quiet "uh oh," and without scolding, begins to organize her materials for the lesson. The children finish picking up the pattern blocks, eating their snacks, and without any prompts from Mrs. Smith, they each take out a clean piece of writing paper from their folders. (February 23, 2004)

As I spend many hours in the classroom over the next months, I begin to appreciate the direct instruction in spelling, handwriting, and grammar that occupies the first portion of the Language Arts block each morning. To a casual observer, it might seem unremarkable, but my appointment as a supervisor of pre-service teachers allows me to observe many mediocre spelling and handwriting lessons. Typically, the students copy and memorize spelling words from a list, writing them each ten times, or copying definitions. Handwriting is often limited to a mini-lesson on forming a particular letter of the alphabet, and then copying the same letter onto lined paper many times. I once observed an entire lesson on writing the cursive letter "o." The young teacher silently modeled six examples of writing the letter "o" – most of the time with her hand covering the overhead - and then made the students practice writing the letter "o" for almost twenty minutes.

Observing a spelling/handwriting lesson in Patty's classroom is noticeably different. The children always begin with a blank sheet of lined writing paper. It is the same kind that I remember from my own elementary schools days, before worksheets could so easily be copied - plain Manila paper with both dashed and solid lines running horizontally across the page to guide the height of letters. Mrs. Smith has several transparencies of the same lined writing paper, and she uses them to model the lessons each morning. Spelling occupies the first thirty minutes of the two-hour language arts block and follows a predicable pattern, integrating the weekly words with handwriting, phonics, spelling rules, and even grammar. On Mondays the students take a pre-test and learn a pattern or concept that is common to all of the weekly words. The remainder of the week includes lessons in writing the words with good penmanship, using the words in sentences, and of course, a spelling test on Fridays.

One Wednesday morning, Mrs. Smith tells the children they will do something new – write their spelling words in cursive. I hear several students gasp an "ooh" when she makes the announcement; they are very excited about the challenge. Patty later explains that she teaches the children to write one cursive letter at a time, reinforcing each throughout the year until they can eventually write the entire alphabet. She begins by modeling the capital "B" on the lined transparency. The speed is quite slow, and as she makes each stroke with the vis-à-vis marker, she says the steps aloud: "up and in at the waistline, down again and make a boat." Before they are allowed to write on their papers, Patty makes them practice writing the letter "B" in the air as she mirrors the action for them.

The first word of the day is "before." Patty continues to model each letter by drawing it slowly and describing the strokes with phrases like "over the hill, up the hill, in at the waistline, and slide." Each time the children write in the air before they write on their papers, mixing the practice between individual letters and entire words. As they work, I heard a student make the sound "ee-ee" as he is writing, and wondered if he is an aural learner. As they continue to the next letter, Patty tells the children about an important meeting she recently attended with the 3rd grade teachers. There was concern that 3rd grade students most frequently cannot write the letter "f" correctly. Because she wants them to be ready for 3rd grade, she takes a little extra time on this letter. As she continues with the lesson, she draws attention to the most common error – looping the bottom half of the "f" from behind rather than the front, and then continues with the visual modeling, oral clues, and air writing before the students are allowed to write the "f" on their own papers. (February 18, 2004)

The structured, direct instruction in spelling, grammar, and handwriting is as much a part of Patty's classroom as the integrated, arts-infused teaching that is the focus of this study. The second grade curriculum is arranged around thematic units, including creative writing, fairy tales, chocolate, insects, the water cycle, and sandy beaches. Throughout the semester, I observed many interdisciplinary activities in language arts, science, and social studies, many of which are infused with the arts. Interdisciplinary curriculum is by nature complex, and could be analyzed many different ways. The focus of this study, however, is to examine the ways that the arts, including, art, music, and drama, are used within the general second grade classroom. Rather than presenting the

lessons chronologically or by unit themes, the lessons are grouped into three segments: art, music, and drama.

Question: How is art used in the classroom?

Although Patty has a Bachelor of Science in Education, she began her undergraduate program majoring in architecture and acquired eighteen semester hours in art, including art history, drawing, color analysis, design in architecture, and history of furniture. Admittedly, she remembers little about the content of these courses, but she believes that it has made her more aware and gives her a different lens to view the world. Art is one of her many interests, and she visits art museums and exhibits frequently, particularly when she travels. This interest has lead to an extensive collection of books about art, art history, and the lives of artists, many of which bleed into the classroom. One shelf in her classroom holds an entire row of over fifty art history books – Monet, Escher, Calder, Van Gogh, Rembrandt, Degas, a collection on the Impressionists, and many others.

Patty's interest in art and art history is woven into the general curriculum and into the lessons she plans. During story time one morning, Patty reads from a collection of poetry and art called *Curious Cats*, published by the Metropolitan Museum of Art. As she reads each poem, Patty takes time to discuss literary elements like metaphor, description, and repetition, as well as the different medium found in the paintings throughout the book, such as painted silk, oil paintings, tapestry, stenciling, and lithographs.

She believes that this exposure to art does make a difference to the children; Patty helps them make connections to the real world. She recounts a time when two children returned from the library overjoyed to tell her, "She's got an O'Keefe in there!" Her

classes study the work of many great artists, and almost always as a connection to their core academic curriculum. She uses the work of Georgia O'Keefe and Andy Warhol in her creative writing curriculum, Picasso for geometry, Escher for tessellations, and Calder for balance of motion. These lessons teach the children a great deal about the life of the artists and the style of their art, and also allow them to create original artwork that connects to core concepts in other disciplines.

Even when it is not a required part of the assignment, it is not unusual for the children to choose to illustrate stories or poems they have written. Patty admits that the children ask to draw during their free time, and she would like to allow it more often, but the schedule is too tight. Patty extends a unit on poetry and creative writing throughout the entire school year, allowing it to overlap with the many other thematic units in the curriculum. The children write poems of many kinds and combine them at the end of the year into an illustrated collection. Although Patty rarely has time to allow free drawing, she does believe that art is an important part of thinking and understanding, and it is present in her classroom in many forms.

Reinforcing Content

Patty believes that children are more visually oriented than aurally, and that learning to observe the natural world through experience is the first step to learning. Pictures are a transition from the physical world to the symbolic world, and the attachment to words comes much later. She explains that if the teacher can "provide those experiences that are visual, those experiences that are tactile, that are real, then you

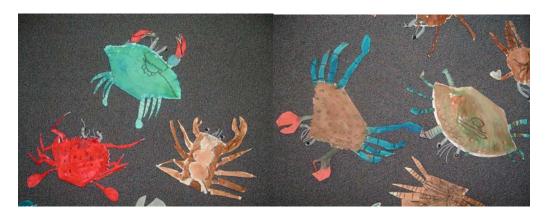
start attaching the words to it, then the kids start understanding things at a deeper level. They've had that building block to go with it. If you just talk about things, then all they have is a very superficial level of understanding." (May 16)

With this philosophy, using visual experiences and visual representation is an important part of learning in the elementary classroom and art is an excellent venue for teaching content information. Patty describes a project she uses to teach the parts of a plant, a science concept, through the artistic medium of collage. She uses materials like straws, felt, and string to have the children create a plant, and asks them to explain why they select certain materials. For instance, they might choose to use a piece of straw for the stem because this is the part of the plant where liquids are absorbed. If they choose a stiff piece of felt, she asks them to explain why they made the choice. As she explains, it's a "very open-ended, artsy type of project, and it's learning about collage, but at the same time, it's getting some pretty deep concepts to show you they understand the form and function of what they're working on." (May 16)

As part of the ocean unit, Patty teaches about the various types of crabs and the adaptations they make to their habitats. In this lesson, she uses a nonfiction book with many scientific illustrations to review the important information. Rather than read the heavy text, she points to the drawings and questions the students about key concepts: Is this crab male or female? How can you tell? Does it have eyes? Why does a crab need so many joints? How do you hold a crab? Why? Where are the legs attached? To reinforce this discussion, Patty sketches a swimming blue crab on the board. As she draws each part, she stops to explain the function and question the students for

comprehension. She adds spikes for protection, an abdominal flap to protect the eggs, legs and joints for movement, claws for ripping and tearing, and eye sockets for the eyes stalks to retract into. Although this is primarily a review discussion about the adaptations of crabs, Patty uses illustrations from a book in addition to a sketch that she drew to reinforce the key vocabulary and concepts.

Following the discussion, the students are assigned to create a scientific model representing a particular type of crab – stone crab, fiddler crab, spider crab, or ghost crab. The body will be made from a paper plate folded in half, and using paper, crayons, paint, beads, and pipe cleaners, the students will add details to show the various body parts. Patty demonstrates how to draw the spikes in crayon so they will not disappear when the body is painted, how to cut jointed legs from paper, how to cut wire for antennae and use pipe cleaners for eye stalks and beads for eyes. The students are also to distinguish the difference in function between various types of crabs. For instance, the ghost crab has tougher claws for catching prey, while the fiddler crab has dainty claws for catching algae.



Drawing and creating models are used to reinforce concepts, but art is not limited strictly to this purpose. During the last week of school, when many other classrooms are no longer doing "real work," Patty's class participates in a "Critter Camp" as a culminating activity for the insect unit. This thematic unit contains arts and crafts activities that are intended to be fun and keep the children interested all the way to the end of the year. The Booster Club allocates \$300 for the second grade team to purchase supplies for the week, and the children spend the majority of a day traveling from one craft center to the next, all of which are manned by parent volunteers. For instance, the students are grouped into "cabins" with their friends and assigned a "bunk" at their cabin/table. Each group chooses a team name and decorates their table with bright colored butcher paper and markers. Every child makes a camp shirt by stamping brightly colored insects on a white t-shirt and a critter visor using pre-cut foam visors, pipe cleaners, felt, sequin eyes, and fuzzy pom-poms.



Much of the week is spent outdoors and the children wear their visors for protection from the sun. They decorate nature bags and use them to collect the treasures the find on the nature walk and the "Critter Safari." However, in addition to the thematic twist, some of the art activities are designed to reinforce content understanding. The "Critter Safari" is designated by a dirt pit in the midst of a grassy field and roped off with

string, allowing the children plenty of opportunities to find "critters." The class spends over an hour outside catching insects with a bug catcher, examining them in a bug viewer, drawing and labeling detailed sketches and suggesting a name for each insect. Later in the week, they use their knowledge of insects to invent a critter that meets the criteria for an insect, and then make a three-dimensional model from clay. This is an assignment similar to the crab models, but slightly more difficult because it requires the students to apply their knowledge of insects to create something original. (May 18)



Organizing Ideas

When Patty uses drawing in the classroom, much of the time it is to help children think through and organize their ideas. She thinks of drawing as a graphic organizer or organizational strategy for anything the children are thinking about, from math and science to problems with their peers. By drawing pictures, they are more able to "zone in" on their ideas and an activity that may seem to be a distraction because it appears to be unrelated actually helps to focus their thoughts. She believes drawing is particularly useful in combination with writing, and interestingly, she has the students draw pictures

before they begin writing, rather than waiting to have them illustrate their stories after they are written. She explains:

I tell them they need to draw to gel their ideas. Period. They need to draw for math. I say, even if you're having a problem with a friend, you need to draw a picture and write about what's going on with that and it will help you think through your ideas – about what's going on. (May 16)

This process of drawing the details of their thoughts gives the children something to write about that can later be transferred into words. She believes that good writing shows detail, and art is an excellent way to help children notice details, particularly through examining lines and patterns. For this reason, drawing accompanies most of the written assignments the children are given. For instance, near the end of the chocolate unit, the class works together to create a timeline of the history of chocolate from 250 to the present. Each child researches a particular event and illustrates a single page that depicts the key elements so that they are eventually strung together into a timeline. Drawing the picture first helps the students to think through the important information before they begin writing. (February 11)



Also as part of the chocolate unit, the class reads a novel called *The Chocolate Touch* and completes a number of related assignments. Toward the end of the book, the students work in small groups to paint life-sized sketches of the key characters in the novel. They use large strips of butcher paper to trace the outline of a partner's body, and then paint the details that they imagine would characterize the fictional characters. This process of drawing and then painting the characters solidifies the ideas the children have about each character and forces them to think about and notice details. In addition to the paintings, the children are asked to brainstorm words that described their character, and eventually these words are transferred on to colored paper and glued to the painting – a purple speech bubble shows thoughts, a yellow square shows actions, and a pink heart shows the feelings of the character. After the paintings are complete, each group writes a song that summarizes the essence of the character. (*March 1*, 3, 8)



A very similar activity is used in the fairy tale unit for characterization. After an extensive study of many different fairy tales and fairy tale characters, each child is asked to select a character and draw it. Although some children refer to illustrated books, most of the drawings are drawn from memory and reflect the student's perception of a

particular character. The Big Bad Wolf has claws and large teeth, Snow White is smiling, and the candle from Beauty and the Beast is painted bright yellow with dancing orange flames. These pictures accompany a written assignment in which the children are asked to write song lyrics that characterize the fairy tale character they depicted. (February 11)



On other occasions, the students draw pictures from their personal memories or experiences. After Spring Break, Patty shows the children a post card from Sandy's trip to Rhode Island. She reads the brief message aloud and asks Sandy to tell more of the details from her trip. After a brief sharing time of trips to the zoo, to Grandma's house and to sporting events, Patty asks the children to remember as many details as they can about the things they did during spring break. After the oral discussion and brainstorming, the children spend almost an hour drawing pictures of their vacations, adding details and colors to demonstrate the things they believe to be important. From these pictures, they write short messages detailing their spring break adventures on the back of a blank index card. (March 22)





Creating an Experience

When Patty asks the children to draw pictures from spring break, she is asking them to remember the details of their experiences and first draw and then write them on paper. In addition to writing from personal experience, she believes in creating experiences that trigger creative writing. She does this by giving the students objects to study and draw, and by examining and drawing the details of an object, they have an experience that can later be transferred to written words. She says,

It gave them something to write about. That's the whole thing about they need to write their experience. If they look at something carefully and they draw it in detail, then they've experienced that object enough to really now go put it in abstract words. I think that's why you do a lot of spin-off with the drawing first. (May 16)

When Patty has the children do schoolyard ecology, she spends a great deal of time talking about how to draw trees, and then sends them outside to observe and draw trees. Back in the classroom, they discuss and share their drawings, noticing the differences among them, and particularly the details included in each. After a discussion of the details that should be examined – the shape of leaves, shades of color, the lines of the bark, the curve of the branches, the children return outside again to observe more

carefully and draw the tree a second time with more detail. She emphasizes that they need to look beyond a superficial level and start to notice important details. As they begin to see individual leaves rather than just a sea of green, they will begin to see patterns and experience a deeper level of learning.

Patty uses art and drawing across the curriculum, but it is particularly important in language arts and writing. She believes that children are more visual than aural and that the pictures help focus their thoughts because they pay more attention to detail with a picture. Although the process of drawing before they write is very time consuming, she says that the level of comprehension and insight is remarkable when they are allowed the extra time to draw, and it absolutely improves the quality of their writing. She continues by saying that showing the children a picture of an object will trigger much more response than asking them to draw entirely from memory. Showing them the physical object to observe adds another dimension because they can touch, feel, and weigh it to get a multi-sensory experience. Extending this experience by drawing the object lets them focus on the details of their experience.

The next section contains two vignettes that show the details of teaching and learning in Patty's classroom. The two lessons are similar, and both are excellent examples of the way that Patty uses art to help the children notice details and become better writers. In both lessons, the first about Georgia O'Keefe and the second about Andy Warhol, Patty teaches the children about the lives and work of the two artists. This art appreciation lesson is extended into a drawing activity and then into a creative writing exercise. To create an experience that the children can write about, she first asks them to

examine an object carefully, noticing details, and then to draw the object in the style of the artist that they studied. When the drawings are complete, they are asked to brainstorm descriptive words for the object, and then to write original poetry – sneaky poems and shape poems that describe the objects.

She Takes Little Things And Paints Them Big!

Sitting in her rocking chair with the children seated on the carpet around her, Mrs. Smith shows the class a picture book about the southwest painter Georgia O'Keefe. As she reads the story, Patty stops to question the students and make connections to other areas. After reading that O'Keefe was born in 1887, she asks the students to tell her the current year, and then segues immediately into her next question: how old was she? A few moments later, she points out that Georgia O'Keefe was one of the first women painters, and that at the time she lived, women could be art teachers but not artists. Most of these questions are typical of any good teacher reading a story to children, and Mrs. Smith stops on virtually every page to question the students and discuss the pictures.

As she continues reading, she begins to point out important information about the artistic style of Georgia O'Keefe. As the class examines a painting of a flower, she tells them that the original painting is 18X20, modeling the dimensions with her hands. This is followed immediately by the question, "do you think this flower was really that big?" The children all respond together, "NO!" At this point, Patty summarizes the main idea she wants the children to take away from the art history lesson on Georgia O'Keefe - She takes little things and paints them big! Patty continues by holding up a picture of a painting titled "Petunia," and points out that it is only part of the flower and O'Keefe's

painting focuses on the small details. She not only paints the small details of the flower, but her lines were fluid, just as good writing should be! A few students mumble comments under their breath as they form opinions about her work. One asks if a mobile is a type of art, and then says that he likes the work of Calder. Another child says that he likes sculpture better than paintings.

Immediately following the story, Patty takes out the poetry packet that is part of the creative writing unit. She turns to the "sneaky poem," a type of poetry that includes several lines of description before revealing the subject in the final line, and asks the students to brainstorm things that remind them of flowers. Georgia O'Keefe's painting, "Petunia" is still visible to the class, and they begin to list descriptions that they identify with the painting - swaying, flowing, flying, curved, circular, diving. From there, Patty asks them to brainstorm things that remind them of flowers. One child says "the sun." After a few seconds of silence, she prompts the children with "what shapes do you see in the painting of the flower?" One child said blue, but blue is an adjective, so another suggests, "blue waves." From this list of words and analogies, Patty helps the class quickly outline a sneaky poem about petunias.

After the discussion, Mrs. Smith pulls out a bag of plant life that she collected from the playground at recess this morning – weeds, dandelions, twigs, grass, and assorted flowers. She gives each table a

collection of plants and a jewelers' loupe for each child in the group. The children spend several minutes exploring with the jeweler's loupe before Mrs. Smith tells them to choose one plant and draw only a small portion of it, filling up the entire page. She demonstrates an example on the board – half of a ladybug drawn in detail, filling up a large portion on the chalkboard. The students spend fifteen minutes carefully examining the objects with the jeweler's loop and drawing small portions onto their papers, checking frequently from object to paper to compare the details. After some time, Patty shows the draft of Danny's sketch – a half completed that covers the entire page. His perspective is unique, choosing to draw only the bloom of the yellow flower from the top, showing each tiny seed, and the dozens of petals that intersect into the center.





When most of the children have sketched their objects from nature, Mrs. Smith asks them to examine the actual object again and write as many descriptive words as can that described the object. She reminds them that they can be literal descriptions or they can be analogies like explosions or volcanoes. The children are all working very intently, and

even though they are not instructed to be silent, there is very little talking among them. As they work, Patty circulates throughout the room commenting on the assignment: "You want twenty to twenty-five words on your paper – this is not the poem, it is a brainstormed list!" A student mumbles, "mine's bendy," to which Patty replies, "write that, it's a description!"

From the lists of descriptive words, each student constructs a sneaky poem formatted from a template – four lines of description, and then a fifth line with only a noun that identifies the flower.

<u>Dandelion – Sneaky Poem</u> Very bright sun, Soft and yellow, Making the world pretty Growing at a park Dandelion

<u>Dandelion – Sneaky Poem</u> Sun, fireworks Yellow flare Swaying, flowing Corn pointy Dandelion

Violets – Sneaky Poem Violet sun, Beautiful and Soft Wiggly and delicate Smells like lotion Small violet flowers

Discussion

Using art or craft projects in the elementary classroom is not necessarily unusual. However, the focus on drawing, particularly free hand, as an important step in the lesson is unusual. It is more common to see projects that have a pre-determined outcome established by the teacher, and in which the students are methodically instructed on the steps to complete the product. I remember seeing nineteen identical brown paper owls hanging in the hallway outside of a kindergarten classroom. The teacher had copied the shape of an owl onto brown construction paper and the students cut them out and then glued paper cupcake holders on the head to make large eyes. The owls were attractive, but there was very little creativity or skill required on the part of the students. The skills involved were cutting, pasting, and following directions.

The structure of the Georgia O'Keefe lesson is markedly different from the paper owl activity. To complete the assignment, the students need to synthesize knowledge and skills from several places to create both an original drawing and an original poem. As discussed earlier, both the drawings and the poems are connected to the content information on Georgia O'Keefe, not simply by drawing and writing about flowers, but by noticing the subtle details in the manner that distinguishes the work of O'Keefe. The drawings of the students are original and unique. Each child is given a different plant or flower to sketch, with no instructions for use of color, angle, shading, line, etc. As a result, some of the flowers are drawn from a side angle showing the entire plant, and others show a top view of only the flower bloom. Although the activity requires that the students have some ability or prior instruction in drawing, no two drawings are the same.

The students are asked to combine their skills in observation and drawing with their knowledge of Georgia O'Keefe's style to create an original artwork.

The poetry assignment is open-ended in much the same way because the end result is that each student creates a unique poem from many synthesized skills. The students' brainstormed descriptive words inspired by their own drawings. Even if all of the students had examined the same drawing, their descriptions would have been unique and different due to the open-ended nature of the assignment. From this list, they are asked to synthesize the list of descriptive words with a known poetry form to create an original poem. All of the students in the class are given the exact same assignment, yet no two poems in the class are identical. The creative and open-ended nature of this activity encourages higher-level thinking.

Patty uses the art history lesson on Georgia O'Keefe to help the children notice details. After the overview of O'Keefe's work, Patty uses the painting "Petunia" to allow the children to notice the details of the painting and to list descriptive words and analogies that come to mind. This activity encourages them to examine the details of each brush stroke, rather than simply generalizing that the painting is of a flower. She carries this concept even further by asking them to complete sketches in the style of Georgia O'Keefe that show the many details of tiny plants. It would not be unusual for a young child to draw a picture of a flower in only a few seconds – an outline of five curved petals attached to a stem with a few oval shaped leaves. In fact, this would be a typical response if children this age were simply asked to draw a flower. Instead, to help the children notice the details in flowers, Patty gives them actual flowers to examine, and

magnifying jeweler's loops to help them see the tiny parts more clearly. Not only do the children examine the real objects carefully, but also the structure of the assignment allows them to take the time to really see the details. They are given fifteen minutes to complete the drawing, a fairly substantial amount of time for a language arts lesson, and asked to make their drawings fill the entire page. The 8 1/2 X 11 inch paper is substantially larger than the tiny flowers, most of which are only an inch or less in diameter. The method with which Patty instructs them to draw also encouraged attention to detail – drawing small portions at a time and checking frequently from object to paper to compare the details.

This is clearly an art history lesson, and one of the most striking things about this vignette of the classroom is the content information presented about Georgia O'Keefe. A more typical second grade lesson might include the biographical information about O'Keefe and probably some connection to the historical period just as Patty included in the discussion of the book. However, the unusual portion of the lesson was in the discussion of the things that make Georgia O'Keefe's work unique to the art world – "she takes little things and paints them big." The children aren't just talking about Georgia O'Keefe and looking at a few paintings. They are discussing the essence of what makes her paintings distinctive.

It is evident that Patty knows a great deal about Georgia O'Keefe, well beyond the information presented in the children's book. She attended a one-hour *Private Eye* workshop on using jeweler's loops to examine objects but the connection to Georgia O'Keefe is her own. When I ask her how she made this connection to use O'Keefe's

work as a lesson on examining details, she explains matter-of-factly, "That's what Georgia O'Keefe does." Patty had enough general knowledge of Georgia O'Keefe to make the connection instantly. Making this connection requires that she know a great deal about the 2nd grade language arts curriculum (See Appendix G: Texas Essential Knowledge and Skills) as well as some knowledge of O'Keefe's work, and is able to quickly pull together resources from multiple places to create one integrated lesson. She has clearly woven the language arts objectives throughout the lesson, both in the emphasis on using descriptive words and in the assignment to write original poetry. (February 23, 2004)

Big Things from Small Packages

When Patty brings the children to the carpet around her rocking chair, she first asks if any of them saw the Andy Warhol exhibit when it was in town recently - two children raise their hands. She begins by reading a picture book about the life of Andy Warhol, titled My Uncle Andy. The children sit enthralled and completely quiet except for occasional murmurs of "look at the car," "cool", and "oh" murmured quietly. Patty is a dramatic reader, able to change the inflection in her voice for the different characters in the book, and to vary the dynamic level throughout the story. Her ability to read dramatically is as engaging as the story itself.

She effortlessly weaves in a math question: "One in college and six kids at home – how many children?" Next is an explanation of the term "junkyard" – "somebody who has a garage sale all the time!" I am quietly amused that a few of these seven and eight-year-old children were already aware of Andy Warhol, but none of them are familiar with junkyards. She continues to stop every few pages to offer simple connections for the children: "What do you think makeshift beds are?" A student guesses, "trundle beds?" and Patty explains further, "with seven people, they were just made up beds from pillows and blankets." Next she restates a major event in the story: "He took the small paint by number

and made a giant one out of it!" Another vocabulary connection – "'peer' means using your eyes."

After she finishes reading the story, Patty spends several minutes talking about Andy Warhol as a pop artist. She quickly makes a contrasting reference to the lesson the week before: "Georgia O'Keefe was into what? Flowers. Andy would paint things you see in everyday life, like soup cans - and he liked to play with color." She brings out a different picture book, also about Andy Warhol, and shows the children a painting of a human face silhouette in green and brown. "Pop artist – can you remember that?" Patty quizzes the class, and then interjected a connection to other prominent people during his time - Marilyn Monroe and Elvis Presley – and then flows directly into an important point: "They painted what was important in their time – pictures of stuff you might see in the grocery store – older art might include pictures of fruit because it was important at the time."

Next she explains the process of pressing an ink print onto another paper to make a print. When a student questions why he would do something like this, she explains: "Andy was into trying new things – it was his style." She further explained that Andy Warhol "became famous and made lots of money while he was alive, which was very lucky for an artist because most don't become famous until after they're dead." The she takes the opportunity to share her personal memories of seeing

Warhol's work. As she flips to a page with a painting of a tuna advertisement, she asks a student to stand up as she compares the painting to his height, demonstrating the exaggerated size of the objects in his paintings.

To conclude the discussion portion of the lesson, Patty asks the students to compare Andy Warhol to Georgia O'Keefe. They begin by telling her things that the two artists have in common, like using the background of the painting to make objects stand out, and painting objects that are important to them. She presses a little further with a question intended to lead the students into a key idea: "Would you say Andy Warhol and Georgia O'Keefe were observant people?" The students nod in agreement, and she continued, "They saw things in ordinary objects that the rest of us don't see. Somebody worked really hard to design that soup can, but I usually just open it up and pour it in a casserole." She uses this example to expand the concept for the students, asking them to name signs that have distinctive designs that are recognizable from a long distance, like McDonalds, Starbucks, and Target.

