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Thinking and Learning through Creative Movement in the Classroom

Katherine M. Nauman-Borton
University of Massachusetts Boston

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THINKING AND LEARNING THROUGH CREATIVE MOVEMENT
IN THE CLASSROOM

A Thesis Presented

by

KATHERINE M. NAUMANN

Submitted to the Office of Graduate Studies, University of Massachusetts Boston, in
partial fulfillment of the requirements for the degree of

MASTER OF ARTS

DECEMBER 1996

Critical and Creative Thinking Program

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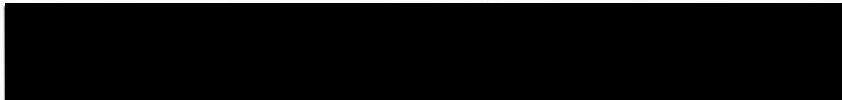
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KATHERINE M. NAUMANN

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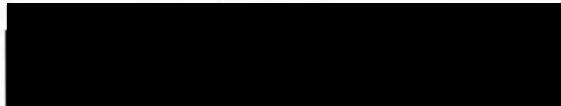
John Murray, Assistant Professor
Chairperson of Committee



Maxine DeBruyn, Director, Department of Dance, Hope College
Member



Margaret Musmon, Associate Professor
Member



John Murray, Director
Critical and Creative Thinking Program

ABSTRACT

THINKING AND LEARNING THROUGH CREATIVE MOVEMENT IN THE CLASSROOM

December 1996

Katherine M. Naumann, B.A., Hope College
M.A., University of Massachusetts Boston

Directed by Professor John Murray

In the past decade, the American school system has come under scrutiny. American children are scoring lower than children from other countries on standardized tests. What can be done to ensure that American students are able to compete in the technological world of today?

Many educators believe that in order for children to fulfill their potential, they must be given more than information and knowledge. They must be taught how to think, how to use the knowledge they learn in school. Researchers such as Robert H. Ennis (Ennis, 1987, 1993) and Matthew Lipman (Lipman, 1995) believe thinking must be advanced in the schools. It must be practiced. Teachers must challenge their students and provide them with opportunities to make decisions, solve problems and be creative.

Other researchers such as Harvard University's Howard Gardner believe students will learn better if all of their "intelligences" are nurtured. This theory advances the belief

that there is more to intelligence than an inborn general intelligence factor. The Multiple Intelligence (MI) theory believes "that