Patty refers to the poetry packet the children have been using throughout the creative writing unit, but his time, instead of using the sneaky poem as she did in the Georgia O'Keefe lesson, she chooses the shape poem and begins to explain the assignment to the students. She gives them blank white paper and a common object, similar to the ones

that Andy Warhol painted. They are to draw the object with pencil, filling up the entire page and using little background to make the object the most important thing on the page. When the pictures are drawn with pencil, they are to outline it in black marker and then color it with bright, bold colors just as Andy Warhol might have used. A discussion arises about the use of crayons, and Patty reminds the class that they want bright and bold colors. She questions them for understanding: "What do you need to do with crayons to make them bright and bold? What about colored pencils?" A student suggests using markers, and Patty confirms that they are a good choice because they are naturally bright and bold.

As the children get their snacks, Patty pulls out a plastic bag filled with objects that she collected from home and school - glue bottles, marker boxes, straws in a box, a can of Hershey's cocoa, a jar of peanut butter, a can of soup, several pairs of scissors, a hole puncher, a few candy bars, a bag of pretzels, and a box of Jell-O. The students even have the option of using the wrapper from their morning snacks. As they begin sorting through the objects on their tables, Patty encourages them to trade and share until they find something they want to draw. Looking for the perfect object, a student asks a question about the assignment, "Mrs. Smith, do we have to drawn the little tiny words?" Looking down at the Butterfinger bar he is holding, she replies, "Yes, if you don't want to do the tiny words, you better choose something else."



When the drawings are complete and many of the students have begun coloring, Patty prompts them to make a list of descriptive words to describe the objects they have drawn. She uses the example of soup to trigger descriptions like "cold day," all warm inside," and "tingly and warm." From their lists, the children use the template to create a shape poem that will be written around the border of their pictures.

Shape Poem – Fritos
Big white letters,
Rectangular red bag
Swirly things inside,
Salty and loopy,
Bite the cerved objects,
Small brown dots on end,
Big crunchy chips,
Very good taste,
Crunch, crunch!

Shape Poem – Push Pins
Rectangular box,
Buy at HEB,
Lots of tiny poky things
Go threw cork
Green, blue, red and purple
Orange and yellow too
Sharp and colorful,
Push pins, Push pins

Shape Poem – Hershey's Kiss Golden triangle bell, Krinkly wrinkly wrapper Little paper ribbon, Strong chocolaty smell, Simple clever open, Peek in a little, Sweet and yummy, Gulp, less gone!

Discussion

The structure of the lesson is similar to the one on Georgia O'Keefe, but the artist is Andy Warhol and the emphasis of his work is placed on the way he uses common objects. This lesson is also used in the creative writing unit, but rather than writing sneaky poems, the children compose shape poems, or poems that describe something. The words are written in the shape of the subject. The format for this lesson is similar to that of the Georgia O'Keefe lesson. The students study both the life and the work of a famous artist, create original art in the style of the artist, and then use their artwork to write original poetry made from a list of descriptors. As mentioned earlier, both the artwork and the poems are open-ended in nature. Each of the children in the class composes an original work that is different from each of the others. The assignment is

exactly the same for all of the children in the class, yet all of their products are unique. It requires the use of higher-level thinking and synthesis of both skills and content knowledge to create a unique product.

I frequently observe beginning teachers attempt to give open-ended creative writing or drawing assignments with less success. Many less experienced teachers simply give the assignment to 'draw a picture' or to 'write a poem.' Perhaps one thing that makes the quality of the student work exceptional in this classroom is the way that Patty scaffolds the learning for the students before they begin working. She explains that if the students are simply asked to write creatively, they almost always end base their writing on a movie plot or some other known experience. She believes the language arts curriculum, and particularly writing, needs to be tied to the experiences of the students. If she asks the students to write about Jell-O, they are able to write wonderful descriptions because they have all eaten it, felt it, and watched it jiggle. She explains that capturing small moments of common experience is key to helping the students write. Rather than ask them to copy a picture or to draw from memory, Patty provides the students with actual objects to examine and draw. The same is true for writing poetry, when the students are writing from immediate and personal experience. This small but important distinction is an important step in assisting the students to create original work.

Patty clearly focuses the attention of the children on the ability of both artists to observe and notice small details. She tells them directly that both Georgia O'Keefe and Andy Warhol "saw things in ordinary objects that the rest of us don't see." The discussion includes a compare and contrast of the two, noting that both paint objects that

are personally important and use a simple background to draw attention to the object. In their own drawings, Patty asks the children to follow the same basic principals that characterize Warhol's work and she is very explicit about the detail she wants in the students' drawings: to fill the entire page with a single object, to draw attention to the object by leaving the background simple, to draw all of the tiny details on the object, and to use bright, bold colors. Her directions include details about the drawing – to sketch the object in pencil, to trace it in black marker, and then to color it with bright colors, rather than giving general directions like "draw a candy bar." Although there are no jeweler's loops for this assignment, the children spend almost twenty minutes studying and sketching their objects before they began adding color.

This particular lesson is part of the Language Arts curriculum, but it is extended into the afternoon science block, overlapping with the science objective of observation. The book Patty reads is about Andy Warhol, but she is able to reinforce many of the major grade-level language objectives through the lesson, like listening and writing – particular writing about details. In addition to the obvious emphasis on language, Patty is able to weave in connections to other disciplines and prior learning. The connection she makes to math – "how many children?" as well as the reference to the previous lesson on Georgia O'Keefe are subtle, but an important part of the emphasis on content knowledge. Much of the biographical information about the artist and the connections to popular culture, such as Marilyn Monroe and Elvis Presley, are connections to history and social studies. She is helping the children to understand an important figure from the past and to understand how he impacted culture. Patty is able to take the discussion one step

further to include a discussion of the artistic style that distinguishes Andy Warhol's work. This additional step takes the lesson beyond a discussion of art history and makes it a discussion about the actual art. She emphasizes to the children some of the techniques that make Warhol's work unique – the way he uses common objects as subjects for his art, the bold use of color, and the experimentation with new techniques.

Summary

Although creating artwork is quite possibly very motivating for students, Patty does not use it primarily for this purpose. She uses art, particularly drawing, as part of the teaching and learning that occurs in her classroom, and it is integrated throughout the week. It is an important part of the curriculum in this second grade classroom, and the children are frequently asked to express their ideas and observations in drawings as well as in writing. In addition to lessons on appreciating the work of famous artists, the students create original artwork through drawing, sketching, painting, and constructing collage, mobiles, and three-dimensional models. Patty identifies three major purposes for using art in her classroom: 1) reinforcing key concepts in other areas, 2) drawing helps children to organize their thoughts and ideas, and 3) examining and drawing objects forces children to notice details.

First, although students in Patty's class often request free drawing time, Patty uses art in her classroom primarily to enrich a particular lesson and reinforce key concepts. In addition to teaching concepts in math and science, she reinforces the elements of art, such as line, shape, and patterns, and uses the work of famous artists to help the children make connections between art and other disciplines. She uses the work of Escher and Picasso

in math to teach shapes, tessellations, and patterns. In science, art is used to help the children think through and demonstrate understanding of scientific concepts, such as using collage to show the form and function of the parts of a plant, or creating three-dimensional models, such as the crabs and insects.

Second, Patty insists that the students write more descriptively when they draw before they write. When they are writing about characters in a story, research they have done, concepts they have learned, personal experiences, or even problems they are facing, Patty asks the children to draw before they begin writing. The process of drawing helps them to think through and organize their ideas. In this sense, she uses drawing as a prewriting activity and as a graphic organizer. Although it is quite time consuming, and they don't have as much time to spend on it as she would like, she believes the level of comprehension and insight is remarkable when the students are allowed to spend more time drawing.

Third, Patty mentions the importance of using drawing to help children notice details; the quality of perception and observation is more sophisticated when they are asked to draw before they begin writing. By carefully examining and drawing objects, they must notice color, shape, line, texture, and pattern. Drawing helps them to fully perceive the things they see, and these perceptions are important to understanding concepts, and to transferring their perceptions to written word. This focus on visual details allows them to write more freely and with more verbal description. She explains that showing the children a picture of an object triggers much more response than asking them to pull descriptions from their heads. Observing the physical object adds yet

another dimension because they can touch, feel, weigh, etc. to get a multi-sensory experience.

Patty believes that the quality of the poetry is improved by the artwork. This is quite evident in the lessons on Georgia O'Keefe and Andy Warhol. In both instances, the students carefully examine an object – a flower in the O'Keefe lesson and a common object in the Warhol lesson – and draw a detailed picture in the style of the artist. From these pictures, they write words and then poetry that capture the essence of the objects. This same concept is later used in a slightly different form as part of the unit on ocean life when the students examine scientific sketches of marine animals and then create their own drawings. From these detailed pictures, they write sneaky poems in the same style as those written in the O'Keefe lesson.

Question #2: How is music used in the classroom?

Music is woven into the curriculum in Patty's classroom throughout the entire school year. As a former music teacher in this same school, I always believed that her classes liked to sing more than the others, regardless of the mix of children in her classroom each year. The current music teacher, Mrs. Black, also mentions that Patty's students frequently arrive in the music room with songs that they would like to sing for her. I remember coming back to visit the first year after I left the school, and Patty's class stopped me in the library to listen to them sing a song about a spider – not the *Eensy, Weensy Spider* - but a song about the body parts of a spider, most of which I cannot remember. Her classes love to sing, and as Patty tells me, "They'll sing forever. Mine will just burst into song in the class – this is just a singing class." (May 16)

Patty admits that she uses music regularly in her classroom, and describes herself as "the kind of person that you say a word, and all of a sudden a song's going in my head and it's stuck there for two hours. I can't get rid of the darn song out of my head!" (May 16) She studied piano as a child, and up into her twenties, she both sang and danced in the chorus of a number of musicals. Although she claims that she does not sing particularly well, she remembers singing in the car, on trips, and in church as an important part of her young life. This love of music is passed on to her two daughters, both of whom are currently majoring in musical theatre at major universities. (March 25)

Thematic Units

This deep passion for music finds its way into the curriculum, as Patty is continually looking and listening for resources to use in her classroom. Playing recordings of music thematically connected to social studies and science units is one of her favorite ways to use music, and she often spends hours selecting recordings to use in her lessons. One shelf in her classroom contains four bins of compact discs, totaling over seventy-five recordings, many of which are classical music or children's songs. Her endless request for recordings has led to a collection that includes Mexican music for a cultural study of winter holidays, South American flute music for a regional study, songs of the American Revolution for a historical unit, and sea shanties for an integrated science unit about the ocean. She even uses the 2001: Space Odyssey soundtrack for a unit on space. She says that she likes to "tie music in, because I feel like I'm very much a holistic teacher. And it's not just science we're learning, but science fits into the culture in some way. What was going on in that time period?" (March 25)

Patty is currently working on collecting music and children's books about some of the hallmark performers in American music, including John Denver, John Lennon, and Bruce Springsteen. In addition to using them to help the children understand historical and cultural connections, Patty hopes to incorporate them into her creative writing curriculum in some way. One of her favorite connections is using Grofe's *Grand Canyon Suite* during a thematic unit on weather. After the children read books about storms and weather, they discuss the different sounds in the composition that represent the

thunderstorm. This listening activity provides them with an experience that is hoped to spark creative writing. She explains:

I did use Grand Canyon Suite during our weather unit because it sounded like a thunderstorm rolling across. I used some classical stuff with the kids when we're talking, and I use that for writing about weather. . . it was after we had read some books about storms and we'd described storms and stuff and then I said now I want you to listen to this and tell me what's happening in this storm. And so they started building up what they decided was happening in that storm. And they sat down and wrote. So I can use music that way. I've used Fantasia, I've used music from Fantasia before – a lot – and used that to pre-set writing. (May 16, 2005)

On other occasions, Patty uses music to help the children notice their own feelings, asking questions like "How does this song make you feel?" She insists that with younger children, it is not even necessary to write about their feelings, but to simply identify and discuss them. This connection between music and feelings transitions well into creative movement, allowing the students to express these feelings with their bodies. She is particularly fond of using music from Walt Disney's *Fantasia*, and has had success allowing the children to dance as flowers to Tchaikovsky's *The Waltz of the Flowers*. Another favorite listening example from *Fantasia* is Dukas' *The Sorcerer's Apprentice*, in which Patty uses the enchanted mops and brooms to lead a discussion on compare and contrast. At other times, she simply plays soothing music, such as the hammered dulcimer, in the background as the children are writing.

Patty uses music in these ways primarily to develop concepts in science and social studies, but she believes that exposure to music will ultimately help the students to think mathematically as they become accustomed to seeing and hearing patterns, a similar process to seeing numeric patterns in math. Although she chooses recorded music

primarily to support the concepts in her thematic units, she takes time to discuss musical concepts, such as pitch and volume, as they arise in conversation. In years past, the second grade curriculum included a unit on sound; Patty used bottles filled with varied levels of colored water to let the children experiment with making patterns from the various pitches, and then they used colored dots to record and notate the patterns that they composed. This notion of thinking musically was extended into a group composition activity where the students combined their patterns and invented notation to record the entrances of different parts.

Teacher-written Songs

Singing, however, finds its way into the classroom more often than any other musical activity, and the students in Patty's class sing almost every day. One morning after the spelling and handwriting lesson, Patty shows the students a bracelet made from a pipe cleaner and six beads, and asks the students if they remember what each bead stands for. There is a general mumbling of "yes" before Patty leads them in singing a song about the stages of the water cycle sung to the tune of *Clementine*. Although the children do not all begin on the same pitch, by the end of the song, all of the children in the class are singing in unison and are obviously enjoying themselves. Afterward, Patty reviews each of the stages and explains each of the beads: the UV bead changes colors when activated by the sun's energy and represents the process of *evaporation*; the perfectly clear bead represents *water vapor*; the clear bead filled with silver glitter resembling snow stands for *condensation*; the blue glittered bead represents *precipitation*, a blue one

stands for *accumulation*, and a glittered, goldish-brown one for *percolation* back into the ground. (March 10)

The children memorize all of the words to the song in the lesson the day before and have no difficulty recalling the multiple verses the following day. In fact, two months later, I heard Pamela and Holly singing the water cycle song quietly as they write ocean poems during an independent work time. (May 10) When I ask Patty why she uses songs with her lessons, she tells me that it "jogs their memory." She continues by saying that she's "had fifth graders come up and tell me during the TAKS test that the water cycle song was going through their head as they were doing their question. It sticks with them." (May 16)

In my position as a supervisor of student teachers, I spend a great deal of time in elementary classrooms. During the past year, I have watched four of my students teach second grade lessons on the water cycle, and I too have memorized the stages of the water cycle from hearing this song. All of them use the first verse of the song, set to the tune of *Clementine*, to help the children remember the steps of the water cycle.

Evaporation, Condensation Precipitation on my mind They are parts of the water cycle, and they happen all the time.

When I ask Patty where she got this song, she tells me that it is part of the AIMS [Activities Integrating Mathematics & Science] curriculum and has been around for a long time. She borrowed the original verse and extended it to include *accumulation* and *percolation* as parts of the cycle. In addition to this song, she has written three others to

help the children understand and remember the water cycle: Chaffers Water Cycle, The Wheel of the Water, and The Water Cycle Boogie. (March 16)

Writing songs to reinforce the concepts and vocabulary in her lessons is something that Patty incorporates regularly, particularly in science. She is a national presenter and private consultant in science education. In this capacity, she frequently travels to the coast with a colleague and co-presenter, Susan, to present professional development workshops in marine science education. During these trips, they often write as many as three or four songs together, usually arising from needs to reinforce concepts and vocabulary in their respective classrooms, or triggered by the curriculum they are teaching in workshops for educators. She explains, "Susan and I were doing a wetlands workshop, so automatically we started writing wetlands songs on the way down there. It'll be driven by what's happening, what we're getting ready to teach, or a need I see for my kids not remembering the vocabulary." (May 16)

Patty and Susan typically write "piggyback songs", or new lyrics to familiar tunes, for the various thematic units that they teach. The content information in their songs is carefully researched and designed to reinforce memory, vocabulary, and key concepts. (April 27) Patty tells me that she and Susan work well together, and that it is useful to "have another head there" because the task is complex. In addition to synthesizing the main ideas they are teaching, they must consider rhyme, meaning, cadence, and syllables of words when writing new lyrics for the familiar melodies. When I ask Patty how she decides which songs to borrow tunes, she says, "Some of them just flat come into my head." She believes that having a large background of songs in her

memory is also useful, particularly if the songs are more traditional, because the rhythms are often easier. She explains that the process gets easier with experience; Susan has three favorite songs that she uses repeatedly, and Patty finds herself returning to use the same tunes over and over again as well. (May 16)

Although the songs are written to supplement particular lessons or units, quite frequently the class will sing the songs during extra moments throughout the day, like the transition from language arts to lunch, or the last minutes of the day. The singing seems like a reward for their hard work, and the students seem excited to participate, often requesting favorite songs. On one occasion the class requested to sing *The Mystery of the Clam*, the theme song from a skit earlier in the unit, and all of the students rummage through their folders to find song sheets with the text typed out on two single spaced pages. The refrain is the only melodic portion of the song, and the part that the children sing most loudly, bleating out the word clam.

The Mystery of the Clam – Refrain

What happened to the clam - am - am - am?

What happened to the clam - am - am - am?

Well bless me soul; someone made a hole.

What happened to the clam - am - am - am?

The five verses are chanted in unison, and the children are staring intently at their papers, possibly because the verses are so text-heavy. It is evident that a few of them are having difficult saying all of the text at the quick tempo, but all of them are following along and making an effort to participate. (May 3) *The Mystery of the Clam* is one of many songs in the class repertoire. And throughout the semester I heard a number of the piggyback songs written by Patty and Susan.

Plankton Song (tune of Twinkle, Twinkle)
Plankton, Plankton, soup of the sea
Animals and plants as tiny as can be
Floating along where the water makes them go
Sometimes going fast, sometimes going slow.

Barnacle (sung with a pirate-like accent)
I'm a barnacle and I'm stuck right here
And I'll be right here if you come next year
I landed on my head; that is really rude
so I use my feet to catch my food
They are feather and long so I stick them out
to catch the plankton that floats about

Manta Ray (to the tune of Pizza Hut)
Manta Ray, Manta Ray
Sawfish, shark and Manta Ray
Cartilaginous, cartilaginous
Sawfish, shark and Manta Ray

Modeling the Process

Patty and Susan have been writing songs together for years, and they have extended this skill to help both children and adults begin to write their own songs. They frequently incorporate song writing into their workshops for educators, usually asking the teachers to write a song following a skit or activity. Patty says that the participants typically look as though they are struggling at first, but by the end, everyone is successful. One of their favorite tunes to use is *The Twelve Days of Christmas*, because it can so easily be used in a team effort, with each person in the workshop writing a single line. (May 16) When I ask her if all teachers can do this, she tells me that they need to have some background in music as well as an emotional investment in it. (March 25)

Patty creates many of the songs used in her classroom, but she also believes modeling the process for students is very important. While writing a song for the end-of-

year Volunteer Appreciation Tea, she located a midi file on the Internet that plays the tune *A, You're Adorable*. When her students hear the tune and find out what she is doing, they all gather around her at the computer, wanting to help her write the words. Another second grade teacher from across the hall comes and helps with a sentence they are all struggling with, and the entire song is completed within fifteen minutes. She explains that once the children see how simple it can be, many students will request to write songs, particularly when they are given a choice of products for assignments. (May 16)

Through her involvement with the local community theatre organizations, Patty met Mandy, a music teacher from a neighboring district, who has her classes write a musical every year. Mandy attends summer workshops sponsored by the National Opera Association each summer, and is returning this year for the level four training.

One of Patty's current goals is to attend the opera workshop and then have the children in her class write a musical. She and Mrs. Black, the music teacher at Berry Creek Elementary are planning to attend the level one workshop the next time it is offered so that they can collaborate to help the students write a musical.

Creative Writing

Although she has not yet been able to have her students write an entire musical, Patty frequently models the process of writing song for her students, and offers many opportunities for them to write song lyrics. She incorporates song writing into the poetry and creative writing unit that is woven across the curriculum throughout the year. This unit is primarily used to meet the standards of the second grade Language Arts TEKS,

[Texas Essential Knowledge and Skills] but many times the content overlaps and is integrated with the various thematic units. Her students spent much of the fourth sixweek period studying an interdisciplinary unit on chocolate. During this thematic study, they research the history of chocolate from ancient times, study the life and achievements of Milton Hershey, design a planned community modeled after Hershey, PA, taste different types of chocolate, watch a recorded version of *Charlie and the Chocolate Factory*, and read a number of books about chocolate.

As part of the chocolate unit, the entire class reads a novel called *The Chocolate* Touch. The novel is accompanied by a number of activities and assignments such as writing in a journal shaped like a Hershey's kiss and painting life-sized caricatures of the main characters in the story. To accompany the caricatures, Patty asks the students to work in groups to write a character sketch that describes one of the main characters in the novel. Each group uses the tune of the familiar folk tune Frere Jacques, and selects adjectives, nouns, verbs, and prepositional phrases that best describe their character. To help structure the assignment, Patty has them use a template taken from the poetry packet they have been using throughout the year, and choose words that fit the format: adjective, adjective, proper noun – prepositional phrase – two "ing' verbs – three syllable word or short phrase – last line repeated. The songs and the caricatures are completed during independent work time over the course of several days. In addition to the criteria for word choice established in the template, such as part of speech or number of syllables per word, Patty insists that the students edit their songs to accurately reflect the character. During one editing session, she redirects two boys to re-write a line about "nice,

thoughtful John" to show his true character – greedy. As is true of most of their work, the children share the final versions of their songs by singing for the class. (March 1, 3, 8)

Perhaps the best way to examine teaching and learning through song writing is to look more carefully at the details of the way Patty structures and scaffolds her lessons. The next section includes two vignettes from Patty's classroom in which the children are engaged in writing original song lyrics to familiar tunes. The first vignette, *If You're Writing and You Know It, Clap Your Hands*, is a creative song writing activity that is used as a cumulating activity for the thematic unit on Fairy Tales. In this lesson, the children are instructed to write a character sketch for a fairy tale character studied during the unit, using the tune of *Frere Jacques*. In *Beach Litter-a-Sea*, the second vignette, the students are writing song lyrics as part of an integrated unit on the ocean, but this time to the tune of *The Twelve Days of Christmas*. Each vignette is followed by a brief discussion of the lesson.

If You're Writing and You Know It, Clap Your Hands

Today is Wednesday and the children are already familiar with the spelling words and are practicing sentence dictation for Friday's test. The sentence the students are working on is: "After church, the very same girl came over again." At first the sentence seems a bit odd, but I know that the spelling pattern for the week is the bossy R. Patty reminds the children that when they hear the 'r' sound without a vowel, it must be an er, ir, or ur combination. When I examine the sentence again I notice five of the weekly spelling words imbedded in it: after, church, very girl, and over. As she guides the dictation, she directs the students to listen carefully not only to the vowel sounds, but also to the division of the words by syllable. She begins with the first word of the sentence "after" and asks the children to clap the syllables as they say the word. She checks their comprehension with prompts: "tell me how many syllables — how many sounds?"

After the dictation when the children are seated on the carpet around Patty's rocking chair, she asks them to list the fairy tale characters they studied earlier in the semester. With a list of more than a dozen fresh in their minds, she tells them that they will be writing songs today. She continues by explaining that a song has two parts – a melody and the words - and she will give them the melody so that they can write the words. To make sure they are familiar with the tune, Patty sings the

song, "Are You Sleeping" several times as the students chime in. Next, she points out the repetition of the words in each pair of lines:

Frere Jacques (Are you Sleeping?)
Are you sleeping?
Are you sleeping?
Brother John
Brother John
Morning bells are ringing
Morning bells are ringing
Ding, ding, dong
Ding, ding, dong

With the repetition of the words established, they sing the tune again, two lines at a time, noticing that both the melody and the words are the same in each pair of phrases. As a counter example, Patty sings a few lines of "The Ants Go Marching One by One" to the children, noting that the first two phrases have the same words:

The ants go marching one by one, hoorah, hoorah The ants go marching one by one, hoorah, hoorah

After she sings these lines, she points at that the tune changes on the second line, even though the words stay the same. She follows with an explanation that songs are like poems because they often use repetition.

The assignment for today is to write a song [words] about a fairy tale character to the tune of "Are You Sleeping." Patty holds up a template that the children will be using with the title "A Character Sketch" written across the top. To the casual observer it might appear to be a worksheet because it is filled with blank lines. On closer

examination, it is an outline of the different phrases to serve as a template for the lyrics.

<u>Character Sketch – Song Template</u>

Adiective adiective name of character Adjective adjective name of character A prepositional phrase telling where the character was A prepositional phrase telling where the character was "ing" verb and "ing" verb "ing" verb "ing" verb and three syllable word or phase to end the story another three syllable word or phrase

As she reviews the format for their songs, Patty asks the children to tell her adjectives that describe the Troll from The Three Billy Goats Gruff. As the children blurt out words to describe the Troll, Patty organizes them into a song. On the last line, she asks them to clap "ding, ding, dong" and notice that there are three syllables. The last phrase will need three syllables. Ironically, when they create the final line for the class song, it contains four syllables – "scaring the goats." However, when the tune is sung aloud, they are able to sing the phrase "scaring the goats" in three beats, keeping with the meter of the song. When the lyrics are complete, Patty sings the song through and the children chime in on the parts they remember.

Character Sketch – oral model

Ugly, mean troll
Smelly, grumpy troll
Under the wooden bridge
Under the wooden bridge
Hiding and guarding
Scaring and yelling
Scaring the goats

Scaring the goats

With the modeling complete, Patty gives the children the final directions: "Go get busy! We will come back and you will sing it for us!" As the children are working at their tables, they are intently focused on the task at hand. I can hear several students singing quietly to themselves, and some are clapping words to determine the number of syllables. Derek, one of the boys identified as 'gifted' finishes a song about Rumplestillskin within the first few minutes and immediately asks Mrs. Smith if he can draw a picture to go with his song. She points out that there is already paper on his desk. In fact, all of the children have blank drawing paper on their tables to draw pictures that illustrate their character sketch songs. With the picture complete, Derek immediately begins working on another song about the Gingerbread Man. Most of the other children are still working on their first drafts and will obviously need a great deal more time to work.

Mrs. Smith pulls a small electric keyboard from somewhere on a shelf and shows Derek how to play the first phrase of the tune. He takes the keyboard and Mrs. Smith moves him to a private nook between the cubbies and the filing cabinet so that he can spend some time practicing the tune. Even though he is sitting across the room from me, I can clearly hear him picking out the melody with his right hand. I know that he is in

the key of C – all beginning piano students use the key of C. The first four phrases of the song are easy and he figures them out almost immediately:

CDEC CDEC EFG EFG

Derek works intensely for over five minutes before he figures out the correct notes. Each time he makes a mistake, he starts at the beginning of the song rather than at the beginning of the fifth phrase, almost as if he is working up momentum to conquer the more difficult part of the melody. When the whole tune is mastered, Derek begins experimenting with adding a left hand accompaniment to the melody – broken fifths on the steady beat. This is more difficult than it appears, and he attempts it several times before moving on to the next variation – crossing his arms to play the melody in the bass and the accompaniment in the treble register. In a final variation, he changes the rhythm of the melody by adding 'swing' eighths.

The class works for almost forty minutes on their songs, writing, singing, and revising, while Mrs. Smith sits in her rocker at the front of the room as the students line up to show her their drafts. She sings through their songs, one at a time, analyzing the text and offering suggestions. Several of the students return to her multiple times, seeking her approval for each revision, and others never come for help at all. As they finish their work at different times, each student finds something else to work on. A few of the boys go to watch Derek play the keyboard, several others find

books to read, and several others spend extra time on their pictures, adding more detail and more color.

One drawing that accompanies the character sketch on Little Red Riding Hood doesn't show a little girl at all, but a curved path, four trees, and some grass. A drawing of Snow White shows a smiling brunette in a yellow and red dress placed on a blue background. A yellow sun peeks at her from the top left corner of the page. A drawing of the Three Little Pigs shows an entire scene, although not one I remember as part of the story, with all three bubble-gum-pink pigs running on their hind legs, and the wolf, also on his hind legs, chasing behind them with his front legs (arms?) reaching out to grab them. The entire page is filled with color—green for the grass and a bright orange background. A large block of orange in the upper center of the page has been colored with crayon several times so that it is darker than the rest. I am not sure if this is a part of the picture, or the student simply got tired of coloring, but I see the letters "TOM" scraped into the layers of waxy crayon.





When all of the children are finished with their work, Mrs. Smith gathers them on the carpet near her rocking chair. Derek moves the keyboard over to the circle and agrees to accompany the performances. As each student stands up to perform his or her song, Mrs. Smith sings with the ones who ask her to help, as Derek plays along in the background. Because he has been practicing the song for almost fifteen minutes, he is quite proficient by now, and is playing the melody at a fast tempo. Mrs. Smith reminds him that an accompanist must go the same speed that the singers sing, even if it is slow.

All but three of the students are timid about singing alone in front of the group, but almost all of the students are eager to share their songs with the class. The three girls who choose to sing alone are students whom I predict. I remember them from their kindergarten year as students with higher than average musical ability. These are the students

who can maintain a tonal center and a steady beat without the assistance of the others. When Pamela stands up to sing, her voice is clear and confident, and even though she is staring at her paper, she obviously enjoys performing in front of the class.

Snow White – Song
Nice pretty Snow White
Beautiful pale Snow White
In a house
In the woods
Working and cooking
Praying and loving
Ate an apple
From the witch

Kathy also sings her song about Goldilocks for the class without the help of Patty or Derek:

Goldilocks – Song
Notty sneaky Goldilocks
That's her Goldilocks
Walking through the woods
Breaking into their house
Eating and sitting
Sleeping and running
Out of the house
Back to home

Sandy's voice is more timid than the other two, but her intonation is good and her voice is clear:

Beauty and the Beast – Song
Kind beautiful Belle
Young brave Belle
In the forest
By the castle
Looking and sharing
Saving and caring
Helping sad Beast

Helping sad Beast

Patty sings with the other students as they perform for the class, holding their papers at arms length so that each student standing beside her can also see. She adapts easily to match the students. Some can easily read the words and sing the tune with her help, and others slow down on the more difficult words, loosing the steady beat entirely. On some of the more difficult ones, Patty often claps as the children sing to help maintain the steady beat and to keep Derek from playing too quickly. Most of the children are able to sing on pitch with her help, but a few still growl in their lower registers, unaware of pitch. Occasionally, when extra practice is necessary, Patty sings the song with a child a second time. Jack waits until the very end to present his song to the class, and even with Patty singing with him, he is reluctant to sing his song for the class. Patty offers to let him read his song like a poem. (February 11, 2004)

Discussion

Like the creative writing assignments used with art, this assignment is open-ended because the directions for all of the students are the same, yet the final products are all quite different. The scaffolding to prepare the children for the activity is an important part of the lesson, and one that I know intuitively will make a dramatic difference in the quality of the students' work. Patty spends several minutes early in the lesson discussing the difference between melody and text in a song, and helping the children to determine

the number of syllables in individual words. With this strongly established, she introduces a template for the type of song she wants the children to create. In this sense, the assignment is not completely open-ended, but provides some structure for writing in the same way that the templates for the sneaky poem and the shape poem do.

Aside from this template that outlined the basic structure of the song, the children are free to choose any fairy tale character and to choose the descriptions they want to include in their songs. Patty models this process for the children by creating a model with their input about the Troll. It strikes me as unusual that she doesn't write down any of their ideas as they are brainstorming. She remembers the words as the children brainstorm and synthesizes the poem in her head before singing it to the class. The example she creates with the children is complete and fairly elaborate, yet she does not provide them with a written version to copy.

In addition to the open-ended nature of the specific assignment, the general setting of the classroom is structured yet highly flexible in a way that allows the students to experiment with their own creativity. Perhaps one of the buzzwords of contemporary education is 'modification' for students needs. In this flexible classroom environment with open-ended activities, the students naturally modified their own assignments to suit their needs, and Patty allows them to do so within the boundaries of the assignment. The children are working on different things at different times throughout the extended work period, and all of them involve creative activities. Some children need the entire forty minutes to write a single version of their songs, while others complete a draft quickly and then work diligently to refine the word choice during the remaining time. A number of

children spend a great deal of time drawing detailed pictures, and others draw only the minimum requirement. A few children even choose to write more than one song. In the example of Derek, the student at the keyboard, he is able to continually challenge himself by playing many versions of the same melody.

Patty provides each of the children with blank paper for drawing, and include a drawing as part of the assignment, but the artwork from this lesson is different from the drawings I see emerge from the lessons on Georgia O'Keefe and Andy Warhol. Undoubtedly, some of the children draw better than others, but overall the drawings seem more childlike. Perhaps it is because the drawings are of fairy tale characters, or it might be that the students were drawing from their imaginations rather than examining real objects. Because the lesson emphasizes the song lyrics, not drawing details, the artwork does not show the same level of sophistication as the lessons on the artists. Or, as Mrs. Smith suggests, it is more difficult to draw objects from memory than when examining the actual object. In this particular activity of drawing entire scenes from memory, the drawing ability of the individual students makes a tremendous difference in the amount of information conveyed through the picture. However, even with the more simplistic drawings, I get a sense of the child's view of a character through his/her drawings.

By the end of the class period, the intonation of the class is markedly better than at the beginning of the period -- the children are now singing in unison with Patty. The range of children's voices is quite limited and adults often sing in a register too low for the children. Even when the range is appropriate, without a starting pitch, most singers will start on different pitches and the group doesn't always sound in tune. Because Derek

has been playing the tune in the key of C (an appropriate range) for quite some time, the tonal center is well ingrained by now, even though his accompaniment does not always match the tempo of the singers.

Both the drawings and the singing are secondary to the true focus of the lesson: choosing words to write the text of a song. In this sense, the assignment requires the students to use their skills in noticing detail. Patty clearly focuses their attention to detail in many ways as she models this lesson. She asks the children to clap the syllables in words both in the spelling dictation at the beginning of the period and during the minilesson on writing song text. This activity helps them to listen carefully to the small sounds that create each word and to choose words carefully for each line. Attention to detail also comes through word choice in the text. In addition to choosing words that match the four beat phrases, the students are to use adjectives, verbs, and prepositional phrases, and all of them need to be appropriate descriptors of the chosen fairy tale character.

In this brief direct-teach portion of the lesson, Patty is able to help the children make connections between the disciplines of music and language arts. The short exercise on clapping syllables is one that I frequently used with primary students to help them notate the rhythm of a word or phrase. One-syllable words are notated with quarter notes, and two-syllable words with a pair of eighth notes. This simple activity reinforces the idea of hearing individual sounds, a concept that is important to the development of both music and language. Patty also helps the children distinguish between the melody of the song and the words of a song through several examples of familiar tunes. These

are both distinct elements that can be separated, and Patty is able to use clear examples of each to explain the concepts to the children. She is very clear that they will be writing new words for a known tune or melody. It is apparent from watching the lesson that both Patty and the children have an intuitive feel for music, and they are able to keep a steady beat when singing the tune, adjusting the words to make them fit the meter of the song. Not only are they able to sing with the meter of the tune, Patty purposefully calls attention to the importance of matching the syllables of the words to the "beat" or rhythm.

Creating a new song is heavily grounded in Language Arts content as well. The template for the song requires that the students insert adjectives, nouns, prepositional phrases, as well as identify the syllables in words. Patty models this process orally for the students, pulling from their prior knowledge of the parts of speech and the characters in the many fairy tales they studied earlier in the semester. The assignment also requires the children to have a fairly extensive understanding of each of the fairy tale characters. The adjectives, verbs, and phrases they use must be carefully chosen to represent the essence of the character, and due to the structure of the template, they must have several different ways to describe a single character. One simple adjective is not sufficient.

Beach Litter-a-Sea

Later in the semester, Patty uses a different tune and a different topic to have the children write song lyrics for their integrated unit on Sandy Beaches. She chooses to use the tune of "The Twelve Days of Christmas" and have the children write about the litter that is frequently found on the sandy beaches of the Gulf Coast. She spends several minutes at the beginning of the class asking students to hum various portions of the tune and clap the syllables for different phrases. Thankfully, they don't sing the entire song; it is a cumulative song, adding one more object each time and then repeating all of the previously mentioned ones in order.

As they hum each phrase, Patty asks them to clap the rhythm and identify the number of sounds they hear. The easiest to determine is six geese a laying, which has five sounds – X XX XX. The same is true for many of the other numbers that follow six: eight maids a milking, nine ladies dancing, ten lords a leaping – and a few are almost the same, but no one seems to notice that sev-en and lev-en have an extra syllable because they are sung in a single beat.

Next, Patty gives the class an opening prompt for their song by replacing the first phrase, "On the First Day of Christmas my True Love Gave to Me..." with "Today in Port Aransas I found upon the beach..."

"The song will be written as a class with each student contributing a

different verse. On their tables are blue plastic containers filled with items that Patty collected over the years from the sandy beaches of Port Aransas. She gives the students a few moments to dig through the buckets and brainstorm ideas for the song. As they are sorting through shells, bottles, and broken toys, I hear a number of students humming the tune quietly. As they work, she reminds them that they may add adjectives to make the phrase match the correct number of sounds. After a few moments, the students brainstorm a list of phrases and Patty writes them on the overhead projector, sometimes modifying them slightly to make them fit the rhythm. And sometimes just listing the objects.

Litter from Port Aransas A little plastic toy man Ducky goggles Star coral Mermaids purse Shells Fishing net High heel shoe Toothpaste in a tube Lightening whelk Clam Big barnacle Oyster shell Hamburger seed Beach glass Crab molt Drift wood Sponge

After a lengthy period of brainstorming ideas and clapping syllables, Patty explains the written assignment: Each student will be

given a large piece of blank paper to draw a picture and write one verse for the song so that she can compile them into a book. She holds up a piece of paper with the opening sentence written on it: "Today in Port Aransas I found upon the beach. . ." She gives the students further instructions for their drawings — to "draw their pictures like a tall building, not a long wall" so that they will all be facing the same direction in the class book. She also emphasizes that their drawings should be big and fill the entire page — Georgia O'Keefe style. The special verses that have an unusual rhythm — a partridge in a pear tree, and five golden rings — are assigned to two students. Mark will write verse one, a little plastic toy man, and Holly will write verse five, du-----cky goggles. All of the other students are assigned to write a verse that contains five sounds.





The students spend almost an hour working on the assignment, digging through the tubs, drawing and coloring their pictures, humming quietly to themselves, and writing their verses. Most of the children work independently without much help from the others or from Patty, but about

fifteen minutes into the work period, Toby asks a question: "do we need five syllables or six?" Patty claps the rhythm: X XX XX – six geese a laying, and then again – XX XX XX – seven swans a swimming, humming the melody rather than singing the corresponding words. She tells Toby that she made a mistake and it should be six, and then claps one more time and gets five again. Finally she tells Toby it could be either, and he returns to his seat, content to finish his assignment.



Ten minutes before lunch, Patty calls the children to the carpet to sing the completed song. This time they sit in a circle rather than a clump so that there will be an order to the verses of the song. Singing the song is a difficult task because the students are familiar only with their own verses, but Patty is a strong leader and able to keep the class together as they work through each verse. She sings each new verse as it is introduced, and usually the author of the verse and a few other children sing with her. Her voice is clear and strong, and she is able to maintain the tune, even with the children mumbling along in the background. As

the song continues to grow – adding one more object each time, the children become more confident with the words and are able to join in spontaneously. They aren't required to sing as she leads them through the song, but many of them do as they catch on to the pattern. Their singing is noticeably louder on verse five, "du-----cky goggles" and on the first two verses that have been repeated many times: "a beautiful bunch of shells and a little plastic toy man."

At 11:30, Patty stops so that the children can get ready for lunch. There are several disappointed sighs because all of the children have not yet presented their verses, but Patty assures them that they will finish singing the entire song later in the afternoon. Because the song is not yet bound in a book, collecting the papers in the order they were sung is necessary. She asks the children to pass their papers one at a time around the circle, putting their own paper on the bottom of the stack. Mark, who wrote verse one, a little plastic toy man, begins the stack and passes it to the next child. As they are carefully stacking their papers in order, Jill returns from a pullout program, obviously curious and disappointed about the activity she missed, only to hear Mason boast: "It was fun!" Mrs. Smith tells her it was part of the writing assignment for the day, but they will be sure to add a verse for her in the afternoon.

Discussion

This activity is also open-ended like the other assignments. The parameters of the assignment are defined – copying the opening sentence, drawing a picture of something that was found on the beach, and writing a descriptive phrase that matches the rhythm of the original tune. Even with these specific directions, the process of drawing and writing is open-ended and allows the children an opportunity to create original verses that show their understanding of the assignment. Each verse will be a unique contribution from an individual student.

The song itself is not necessarily what makes this activity one that is open-ended, creative, and requiring higher-level thinking. The important distinction is that the students write the song themselves, pulling from their knowledge of litter on the beaches of the Gulf Coast. Not only is Patty using the song writing activity as a higher-level thinking activity, but she also spends considerable time – over half an hour – preparing them to do it. She goes well beyond the simple directives: "write a verse to the tune of *The Twelve Days of Christmas*" and "draw a picture to go with it." She spends time clapping syllables, isolating phrases, examining objects, and brainstorming with the large group before she asks the students to begin the assignment. When I ask Patty why she does not made a visual model for the students, she tells me that she prefers to do oral modeling for rather than making a physical model for them to copy. She feels that the guided brainstorming is an important part of helping them get their ideas started, but because she does not create her own visual model, they are less likely to remember all of the details and copy her example too closely. She takes a great deal of time to help them

generate ideas, but does not give them a model to copy. This is counter intuitive to my knowledge about teaching visual learners, but her point is interesting – a visual model may limit creativity because it can be easily copied.

Patty spends about ten minutes clapping to help the children listen to individual sounds. Although they frequently clap individual words, in this instance they clap entire phrases. This is more difficult than it appears because many of the phrases have the same melody and a predictable word pattern, yet the rhythm, and therefore the syllables, change. The phrase a partridge in a pear tree, has seven syllables, but when the tune is hummed, there are eight different sounds – partridge is sung on three different pitches even though the word has only two syllables. The same is true for two turtledoves, with four syllables but five pitches, and three French hens, with three syllables and four pitches. Because they are humming the melody rather than singing the words, they count the pitches in the melody as they are clapping.

The brainstorming activity is an important part of the pre-writing phase because it helps the students to generate ideas before they began working individually. All of the students have real physical objects in front of them as they are drawing/sketching, and the pictures show more detail than those that accompany the fairy tale songs, but less than the lessons on O'Keefe and Warhol. One thing that is noticeably different about the drawing in this classroom, is that Patty almost always asks the students to draw their pictures before they write. It would be much more typical in an elementary classroom to have the students draw illustrations after they have written a story or poem if they have extra time. In this classroom, creating the drawing/sketch is part of the thinking process that focuses

the students on details as they examining and draw the object. As Patty mentions earlier, she believes that asking students to write about things they have direct experience with dramatically improves the quality of their writing.

This seemingly simple activity requires the students to synthesize information from their prior knowledge in music, language arts, and science to create a new product. Most of the content information is not new to the students, but the way they are asked to pull from it is new. Patty uses the direct teach portion of this lesson to review the important aspects of rhythm and phrase and to help the children listen closely to the syllables in words. Although the terminology is not directly linked to music content, the concepts are the same. The language arts aspect of the lesson focuses on creative writing and using descriptive words. The science content is an extension of the larger unit on sandy beaches that the students study for weeks. This is a chance to process the information in a creative and engaging manner.

Summary

Music plays an important role in Patty's classroom, although it is used in different ways and for different purposes than art. Her classes love to sing and they do so frequently. They use songs with every thematic unit, and sometimes spend extra moments during the day singing favorite songs from the past. In addition to singing, the children have opportunities to write their own song lyrics and to listen to a wide range of recorded music. Patty uses music in her classroom for three main purposes: 1) to reinforce concepts within a thematic unit, 2) to help children memorize vocabulary and concepts, and 3) as a creative writing activity that allows them to synthesize information.

Patty uses recorded music to supplement thematic units and to reinforce concepts, such as listening to the 2001: A Space Odyssey theme to help the students conceptualize distance in outer space or using creative movement with The Sorcerer's Apprentice to open a discussion of compare and contrast. Music is also used to trigger creative writing from the students, such as listening to the Grand Canyon Suite before writing about thunderstorms, or even as soft background music to set a tone in the room. In almost any study of a particular culture or historical period, music is an important element of the time and listening to music will elicit deeper discussion and understanding.

Singing and writing songs are very important in this classroom, and Patty not only writes songs to supplement her lessons, but also models the songwriting process for her students. She is quite knowledgeable in many areas, particularly in science, and she spends a great deal of time researching topics before she writes songs or develops activities for her classes. The songs she writes are generally "piggyback" songs with a melody borrowed from a familiar song, and she writes new lyrics that are purposeful and grounded heavily in content knowledge. Her intent is to help students remember vocabulary and key concepts, and even years later she has students approach her and tell her they remember the songs from her second grade science class.

The writing process is a complex, open-ended activity that allows a great deal of creativity on the part of the children, and on many occasions they are given the opportunity to write original song lyrics. Patty models the songwriting process for her students not only by letting them help her write songs for special occasions, such as the Volunteer Tea, but also by scaffolding the creative process and giving them both a

melody and a template to follow. She spends considerable time discussing and brainstorming ideas with her students before they begin writing, and just as she does with other writing assignments, she asks the students to organize their ideas through a picture before they begin writing. The process of creating an original song is complex and it requires the students to synthesize content information and to pay attention to cadence, meter, phrases, word choice, and syllables. The students spend a great deal of time clapping and noticing syllables within individual words, listening to the differences between melody and lyrics, identifying lines that are the same before they begin their own songs.

Question: How is drama used in this classroom?

As the music specialist at Berry Creek Elementary, I directed four different second grade musical plays in which Patty's classes performed. I often placed her class in the center of the chorus with students from the other three classes surrounding them. I did this because Patty's students loved to sing and provided a solid foundation for the performance. With predictability, her students read expressively and fluently, they were eager to audition for the productions, and each year her students held a majority of the leading roles. During the year in which we wrote and produced an original musical, the school librarian conducted the auditions and unknowingly assigned the four major speaking parts to students in Patty's class. From this experience, my interest in the types of activities Patty uses in her classroom was piqued.

Patty is actively involved in community theatre as a board member and a stage Mom, and she travels to both Chicago and New York to attend musicals, plays, and Broadway shows. She minored in drama as an undergraduate, and has a performance background in musical theatre. This background in the performing arts is an important part of her life, and she incorporates it into an already established curriculum. She recently attended a performance of *Cirque de Sole*, and immediately thought of one of her science concepts – balance of motion. She bought a copy of the DVD following the performance and is currently developing activities to use in the classroom with her students, as well as looking for age-appropriate songs from *Into the Woods* to use with the Fairy Tale unit.

Other than Disney musicals, which many of the children see at home, finding theatrical performances with content appropriate for young children is difficult. Patty's efforts to promote appreciation for theatre are primarily directed outside of the classroom. This year she sent an announcement to parents about a musical based on the popular children's book, "Jenny B. Jones," to be performed in a local theatre. The Berry Creek second grade team also donated tickets to the school raffle for a play called "The Toys Who Stole Christmas." Audience behavior etiquette is frequently woven into class discussion through the school year, and on the occasion that a school assembly features a performing artist, she takes the time to debrief with her students, discussing the things they like and do not like about the performance. After a recent musical theatre performance on Texas history, several of the children commented, "it's like how you write songs about science," making the connection that the performer writes and sings songs to teach history in the way that Patty teaches science through song.

Expressive Communication

Patty is a naturally dramatic personality, but she is especially so when reading or telling a story to her students. "Anytime I read a story I use voices. I do it ALL the time." (May 16) She does this both to engage the students in the story, but also to fully communicate with the students. She insists that much of the meaning, context, and emotion that comprise the story are lost when the story is read in a flat tone; interpretation through inflection and dramatic reading is often the best way to communicate ideas and understanding a story.

Well, if you don't use dramatic voices and inflection, you lose the meaning of the story. So it's an interpretation of whatever I'm doing. If it is, for instance, when he does that particular story, he needs to show excitement in his voice because that's what's going on. Otherwise, all you have is like a documentary that is documenting a sequence of something. But, that's not what we're doing. We're living an experience, and an experience is going to have reactions, it's going to have a difference in tone, it's going to have different inflections in it, and so that's why I do it. A story's not a blah group of sentences. A story is there to relate emotion as well as events. (May 16, 2005)

Perhaps one of the obvious benefits of dramatic reading is that it is naturally engaging for the audience. Patty is a dramatic reader and storyteller and frequently uses this technique with her students, weaving it into the books she reads and the explanations she provides the students. In her words, "It draws them in, just absolutely pulls them in. When you do a voice they are just awestruck and they are right with you in every moment." She even mentions her own preference for listening to National Public Radio's *Selected Shorts*, a broadcast of short stories read aloud by well-known actors. She insists that listening to the dramatic readings is more powerful and more enjoyable for her than simply reading the written text.

One of the major assignments for the second semester is to write an original story detailing the life of a water molecule as it travels through the water cycle. The assignment is given near the completion of an extensive unit on the water cycle. Rather than reading a picture book in typically elementary school fashion, Patty uses storytelling as she introduced the assignment, pulling from and embellishing a story from the Project Wet curriculum. As she tells the story, the children are staring directly at her, leaning slightly forward as if they can't wait to hear what will happen next. Her story details the journey of a single water droplet as it travels from one adventure to the next – a narrow

escape from being drunk by a deer, the adventure of tumbling down a rapid waterfall, and the fright of being sucked in by a fish and then pushed back out. She is particularly expressive as she increases and decreases the speed of her words, occasionally adding a dramatic pause or changing the tone and pitch of her voice to suit the mood of the adventure. She whispers and shouts, showing excitement, fright, and fascination as she continues, pausing occasionally to create suspense and let the children guess her location.

As she completes the story, there is a silent pause before she prompts the students to tell her the things they notice. Instantly, several students mention the expressive voice she uses to tell her story. They are also able to recall description of feeling and cite descriptive examples of the plot, but the most glaring observation is the dramatic voice that Patty uses to tell her story. In this instance, Patty uses dramatic storytelling to engage the students in the story, to communicate many of the subtle details of expression, and to help her students generate ideas for their own stories. Patty notes that this oral modeling is particularly important because it provides an experience for the students, which is key to quality writing. The model is detailed and elaborate so that it will trigger many ideas for the students, yet Patty deliberately avoids providing a written model for the students so that they will not copy her work.

As a writing activity, the major objectives are using voice and descriptive detail.

The assignment follows an extensive unit on the water cycle, and in addition to Patty's elaborate oral model, the students complete a pre-writing activity that includes nine stations representing each of the places water is found: rivers, oceans, plants, glaciers, ground water, soil, lakes, plants, and animals. However, dramatic reading is an important

secondary objective as the students share their stories aloud in an "author's chair." As the students take turns sitting in the author's chair and reading their stories to the class, the others listen and offer comments and compliments. Pamela, a particularly dramatic student receives a great deal of positive feedback on the first draft of her story, both due to her expressive reading and the humorous details she incorporates into her narrative. The class breaks into laughter and applause when she reads in a high, squeaky voice, "I was swallowed by a big salamander, and he peed me out as a big, yellow puddle!" After she finishes reading, Patty asks the class if Pamela read with a lot of expression, and they responded with an overwhelming YES!

(March 10, 29, 31)

In this context, the dramatic reading is an important component of their stories and part of the communication with the class. For this reason, she also uses reader's theatre with her students, working on expressive reading and inflection. She insists that the primary importance of reader's theatre is not in the finished product, but in the discussion that goes into creating it. The class discusses context as well as the feelings and characterization of each role. The students are able to demonstrate their understanding of a story by their ability to read with appropriate inflection. "Because you've got to know what the meaning of the story is or you're just going to make funny voices. You want your voices to match the actual meaning of it."

Patty speaks repeatedly about the importance of modeling for the students and this is evident in many aspects of her classroom. In addition to modeling the oral storytelling as in the example of the Life Story of a Water Molecule, Patty models the process in an

unusual manner. It is not unusual to hear teachers read aloud to their students, particularly in the younger grades when many of the students do not yet read fluently, and sometimes students are also asked individually to read aloud. However, during a study of *The Chocolate Touch*, Patty uses choral reading to have the class read the entire text aloud in unison.

As she reads the text in an expressive voice, the children read aloud with her, matching her tempo, inflection, and tone. They imitate each dramatic pause and add emphasis to certain words, speaking more loudly or more softly depending on the mood of the story. The pace of the reading is slow, but not too slow, and the group is able to stay together as they read. Patty pauses a moment to compliment the students before they continue reading the chapter: "*I'm scared* - I like the way you changed your voices! His emotions have changed, and you all changed your voices to reflect it!"

One of the most distinctive facets of this example is that the modeling Patty provides for the students is interactive. It is much more common for students to listen passively as a teacher models dramatic reading. This interactive feedback reminds me more of music lessons or drama rehearsals than it does an elementary school read aloud. The students are reading with the teacher as she models expressive reading, in the way that a piano teacher might play along with her student, and by doing so the children have a model for each word and phrase as well as a general idea of the tone. Attention to the details of expression are both modeled and imitated throughout the process – a model more typical in arts instruction than reading instruction. (March 1)

Transmitting Information

Expressive verbal communication is certainly one important benefit of using drama, particularly in the elementary school classroom. However, Patty uses drama not only to engage students and help them better understand meaning and emotion, but also as a means of delivering content information. She relates one of her favorite methods of presenting new information to students – by dressing a character in costume. She uses this technique frequently, particularly in the units on marine life, insects, and fairy tales. As a child sits in the front of the room for demonstration, Patty adds one costume piece at a time to crabs, jellyfish, spiders, and knights until they are fully outfitted. As she dresses a crab, she draws attention to each body part as it is added, commenting on the adaptive purpose of each – spikes for protection from predators, an abdominal flap for protecting the eggs, either a large moveable claw to pinch or dainty claws for catching algae, joints for moving sideways and back, eye stalks for multi-directional vision, and eye sockets to retract the eye stalks and protect them. The dramatic presentation is intended to help the children learn and remember the various parts of the crab, as well as the specific adaptive purpose of each.

Drama is not typically used for memorization of facts, but for developing conceptual understanding and prompting discussion. Patty finds that skits and plays are effective ways to deliver content information in the classroom as well. One of her trademark skits, *What Happened to the Clam?* is intended to introduce children to the various adaptations animals make to their habitats. She uses an interactive mystery format to weave many pieces of science information into a storyline that develops

conceptual understanding. Dressed in costume, Patty assumes the roles of four different marine animals: the crab, the starfish, the jellyfish, and the seagull, choosing different voices to characterize each animal and to engage the students in the performance. She explains, "I have to do a voice for each one because they're different animals. You have to create the façade."

The skit is performed for the combined second grade classes to introduce an integrated science unit on sandy beaches. Integrated with the other subjects throughout the day and extending over two weeks, the sandy beaches unit is actually part of a multigrade curriculum on marine life, developed collaboratively with scientists and science educators from the University. The skit is enriched by a melodic refrain sung throughout; as well as by chant-like verses that each of the animals uses to convey information, and catchy, repetitive phrases such as 'spit and drill, spit and drill' or 'he pulled and then I pulled, he pulled and then I pulled' that assist with memory. Because the skit is interactive, the students are involved throughout the performance by chanting and singing as they attempt to solve the mystery of the clam.

As she introduces each character, the children question her in an attempt to determine which of the animals created a hole in the clamshell: "Did you eat the clam?" Each animal has a repetitive chant that provides clues to solving the mystery, such as "*rip* and tear, rip and tear." As the children chant along with her, they examine four photocopied pictures of clam shells – one torn into pieces, one smattered into tiny pieces, one with a hole drilled into the shell, and one that was less obviously broken. As each character finishes an interrogation by the students, the children chose a picture of each

broken shell and the corresponding animal believed to have eaten it and paste both onto the face of a square pyramid.





The Laughing Gull laughs hysterically as it waves the white-feathered wings repeatedly and flies into the sky to drop the shell, smattering it into many pieces.

Laughing Gull (verse from The Mystery of the Clam)
I scoop up a clam with my beak,
Fly very high, a rock I seek,
Let it fall down so it will crash,
Landing on the rock, watch it smash,
I love my meal and pick it clean,
Just broken pieces can be seen.

The Starfish, which puts its stomach inside the clamshell to eat it, chants her movements in rhythmic repetition: 'I pulled and the clam pulled, I pulled and the clam pulled.'

Over a clam I slowly crawl,
Use my arms to cover it all,
Hold on tightly with tube feet,
In this contest I can't be beat!
I pull until the shell divides,
Then stick my stomach right inside.

Starfish (verse from The Mystery of the Clam)

I slowly soak up a juicy meal.
Leave the shell open – what a deal!

The Crab chants 'rip and tear, rip and tear, rip and tear' as the giant claws tear at the open air.

Crab (verse from The Mystery of the Clam)
I walk over sideways to the clam,
Using my eyestalks to watch where I am,
I use my claws to clip round the edges,
Slip them inside and use them like wedges,
When the clams open, I rip and tear,
Shredding all the food that is in there,
If you seen a clam that way my meal,
The edges are chipped and will not seal.

The Snail, which uses acid to penetrate the tough shell, repeats the phrase 'spit and drill, spit and drill.'

Snail (verse from The Mystery of the Clam)
On one big foot through the sand I crawl,
In search of clams, either large or small,
I wrap my foot all around the clam,
A slow hungry predator, I am,
I spit out acid to soften the shell,
Drill with my radula which works very well,
The nice round hole is just the perfect size,
The meal I pull out really satisfies!

The skit is an interesting way to present science content to the students, and the choice of drama could easily be simplified as entertaining. However, when I question Patty about her intent, she emphasizes the enormous amount of information presented through the format of the skit. This content information is woven into a story line that places all of the information in a context of interacting characters and provides the students with both conceptual understanding and a purpose for learning and memorizing facts. She notes that almost all of her skits are combined with a song of some sort that assists with memory of concepts and vocabulary. The song is included primarily to help

the children remember information, particularly vocabulary. Although the skit most likely aids with memorization as well, she is clear that her emphasis is on conceptual understanding, not memorization.

It's puzzle pieces that fit together, and if you just have all separate on the table, they're all still there, but fitting them together in a context – a systemic approach. Very little that we do in life stands alone - nothing. And yet, in education, we tend to want to teach things in little isolated chunks. When we teach it that way, I don't think the kids really do anything more than memorize it for that moment, but if we can get it integrated with other things, and get it in a proper context, then it actually becomes part of their concepts. It conceptualizes it a little better than memorizes it. That's what I guess I work for, is conceptualization, not mere memorization. (May 16)

Patty says that, "it's about the processing, about the understanding. Bringing it to them so that they can truly understand it and not at a superficial level. Trying to get them to understand things at a deeper level." She explains that when she introduces a skit, such as *The Mystery of the Clam*, she introduces an enormous amount of information in a short time and it is attainable to the children because it is presented in context rather than as isolated facts. Because the parts fit together into a story, the children are able to see the way things interact and begin to understand the purpose of those facts. In this instance, it is the adaptations of marine life such as crabs and snails. Those adaptations make sense, and are more memorable in the context of the skit; she purposefully uses the dramatic format rather than expository reading to develop conceptual understanding.

Critical Thinking through Simulations and Role Play

Patty uses simulations to engage the students in learning, allowing the children to absorb themselves in the many aspects of a particular situation and experience the problems and conflicts that arise from the environment. It is not a scripted play, but a recreated, interactive situation in which the children have room to make decisions and to think within a particular context. She speaks of a thematic unit on Pioneers in which the team goes "the whole nine yards" by allowing two entire weeks for simulation of pioneer life. For ten days, the students come to school dressed in clothing of the time, sit with their chairs pushed together as if they are benches, and write their assignments with slates on their laps. During the length of the unit, most of the activities the children participate in are typical of pioneer life, including reading from the McGuffy reader, making candles, washing their clothes with a wash board, and shucking corn.

Sometimes these simulated environments take the form of games, such as predator-prey, a dramatic game designed to help the students develop conceptual understanding of the food chain. To set the environment, Patty scatters the outdoor playground with popcorn before the lesson, and then assigns the majority of the students as animals at the bottom of the food chain as insects, five marked as sparrows, and two students at the top of the food chain as the hawks. The game resembles the traditional game of tag with an "it" chasing the others - except that all of the students are attempting to collect food in the midst of a multi-level chase. Each student has a plastic zip-lock bag marked with a solid line indicating the amount of food he or she needs to collect to "survive." The insects need to fill only a quarter of the bag with popcorn gathered from

the ground. The sparrows need to fill half of the bag with popcorn collected either from the ground or taken from the bag of any insects they are able to tag; and the hawks need to fill three-quarters of their bags with popcorn from either the ground or from the bags of any children they are able tag.

To a casual observer, watching the children running and screaming on the playground might seem to be a game "just for fun," but Patty considers this learning activity to be more than a game for entertainment. She explains that, "Even though it's a game, it's still role playing and it's still drama when they're acting it out." Patty carefully chooses this lesson to teach the concept of predator-prey relationships in the food chain, giving the children a common experience to talk about and discuss. The discussion, she insists, is crucial to conceptual development, while the role-playing adds deeper understanding of the situation and a new dimension to the discussion that could not be gained from reading alone. From this experience, they have a foundation for conceptual understanding of predator-prey relationships and are able to more clearly understand and discuss adaptive features, such as peripheral vision.

But even when we play the game at the party, with the predator-prey, they talked about the tension of how it felt having somebody over your shoulder, just waiting to nail you - how they were always looking around like this if they were lower on the food chain. They had to watch all the time. There was some really good discussion that came out of that, because we really put them in that position, versus just memorizing what the food chain is. It puts more reality into that and looking at each animal and it's nitch in that food chain and talking about, - O.K., why does a mouse have it's eyes right here? So it can see 360. Didn't you wish yours were out here? Didn't you see? You got nailed in the back because you didn't have that peripheral vision that went as far around. (May 16)

Patty also notes that simulation is important for adults as well as children, and offers this example from a recent Wetlands Workshop:

It's interesting because it works with adults too, because I just did a wetlands workshop, and we acted out a wetland, and they all became animals within the wetland. It was really interesting because we debriefed it afterwards. What did you see going on and what happened? One of the ladies said, "I was freaked out that the bird was going to get me the whole time. I was always conscious about where is he?" I said, "That's the reality of putting you in that situation. If I just said, 'this bird eats this, this bird eats this. .' When I put you in this situation, you get a much deeper understanding of what's going on. (May 16)

Patty is clear that the process is the most important part of the simulation activities and the follow-up discussion is as important to the learning as the actual dramatic reenactment. "You can process in the discussion, and sometimes that's our best stuff. They get stuck with the writing process sometimes, and they actually come up with better ideas sometimes in discussion because they're not limited by the physical and by having to figure out how to spell the word."

In addition to the organized simulations designed for larger groups, Patty uses role-playing to assist individual children. She admits there are some children who are capable of working through problems in their heads, but for others, the process of acting it out helps them think through their ideas. Problem solving in math is one area where this skill is quite useful. The children frequently act out the word problems, which is particularly helpful when they are unable to write in the math books, for students who cannot fully picture things in their heads, or for those who need to physically do something before they can express it verbally. She encourages the students that are 'stuck' to stand up and physically move around the room to understand the things that are

happening in the situation before they attempt an answer. The students stand up and walk across the room to Grandma's house, knock on the door, and ask for three cookies, and then continue to the neighbors house to ask for two more, and finally back home to give one each to Mom, Dad, and Susie. Acting out this process helps them think through the details of the problem and begin to understand what is happening so that they can transfer those ideas to numeric notation.

A similar process is also useful for individual students that are having difficulty with writing. Patty is working with one particularly creative child who is writing an original story and having some difficulty translating his ideas into narrative. To help this boy express his ideas, Patty asks him to act out the story: "Get up and do it. Show me what's happening. Show me with your hands." (May 16) She prompts him to physically acts out the story with talking, moving, and dialogue, as she transcribes his descriptions. From there, she shows him how to choose words from a thesaurus that will make a "simple sentence into a super sentence." For instance, as he leaned on the computer keyboard with his mouth, Patty helped him translate this action into words: "Gazing blankly at the radar screen, bored and sleepily yawning. When the midget-sized white dot evaporated from the screen. He blinked and looked closely. It was not there!" In this example, the student is able to think carefully about the details of his experience – leaning on a computer keyboard – and to articulate the details of that experience: "gazing blankly" is a stronger description than "looking," "bored and sleepily" show emotion, both "blinking" and "looking closely" show a reaction to the moment, and his final

thought, "it was not there!" shows surprise. The process of acting out the story he is creating allows the student to notice many of the subtle details that create good narrative.

Creative movement is also considered a form of drama, and it is one that Patty uses in her classroom to help children think about the complexities of a particular situation. The next section, *Motion in the Ocean*, is a vignette of a creative movement lesson designed to help students think about the ways marine animals interact with each other and the environment in an ocean habitat. In this lesson, each of the students assumes the role of a specific marine animal. After studying and researching the various animals, the students are given an extended period to "brainstorm" and explore their ideas with movement.

Motion in the Ocean

After nearly forty-five minutes of sharing word puzzles they created, the children are beginning to get restless, and Patty tells them to stand up and stretch for a few moments before they continue with the next activity. The children seem relieved to stand for a few moments, and begin stretching their arms and legs and rolling their shoulders. When they are seated on the carpet again around Patty's rocking chair, she divides the class into thirds, assigning a mix of boys and girls to each of three categories – creatures that live above the sand, in the water, or in the air. To each group she hands slips of paper with the names of various sea animals written on them. Using the creatures studied in the unit, the children are assigned to pantomime the movements of various creatures. As she hands out the slips of paper, there is some argument between Bill and Andy in the "above the sand" group about who will get the sea turtle. At one point, Bill is on the verge of tears. To resolve the conflict, the boys play rock paper scissors three times. Andy, the winner, chooses the slip he wants and both boys seem content to continue with the activity.

As the three groups are trying to organize themselves, Patty circulates through the room telling each group to work through the movements they will make. The children spend a few minutes reading their papers, and then two of the groups get up and begin experimenting with movements - wiggling their arms and legs or crawling on the floor.

Even though they were the first to receive their assignments, the third group is still carefully reading their papers and reading the information to each other. Finally, Andy lies down on his stomach and begins rocking back and forth with his weight resting on his forearms, pretending to nibble with his fingertips.

Across the room, Holly is standing up and floating around the room with her arms bent slightly at the elbows and flapping gently at her sides. As I watch her graceful movements, I wonder if she takes ballet. Mark is crawling on his stomach into my corner of the room; pulling his entire weight with his forearms with his legs fully extended behind him. I am amazed that he can move so rapidly in this position. Ellie, who is taking her role very seriously, has been curled in fetal position on the floor for some time and does not appear to be moving at all. The other students are scattered throughout the room, with varied levels of activity during the "brainstorming" time. There are nine students standing and a few are standing still, but the others are jumping, flapping, or scrambling around the room. Three students are lying face down with their bellies pressed against the floor, and a few others are squatting or crawling on their knees. Two students are just sitting as if they are trying to think of something to do. Although the noise level is gradually escalating, the children are engaged in the activity and their movements appear to be related to the initial assignment.

After fifteen minutes of 'brainstorming' and free exploration, Patty asks the students to pull their chairs to the front of the room so that the audience can sit in them. Typically the children sit on the floor around her rocking chair, but this arrangement with the chairs provides more structure and defines the "stage" for the activity. The children follow the directions promptly and within a few moments they are clustered together in the front corner of the room surrounding Patty.

When the children are quiet and ready to begin, Patty gives the directions for the performances:

First of all, you guys researched by reading your paper about your animal. You know according to that research, how that animal behaves. These are animals you have already studied. You have already figured out how your animal acts, and you worked out with your group how your animals interact with each other. You're going to show us your scene on your spot.

She calls Kathy's group, the 'above the sand' category, to begin and reminds the audience of children that all of the animals live above the sand. When the first group is standing, Patty reminds them to close their eyes like an actor would and 'get into' their characters. "You are no longer second graders. You are animals that live above the sand."

After her directions, the students in the first group begin to move quietly around their space. Two students are standing with their extended arms in front of them, opening and closing them like beaks. Another student is on his belly, two more are on their knees, and bird-like

screeches are coming from one of the students. After a few moments,

Patty shouts, "freeze" and the students stop their movements. She begins

reading the clues for the first animal:

My shell is a carapace
I'm a reddish brown
People catch me in shrimp nets and sharks eat me
Out of the water I eat jellyfish and Portuguese man-of-war
But near the shore I like to eat crabs
I crawl onto the beach to lay my eggs
I also am hurt because I eat trash.

The children answer in unison, "Sea turtle!" Patty prompts them further, "Who was behaving and acting like a sea turtle?" A child responds "Jessica" and Patty quickly moves on until all of the animals in the first group have been identified.

The second group is assigned to be animals that live under the sand. As they stand to find their places, Patty reminds the class that these are all animals that live under the sand, and then reminds the second group to close their eyes and "go into their characters." "Do not move in any way that is not the character." When this group begins, all five students begin pantomiming their animals simultaneously. Four of the children remain on the floor, but James is standing with his arms outstretched, moving rapidly in a circular motion. I know that he's not a bird because his group is 'animals under the sand' – but I have no idea what he is pantomiming. After a few moments, Patty commands the group to "FREEZE!" and comments that there is a lot of action happening in the

room - a lot of predator prey. She begins reading the clues for the first animal:

I am a boy crab
I have one big claw and one smaller claw
If I were a girl crab, both my claws would be the same size
I eat small bits of plants and animals that I find in the sand
I burrow in the sand to hide from the sun and also to wait
until all the birds can't see me.
I am dark brown during the day and light colored at night.

The students guess almost immediately that it is a fiddler crab because

Tommy was moving sideways and back, just like the Fiddler crab. Patty

continues immediately with the next hint:

I have a light-brown shell and a huge beige foot I drill holes in clams.
I plow through the sand looking for a clam.
Only the top of my shell shows above the sand.
Manta Rays like to eat me.
Native Americans used to eat me too.

As soon as Patty finishes reading the last line, the children shout together, "SARAH!" Patty prompts them further, "What was she? Yes, moon snail. How could you tell? What did she do?" The children are mumbling answers aloud but it is difficult to distinguish individual voices. Final Patty summarizes, "She would spit and drill!"

The third group is assigned the category 'animals under the water.' If I didn't know the set or the category before they began the pantomimes, I might have guessed they were farm or jungle animals. This group continues much like the other two groups, with all of the children

pantomiming for about a minute before Patty stops them to read the clues for the barnacle:

I live in a shell
I like to attach to hard things
I'm shaped like a volcano
I eat plankton
I catch the plankton with my feathery legs

As a group, the children are able to determine which student pantomimed each animal quite easily, and in many cases, they know the names of the animals as well. After all the groups are finished, Patty leads a discussion with the students and prompts them to describe the types of movements they saw that might give clues to the identity of the animals. Danny mentions the way Betty was drifting and floating slowly from side to side. Ellie makes an interesting connection and says: "What Pamela was doing reminded me of the barnacle song!" Patty follows immediately with another question, "How is that like a barnacle?" and Pamela responds with, "She was stuck there." This comment reminds all of the children of the Barnacle Song they learned earlier in the unit, and they spend the last few moments before lunch singing it with lilting, piratelike accents:

Barnacle Song

I'm a barnacle and I'm stuck right here
And I'll be right here if you come next year
I landed on my head that is really rude
So I use my feet to catch my food
They are feathery and long so I stick them out

To catch the plankton that floats about

Discussion

In the example above, the students in Patty's classroom are using creative movement to explore marine animals within their natural habitats, followed by a teacher-led debriefing session. The pantomiming activity seems to have fewer parameters, particularly in terms of student behavior, than most other assignments. It is evident that the students in her class are accustomed to following directions and abiding by the classroom rules. Other that the quickly resolved dispute over which student will be the sea turtle, there is no inappropriate behavior. Although the room is not completely quiet during the experimental time, the students remain on task and are taking the assignment seriously even in this unstructured environment.

The assignment is quite open-ended, with the directions being to "act out the animal they are given." The students are free to represent the particular animal any way that they feel is appropriate. Patty does not give specific directions for moving their bodies, positioning themselves in the room, or interacting with the other students. The students maintain ownership of their animals, and much of their assignment is to think about the characteristics of the animal and represent it with movement. Patty explains her intent for this activity:

Adaptation. They have to think about the behavior of the animals and that's real behavior specific because as the tide goes in and out, the behaviors change, and so, if you're behaving as that animal, you're gonna have to adapt your behaviors. (May 16)

This is not a simple assignment to imitate movements, but a higher-level thought process designed to promote conceptual understanding. Not only are the students required to

create movement that represents the characteristics of a given animal, they are also asked to adjust their behavior within an interactive environment. There are many variables within a role, including adaptive response to the environment and to the other animals in the habitat.

Patty clearly has a science objective in mind when using this lesson, but she makes use of teachable moments to help the students better understand how creative movement can be effective. She mentions that in years past she has had time on Fridays to focus on creative dramatics, but she does not currently have a structured program. However, when opportunities present themselves as the students are exploring creative movement she addresses things as they arise.

As we start to do something and I see somebody doing something and just being wild and crazy, that's when I stop and say, 'let's think about it. What would your character be feeling right now? I don't just sit down and say, so now we're going to do a play, let's talk about character growth. We don't. It's more like in the moment, but I do a lot of that in the moment teaching. When I see something, I can spin off of it, or if I see somebody that's doing something really well, then I say look – oh, how did you do that? What were you thinking about when you got started on that? I can spin off from what the kids are doing, but because we do things fairly frequently, those things arise. (May 16)

Each time a group performs, Patty reminds them to "go into your characters. Do not move in any way that is not the character." The children focus their body movements – use of limbs, speed of motion, position in space – on their knowledge of individual animals and their adaptation to the habitat. As a result, their movements range from lying completely still in fetal position to rapidly dragging themselves around the room with their forearms. Some students hardly move and others are moving frantically, but each is

noticing the details of animal behavior. In this instance, attention to detail is evident both in the ways the children create movement to represent their animals, and in the way they examine both the movement and the verbal clues to determine the animal portrayed.

The discussion allows the class to consider the movements of the other students as well as the verbal clues that describe each animal, and there are many opportunities for connections to prior learning. The debriefing also offers opportunities for the children to notice details, both from the movement of their classmates and from the oral descriptions that Patty reads to them. For instance, rather than using the generic term "crab," Patty refers to the fiddler crab, one of four types the students have studied. In the description she reads, she draws attention to the differences between male and female fiddler crabs, their diet, the way they hide from predators, and the way they change colors to adapt to the environment.

I am a boy crab
I have one big claw and one smaller claw
If I were a girl crab, both my claws would be the same size
I eat small bits of plants and animals that I find in the sand
I burrow in the sand to hide from the sun and also to wait until all the birds can't see me.
I am dark brown during the day and light colored at night.

The students were able to instantly identify the animal as a fiddler crab from the description, but also to identify the student, Tommy, who is assigned the role of fiddler crab, based on his sideways and back movement.

This particular activity is distinguished from a more generic game of charades by the strong emphasis on content knowledge. The animals are more specific than general – sea turtle rather than turtle, moon snail rather than snail, and fiddler crab rather than crab.

The informational sheets the students are given for research are written in a single-spaced 12 pt font – an indication that the text is not written for younger children or beginning readers. The vocabulary is advanced, the information is dense, and scientific drawings of each animal are included. The clues for the animals are detailed and content heavy, often talking about diet and movement, rather than simple visual descriptions. The following excerpt was given to the children for their research about barnacles:

Barnacles

Imagine spending most of your life standing on your head and eating with your feet! When you walk along the seashore, you can find barnacles on almost any solid surface that gets covered by saltwater. On rocks, dock pilings, boats, even mussels, you can find clusters of these hard, white, cone-like houses. That's where barnacles live, peeking out only when water covers them so they can filter food into their homes.

Barnacles are crustaceans, related to lobsters, crabs and shrimp. They look like tiny shrimp in their larval stage, where they swim as members of zooplankton in the ocean. When they are ready to settle down, they search for a suitable site, pulling themselves along by the adhesive tips of their antennae. Barnacles may take days to find just the right spot, allowing the currents to carry them from one spot to another.

After selecting a spot, the barnacle secures itself head-first to the surface with a glue. This glue is so strong, the barnacles' cone base is left behind long after it has died. Dentists are now studying this glue for its adhesive properties. Now the larva is ready to grow into an adult and build its tough housing.

The barnacle secretes calcium-hard plates, which totally encase them. Four more plates form a "door" which the barnacle can open or close, depending on the tide. When the tide goes out, the barnacle closes its shell to conserve moisture. As the tide comes in, a muscle opens up these plates, and the feathery, jointed legs of the barnacle sift the water for food. The legs also have gills for gas exchange.

As the barnacles grow, they must molt when the exoskeleton gets too small. But since they never leave their plated homes, they must enlarge their current one. No one is quite sure how the barnacle accomplishes this home renovation, but there is probably a chemical secretion that dissolves the inner layers while new material is added to the outside. Adapted from www.umassd.edu/Public/People/Kamaral/thesis/Barnacles.html

The clues that Patty reads aloud to the class use simpler vocabulary but they summarize the important content information about each animal. Her descriptions of the animals include a physical description, the food they eat, and the place they live. Patty's description of the barnacle also captures the important information, but with simpler vocabulary and in a riddle format.

Barnacle Riddle
I live in a shell
I like to attach to hard things
I'm shaped like a volcano
I eat plankton
I catch the plankton with my feathery legs

This same information about the barnacle is reinforced through the song the children have memorized:

Barnacle Song

I'm a barnacle and I'm stuck right here
And I'll be right here if you come next year
I landed on my head that is really rude
So I use my feet to catch my food
They are feathery and long so I stick them out
To catch the plankton that floats about

In addition to the content heavy written information and oral clues, Patty's intent for the activity is to develop conceptual understanding of adaptations to habitat, and the children are expected to pantomime their actions in ways that clearly illustrated their content knowledge. To do this, the children need to understand the physical appearance of the animal, where the animal lives, how it moves, what it eats, how it interacts with the habitat, and how it interacts with other animals. It becomes evident during the discussion that the children already have some understanding of the animals before they are given their assignments for the day, and they utilize their own background knowledge as well as the written clues to create movement. Their actions appear to show their understanding of the way each animal adapts to a particular habitat – above the sand, below the sand, or under the water. When I ask Patty if her intent for this activity is assessment, she said that it was not. Although she does watch to see if the children understand, her primary purpose for using creative movement in this way is to develop a concept of adaptation.

Summary

Patty uses drama in her classroom in a multitude of ways ranging from creative dramatics to writing and performing skits for her students. She plans drama activities for three basic purposes: 1) to teach expressive communication, 2) to transmit content information to her students, and 3) to foster critical thinking through simulations and role-play.

She believes that dramatic reading and storytelling are extremely important for fully understanding a story because much of the communication is done through emotion and characterization, both of which are more evident in dramatic reading. In her words: "We're living an experience, and an experience is going to have reactions, it's going to have a difference in tone, it's going to

have different inflections in it, and so that's why I do it. A story's not a blah group of sentences. A story is there to relate emotion as well as events." (May 16, 2005) To help the children grasp this concept, she models dramatic voices anytime she reads to them and has them read aloud with her to experience the pauses, inflection, and subtle changes in pitch and dynamics that are a part of good reading. Reader's theatre is also helpful in accomplishing this goal, and the students are coached to read expressively both in the work of others and when sharing their own writing.

Patty finds that using plays or skits to teach content information is very effective. Not only do the children receive a great deal of information in an engaging manner, but it is presented in a story line format that helps put isolated facts into context. The students are able to understand the concepts more thoroughly and to better see a purpose for and remember the facts when they are presented this way. Drama as an art allows communication to occur not only through the verbal text, but also through the communication of the voice, through body language, and through the interaction of many characters within the scene. A great deal of information can be received in this format. She also likes to use dress-a-character lectures to present information to students, particularly when they are learning the parts of something, like a clam or a spider. By adding one costume piece at a time, she is able to focus the attention of the students on individual parts and to explain the function of each in context.

Participating in dramatic activities through simulations, role-play and creative movement is helpful for the students to understand situations and to think critically about

them. Patty uses interactive simulations like recreating the Pioneer Days and participating in predator-prey games to let the students have an experience. When they have a common experience like these, the children are more fully able to understand the complexities of an environment. This understanding often triggers deep discussion and learning because the students have specific details to discuss – like the adaptation of peripheral vision for protection in the food chain. A similar experience occurs when the students use creative movement to recreate an ocean habitat. In addition to semi-structured group experiences, role-playing at an individual level may be useful for thinking about details as a pre-writing activity, or for thinking through complex problems in math.

Discussion and Conclusions

The purpose of this study is to examine teaching and learning in an exemplary, arts-infused elementary classroom. The arts, visual art, music and drama, are all distinct disciplines with separate concepts, principles, skills, and terminology. For this reason, it is difficult to generalize their likenesses without first discussing their differences. Eisner (1997) writes, "the forms we use to represent what we think – literal language, visual images, number, poetry – have an impact on how we think and what we can think about. If different forms of representation performed identical cognitive functions, then there would be no need to dance, compute, or draw." (pg. 349) He continues by adding that "each form of representation can be used in different ways, and each way calls on the use of different skills and forms of thinking." (pg. 352) The arts are all distinct forms of perceiving, thinking, and communicating. To fully use our minds and understand complexity, we need to perceive, think, and communicate through a variety of forms.

Gallas (1994) writes that children do not naturally limit themselves to the adult preferences for written word. Their understanding and communication is complex, and in addition to talking and writing, they express themselves through singing, dancing, and drawing. She explains that the arts "enable children to think about new knowledge in more complex and meaningful ways by transforming their understanding of difficult concepts into metaphoric language and acts." (pg. 111) The multi-arts curriculum in her classroom is intended to honor the understanding that comes naturally to children, and to use it to expand their knowledge in other areas. A similar philosophy is reflected in Patty Smith's classroom. She uses a curriculum infused with the arts to help children learn.

Because art, music, and drama are distinct disciplines, the ways they are used to perceive, think, and communicate are necessarily different, and these differences are evident in the classroom. Patty uses visual art in the classroom for three basic purposes: to help children understand content information, to help them organize their ideas, and to create experiences. Music is used to reinforce thematic units and concepts, to help children memorize information through singing, and as a means of synthesizing their learning in a creative way. Drama is used for expressive communication, to convey content information, and to help children think critically within a particular context.

Despite the differences in form, use and intent, there are some commonalities among the various arts activities in Patty's classroom. First, the majority of activities in which the children participate, including the arts activities, are open-ended assignments. The students are required to think critically and to be creative, and the outcomes of their work will vary widely throughout the class because they are not creating identical products. Second, Patty calls attention to details and helps the children to notice them by looking and listening carefully. Third, all of the activities in the classroom are grounded in content knowledge and are intended to help the students gain a stronger understanding of concepts.

Open-Ended Activity

Open-Ended Activities are those that do not have a pre-determined outcome.

They could and should have more than one possible solution, and completing activities of this type requires the students to be creative and to think critically. Gallas emphasizes the

importance of creative activities for developing higher-level thinking: "our understanding of thinking has been expanded over the years, and we now generally agree that the creative process is an integral part of higher-level thinking." (pg. 116)

Patty expands by saying that these types of assignments represent original, divergent student ideas. As a form of assessment, they show her that the students truly understand a concept because they can apply it in another situation. Her preference for using these types of activities is strongly rooted in her belief that they make children think more deeply. She explains:

Even when I taught kindergarten I quit doing the patterns because part of getting something on the page is planning. If I don't give you a pattern, then you have to think about the spatial relationships that go in there. You have to think about this huge sheet of paper and how do you get five body parts out of it, so there's all this planning that goes into it for kids to really try to figure it out. (May 16)

The nature of an open-ended assignment means that it can be approached many different ways and many different outcomes are acceptable. Perhaps one of the great controversies in the field of education is the issue of modifications for diverse learners, and open-ended assignments are naturally modified. The children in Patty's classroom receive support services that are a part of the larger school structure. There is an advanced math class for children that qualify, two children are pulled out of Language Arts daily for special education classes, and two more are pulled out twice per week for gifted and talented enrichment. Within her own classroom, Patty uses novels written at various reading levels to accommodate her students. However, the majority of the assignments in her classroom, and particularly those related to thematic units, are openended assignments and all of the students in the class receive the same instructions.

The open-ended nature is true for virtually all of the assignments in this classroom, but it is particularly evident in the art activities. In each instance, the children are given blank paper with instructions and parameters to draw or construct something specific. In the lesson on Georgia O'Keefe, the students are instructed to carefully examine flowers and to draw them in detail. There are no remedial assignments for lower performing students or enriched assignments for gifted students. The generic assignment to examine and draw allows the students to do so within the range of their abilities. Some students demonstrate more artistic talent than others, but the process of looking carefully is valuable to all of the children. The modifications that occur are not through the nature of the assignment, but through the revisions that Patty insists that students make to their work.

The lesson on Andy Warhol is much the same. The children began with blank paper and examine an object thoroughly before drawing it. Both the drawing and the accompanying poem are open-ended, calling for the students to think creatively. When Patty asks the students to draw to organize their ideas, they are pulling from their memories or their imaginations to create images representing their thoughts. They are not tracing, coloring, or even copying pictures that are drawn by someone else. The open-ended nature of the assignment encourages them to carefully plan the things they include in the picture.

In the assignments designed to aid conceptual understanding in a content area,

Patty also uses open-ended assignments that require the children to think about the

important information and how it fits together into a whole. In the instance of the plant

collages, she asks the students to demonstrate form and function of the various types of plants by choosing different materials, like a straw, to represent the function of a plant part, like a stem. The act of thinking about the function and how to put the pieces into a whole separate this activity from a craft activity that required the students to copy a model made by the teacher.

Many of the music activities are open-ended as well. Listening to music is a naturally open-ended activity; the listener can perceive many different things and some students will perceive more than others. The discussion and the creative writing that often follow the guided listening are also naturally open-ended assignments, allowing the children to express opinions, suggestions, or connections. Although memorizing songs is not an open-ended activity, Patty uses her own songs to model the process for her students. The students have many opportunities to write song lyrics, and writing original songs is an extremely complex and open-ended activity that can allow for different outcomes from different students. Consider this example of three students who wrote very different songs about The Big Bad Wolf:

The Big Bad Wolf - Danny
Mean, grumpy wolf
Smelly, big wolf
Walking to Grandma's House
Eating at Grandma's House
Eating and sleeping
Growling and chewing
Eating the Grandma
Eating the Grandma

The Big Bad Wolf - Taylor
Sneaky old wolf
Grayish brown wolf
In the woods

On the trail
Chasing and catching
Running and pouncing
Now he won't
Now he won't

The Big Bad Wolf – Timothy

Hungry mean wolf
Big scary Wolf
Living in the cave
Living in the forest
Scaring and attacking
Fighting and eating
Run away wolf
Bye- bye wolfy

Each of the students demonstrates some understanding of the character of the big bad wolf – hungry, scary, mean, sneaky, grumpy; as well as his actions – attacking, fighting, eating, growling, chewing, running, pouncing, yet their songs are quite different. The structure of the class period allows the students even more creative freedom. Some of the students need the entire time to write a single verse and others need only a few moments. Patty allows but does not require some students to write additional songs. Others choose to spend extra time adding detail to their pictures and less time on the lyrics. In the case of Derek who quickly completes two songs and needs an extra challenge, Patty allows him to experiment with the keyboard, picking out the melody of the tune to accompany the class singing.

Many of the dramatic activities used in Patty's classroom, and particularly those that involve role-play, are open-ended assignments that allow the children to synthesize information and create new products. Rather than for memorization, Patty offers drama to help the students communicate expressively, to teach concepts in the academic

subjects, and to help the children think critically. In each instance, there are opportunities for creative input from the students and multiple outcomes based on their input. Patty models expressive communication for her students each time she reads to them or tells them a story – several times each day. In addition to this modeling, they practice reading expressively with Patty's guidance during the choral reading, and receive constructive feedback on both their reading and their writing in the author's chair. Reading expressively by using inflection, tone, pitch, or characterizing the dialogue is an artistic interpretation of the story. It requires that the reader think about the emotion of each character, reaction to the action, and interaction among characters. It is a complex task with more than one possible outcome and it adds depth of understanding for both the reader and the audience. She suggests "Open-ended is more important because it's more divergent. It's that same thing about learning all those miniscule little facts, and you can learn one way to do something, and that really doesn't suit you in life." (May 16)

All of the simulation and role-play activities were open-ended in that they allow multiple outcomes, they allow the students to make choices that impacted the end product, and they foster critical thinking for the students. The Pioneer unit is a simulation activity that allows the students to assume the role of pioneer children by dressing and acting in a particular way for an extended period of time. Both the predator-prey game and the creative movement activity place the students in a defined context and ask them to respond within that environment. Within this simulated environment, the children make decisions based on their own position in the food chain, knowing that their decisions will be altered by the actions of others. Each time the game is played, it has a

different outcome. In all three instances, the simulations allow the children to make choices and to develop a conceptual understanding of a particular environment. The open-ended nature of the activities leads to complex discussions of the problems within that particular situation. The students discuss the things that they noticed during the game, like the tension of being constantly watched, and use this as a springboard for discussion about predator-prey relationships. This is quite different from answering factual questions about which animals eat other animals.

Creative writing is by nature an open-ended activity and the various products that students produce for a single assignment will vary widely, even with carefully defined parameters. Patty uses role-play to help a single student translate his ideas into written words, by asking him to physically act out he story he imagined and then to describe his own actions in words. The actions, the words, and the plot were original, and the unique way that he combined them not only lead to a written narrative, but also allowed his "rough draft" to take the form of a skit as he worked through his ideas. In the instance of the Water Cycle Story, Patty elaborately modeled the type of story she wanted the students to write through dramatic storytelling. From this, they were able to both write stories with detail, but also to read their own stories dramatically to share with an audience.

Attention to Detail

Although open-ended activities require higher-level thought on the part of the student, it could be argued that it is more difficult to scaffold these activities so that students are successful. Giving the students a blank sheet of paper and asking them to

draw a picture, compose a song, or write a play can be overwhelming because there are no parameters. Patty speaks repeatedly about the importance of modeling the assignments for students before they begin working, drawing attention to the details she would like them to include. Especially noticeable about the modeling that Patty does with her students is that it is primarily oral. She elaborately models the products she would like from her students, believing that the oral brainstorming, discussion, and explanation of the assignment are necessary to get the creative process started. By orally modeling she gives her students many ideas to think about and include in their work, but does not give them a physical model to copy. This is done intentionally so that their products will be original and will demonstrate complex thought and learning.

In addition to the oral modeling, a great deal of revision occurs in this classroom as Patty calls attention to the details that distinguish quality and accuracy. During one morning revising session, Patty stands in the classroom for over an hour as students bring their poems to her for revisions. At one point, there are over ten students waiting to show their work. In addition to the typical edits for capitalization and spelling, she gives extensive feedback on using descriptive words and on capturing the essence of the animals about which they are writing. She is direct and honest with the students, pushing them to improve their work. When Derek brings a haiku with the phrase "lots of" included, Patty tells him it is "really simplistic. Think of a better way to say that." Danny used the descriptions "moving and floating" and Patty pushes him to find a better way to say it. When he finally comes up with "drifting" she responds, "Yes, I would choose that instead. It shows movement." Ellie's poem about sea turtles includes the

line: "swimming and digging; always there." Patty reminds her that sea turtles are an endangered species and they aren't always there. The line must be changed. (May 10)

The students also spend considerable time revising their own work and sharing it with their peers. During the writer's workshop time it is not uncommon to see children reading their own stories aloud through a 'whisper phone' made from PVC pipe, or reading them to a partner to receive constructive feedback. Frequently, the children have the opportunity to share their work with the entire class through the author's chair, a little red stool that sits in the front of the room next to Patty's rocking chair. As they take turns reading drafts of their writing, the other students in the class listen for the details of the pieces they have written or the way they are reading, and offer comments and complements, like: "you used 'then' too much," "I really like that, I was surprised that he was afraid of guns," "I like that you used both of your siblings, not just one," "I noticed that you had a little trouble reading at the end," or "I like that yours is funny." Patty also offers feedback to the students as they share their work, taking the opportunity to reinforce concepts for the class as she points out the use of literary elements like alliteration, rhyme, or voice in the students' work.

This attention to detail is evident in the arts activities as well as in the general classroom. Maxine Greene writes that this perception is of importance to authentic learning:

I believe that, when consciousness is opened to the appearances and to the sounds of things, when children are encouraged not simply to perform correctly, to demonstrate sets of skills or competencies, but to perceive and name dimensions of their lived worlds, they are far more likely to pose the questions in which authentic learning begins. (pg. 62) (Greene, 2001)

Particularly with visual art, Patty shows the children how to look and notice details in the world around them. Patty explains the revision of a simple insect drawing: "How long should the legs on an insect be? They'll make them short, fat and stubby, and you'll say now look at those little insects - this little plastic one. [insect] Do your legs look like that?" (May 16) When the students construct three-dimensional models, attention to detail and accuracy is important. Here Patty explains to a student the importance of placing the legs correctly on a crab model: "First of all, are all these legs coming out of the top, or do you need some coming out of the bottom? Only two come out the top and the other four come out the bottom, and the bottom two have to have what on them?" (April 21)

Patty believes that attention to detail through artwork and drawing improves the quality of student writing. She explains that showing the children a picture of an object will trigger much more response than asking them to pull descriptions from their heads. Showing them the physical object to observe adds another dimension because they can touch, feel, and weigh it to get a multi-sensory experience. This is particularly evident in the lessons on Georgia O'Keefe and Andy Warhol. As Patty teaches the class about the artists, she draws attention to the details that characterize the work – like the bright, bold colors that Warhol chooses. This attention to detail is noticeable in the drawings the students create. They spend considerable time in both lessons examining objects and carefully drawing them, enlarging the details on the page.

However, the students do not need to physically examine an object to benefit from using drawing before they write. Patty also has them draw to organize their ideas as they

think through the details of the things they would like to express. She says that the children pay more attention to detail when they draw a picture, and the characters they draw help stimulate the details and help them write descriptive words. When the students write character sketches, they first draw or paint a symbolic representation of the character to help them think about the details they need to include in their writing. The same is true for writing the spring break postcards and the timeline on the history of chocolate.

With music, attention to detail is most evident in the songs written by the teacher and the students. The song that accompanies the skit, *The Mystery of the Clam*, contains four verses that describe how each of the major characters eats a clam. The rhythmic chants convey a great deal of content information, and are intended to help the students remember small details. This verse written about the crab helps the students remember how it walks, why it uses eyestalks, and how it uses claws to rip and tear the edges of the clamshell.

I walk over sideways to the clam,
Using my eyestalks to watch where I am,
I use my claws to clip round the edges,
Slip them inside and use them like wedges,
When the clams open, I rip and tear,
Shredding all the food that is in there,
I you seen a clam that was my meal,
The edges are chipped and will not seal.

Song writing is a complex activity that must consider a number of variables, and this same attention to detail is evident in the songs that the children write. Not only does Patty have her students include details about the concept they are trying to convey, such

as descriptive words to summarize a character, but she also asks them to notice details of many other elements. When she introduces this activity she asks them to distinguish between the melody and the lyrics of a song and to listen to repetition in both the melody and the text. She also spends a great deal of time clapping the syllables in words to help the children learn to listen to individual sounds and match these with the rhythm of the melody. The template for the song suggests specific types of words, like adjectives, verbs, nouns, and prepositional phrases to structure the lyrics. Patty reinforces all of these elements both in the way that she presents the lesson to the children, and in the way she asks them to revise their original drafts.

Just as she does with art and music, Patty encourages the students to listen for detail in dramatic performances. This is evident particularly in the discussions that follow simulations, as well as in the revision process of creative work. Following the predator-prey game, Patty asks the children to share the details of the things they remember as she leads a complex discussion. The same could be said for the other simulation activities, both group and individual. In the example of the student that writes his creative story by writing down the details of his own movements, thoughts, and actions, there is perhaps even more attention to detail. As his draft is further revised with a thesaurus to include words that are more descriptive.

In the examples of expressive communication such as storytelling, creative writing and choral reading, it can be said that attention to detail is a consistent theme running through the lessons. After Patty finishes the performance of her own version of the Life Cycle of a Water Molecule, she asks the children to share the details they can

remember from the story and to talk about the emotions that are evoked by certain things. In the instances of student-authors reading their work, they were encouraged to share their drafts with the class, receiving comments and complements on their work from the others. The class actively listened to the details of each story and provided suggestions and insight such as "you had good transitions." The following quote was made to the class after they finished offering suggestions to a student-author. It was one of many similar ones I hear throughout the semester. "You are great listeners. You are listening for details, and are able to give examples from the work to support your comments." (March 29) After this particular sharing session, Patty encouraged many students to go back and read their work aloud, listening for details, either by listening to themselves, or by reading aloud to partners.

Grounded in Content

The third theme that runs throughout all of the arts activities in Patty's classroom is that they are grounded in content knowledge. Patty's own content knowledge is remarkable, particularly for an elementary teacher, and this knowledge is reflected in each of the activities and assignments that she plans for her students. She has training in art, music, and drama and is able to integrate these arts into the core content areas of language arts, math, social studies, and science. With a Master's degree in reading difficulties, Patty is quite strong in Language Arts content, and she has established herself as an outstanding presenter and consultant in Math and Science education. This extensive

background crosses a number of disciplines and makes her ideally suited to design elementary curriculum that is strongly grounded in content.

Quite clearly, Patty uses art in the classroom to help children notice details and organize their ideas in ways that reinforce these key concepts, and she designs curricular activities intended to help her students to understand concepts. The drawings and models of insects, crabs, and plants are all help the students understand science concepts. By making original artwork, the students are forced to think about content information and create a product that demonstrates that understanding. Art, and particularly drawing, is used quite often with the writing curriculum and it is seen as a fundamental step in developing strong writing skills in the children. Patty asks the children to look carefully and notice details. These perceptions are transferred to writing and are evident in the descriptive words that the children choose. Consider this poem a student writes about a single Hershey's kiss, where she includes a physical description of the candy, the texture of the paper, the smell, the taste, and even a hint that it will not last long.

Golden triangle bell
Krinkly, wrinkly wrapper
Little paper ribbon
Strong chocolaty smell
Simple clever open
Peek in a little
Sweet and yummy
Gulp! Kiss gone.

The music activities, and particularly the songs, are laden with content information as well. The songs that Patty writes help the children learn and remember science information like the stages of the water cycle or the parts of a spider. They

include vocabulary and key concepts that are reinforced each time the children sing them, and the children sometimes sing and remember them for years. The songs the children write are used not only as a creative writing exercise, but also to help them synthesize content information. In the instance of the character sketch songs, the children consider many complex variables like syllables, part of speech, rhythm, meter, and cadence in addition to capturing the essence of a character in a few words. Consider this song about Goldilocks that describes her character as well as her actions.

Notty sneaky Goldilocks
That's her Goldilocks
Walking through the woods
Breaking into their house
Eating and sitting
Sleeping and running
Out of the house
Back to home

Regardless of the purpose or circumstance, all of the dramatic activities are strongly linked to content learning in math, science, language arts, social studies, and sometimes theatre. Science content and concepts are reinforced in many of the activities, including the marine life creative movement activity, the predator-prey game, the dramatic telling of the *Life Cycle of a Water Molecule*, through dress-up lectures, and through the dramatic skit, *What Happened to the Clam?* Social studies content is introduced in the Pioneer Life unit, and mathematical thinking is reinforced through individual role-play and re-enactments. Language Arts skills, including reading, writing, listening, and speaking, are used and refined throughout virtually all of the lessons that include drama. The students listen to dramatic modeling through the storytelling, the

author's chair, and the skit. They practice both reading and speaking through sharing their own written works and through the choral reading lead by Patty, and are given opportunities to write creative stories that showed expression and detail. Drama content is reinforced as it occurs, and primarily through the focus on appropriate movements to express mood or action in the creative movement activities.

Summary

The various arts allow children to perceive, think, and communicate in ways that are natural to childhood. As Gallas explains:

We overload children with words and words and words about every conceivable subject, and these words represent the limited communication structure of the adult world. They do not even slightly acknowledge the more expansive system of expression, communication, and problem solving that children possess when they begin school. (pg. 116)

Patty uses art, music, and drama extensively in her classroom and for a variety of different reasons, but all of them are intended to enhance teaching and learning in her classroom. She uses art to help children learn and understand concepts, to help them organize their ideas, and to let them have experiences before they write. Music is used to reinforce thematic units, to help with memorization and vocabulary, and as a creative writing activity. Drama helps the children to communicate expressively, to understand content information, and to think critically within a particular context. The arts activities in Patty's classroom are not an extra layer that she adds to the top of her curriculum. They are an integral part of it, and the activities retain many of the qualities one might expect to find in good teaching in general. First, most of the activities are open-ended

assignments that require the students to think critically and to be creative. Second, Patty helps the students to notice detail. Third, all of the activities are grounded in content and intended to improve student learning, particularly in the four core subjects. In this classroom setting, the arts are infused innovatively and effectively by an exceptional teacher.

Chapter 5

Conclusions and Implications

During the past decade, initiatives to infuse the arts into the core academic subjects have appeared throughout the nation. Many of these initiatives are district or state initiatives, or arts partnerships implemented for the purpose of raising student achievement and increasing motivation among students. Assessments report positive findings on the success of arts integration programs in many instances. However, the majority of these studies are based on student performance as measured by standardized tests, surveys of both teacher and student attitudes, or checklists of behavioral traits. A growing body of research comprised of experimental studies linking specific pedagogical techniques, such as using drama to increase story comprehension, is also beginning to emerge. There is also a sizable body of literature describing the structure of individual programs, particularly the organization, funding, and assessment of such programs. Even though research in the field of arts and learning is continuing to grow, very few studies exist that describe the specific arts activities that occur within a complex classroom environment.

This study examined teaching and learning through the arts in an exemplary elementary classroom. Specifically, the case study examined the particular ways that an exemplary teacher uses art, music, and drama in her self-contained classroom, and why she chooses to do them in a particular way. One primary and three sub- questions guided investigation:

- How do teaching and learning occur in an exemplary, arts-infused elementary classroom?
 - o How is art used in the classroom?
 - o How is music used in the classroom?
 - How is drama used in the classroom?

Patty is a general elementary teacher assigned to teach language arts, social studies, math, and science in a self-contained second grade classroom. She was identified as exemplary by her professional accomplishments, and chosen for the study because she integrates art, music, and drama into many aspects of the general curriculum. This case is of particular interest because the participant is an exemplary educator and it is assumed that many of the curricular activities in her classroom are of high quality. All of the activities used in her classroom are a result of her professional judgment, training, and vision to create an integrated curriculum.

Data was collected from classroom observations, interviews, and documents to construct a qualitative case study. The case study includes narrative vignettes of teaching and learning in the classroom, extended quotes from the participant, and analysis from the researcher. The teacher-participant organizes the curriculum around interdisciplinary themes. During the course of this investigation, lessons from several thematic units were observed: poetry/creative writing, chocolate, ocean life, the water cycle, insects, and fairy tales. The poetry/creative writing unit was extended throughout the entire school year and often overlapped with the other units, each of which were limited to a shorter time frame of three to six weeks.

In each of the units, students engaged in activities that involved art, music, and drama. Analysis of the data concluded that three themes were evident throughout the majority of the activities.

- First, virtually all of the assignments were open-ended, allowing the students to create original works in art, music, and drama. They spent relatively little time copying or memorizing the work of others.
- Second, the teacher spent considerable time drawing attention to details, both visually and orally, asking the students to notice the details and to make them evident in their own work.
- Third, all of the arts assignments were designed to reinforce content learning within the integrated unit.

In short, the arts activities met many of the criteria for quality curriculum that could be expected from more traditional methods – they were designed to teach content information and they required the students to use higher-level thinking. The same high standards were held for activities in art, music, and drama that could be expected in more traditional forms of assessment.

Conclusions

In addition to the three themes that emerged as common threads among the arts activities in this classroom, several commonalities pertaining to the use of each of the arts: art, music, and drama, can be identified. The teacher in this study consistently incorporated drawing with writing, allowing the students to create original artwork to accompany their stories and poems, and integrated art history lessons on well-known

artists throughout the traditional curriculum. Music or singing was used primarily as a way to help children remember content information, or to help them synthesize information by writing song lyrics. Drama was used both by the teacher as a way to present new information, and as a creative activity in which students could participate and explore content learning. The following generalizations can be drawn from this case study:

1. Open-Ended Activities

- a. The students drew original pictures to accompany virtually all of their writing assignments. The students did not color, trace or copy drawings from templates or worksheets.
- b. The children wrote 'piggyback' songs several times as part of the creative writing unit. During this process they were forced to synthesize content information into a song template.
- c. The students participated in simulations and creative movement activities that allowed them to make decisions and think critically within a defined context.
- d. Because the majority of the art, music, and drama activities were openended assignments, they allowed the students opportunities to use their creative abilities and required them to use higher-level thinking skills.

2. Attention to Detail

- a. On several occasions, the students were asked to draw detailed pictures of actual objects before they began writing. The children were deliberately instructed to complete the drawings first because it helped them to carefully examine and focus on the details of the object about which they were writing.
- b. The teacher particularly focused song-writing activities on noticing the syllables of both the melody and the text of the song. The children sang and clapped syllables throughout the year to develop the ability to discriminate the syllables.
- c. To encourage creativity and originality in student work, the teacher elaborately discusses and models assignments for the students before they begin working, but she does not make visual models or templates for them to copy.
- d. The teacher designs instruction that helps the children notice details. This was evidenced in the art lessons through the detailed drawings, in music through clapping syllables and writing songs that fit within a framework, and in drama with pantomimes that mimicked the movements of marine life.
- e. The children spent considerable time revising their work and were encouraged to share their products with the class. Student artwork was displayed both in the hallway and around the room, and original songs and creative drama were performed for the class on an ongoing basis.

3. Grounded in Content

- a. The teacher has an interest in art and art history, and throughout the year she incorporates lessons on the lives and works of well-known artists. The children view work created by the artist and then create their own original artwork in a similar style.
- b. The teacher frequently wrote and taught 'piggyback' songs, or songs with new lyrics written to familiar tunes, to help the students learn and remember content information, concepts, and vocabulary.
- c. Song writing was incorporated into the poetry/creative writing unit and also with the thematic units on chocolate, fairy tales, and marine life. The same song writing activity was used in the different context of these thematic units and allowed the children to practice the same writing skill while synthesizing new concepts.
- d. The teacher wrote and performed a dramatic skit to engage the children in a new unit and to help them absorb content information.
- e. The children engaged in dramatic play to demonstrate their knowledge of content information.
- f. The teacher has extensive content knowledge and frequently researches new topics before attempting to teach them. She uses this knowledge to design curricular activities that are developmentally appropriate as well as rich in content information.

- g. The art, music, and drama activities in this particular classroom are rich in content information and contribute to learning in the core academic subjects.
- h. Although content learning in the core subjects is strong, concepts and skills specific to the arts are secondary and not adequate to replace specialized courses in art, music, and drama.

<u>Implications for the Field</u>

This study contributes to the arts and learning field by providing qualitative research into the particulars of arts-infused curricular activities within an elementary classroom. The detailed descriptions and insight provided by the teacher-participant and the researcher are expected to open an academic discussion of the many ways the arts can be used within the traditional self-contained classroom, the purpose for doing so, and specific instructional strategies that maximize learning. Quantitative studies that attempt to prove causality through a specific instructional method are necessarily limited by many variables, including the students in each group, and particularly the teacher for each study. The teacher is an important variable in the quality of instruction delivered, and the details of this variable are most easily captured through a qualitative study. Academic discourse on the subtle details that distinguish this particular arts-infused classroom from others will help researchers begin to articulate quality teaching through the arts.

The findings have potential use for pre-service teacher education and for the professional development of practicing teachers. Because the teacher in the study is an

exemplary teacher, her practice can serve as a model for professional educators. The art, music, and drama activities that she designs and uses in her elementary classroom are developmentally appropriate, rich in content information, open-ended, and encourage students to notice details. In addition to the activities described, some of the pedagogical practices that she uses may be of importance to practicing teachers, particularly the way she uses drawing as a pre-writing activity to help students examine objects carefully, the way she elaborately discusses and models assignments before allowing students to work independently, the way she asks the students to write original song lyrics rather than asking them to memorize pre-composed songs, and the way she allows the children to revise and share their work with the class.

Limitations

All qualitative research is naturally limited by the ability of the researcher to capture, both in perception and in narrative, the rich detail that distinguishes it from quantitative studies. This is perhaps even more so with a qualitative study about the arts. Each of the arts is a language of its own that is perhaps best expressed in that art form. Although narrative inquiry offers many opportunities for the researcher to convey the nuances that create learning through the arts, in the translation from art, music, and drama to written text, many of the details are lost. An arts-infused classroom is a multi-sensory experience with many sights, sounds, and even smells happening simultaneously, and as with most classrooms, each has a unique atmosphere that can be sensed upon entering the room. It is impossible to capture all of the nuances that create the arts-infused classroom, and the lens of the researcher ultimately shapes the direction of the study. Although the

observer can perceive many of these details at once, almost certainly many others are lost, while others may be perceived but not captured in writing. The details that are noticed are most likely those with which the researcher is familiar or expecting, while others may be overlooked. The overly familiar details may seem obvious and omitted because they are unremarkable.

Yet another limitation of this study is the necessarily small and unique sample size. Because this case study was limited to a single classroom within a unique school district, the conditions under which it thrives, as well as the specific arts-infused activities and strategies, are not easily replicated in other circumstances. The limited sample size also prevents the researcher from drawing large generalizations about arts-infused curriculum within all exemplary elementary classrooms. The findings of the study can only hope to illuminate the themes that create this unique environment and offer it as a model for exemplary instruction.

The qualitative design of this study narrows the focus to one of exploration within a single classroom. The nature of this research precludes it from any attempts to establish causality. No attempts were made to prove that arts-infused instruction is superior to other forms of instruction or that specific instructional strategies are more effective than others. No attempts were made to show that instruction through the arts in this particular classroom is superior to arts-infused instruction in other classrooms. No attempts were made to judge learning outcomes, either in terms of individual student progress or in comparison of students by standardized test scores. In essence, this study is bounded by

the researcher's attempts to describe and understand the specific activities used for instruction.

Recommendations for Further Research

This qualitative investigation into arts-infused teaching and learning in an exemplary elementary classroom is unique to the field. The findings of this study serve as an introduction to the complexities of learning through the arts within a self-contained classroom, and offer multiple opportunities for research in teacher education. Further studies of this type are needed to explore quality curriculum infused with the arts, particularly in exemplary classrooms. In addition to case studies of exemplary classrooms, case studies exploring teaching and learning through typical classrooms infused with the arts will provide insight into instructional practice in a variety of settings. Research on pre-service teachers and their use of arts-infused curriculum is also missing from the field. There is a particular need for case studies that explore the specific teaching strategies and curricular activities that pre-service teachers use, how they scaffold or instruct these activities for their students, and why they make decisions about each activity. More research of this type may confirm Eisner's (1997) assumption:

It is unfortunate that the resource-rich environments that characterize good preschools and kindergartens are typically neutralized as young children move up into the grades. We would do better, I believe, to push the best features of kindergarten upward into the grades than to push the grades into the kindergarten. (Pg 352)

Appendix A: Cognitive Development

Cognitive Growth

There may be some truth to the popular slogan, Music Makes You Smarter, or at least there is increasing evidence that performing music cause the brain to grow and develop in unique ways. In an overview of the field, neurophysiologist and brain researcher Norman Weinberger has offered a more holistic picture of how music, in particular, functions in the brain and the role music plays in the development of cognition. His research explores the biological and neurological, as opposed to cultural, importance of studying music. He concludes that vocal and instrumental performance provides a "complete mind/brain workout" because it engages many areas of the brain simultaneously, and because it stimulates the growth of new connections, (synapses) between brain cells, or neurons. Music performance may require use of multiple parts of the brain, including centers for sensory and perception, cognition, planning movements, fine and gross muscle coordination, evaluation of behavior, pleasure, learning, and Weinberger's implications for further research indicate that there is little memory. collaboration between arts education researchers and neuroscientists, and there are a significant number of studies in arts education that remain unpublished, and as a result, very little is know about how arts education relates to other areas of education as well as child development. (Weinberger, 1998)

Cognitive Transfer

The work of Weinberger offers evidence that the study of music stimulates brain growth and influences the way the brain develops, and that performing music is a complex task that uses many parts of the brain simultaneously. However, establishing that music can *cause* student performance to increase in other areas, or cause a transfer in learning, and improve school performance is still widely debated. Studies conducted by Rauscher showed that listening to a Mozart piano sonata improved spatial reasoning in college students for short periods of time. Before the study could be replicated multiple times to ensure reliability, it gained popularity with the media and generated a storm of reports on the "Mozart effect" leading eventually to the wide-spread policy of distributing classical music CDs to newborn babies in Georgia and Michigan, in an attempt to raise IQ. (Winner & Hetland, 1999) Although there may eventually be research supporting the transfer of learning from studying the arts to learning in other areas, the research in this field is limited. Researchers strongly advise against developing rationales for arts education based on studies of cognitive transfer. The findings of the research of the effects of arts instruction on academic performance can be compiled into two basic categories: 1) Causation - experimental studies that show study in the arts causes transfer of learning into other areas, and 2) Correlation - studies that correlate study in the arts with achievement.

Project Zero's Reviewing Education and the Arts Project (REAP) published *The*Arts and Academic Achievement: What the Research Shows, a major report examining

research findings related to causation, or study in the arts and cognitive transfer. The REAP report screened over eleven thousand reports, papers, and presentations written between 1950-1999 that claim study in the arts lead to some form of academic improvement, and selected one hundred eighty-eight of them for review, based on the design of the methodology. The sample was limited to statistical reports investigating the relationship between at least one art form and at least one academic area. The findings show three reliable causal links for learning in the arts: 1) listening to music and spatialtemporal reasoning, 2) learning to play music and spatial reasoning, and 3) classroom drama and verbal skills. Two additional areas show promise for further research, but due to limited studies, do not yield conclusive results: 1) learning to play music and mathematics, and 2) dance and nonverbal reasoning. The report concludes that there are many benefits to including the arts in the curriculum, but too little research is available to make broad generalizations about study in the arts and academic achievement. The research team insisted that rationales for the arts in education should not be based on the statistical relationships between the study of arts and learning in other areas, but on the intrinsic value of the arts in education. (Hetland & Winner, 2001)

Appendix B: Learning Theories

Multiple Intelligence Theory

Initially introduced over twenty years ago, Gardner's theory of Multiple Intelligences (Gardner, 1983) gained increasing attention because it expanded the contemporary views of intelligence to include distinct types of intelligence: Verbal, Spatial, Musical, Bodily-Kinesthetic, Logical, Interpersonal, and Intrapersonal. The theory of Multiple Intelligences is not actually a theory of how learning occurs, but a theory of distinct types of intelligence originating in different locations in the brain. Gardner asserts that most individuals possess each type of intelligence, but all minds are quite different for both genetic and environmental reasons. Many students show distinct strengths in some types of intelligence and weakness in others. He profiles the intellectual awareness of children at ages five and ten, noting a distinct difference in the ways learning manifests itself. The younger children have very little awareness of culturally defined domains, but tend to be more attracted to or interested in certain types of activities, even if they are not proficient in specific skills. The older children begin to become aware of specific domains, and attempt to gain expertise in the skills and concepts specific to them. (Gardner, 1993)

This theory has two major implications for arts education. First, several of the intelligences can be developed directly through education in the arts. Musical intelligence could be developed directly through music instruction just as bodily-kinesthetic intelligence could be developed through training in dance, verbal intelligence

through training in drama, and spatial intelligence through instruction in art. Perhaps even more important for arts education, is the concept that discipline-based arts education could foster growth in several types of intelligence. For example, discipline-based music instruction incorporates music performance as well as instruction in the history of music, the aesthetics of music, and the criticism of music. The different intelligences, as Gardner has demonstrated, originate in distinctly different portions of the brain, and music performance, as Weinberger's research has shown, (Weinberger, 1998) is a complex task involving many portions of the brain simultaneously. It could be argued that music education can be used to develop the innate intelligences of many students, not only because it nurtures musical intelligence; but also logical intelligence for reading notation and studying music theory; kinesthetic intelligence for playing an instrument; verbal intelligence for singing, as well as studying music history and culture; intrapersonal intelligence for projecting emotions into performance; interpersonal intelligence for communicating with an audience; and, as concluded by the REAP report, (Hetland & Winner, 2001) listening to music and playing an instrument have been shown to increase spatial ability, at least for short periods of time. Similar arguments could be made for discipline-based instruction in drama, dance, and visual art. Second, Multiple Intelligence theory has had a profound influence over the way educators think about instruction and discuss how things should be taught. Gardner argues for a "school of the future" that not only structures time and activity differently from more traditional schools, but also moves away from uniform teaching and learning, and moves toward an individual-centered learning environment. He insists that the traditional subjects can be

taught using different methods that are both "intelligence-fair" and developmentally appropriate. The arts can be particularly useful in restructuring these elements of a school environment because they can be used as modes of presenting information, of assessing student understanding, as well as developing students' natural intelligences. (Gardner, 1993) There is evidence that Multiple Intelligence theory is being applied in schools across the nation and that the arts are used to put the theory into practice. A survey of three hundred school districts that value the arts concluded that Gardner's theory has "deeply affected philosophies and programs in many school districts." (Pg. 10) (Arts Education Partnership & President's Committee on the Arts and the Humanities, 1999)

Learning Styles

Receiving and processing information is a fundamental step in the learning process. Learning styles are the ways in which students "concentrate on, process, internalize, and remember new and difficult academic content." Research on learning styles suggests that students have preferred modes of learning, and when students are instructed in these styles, achievement increases. There are a number of factors that comprise learning styles, and they can be grouped into six basic categories: 1) psychological - global, analytical, or integrated learners; 2) environmental - light, sound, temperature, etc.; 3) emotional – motivation and focus; 4) sociological - studying alone or in groups; 5) physiological - auditory, visual, tactual, and kinesthetic; and 6) physiological - time of day, snacking, and the ability to move. (Dunn, Denig, & Lovelace, 2001) Although each of the categories plays a role in processing and learning new content, the internal physiological elements, including auditory, visual, tactual, and

kinesthetic learning styles, are particularly important to the discussion of arts-infused curricula, because the arts offer many opportunities for learning in these distinct modes.

The fine and performing arts can be used to accommodate learning styles both by allowing students to see (visual) and hear (auditory) the art forms as they process information, and also to use their hands (tactual) and their entire bodies (kinesthetic). Music performance offers opportunity for auditory processing, visual processing if there is text provided, tactual processing if instruments are played, and kinesthetic if movement is used to accompany a song. Making artwork allows visual and tactual processing. Dancing can be used for processing information visually, aurally, and kinesthetically. Drama is suitable for information processing using aural, visual, and kinesthetic modes. Incorporating the arts into the classroom is one way of modifying instruction to incorporate multiple learning styles.

Appendix C: Theories of Motivation

Research on theories of motivation also suggests that declines in motivation "often can be traced to changes in the classroom environment and teaching practices." (pg. 104) Motivation is one of the primary reasons that arts educators have initiated the restructuring of programs to integrate the arts into the general core curriculum. A number of theories of motivation may hold relevance to arts education in general, and to the arts-infused curriculum as well: 1) locus of control - the learner believes he or she can control the outcome of learning and expects to be successful; 2) intrinsic vs. extrinsic motivation - intrinsic being the immersed or deeply engaged in an activity because it is enjoyable, and extrinsic being motivated by outside factors, such as grades; 3) interest – situational interest due to environmental conditions usually triggers deeper levels of learning, including recall and comprehension; 4) value of the task – students are more or less motivated by the value they see in performing the task, whether it is for enjoyment (intrinsic), accomplishment of an external goal (utility), the importance of the task itself (attainment), or the cost of performing or not performing the task; 5) goals for achievement – performance goals are motivated by competition with others, and students with mastery-oriented goals choose difficult tasks and focus more on their own progress than competition with others, and there is increasing evidence that mastery-oriented goals may be specific to certain domains or activities rather than generalized to all subject areas; 6) social motivation – students may be motivated by social responsibility to either the teacher or the peer group. (Wigfield, Eccles, & Rodriguez, 1998)

Each of the previously mentioned theories of motivation could be used to rationalize both discipline-based arts education programs, and the integration of the arts into the general classroom. First, beliefs about competency or locus of control, intrinsic motivation, and achievement goals are all positively related, leading to greater persistence, engagement in the activity, and a choice of more challenging activities. (Wigfield et al., 1998) It could be argued that students that view themselves as competent in the arts are more likely to be engaged in activity, intrinsically motivated, choose more challenging activities, and work for mastery of content rather than for purely competitive or externally motivated rewards. Second, situational motivation, is triggered by environmental conditions and can generate curiosity leading to greater learning, intrinsic motivation, and a personal motivation to learn. (Wigfield et al., 1998) Arts educators could also argue that using the arts in the regular classroom context makes the environment more interesting or stimulating and can lead to greater student motivation and subsequent learning. Third, the value that students place on a task is directly related to the energy exerted on the task. Value may be attributed to a task because it is intrinsically motivating, is necessary to achieve goals, is important for various personal reasons, or because there are costs associated with completing or not completing the task. (Wigfield et al., 1998) Theories of task value could support arts-infused curriculum if the students involved were intrinsically motivated by an arts activity; placed attainment value, or importance of doing high quality work, on the arts activity, particularly in pursuit of the aesthetic qualities inherent in the arts. Finally, social motivation, particularly peer pressure, plays a significant role in shaping students beliefs about the importance of performance in various activities. (Wigfield et al., 1998) In the arts-infused classroom, this may play a role in motivating students to work in groups, particularly toward assignments in the performing arts, to avoid letting the rest of the group down. An analysis of the NELS: 88 survey revealed that students highly involved with the arts for a long period of time perform better in school, and although causality has not been established, there is some indication that positive peer associations or social motivation is a factor in a students decision to stay involved in arts programs. (J. S. Catterall, Waldorf, Lynn et al., 1999)

Appendix D: Organizational Structure

Just as the values and goals of the individual districts significantly impact the quality of the arts programming, the way in which the arts program is organized within a larger structure also has a significant impact on the type of learning and instruction that may occur. Many grassroots programs have appeared within the last decade, and it would be beyond the scope of this paper to mention each of them. However, there are some overall themes in the types of settings in which elementary schools with strong arts programs, and specifically arts-infused programs, regularly appear. An arts-infused curriculum might be found within private schools, public magnet schools, district level initiatives, community partnerships, and within the classrooms of individual teachers.

Private School Initiatives

Although they are not a part of the public school system, private schools can provide excellent models for arts-infused curriculum, and some public charter schools have modeled themselves after successful private schools. One of the most commonly mentioned arts based educational movements in the United States is the Waldorf school curriculum. The Waldorf philosophy claims to focus on the education of the whole child, with an emphasis on nurturing the creative as well as the intellectual self through a "developmentally-oriented curriculum, permeated with the arts." Founded in 1919 by Rudolph Steiner, the Waldorf schools have solidly established themselves among the private schools, with over 800 schools worldwide, and recently, the Steiner College has

expanded to include teacher training institutes for applied methods in the public school classroom, as well as training for using Waldorf methodology with At-Risk youth. (Rudolf Steiner College, 2004)

Public Magnet Schools

Magnet schools have become increasingly common and can be found in most of the states across the Nation. They generally offer a specialized curriculum of some type, which is intended to attract students from many portions of the district that might not normally attend the school. Magnet programs may include math and science programs, humanities programs, after school programs, fine and performing arts electives, arts-infused curriculum, or any other number of programs deemed valuable to local communities. There are growing numbers of elementary arts magnet schools throughout the United States, some offering specialized arts programs, arts-infused curriculum, or both.

District Level Initiatives

In addition to an increasing number of successful private or publicly funded Arts Magnet Schools, some traditional public school systems have began to implement systematic training for arts programs and an arts-infused core curriculum. There are growing examples of district level initiatives that restructure all or part of the district structure to place serious consideration on learning in and through the arts. Although it is beyond the scope of this paper to explore them all, a single example will

help clarify the structure of district level arts initiatives. When a Vancouver, WA school district faced a plummeting economy and a desperate need to repair aging buildings, the community was surveyed to find out how a new vision for the school district could best serve the needs of the community. One of the turning points for making the arts an important part of the revitalization plan was the realization that the community served many different types of children, and "the light can come on for some kids through the arts." (pg. 33) (E. B. Fiske, 2001) With the arts established as a necessary element for restructuring the district, plans were made to revitalize the curriculum, invest in staff development, rehabilitate the school facilities, and build community partnerships. Implementation for the plan included serious consideration of the arts programs at both the elementary and secondary levels. The elementary arts program was expanded to include dance, visual art, and music taught by specialists for all children. The secondary level was designed on the concept of 'schools of choice' and included schools with many different specializations, including an arts and academics school. The arts school is designed to grow into a K-12 school with an arts-infused curriculum at the core of learning in the 'academic' portion of the day. The other high schools in the district include traditional fine and performing arts programs, and a new district performing arts facility was constructed for use by all. (Arts Education Partnership & President's Committee on the Arts and the Humanities, 1999)

Arts Partnerships

Another model for examining the structure of arts-infused classrooms is the arts partnership. Arts partnerships may take a variety of forms, but most including pairing between arts specialists and traditional core content teachers. The city of Chicago has initiated the Chicago Arts Partnerships in Education, or CAPE, a partnership that pairs individual schools with several arts and community organizations. Within each school, artists and educators co-plan integrated instruction that incorporates the performing and visual arts into other academic disciplines. A sample unit developed from this partnership was a kindergarten unit entitled *Making Shapes of our Environment*. The unit developed by two professional artists and a team of kindergarten teachers, integrated dance, visual art, math, and social studies into a month-long unit of study. The professional artists team-teach with each of the classroom teachers for five periods throughout the course of the unit, teaching lessons on painting and dancing shapes. (Burnaford, 2001)

Appendix E: Critical Links Report

Multi-Arts Studies

The research on multi-arts programs includes a broad range of studies that examine multiple contexts and art forms, many from large-scale initiatives such as school or district-wide programs and community partnerships. Although there is some evidence that students involved in the arts exhibited higher academic performance, there is not yet enough evidence to establish causality or transfer of learning. (Horowitz & Webb-Dempsey, 2002) Four of the studies have particular relevance for this inquiry into the importance of the arts in the elementary classroom. Three specifically support the positive benefits of an arts integrated curriculum, and the fourth supports the general inclusion of the arts within the basic curriculum.

First, a study by Baum and Owens examined a group of upper elementary students identified as talented in the arts for evidence of self-regulatory behaviors, included paying attention, persevering, problem-solving, self-initiating, asking questions, taking risks, cooperating, using feedback, and being prepared, within an arts-integrated curriculum. The researchers found that the students showed significantly more self-regulatory behaviors within an arts-integrated curriculum than within a traditional classroom setting. Although there was no difference in content knowledge between the control and experimental groups, results from a three-year study of academically at-risk students taught through an arts-infused curriculum showed greater gains in reading than a control group. (Baum & Owen, 2002)

Second, Learning In and Through the Arts: The Question of Transfer, a qualitative study of over 24,000 upper-elementary and middle school age students and their teachers attempt to correlated arts study, both in specialized courses and in an arts-infused curriculum, to increased imagination, risk-taking, expression, and cooperative learning. The findings report that students with higher levels of arts experiences were more likely to be perceived by their teachers as expressive, risk-taking, creative, and able to work cooperatively. (Burton, Horowitz, & Abeles, 2002)

Third, the *Chicago Arts Partnerships in Education (CAPE)*: Evaluation Summary evaluated the long-term success of a partnership between artists and classroom teachers to create an arts-infused curriculum by developing interdisciplinary units to integrate the arts with the academic subjects. The summary reports that low-SES students in the CAPE schools performed better than control groups on reading and math scores. This difference was statistically significant at the elementary level but not at the secondary level. (E. Fiske, 2002)

Fourth, The Arts in the Basic Curriculum Project: Looking at the Past and Preparing for the Future provides an evaluation of a South Carolina initiative to include the arts in the core curriculum. The findings reported that both teachers and administrators rated the program positively. The evaluation did not attempt to prove that scores in core subjects would increase due to study of the arts. In fact, student performance on standardized tests did not increase, but the findings concluded that scores

in academic content did not decline as a result of more instructional time spent in the arts.

(Seaman, 2002)

Music

An overview of the research on music and learning offers substantial support for the benefits of music education. A meta-analysis, or synthesis of a larger body of literature, suggests four reliable correlations connected to music: increased spatialtemporal reasoning, achievement in math, achievement in reading, and improved social, emotional and behavioral outcomes. (Scripp, 2002) Scripp argues against traditional means of determining outcome based on direct cause and effect, but instead argues research to consider a "two-way interactionist" view that examines the reciprocal benefit of interdisciplinary learning rather than attempting to establish causality. The research on learning and the brain has shifted theories of music as culturally useful to ones that consider the neurological impact that the study of music may have on brain development. Specifically, transfer may occur because studying music develops many portions of the brain, and often centers that are shared by other processes, such as spatial-temporal thinking. Finally, he argues that music has been identified as having an "overwhelmingly positive reinforcement value for behavior in classrooms." It may be a powerful tool for motivation, building self-efficacy, and modifying behavior. (Scripp, 2002)

Although the Critical Links summary of music reports significant connections between music learning and social, emotional and academic outcomes, relatively few of the cases examined address the use of music within the context of the general elementary

classroom. Of the fifteen studies related to music, only five have direct relevance to this investigation into the integration of music into the academic setting. Two of these five report studies integrating music and language within the elementary classroom. First, an experimental study of fifth-grade students who received instruction in reading and music, with the control group also receiving integrated instruction that focused on higher-order thinking skills and the exploration of social, cultural, and historical contexts. The results found a statistically significant increase in attitude in both reading and music for the experimental group. However, there was no difference in achievement between the two groups. (Andrews, 2002) Second, a study of second grade students receiving specialized instruction in French and Music, with the experimental group also receiving integrated instruction from the classroom teacher. The experimental group was reported to perform better in both French and Music, and specifically in oral grammar, pronunciation, vocabulary, reading comprehension, and understanding of musical concepts related to tonal-rhythmic pattern and form. (Lowe, 2002)

Another study examined the effects of background music on writing performance for fifth/sixth grade students. One group wrote for one hour while listening to exciting music, the second while listening to calm music and a third group wrote in silence. There was no difference in the reported scoring for the group that listened to calm music and the group that wrote in silence. However, the group that wrote while listening to exciting music scored significantly lower on the writing sample. Furthermore, the students that listened to the exciting music were more likely to report that they liked the music, did not

believe it was distracting, and believed that it increased their performance. (Hallam, 2002)

Using music within the classroom to motivate students and modify behavior is one of the primary correlations identified by Catterall. (J. S. Catterall, 2002a) Two particular studies refer to the use of music for these purposes within an elementary setting. First, a case study of two fourth grade boys labeled as 'emotionally disturbed' compared writing performance from writing in silence to writing while listening to music in a variety of styles. The results reported the boys wrote significantly more words while listening to music, felt more positive about their writing, and were observed to be more focused. The students reported that the music made writing more exciting and helped them stay focused. (Kariuki & Honeycutt, 2002) Second, a meta-analysis of ninety-eight studies examined the impact of listening to music as a reward for meeting behavioral objectives, rather than measuring outcome of academic performance. The findings reported that music can be used effectively as a reward to control behavior, and was significantly more effective than other types of reinforcements, including candy, juice, stories, and praise. (Standley, 2002)

Drama

The research in drama establishes classroom drama as an effective learning tool. The majority of the research has focused on children in the elementary grades and particularly on the use of drama within the language arts classroom. Studies continually demonstrate positive correlations between classroom drama and reading comprehension,

story recall, oral understanding and written understanding. This is found to be truer with younger students than with older students. (J. S. Catterall, 2002b) Catterall also suggests that research in classroom drama has been narrowly focused on reading and language because they constitute a large portion of all research in academic learning and are easily addressed through short-term, experimental studies. Research on social development is much more difficult to quantify and has been avoided for this reason. Also missing from the body of research are studies involving older children and studies examining the impact of theatre in education.

The following studies support specific methods of using drama in the elementary classroom. Those included are primarily experimental studies that link classroom drama with story comprehension or writing ability, as well as one investigating social skills and one assessing student attitudes toward learning. Seven are directly relevant to the use of classroom drama for increasing story recall and comprehension.

An experimental study of fifth grade students identified as remedial readers attempted to improve reading comprehension by allowing students to act out stories, rather than through the traditional means of teacher-led discussion and vocabulary exercises. The results conclude that comprehension was significantly better in the students that used creative drama for understanding stories than for the group that participated in discussion and the control group. In addition, the researchers reported some evidence of transfer, or increased performance in reading comprehension by the students in the experimental group not only for the stories they physically acted out, but

also in stories they read at a later time. (DuPont, 2002) In a similar study, two groups of elementary children were tested on story comprehension both when read a story by an adult and when allowed to act out the story as it was read. Both groups received each treatment. The findings reported that students' comprehension was significantly higher when allowed to dramatize the story, and the results were more dramatic with the younger first grade readers than with the older second and third grade readers. The researchers suggest that the students were more engaged in the story when allowed to actively participate through drama and that drama reinforced many of the story elements, including main idea, character identification, and character motivation. (Page, 2002)

Similar findings are evident in studies of young children. A study by Pellegrini and Galda on thematic-fantasy play compared the effect of drama on reading and story recall and sequence of events compared to drawing and traditional discussion. Students in kindergarten and first grade scored significantly higher on story recall than control groups, but second grade students showed no significant difference in performance. Story recall within the group receiving the drama instruction was positively linked to the centrality of the role of the performer. (Pellegrini & Galda, 2002) The same results were found in *The Effect of Dramatic Play on Children's Generation of Cohesive Text*, when a study of kindergarten through second grade students tests the ability of students to recall or tell a story to either an informed or a naïve listener. Students that used drama to process the story showed a more advanced level of verbal retelling than students that processed the story through drawing or discussion. (Pellegrini, 2002a) The same researcher also studied the effect of thematic-fantasy play on both immediate and

sustained recall. The students were all in kindergarten and first grade and pulled from a population of predominantly African American, high-poverty students from rural Georgia. Story recall was greater for kindergarteners and weaker readers, and the treatment was more effective for immediate recall than for sustained recall. The study contributes to previous findings on drama and story recall, but cautions against jumping to sweeping generalizations based on the absence of significant results in sustained recall. (Pellegrini, 2002b)

Williamson and Silvern examined the importance of events within thematic fantasy play that contributed to story comprehension. This study of kindergarten children used thematic fantasy play to help children process a story and compared results of story recall, retelling and sequencing to the same tests for stories that were heard. The results reported that dramatization alone contributed relatively little to story comprehension. However, metaplay, or acts of directing, thinking and making decisions about the enactment contributed substantially to story comprehension. (Williamson & Silvern, 2002)

Parks and Rose conducted an experimental study to determine the impact of a Whirlwind curriculum program than emphasized reading comprehension through drama. The study was designed to test the impact of using drama in the classroom on reading comprehension and performance on the Iowa Test of Basic Skills. Curriculum was designed collaboratively between the classroom teacher and an artist-in-resident and the fourth-grade students involved scored three months higher on the ITBS than a control

group. The study supports other findings suggesting that drama increases performance in reading skills and nonverbal communication. (Parks & Rose, 2002)

Three studies linked classroom drama to writing performance. One experimental study of narrative writing in the primary grades included was designed to test the effects of drawing and drama as pre-writing strategies. The study found that both drama and drawing significantly improved the quality of children's narrative writing as compared to more traditional approaches. The results were consistent and significant. (Moore & Caldwell, 2002) In another study, Wagner examined the effects of role-playing on written persuasion. The study compared fourth and eighth grade students' ability to write a persuasive letter based on each of the pre-write activities, no instruction, direct instruction, or dramatic role-playing. Fourth grade students scored significantly higher when allowed to role-play before writing, and actually performed worse with no instruction than with direct instruction. Eighth grade students scored significantly better with role-play instruction than with no instruction. (Wagner, 2002)

Pellegrini observed kindergarten children from a rural school during their freeplay periods and compared their ability to write isolated whole words to the type of play in which they engaged by choice. The four categories of play included functional play, constructive play, dramatic play, and games with rules. The regression analysis examined gender, age, and socio-economic status as well as play style. The findings report that children that engaged in dramatic play, which demanded symbolic functioning, also were more able to write whole words, presumably because they also required the use of symbols. (Pellegrini, 2002c)

Two more studies on classroom drama have significance for the elementary classroom, but focus on social and motivational issues rather than reading and writing performance. The first study included seventeen children labeled 'at risk,' many of whom had been retained and all of whom were reading below grade level. The students had previously been taught through a traditional round robin approach and were transitioned into an approach involving classroom theatre and a more interactive chance to interpret texts and perform narrative. The findings conclude that students previously labeled as failures began to see themselves as readers. Classroom theatre allowed them exposure to new reading resources, opportunities for peer discussion, and decisionmaking. (S. A. Wolf, 2002) The second study examined the effects of creative drama on social and oral language skills. This experimental study of thirty-five elementary aged students identified with learning abilities, attempted to use creative drama as a means to teach social skills, including courtesy to others, self-control, focus, and social Students in the control group received only language instruction, but students in the experimental group also received twelve, forty-minute creative drama lessons. The experimental group showed greater gain in the four clusters of social skills as well as an improvement in oral expressive language skills. (de la Cruz, 2002)

Visual Art and Dance

Existing research on visual art and dance is less present and less conclusive than findings in music and drama. The most consistent finding in dance research is that it is "effective as a means of developing three aspects of creative thinking: fluency, originality, and abstractness." pg. 16, (Bradley, 2002) However, the Critical Links report revealed more areas for continued research than it did findings, specifically, links between dance and cognitive processes, the need for a common language to discuss dance, and the need for an aligned curriculum. However, two studies are relevant to learning in the elementary classroom.

The first is a qualitative case study of two boys, ages 7 and 10, living in a residential treatment home and identified with behavioral disorder. Findings report that the combination of poetry and movement engaged the students, as well as developed creativity and social/motor learning. This case lays a foundation for further study. (Mentzer & Boswell, 2002) The second is an assessment of a first grade reading program called Basic Reading through Dance, implemented in three Chicago public elementary schools serving predominantly African-American, poverty-level children. Pre and posttest showed improvement in reading for both control and experimental groups, but significantly better improvement for students receiving the dance instruction. (Rose, 2002)

The available research linking visual art and learning is also limited and the summary essay of the Critical Links report reveals more concerns than answers for the field. The concerns Baker addresses are similar to many of the other concerns with arts

integration and research in general, including the need for direct instruction in visual art as well as other disciplines within the context of an integrated curriculum, the need for definition of terms within specific contexts, the need for contextualization within instructional settings, the need for balance of instruction in art and other disciplines, and a need for complete studies that consider all of the many complex variables that impact classroom performance. (Baker, 2002)

Four studies on visual art and learning were reviewed for inclusion in the Critical Links report, three of which are relevant to the elementary classroom. All three found connections between drawing and language or reading development. The first was a meta-analysis of the available research linking instruction in visual art and reading readiness. A review of over 4,000 studies on the effect of visual art instruction on learning to read produced only 10 studies that met the author's criteria for experimental studies. There is clearly a need for more research in this area, but results of a metaanalysis based on the limited number of studies showed only a small relationship between art instruction and reading readiness. (Burger & Winner, 2002) A second experimental study examined 6th grade world history students to assess both content and interdisciplinary knowledge. Two groups of students studied Mesopotamia and Egypt. One unit was assessed entirely through written work and the other through writing and drawing, with both groups receiving each treatment. The researches conclude that students demonstrated greater understanding of history through a combination of drawing and writing than through writing alone. The third study is an ethnographic case study of two reluctant readers labeled as learning disabled. The boys received reading comprehension instruction through the visual arts, including creating cutouts to dramatize the stories and drawing pictures of strong visual impressions. The findings report an improvement in reading, particularly in taking ownership and initiative in interpreting text. The researchers suggest the instruction helped the students to visualize the story as they processed it and may have also been motivating for the students because both were interested in art. (DeJarnette, 2002)

Appendix F: Evaluation

More than what educators say, more than what they write in curriculum guides, evaluation practices tell both students and teachers what counts. How these practices are employed, what they address and what they neglect, and the form in which they occur speak forcefully to students about what adults believe is important. Because of the importance of evaluation, it is a critical subject for educational connoisseurship. I believe no effort to change schools can succeed without designing an approach to evaluation that is consistent with the aims of the desired change. (pg. 81) (Eisner, 2002)

Evaluation and assessment have become major topics of discussion, both in the political arena and among educators. Assessing what students know not only helps to guide further instruction for individual students, but also to evaluate programs on a larger scale, and even to hold teachers and schools accountable for the outcome of student learning. Assessment in the arts is perhaps more problematic than assessment in math, science, language arts, and social studies, particularly because the open-ended and diverse nature of artistic products makes them difficult to quantify, qualify, or generalize. Assessment does, however, define even more so than curriculum and pedagogy, the values of an educational structure. Three types of assessment are of particular importance to the discussion of arts education, as well as teaching and learning through the arts: the National Assessment of Educational Progress, standardized testing, and performance-based assessment.

National Assessment Educational Progress

As recently as 1997, the National Assessment of Educational Progress (NAEP) assessed student performance in the arts for the first time in almost twenty years.

Although music and visual art were assessed during the 1970s, the NAEP 1997 Arts Report Card was the first to include dance and theatre as well as art and music. Field-tests in the four arts fields included grades four, eight, and twelve, but due to budgetary constraints, the assessment was ultimately limited to eighth grade students. Dance was an original portion of field tests, but was ultimately eliminated because it was taught so infrequently that a suitable sample size could not be found. Lehman suggests: "Perhaps the most important feature of the arts assessment is its very existence. The inclusion of the arts within NAEP reinforces the opinion that the arts belong among the basic disciplines of the curriculum." (pg. 13) The actual data collected to assess students' skills and knowledge was unremarkable. Namely, art and music were more likely than theatre and dance to be offered in public schools and they were typically taught by specialists. Students that received more instruction at school or were more involved outside of school tended to perform better in the arts. (Lehman, 1999)

Standardized Testing

Along with many others who are unsatisfied with the 'uniform view,' I certainly believe that the literacies of American students ought to be improved, that every student ought to have the opportunity to master certain basic disciplines, and that much of the educational program of the 1960s (and of earlier decades) was not well considered. Yet I am equally convinced that many of the cures suggested by the neoconservative reformers are worse than the disease; and that in any case the proposed cures will not heal the patients. (pg. 69) (Gardner, 1993)

While the NAEP can be used to provide a general overview of student performance in the arts across the Nation, it does not serve as a suitable evaluation for local arts programs or individual students. Assessment is a timely topic of discussion

among educators, politicians, and the general public and frequently the term is used interchangeably with 'accountability' for teacher performance and student learning. A trend in the contemporary political climate is to hold schools accountable by evaluating student performance with standardized tests that can be quantified and compared to other states, districts, and campuses. Currently, federal funding through the No Child Left Behind Act is available only to schools that show mastery of basic skills through performance on standardized tests in core content areas. ("No Child Left Behind," 2001)

Many states, including Texas, have implemented standardized testing for the purpose of school accountability. Although there is at least some consensus over the need for schools to be held accountable for student learning, a debate remains about the appropriateness of standardized tests as evaluation of student learning and teacher effectiveness. Some cite evidence that the tests have forced school districts to make curricular changes leading to noticeable improvement in the test scores of minority youth. (Scheurich, Skrla, & Johnson, 2000) Others defend teaching to the test because it is believed to increase learning, as evidenced in this quote from a report issued by an independent consultant commissioned by Texas Education Agency stated: "teaching to the test may bring a desirable focus and may result in some learning taking place in schools where very little was present prior to the reforms." (Achieve, 2002)

Following a wave of standardized testing with increased consequences and accountability, local school districts have made concerted efforts to articulate, align, and standardized curriculum at all grade levels. In 1998, the state of Texas adopted the "Texas Essential Knowledge and Skills" which state learning goals for every grade in

every content area. These TEKS are closely aligned with the standardized test, now called the TAKS. In an effort to assess student progress by various benchmarks as early as kindergarten, Texas districts are beginning to produce written documents that specifically outline a scope and sequence for students learning at each grade level. Despite the obvious lack of flexibility in curricular content, this can be seen as a positive because it allows students from across the state equal access to a basic level of sequential instruction.

Effective in the Fall of 2003, with the passage of Senate Bill 815, the fine arts standards, called Texas Essential Knowledge and Skills, (TEKS) were promoted from recommended guidelines to required curriculum. All Texas Schools that offer courses in art, music, theatre, and dance must use the TEKS to frame instruction. Waggoner calls this legislation a significant distinction because the State Standards can no longer be disregarded by local districts. However, he points out some concerns of equal importance, particularly the things that are not included in SB 815, such as a mandate that all four arts be taught at every grade by certified specialists for prescribed amounts of time – and added to the content areas assessed by the Texas Essential Knowledge and Skills. He suggests the results of SB 815 will provide a baseline for rigorous study in the arts and serve as a reference point for assessment. (Waggoner)

Unfortunately, the arts are not included in state level assessment, and as pressure to increase performance in areas assessed by standardized tests increases, curricular concerns focus on the core areas of language arts, math, and science and away from the arts. Many school districts spend thousands of dollars on test-preparation materials and

consultants at the expensive of higher quality instructional materials. In many cases, the majority of the instructional budget is spent on test preparation materials and TAAS/TAKS practice has become the curriculum, particularly for schools labeled as low performing or containing large populations of poor and minority students. (McNeil & Valenzuela, 2001)

This narrowing of the curriculum in preparation for standardized testing has a number of potential detriments to instruction in the arts in general and to the arts-infused elementary curriculum in particular. First, instructional time is typically allocated first to the content areas that are formally evaluated and the arts are not included in State level and in most instances, district level testing. Second, the curriculum that is offered in the elementary classroom is often designed to teach directly to the multiple choice tests students will take in math, reading, writing, and science. There is little room left for an arts-infused curriculum.

Portfolio Assessment

Although inclusion of the arts within the state level assessment of standardized testing might establish them more firmly within the context of the core curriculum and securing instructional time and the increased likelihood of certified teachers, many argue that standardized testing is not a valid form of assessment in general and is particularly unsuitable for the arts. Schultz acknowledges the importance of assessment in general as a method of determining what a student has learned and if the end product met the established goals, but he opposes standardized testing based on the rationale that historically, instructors rather than politicians have established standards for outcome.

He refers to the performance jury used to assess musicians as evaluation directly linked to curriculum and controlled by instructors. Standardized testing is often linked to funding, which is controlled by politicians, and ultimately shapes and drives the curriculum. In this instance, educators are held responsible for results even though they are not allowed to determine curriculum. The system of assessment driving curriculum is complicated by "the desire to quantify quality in a manner that makes quantification difficult, if not impossible." (pg. 12) This he attributes to an over-reliance on competition and insistence on comparing things that shouldn't be compared. (Schultz, 2002)

Eisner argues that children will be faced with an increasingly complex world full of ambiguity that will demand that they are able to consider multiple outcomes, relationships, frame problems and form plans for problem solving. Multiple-choice tests are built on a competitive model that is aimed at comparison of students and schools. They force students into making simple right or wrong choices based on pre-formulated answers. He claims that the system does not value or nurture individual differences in students, and the narrow curriculum to which children are exposed ultimately shapes the types of meaning they can make. As an alternative to standardized testing, he suggests that performance assessment might "enable assessors to make valid judgments about 'what they know and can do' in situations that matter." (pg. 659) He argues that the competitive foundation of public education and the desire for uniformity are fundamentally flawed and do not allow for the unique abilities of individual children that might be more easily evaluated through performance assessment. (Eisner, 1999)

Madeja argues that standardized tests, "when generated from the top down, have a significant effect on the content of curriculum and instructional time in the school day that is directed toward reading and mathematical skills, especially in the primary grades." (pg. 14) The arts are frequently removed from the line of standardized testing, partially because they are difficult to assess in quantifiable terms. He advocates curriculum and assessment that are developed together as part of a cycle in such a way that judgments are constantly refined based on the classroom experience. Traditional quantitative tests, like standardized multiple-choice exams are particularly inappropriate for the arts classroom because they do not measure expressive outcomes, aesthetic qualities, or visual problem solving abilities. In addition to the obvious difficulties with assessing art through standardized tests, there is resistance from art educators to do so because the nature of the art makes quantification too subjective, doing so may stile creativity, and may prevent some students from enrolling in art courses. In place of standardized tests, an argument is made for electronic portfolio assessment. Portfolio assessment has a long history in art at many levels as a tool for documenting progress over time. The electronic portfolio has recently become a more viable option as equipment has become more accessible to school districts. The format is also particularly conducive to assessing art because it allows for documentation through multiple modalities. (Madeja, 2004)

Also apposed to standardized testing, Gardner presents it as a polar opposite to the apprentice model of pre-industrial societies in which a young child worked directly under the guidance of a master teacher, receiving ongoing evaluation and feedback in a real-world setting. He argues that contemporary views of assessment lean too far toward

standardized testing and are based on notions of uniform schooling and maximizing comparisons among students. Standardized tests are biased in favor of students with verbal and mathematical skill and even in such instance, assess only a superficial snapshot of learning taken out of context. Real-life situations often call for a variety of intelligences pooled together into a team of minds, with an emphasis on the uniqueness that each individual brings. He suggests the need for assessments that are ecologically valid, or capable of predicting long-term performance, intelligence-fair, comprised of multiple measures, sensitive to individual differences, developed from intrinsically interesting materials, and designed to help improve the ability of the student. It is particularly important that students receive continual feedback with suggestions for improvement without the pressure of comparison among students. In essence, assessment needs to lean more towards traditional notions of apprenticeship where students receive ongoing assessment in a natural context for an extended period of time. This type of assessment would be documented through completion of complex projects and sample products compiled in a portfolio collection. (Gardner, 1993)

Assessment is a complex issue in general and can become even more problematic when assessing arts programs becomes a focus of discussion. The National Assessment of Educational Progress focused only on discipline-based arts programs rather than arts-infused programs, and even so, was only able to show minimal results in eighth grade music and art. None of the results could be generalized or used to compare students across different regions. Standardized testing has taken a prominent place in the discussion of evaluation and accountability within the public school system. The

exclusion of the arts from the accountability system has reinforced their secondary status within the curriculum. The design of the tests is particularly unsuitable for the qualitative nature of the arts and makes it less likely that content area curriculum driven by multiple-choice assessment will be arts-infused. For a multitude of reasons, many educators believe that standardized testing has severe limits and might be better replaced by more authentic forms of assessment such as locally developed curriculum and assessment, performance-based assessments, long-term portfolio collections, and formative feedback that is constructive in nature.

Appendix G: Texas Essential Knowledge and Skills

§110.4. English Language Arts and Reading, Grade 2.

- (a) Introduction.
- (1) In Grade 2, students read and write independently. Students have many opportunities to use spoken language. Second grade students understand that there are different purposes for speaking and listening. Students know how to attract and hold the attention of their classmates when they make announcements or share a story. Second grade students recognize a large number of words automatically and use a variety of word identification strategies to figure out words they do not immediately recognize. Students read regularly for understanding and fluency in a variety of genres, including selections from classic and contemporary works. Students read texts from which they acquire new information. Students summarize what they read and represent ideas gained from reading with story maps, charts, and drawings. Students use references, including dictionaries and glossaries, to build word meanings and confirm pronunciation. Second grade students revise and edit their own writing to make ideas more clear and precise. Students use appropriate capitalization and punctuation. Students use singular and plural nouns and adjust verbs for agreement. In Grade 2, students' penmanship is characterized by letters that are properly formed, words that are properly spaced, and overall compositions that are legible. Students begin to take simple notes and compile notes into outlines.
- (2) For second grade students whose first language is not English, the students' native language serves as a foundation for English language acquisition.
- (3) The essential knowledge and skills as well as the student expectations for Grade 2 are described in subsection (b) of this section. Following each statement of a student expectation is a parenthetical notation that indicates the additional grades at which these expectations are demonstrated at increasingly sophisticated levels.
- (4) To meet Public Education Goal 1 of the Texas Education Code, §4.002, which states, "The students in the public education system will demonstrate exemplary performance in the reading and writing of the English language," students will accomplish the essential knowledge and skills as well as the student expectations for Grade 2 as described in subsection (b) of this section.
- (5) To meet Texas Education Code, §28.002(h), which states, "... each school district shall foster the continuation of the tradition of teaching United States and Texas history and the free enterprise system in regular subject matter and in reading courses and in the adoption of textbooks," students will be provided oral and written narratives as well as other informational texts that can help them to become thoughtful, active citizens who appreciate the basic democratic values of our state and nation.

- (b) Knowledge and skills.
- (1) Listening/speaking/purposes. The student listens attentively and engages actively in a variety of oral language experiences. The student is expected to:
 - (A) determine the purpose(s) for listening such as to get information, to solve problems, and to enjoy and appreciate (K-3);
 - (B) respond appropriately and courteously to directions and questions (K-3);
 - (C) participate in rhymes, songs, conversations, and discussions (K-3);
 - (D) listen critically to interpret and evaluate (K-3);
 - (E) listen responsively to stories and other texts read aloud, including selections from classic and contemporary works (K-3); and
 - (F) identify the musical elements of literary language such as its rhymes, repeated sounds, or instances of onomatopoeia (2-3).
- (2) Listening/speaking/culture. The student listens and speaks to gain knowledge of his/her own culture, the culture of others, and the common elements of cultures. The student is expected to:
 - (A) connect experiences and ideas with those of others through speaking and listening (K-3); and
 - (B) compare language and oral traditions (family stories) that reflect customs, regions, and cultures (K-3).
- (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to:
 - (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3);
 - (B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3);
 - (C) ask and answer relevant questions and make contributions in small or large group discussions (K-3);
 - (D) present dramatic interpretations of experiences, stories, poems, or plays (K-3); and

- (E) gain increasing control of grammar when speaking such as using subject-verb agreement, complete sentences, and correct tense (K-3).
- (4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to:
 - (A) use vocabulary to describe clearly ideas, feelings, and experiences (K-3);
 - (B) clarify and support spoken messages using appropriate props such as objects, pictures, or charts (K-3); and
 - (C) retell a spoken message by summarizing or clarifying (K-3).
- (5) Reading/word identification. The student uses a variety of word identification strategies. The student is expected to:
 - (A) decode by using all letter-sound correspondences within a word (1-3);
 - (B) blend initial letter sounds with common vowel spelling patterns to read words (1-3);
 - (C) recognize high frequency irregular words such as said, was, where, and is (1-2);
 - (D) identify multisyllabic words by using common syllable patterns (1-3);
 - (E) use structural cues to recognize words such as compound, base words, and inflections such as -s, -es, -ed, and -ing (1-2);
 - (F) use structural cues such as prefixes and suffixes to recognize words, for example, un- and -ly (2);
 - (G) use knowledge of word order (syntax) and context to support word identification and confirm word meaning (1-3); and
 - (H) read both regular and irregular words automatically such as through multiple opportunities to read and reread (1-3).
- (6) Reading/fluency. The student reads with fluency and understanding in texts at appropriate difficulty levels. The student is expected to:

- (7) Reading/variety of texts. The student reads widely for different purposes in varied sources. The student is expected to:
 - (A) read classic and contemporary works (2-8);
 - (B) read from a variety of genres for pleasure and to acquire information from both print and electronic sources (2-3); and
 - (C) read to accomplish various purposes, both assigned and self-selected (2-3).
- (8) Reading/vocabulary development. The student develops an extensive vocabulary. The student is expected to:
 - (A) discuss meanings of words and develop vocabulary through meaningful/concrete experiences (K-2);
 - (B) develop vocabulary by listening to and discussing both familiar and conceptually challenging selections read aloud (K-3);
 - (C) develop vocabulary through reading (2-3); and
 - (D) use resources and references such as beginners' dictionaries, glossaries, available technology, and context to build word meanings and to confirm pronunciation of words (2-3).
- (9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to:
 - (A) use prior knowledge to anticipate meaning and make sense of texts (K-3);
 - (B) establish purposes for reading and listening such as to be informed, to follow directions, and to be entertained (K-3);
 - (C) retell or act out the order of important events in stories (K-3);
 - (D) monitor his/her own comprehension and act purposefully when comprehension breaks down such as rereading, searching for clues, and asking for help (1-3);
 - (E) draw and discuss visual images based on text descriptions (1-3);
 - (F) make and explain inferences from texts such as determining important ideas and causes and effects, making predictions, and drawing conclusions (1-3);

- (G) identify similarities and differences across texts such as in topics, characters, and problems (1-2);
- (H) produce summaries of text selections (2-3); and
- (I) represent text information in different ways, including story maps, graphs, and charts (2-3).
- (10) Reading/literary response. The student responds to various texts. The student is expected to:
 - (A) respond to stories and poems in ways that reflect understanding and interpretation in discussion (speculating, questioning) in writing, and through movement, music, art, and drama (2-3);
 - (B) demonstrate understanding of informational text in various ways such as through writing, illustrating, developing demonstrations, and using available technology (2-3);
 - (C) support interpretations or conclusions with examples drawn from text (2-3); and
 - (D) connect ideas and themes across texts (1-3).
- (11) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts. The student is expected to:
 - (A) distinguish different forms of texts, including lists, newsletters, and signs and the functions they serve (K-3);
 - (B) identify text as written for entertainment (narrative) or for information (expository) (2);
 - (C) distinguish fiction from nonfiction, including fact and fantasy (K-3);
 - (D) recognize the distinguishing features of familiar genres, including stories, poems, and informational texts (1-3);
 - (E) compare communication in different forms such as contrasting a dramatic performance with a print version of the same story or comparing story variants (2-8);
 - (F) understand and identify simple literary terms such as title, author, and illustrator across a variety of literary forms (texts) (2);

- (G) understand literary forms by recognizing and distinguishing among such types of text as stories, poems, and information books (K-2);
- (H) analyze characters, including their traits, relationships, and changes (1-3);
- (I) identify the importance of the setting to a story's meaning (1-3); and
- (J) recognize the story problem(s) or plot (1-3).
- (12) Reading inquiry/research. The student generates questions and conducts research using information from various sources. The student is expected to:
 - (A) identify relevant questions for inquiry such as "Why do birds build different kinds of nests?" (K-3);
 - (B) use alphabetical order to locate information (1-3);
 - (C) recognize and use parts of a book to locate information, including table of contents, chapter titles, guide words, and indices (1-3);
 - (D) use multiple sources, including print such as an encyclopedia, technology, and experts, to locate information that addresses questions (2-3);
 - (E) interpret and use graphic sources of information such as maps, charts, graphs, and diagrams (2-3);
 - (F) locate and use important areas of the library media center (2-3);
 - (G) demonstrate learning through productions and displays such as murals, written and oral reports, and dramatizations (2-3); and
 - (H) draw conclusions from information gathered (K-3).
- (13) Reading/culture. The student reads to increase knowledge of his/her own culture, the culture of others, and the common elements of culture. The student is expected to:
 - (A) connect life experiences with the life experiences, language, customs, and culture of others (K-3); and
 - (B) compare experiences of characters across cultures (K-3).
- (14) Writing/purposes. The student writes for a variety of audiences and purposes, and in various forms. The student is expected to:

- (A) write to record ideas and reflections (K-3);
- (B) write to discover, develop, and refine ideas (1-3);
- (C) write to communicate with a variety of audiences (1-3); and
- (D) write in different forms for different purposes such as lists to record, letters to invite or thank, and stories or poems to entertain (1-3).
- (15) Writing/penmanship/capitalization/punctuation. The student composes original texts using the conventions of written language such as capitalization and penmanship to communicate clearly. The student is expected to:
 - (A) gain increasing control of aspects of penmanship such as pencil grip, paper position, stroke, and posture, and using correct letter formation, appropriate size, and spacing (2);
 - (B) use word and letter spacing and margins to make messages readable (1-2);
 - (C) use basic capitalization and punctuation correctly such as capitalizing names and first letters in sentences, using periods, question marks, and exclamation points (1-2); and
 - (D) use more complex capitalization and punctuation with increasing accuracy such as proper nouns, abbreviations, commas, apostrophes, and quotation marks (2).
- (16) Writing/spelling. The student spells proficiently. The student is expected to:
 - (A) use resources to find correct spellings, synonyms, and replacement words (1-3);
 - (B) write with more proficient spelling of regularly spelled patterns such as consonant-vowel-consonant (CVC) (hop), consonant-vowel-consonant-silent e (CVCe) (hope), and one-syllable words with blends (drop) (1-3);
 - (C) write with more proficient spelling of inflectional endings, including plurals and verb tenses (1-2); and
 - (D) write with more proficient use of orthographic patterns and rules such as keep/cap, sack/book, out/cow, consonant doubling, dropping e, and changing y to i (2).

- (17) Writing/grammar/usage. The student composes meaningful texts applying knowledge of grammar and usage. The student is expected to:
 - (A) use singular and plural forms of regular nouns (2);
 - (B) compose complete sentences in written texts and use the appropriate end punctuation (1-2);
 - (C) compose sentences with interesting, elaborated subjects (2-3); and
 - (D) edit writing toward standard grammar and usage, including subject-verb agreement; pronoun agreement, including pronouns that agree in number; and appropriate verb tenses, including to be, in final drafts (2-3).
- (18) Writing/writing processes. The student selects and uses writing processes for self-initiated and assigned writing. The student is expected to:
 - (A) generate ideas for writing by using prewriting techniques such as drawing and listing key thoughts (2-3);
 - (B) develop drafts (1-3);
 - (C) revise selected drafts for varied purposes, including to achieve a sense of audience, precise word choices, and vivid images (1-3);
 - (D) edit for appropriate grammar, spelling, punctuation, and features of polished writings (2-3);
 - (E) use available technology for aspects of writing, including word processing, spell checking, and printing (2-3); and
 - (F) demonstrate understanding of language use and spelling by bringing selected pieces frequently to final form and "publishing" them for audiences (2-3).
- (19) Writing/evaluation. The student evaluates his/her own writing and the writing of others. The student is expected to:
 - (A) identify the most effective features of a piece of writing using criteria generated by the teacher and class (1-3);
 - (B) respond constructively to others' writing (1-3);
 - (C) determine how his/her own writing achieves its purposes (1-3);

- (D) use published pieces as models for writing (2-3); and
- (E) review a collection of his/her own written work to monitor growth as a writer (2-3).
- (20) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to:
 - (A) write or dictate questions for investigating (2-3);
 - (B) record his/her own knowledge of a topic in various ways such as by drawing pictures, making lists, and showing connections among ideas (K-3);
 - (C) take simple notes from relevant sources such as classroom guests, information books, and media sources (2-3); and
 - (D) compile notes into outlines, reports, summaries, or other written efforts using available technology (2-3).

Source: The provisions of this §110.4 adopted to be effective September 1, 1998, 22 TexReg 7549.

§111.14. Mathematics, Grade 2.

- (a) Introduction.
- (1) Within a well-balanced mathematics curriculum, the primary focal points at Grade 2 are comparing and ordering whole numbers, applying addition and subtraction, and using measurement processes.
- (2) Throughout mathematics in Kindergarten-Grade 2, students build a foundation of basic understandings in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; measurement; and probability and statistics. Students use numbers in ordering, labeling, and expressing quantities and relationships to solve problems and translate informal language into mathematical symbols. Students use patterns to describe objects, express relationships, make predictions, and solve problems as they build an understanding of number, operation, shape, and space. Students use informal language and observation of geometric properties to describe shapes, solids, and locations in the physical world and begin to develop measurement concepts as they identify and compare attributes of objects and situations. Students collect, organize, and display data and use information from graphs to answer questions, make summary statements, and make informal predictions based on their experiences.

- (3) Problem solving, language and communication, connections within and outside mathematics, and formal and informal reasoning underlie all content areas in mathematics. Throughout mathematics in Kindergarten-Grade 2, students use these processes together with technology and other mathematical tools such as manipulative materials to develop conceptual understanding and solve problems as they do mathematics.
- (b) Knowledge and skills.
- (1) Number, operation, and quantitative reasoning. The student understands how place value is used to represent whole numbers. The student is expected to use concrete models to represent, compare, and order whole numbers (through 999), read the numbers, and record the comparisons using numbers and symbols (>, <, =).
- (2) Number, operation, and quantitative reasoning. The student uses fraction words to name parts of whole objects or sets of objects. The student is expected to:
 - (A) name fractional parts of a whole object (not to exceed twelfths) when given a concrete representation; and
 - (B) name fractional parts of a set of objects (not to exceed twelfths) when given a concrete representation.
- (3) Number, operation, and quantitative reasoning. The student adds and subtracts whole numbers to solve problems. The student is expected to:
 - (A) recall and apply basic addition facts (sums to 18);
 - (B) select addition or subtraction and solve problems using two-digit numbers, whether or not regrouping is necessary; and
 - (C) determine the value of a collection of coins less than one dollar.
- (4) Number, operation, and quantitative reasoning. The student models multiplication and division. The student is expected to:
 - (A) model, create, and describe multiplication situations in which equivalent sets of concrete objects are joined; and
 - (B) model, create, and describe division situations in which a set of concrete objects is separated into equivalent sets.

- (5) Patterns, relationships, and algebraic thinking. The student uses patterns in numbers and operations. The student is expected to:
 - (A) find patterns in numbers such as in a 100s chart;
 - (B) use patterns in place value to compare and order whole numbers through 999;
 - (C) use patterns to develop strategies to remember basic addition facts; and
 - (D) solve subtraction problems related to addition facts (fact families) such as 8 + 9 = 17, 9 + 8 = 17, 17 8 = 9, and 17 9 = 8.
- (6) Patterns, relationships, and algebraic thinking. The student uses patterns to describe relationships and make predictions. The student is expected to:
 - (A) generate a list of paired numbers based on a real-life situation such as number of tricycles related to number of wheels;
 - (B) identify patterns in a list of related number pairs based on a real-life situation and extend the list; and
 - (C) identify, describe, and extend patterns to make predictions and solve problems.
- (7) Geometry and spatial reasoning. The student uses attributes to identify, compare, and contrast shapes and solids. The student is expected to:
 - (A) identify attributes of any shape or solid;
 - (B) use attributes to describe how two shapes or two solids are alike or different; and
 - (C) cut geometric shapes apart and identify the new shapes made.
- (8) Geometry and spatial reasoning. The student recognizes that numbers can be represented by points on a line. The student is expected to use whole numbers to locate and name points on a line.
- (9) Measurement. The student recognizes and uses models that approximate standard units (metric and customary) of length, weight, capacity, and time. The student is expected to:
 - (A) identify concrete models that approximate standard units of length, capacity, and weight;

- (B) measure length, capacity, and weight using concrete models that approximate standard units; and
- (C) describe activities that take approximately one second, one minute, and one hour.
- (10) Measurement. The student uses standard tools to measure time and temperature. The student is expected to:
 - (A) read a thermometer to gather data; and
 - (B) describe time on a clock using hours and minutes.
- (11) Probability and statistics. The student organizes data to make it useful for interpreting information. The student is expected to:
 - (A) construct picture graphs and bar-type graphs;
 - (B) draw conclusions and answer questions based on picture graphs and bar-type graphs; and
 - (C) use data to describe events as more likely or less likely such as drawing a certain color crayon from a bag of seven red crayons and three green crayons.
- (12) Underlying processes and mathematical tools. The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:
 - (A) identify the mathematics in everyday situations;
 - (B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;
 - (C) select or develop an appropriate problem-solving strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem; and
 - (D) use tools such as real objects, manipulatives, and technology to solve problems.
- (13) Underlying processes and mathematical tools. The student communicates about Grade 2 mathematics using informal language. The student is expected to:

- (A) explain and record observations using objects, words, pictures, numbers, and technology; and
- (B) relate informal language to mathematical language and symbols.
- (14) Underlying processes and mathematical tools. The student uses logical reasoning to make sense of his or her world. The student is expected to reason and support his or her thinking using objects, words, pictures, numbers, and technology.

Source: The provisions of this §111.14 adopted to be effective September 1, 1998, 22 TexReg 7623.

§112.4. Science, Grade 2.

- (a) Introduction.
- (1) In Grade 2, the study of science includes planning and conducting simple classroom and field investigations to help students develop the skills of making measurements using standard and non-standard units, using common tools such as rulers and clocks to collect information, classifying and sequencing objects and events, and identifying patterns. Students also use computers and information technology tools to support their investigations.
- (2) As students learn science skills, they identify components and processes of the natural world including the water cycle and the use of resources. They observe melting and evaporation, weathering, and the pushing and pulling of objects as examples of change. In addition, students distinguish between characteristics of living organisms and nonliving objects, compare lifelong needs of plants and animals, understand how living organisms depend on their environments, and identify functions of parts of plants and animals.
- (3) Science is a way of learning about the natural world. Students should know how science has built a vast body of changing and increasing knowledge described by physical, mathematical, and conceptual models, and also should know that science may not answer all questions.
- (4) A system is a collection of cycles, structures, and processes that interact. Students should understand a whole in terms of its components and how these components relate to each other and to the whole. All systems have basic properties that can be described in terms of space, time, energy, and matter. Change and constancy occur in systems and can be observed and measured as patterns. These patterns help to predict what will happen next and can change over time.

- (5) Investigations are used to learn about the natural world. Students should understand that certain types of questions can be answered by investigations, and that methods, models, and conclusions built from these investigations change as new observations are made. Models of objects and events are tools for understanding the natural world and can show how systems work. They have limitations and based on new discoveries are constantly being modified to more closely reflect the natural world.
- (b) Knowledge and skills.
- (1) Scientific processes. The student conducts classroom and field investigations following home and school safety procedures. The student is expected to:
 - (A) demonstrate safe practices during classroom and field investigations; and
 - (B) learn how to use and conserve resources and dispose of materials.
- (2) Scientific processes. The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to:
 - (A) ask questions about organisms, objects, and events;
 - (B) plan and conduct simple descriptive investigations;
 - (C) compare results of investigations with what students and scientists know about the world;
 - (D) gather information using simple equipment and tools to extend the senses;
 - (E) construct reasonable explanations and draw conclusions using information and prior knowledge; and
 - (F) communicate explanations about investigations.
- (3) Scientific processes. The student knows that information and critical thinking are used in making decisions. The student is expected to:
 - (A) make decisions using information;
 - (B) discuss and justify the merits of decisions; and
 - (C) explain a problem in his/her own words and identify a task and solution related to the problem.

- (4) Scientific processes. The student uses age-appropriate tools and models to verify that organisms and objects and parts of organisms and objects can be observed, described, and measured. The student is expected to:
 - (A) collect information using tools including rulers, meter sticks, measuring cups, clocks, hand lenses, computers, thermometers, and balances; and
 - (B) measure and compare organisms and objects and parts of organisms and objects, using standard and non-standard units.
- (5) Science concepts. The student knows that organisms, objects, and events have properties and patterns. The student is expected to:
 - (A) classify and sequence organisms, objects, and events based on properties and patterns; and
 - (B) identify, predict, replicate, and create patterns including those seen in charts, graphs, and numbers.
- (6) Science concepts. The student knows that systems have parts and are composed of organisms and objects. The student is expected to:
 - (A) manipulate, predict, and identify parts that, when separated from the whole, may result in the part or the whole not working, such as flashlights without batteries and plants without leaves;
 - (B) manipulate, predict, and identify parts that, when put together, can do things they cannot do by themselves, such as a guitar and guitar strings;
 - (C) observe and record the functions of plant parts; and
 - (D) observe and record the functions of animal parts.
- (7) Science concepts. The student knows that many types of change occur. The student is expected to:
 - (A) observe, measure, record, analyze, predict, and illustrate changes in size, mass, temperature, color, position, quantity, sound, and movement;
 - (B) identify, predict, and test uses of heat to cause change such as melting and evaporation;
 - (C) demonstrate a change in the motion of an object by giving the object a push or a pull; and

- (D) observe, measure, and record changes in weather, the night sky, and seasons.
- (8) Science concepts. The student distinguishes between living organisms and nonliving objects. The student is expected to:
 - (A) identify characteristics of living organisms; and
 - (B) identify characteristics of nonliving objects.
- (9) Science concepts. The student knows that living organisms have basic needs. The student is expected to:
 - (A) identify the external characteristics of different kinds of plants and animals that allow their needs to be met; and
 - (B) compare and give examples of the ways living organisms depend on each other and on their environments.
- (10) Science concepts. The student knows that the natural world includes rocks, soil, water, and gases of the atmosphere. The student is expected to:
 - (A) describe and illustrate the water cycle; and
 - (B) identify uses of natural resources.

Source: The provisions of this §112.4 adopted to be effective September 1, 1998, 22 TexReg 7647.

§113.4. Social Studies, Grade 2.

- (a) Introduction.
- (1) In Grade 2, students focus on a study of their local community by examining the impact of significant individuals and events on the history of the community as well as on the state and nation. Students begin to develop the concepts of time and chronology by measuring calendar time by days, weeks, months, and years. The relationship between the physical environment and human activities is introduced as are the concepts of consumers and producers. Students identify functions of government as well as services provided by the local government. Students continue to acquire knowledge of important customs, symbols, and celebrations that represent American beliefs and principles. Students identify the significance of works of art in the local community and explain how

technological innovations have changed transportation and communication. Students communicate what they have learned in written, oral, and visual forms.

- (2) To support the teaching of the essential knowledge and skills, the use of a variety of rich material such as biographies; folktales, myths, and legends; and poetry, songs, and artworks is encouraged. Selections may include the legend of the bluebonnet. Motivating resources are also available from museums, historical sites, presidential libraries, and local and state preservation societies.
- (3) The eight strands of the essential knowledge and skills for social studies are intended to be integrated for instructional purposes. Skills listed in the geography and social studies skills strands in subsection (b) of this section should be incorporated into the teaching of all essential knowledge and skills for social studies. A greater depth of understanding of complex content material can be attained when integrated social studies content from the various disciplines and critical-thinking skills are taught together.
- (4) Throughout social studies in Kindergarten-Grade 12, students build a foundation in history; geography; economics; government; citizenship; culture; science, technology, and society; and social studies skills. The content, as appropriate for the grade level or course, enables students to understand the importance of patriotism, function in a free enterprise society, and appreciate the basic democratic values of our state and nation as referenced in the Texas Education Code, §28.002(h).
- (b) Knowledge and skills.
- (1) History. The student understands the historical significance of landmarks and celebrations in the community, state, and nation. The student is expected to:
 - (A) explain the significance of various community, state, and national celebrations such as Memorial Day, Independence Day, and Thanksgiving; and
 - (B) identify and explain the significance of various community, state, and national landmarks such as the county courthouse and state and national capitol buildings.
- (2) History. The student understands the concepts of time and chronology. The student is expected to:
 - (A) describe the order of events by using designations of time periods such as ancient times and modern times;
 - (B) use vocabulary related to chronology, including past, present, and future;
 - (C) create and interpret timelines; and

- (D) describe and measure calendar time by days, weeks, months, and years.
- (3) History. The student understands how various sources provide information about the past. The student is expected to:
 - (A) name several sources of information about a given period or event; and
 - (B) compare various interpretations of the same time period using evidence such as photographs and interviews.
- (4) History. The student understands how historical figures and ordinary people helped to shape our community, state, and nation. The student is expected to:
 - (A) identify contributions of historical figures such as Henrietta King and Thurgood Marshall who have influenced the community, state, and nation;
 - (B) identify historic figures such as Amelia Earhart and Robert Fulton who have exhibited a love of individualism and inventiveness; and
 - (C) explain how local people and events have influenced local community history.
- (5) Geography. The student uses simple geographic tools such as maps, globes, and photographs. The student is expected to:
 - (A) use symbols, find locations, and determine directions on maps and globes; and
 - (B) draw maps to show places and routes.
- (6) Geography. The student understands the locations and characteristics of places and regions. The student is expected to:
 - (A) identify major landforms and bodies of water, including continents and oceans, on maps and globes;
 - (B) locate the community, Texas, the United States, and selected countries on maps and globes; and
 - (C) compare information from different sources about places and regions.
- (7) Geography. The student understands how physical characteristics of places and regions affect people's activities and settlement patterns. The student is expected to:

- (A) describe how weather patterns, natural resources, seasonal patterns, and natural hazards affect activities and settlement patterns; and
- (B) explain how people depend on the physical environment and its natural resources to satisfy their basic needs.
- (8) Geography. The student understands how humans use and modify the physical environment. The student is expected to:
 - (A) identify ways in which people depend on the physical environment, including natural resources, to meet basic needs:
 - (B) identify ways in which people have modified the physical environment such as building roads, clearing land for urban development, and mining coal;
 - (C) identify consequences of human modification of the physical environment such as the use of irrigation to improve crop yields; and
 - (D) identify ways people can conserve and replenish natural resources.
- (9) Economics. The student understands the importance of work. The student is expected to:
 - (A) explain how work provides income to purchase goods and services; and
 - (B) explain the choices people in the U.S. free enterprise system can make about earning, spending, and saving money, and where to live and work.
- (10) Economics. The student understands the roles of producers and consumers in the production of goods and services. The student is expected to:
 - (A) distinguish between producing and consuming;
 - (B) identify ways in which people are both producers and consumers; and
 - (C) trace the development of a product from a natural resource to a finished product.
- (11) Government. The student understands the purpose of governments. The student is expected to:
 - (A) identify functions of governments;

- (B) identify some governmental services in the community such as libraries, schools, and parks and explain their value to the community; and
- (C) describe how governments establish order, provide security, and manage conflict.
- (12) Government. The student understands the role of public officials. The student is expected to:
 - (A) compare the roles of public officials including mayor, governor, and president; and
 - (B) identify ways that public officials are selected, including election and appointment to office.
- (13) Citizenship. The student understands characteristics of good citizenship as exemplified by historic figures and ordinary people. The student is expected to:
 - (A) identify characteristics of good citizenship such as a belief in justice, truth, equality, and responsibility for the common good;
 - (B) identify historic figures such as Florence Nightingale, Paul Revere, and Sojourner Truth who have exemplified good citizenship; and
 - (C) identify ordinary people who exemplify good citizenship.
- (14) Citizenship. The student understands important customs, symbols, and celebrations that represent American beliefs and principles and contribute to our national identity. The student is expected to:
 - (A) identify selected patriotic songs such as America the Beautiful;
 - (B) identify selected symbols such as state and national birds and flowers and patriotic symbols such as the U.S. and Texas flags and Uncle Sam; and
 - (C) explain how selected customs, symbols, and celebrations reflect an American love of individualism, inventiveness, and freedom.
- (15) Culture. The student understands the significance of works of art in the local community. The student is expected to:
 - (A) identify selected stories, poems, statues, paintings, and other examples of the local cultural heritage; and

- (B) explain the significance of selected stories, poems, statues, paintings, and other examples of the local cultural heritage.
- (16) Science, technology, and society. The student understands how science and technology have affected life, past and present. The student is expected to:
 - (A) describe how science and technology have changed communication, transportation, and recreation; and
 - (B) explain how science and technology have changed the ways in which people meet basic needs.
- (17) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:
 - (A) obtain information about a topic using a variety of oral sources such as conversations, interviews, and music;
 - (B) obtain information about a topic using a variety of visual sources such as pictures, graphics, television, maps, computer software, literature, reference sources, and artifacts;
 - (C) use various parts of a source, including the table of contents, glossary, and index, as well as keyword computer searches, to locate information;
 - (D) sequence and categorize information; and
 - (E) interpret oral, visual, and print material by identifying the main idea, predicting, and comparing and contrasting.
- (18) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to:
 - (A) express ideas orally based on knowledge and experiences; and
 - (B) create written and visual material such as stories, poems, maps, and graphic organizers to express ideas.
- (19) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:

- (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and
- (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.

Source: The provisions of this §113.4 adopted to be effective September 1, 1998, 22 TexReg 7684.

§117.8. Art, Grade 2.

- (a) Introduction.
- (1) Four basic strands--perception, creative expression/performance, historical and cultural heritage, and critical evaluation--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. Students rely on their perceptions of the environment, developed through increasing visual awareness and sensitivity to surroundings, memory, imagination, and life experiences, as a source for creating artworks. They express their thoughts and ideas creatively, while challenging their imagination, fostering reflective thinking, and developing disciplined effort and problem-solving skills.
- (2) By analyzing artistic styles and historical periods students develop respect for the traditions and contributions of diverse cultures. Students respond to and analyze artworks, thus contributing to the development of lifelong skills of making informed judgments and evaluations.
- (b) Knowledge and skills.
- (1) Perception. The student develops and organizes ideas from the environment. The student is expected to:
 - (A) identify variations in objects and subjects from the environment, using the senses; and
 - (B) identify art elements such as color, texture, form, line, and space and art principles such as emphasis, pattern, and rhythm.
- (2) Creative expression/performance. The student expresses ideas through original artworks, using a variety of media with appropriate skill. The student is expected to:

- (A) express ideas and feelings in artworks, using a variety of colors, forms, and lines;
- (B) create effective compositions, using design elements and principles; and
- (C) identify and practice skills necessary for producing drawings, paintings, prints, constructions, and modeled forms, using a variety of art materials.
- (3) Historical/cultural heritage. The student demonstrates an understanding of art history and culture as records of human achievement. The student is expected to:
 - (A) identify stories and constructions in a variety of artworks;
 - (B) compare ways individuals and families are depicted in different artworks; and
 - (C) identify different kinds of jobs in art.
- (4) Response/evaluation. The student makes informed judgments about personal artworks and the artworks of others. The student is expected to:
 - (A) define reasons for preferences in personal artworks; and
 - (B) identify ideas in original artworks, portfolios, and exhibitions by peers and artists.

Source: The provisions of this §117.8 adopted to be effective September 1, 1998, 22 TexReg 4943.

§117.9. Music, Grade 2.

- (a) Introduction.
- (1) Four basic strands--perception, creative expression/performance, historical and cultural heritage, and critical evaluation--provide broad, unifying structures for organizing the knowledge and skills students are expected to acquire. In music, students develop their intellect and refine their emotions, understanding the cultural and creative nature of musical artistry and making connections among music, the other arts, technology, and other aspects of social life. Through creative performance, students apply the expressive technical skills of music and critical-thinking skills to evaluate multiple forms of problem solving.
- (2) By reflecting on musical periods and styles, students understand music's role in history and are able to participate successfully in a diverse society. Students analyze and evaluate music, developing criteria for making critical judgments and informed choices.

- (b) Knowledge and skills.
- (1) Perception. The student describes and analyzes musical sound and demonstrates musical artistry. The student is expected to:
 - (A) identify instruments visually and aurally;
 - (B) use music terminology to explain sounds and performances; and
 - (C) identify music forms such as AB and ABA.
- (2) Creative expression/performance. The student performs a varied repertoire of music. The student is expected to:
 - (A) sing or play a classroom instrument independently or in groups; and
 - (B) sing songs from diverse cultures and styles or play such songs on a musical instrument.
- (3) Creative expression/performance. The student reads and writes music notation. The student is expected to:
 - (A) read and write simple music notation, using a system (letters, numbers, syllables); and
 - (B) read and write music that incorporates basic rhythmic patterns in simple meters.
- (4) Creative expression/performance. The student creates and arranges music within specified guidelines. The student is expected to:
 - (A) create rhythmic phrases; and
 - (B) create melodic phrases.
- (5) Historical/cultural heritage. The student relates music to history, to society, and to culture. The student is expected to:
 - (A) identify music from various periods of history and culture;
 - (B) sing songs and play musical games from diverse cultures; and
 - (C) identify relationships between music and other subjects.

- (6) Response/evaluation. The student responds to and evaluates music and musical performance. The student is expected to:
 - (A) distinguish between beat/rhythm, higher/lower, louder/softer, faster/slower, and same/different in musical performances; and
 - (B) show appropriate audience behavior during live performances.

Source: The provisions of this §117.9 adopted to be effective September 1, 1998, 22 TexReg 4943.

§117.10. Theatre, Grade 2.

- (a) Introduction.
- (1) Four basic strands--perception, creative expression/performance, historical and cultural heritage, and critical evaluation--provide broad, unifying structures for organizing knowledge and skills students are expected to acquire. Through perceptual studies, students increase their understanding of self and others and develop clear ideas about the world. Through a variety of theatrical experiences, students communicate in a dramatic form, make artistic choices, solve problems, build positive self-concepts, and relate interpersonally.
- (2) Students increase their understanding of heritage and traditions through historical and cultural studies in theatre. Student response and evaluation promote thinking and further discriminating judgment, developing students who are appreciative and evaluative consumers of live theatre, film, television, and other technologies.
- (b) Knowledge and skills.
- (1) Perception. The student develops concepts about self, human relationships, and the environment, using elements of drama and conventions of theatre. The student is expected to:
 - (A) react to sensory experiences;
 - (B) expand spatial awareness in dramatic play, using expressive and rhythmic movement;
 - (C) participate in dramatic play, using actions, sounds, and dialogue; and
 - (D) role-play, imitate, and recreate dialogue.

- (2) Creative expression/performance. The student interprets characters, using the voice and body expressively, and creates dramatizations. The student is expected to:
 - (A) demonstrate safe use of movement and voice;
 - (B) role-play in real life and imaginative situations through narrative pantomime, dramatic play, and story dramatization;
 - (C) create dramatizations of limited-action stories, using simple pantomime and puppetry; and
 - (D) dramatize poems and songs, using simple pantomime and puppetry.
- (3) Creative expression/performance. The student applies design, directing, and theatre production concepts and skills. The student is expected to:
 - (A) select aspects of the environment for use in dramatic play;
 - (B) adapt the environment for dramatic play, using simple materials;
 - (C) plan dramatic play; and
 - (D) cooperate and interact with others in dramatic play.
- (4) Historical/cultural heritage. The student relates theatre to history, society, and culture. The student is expected to:
 - (A) imitate life experiences from various historical periods in dramatic play; and
 - (B) identify diverse cultural dimensions in dramatic play.
- (5) Response/evaluation. The student responds to and evaluates theatre and theatrical performances. The student is expected to:
 - (A) identify and apply appropriate audience behavior;
 - (B) react to and begin to evaluate dramatic activities;
 - (C) employ music, creative movement, and visual components in dramatic play; and
 - (D) observe the performance of artists and identify theatrical vocations.

Source: The provisions of this §117.10 adopted to be effective September 1, 1998, 22 TexReg 4943.

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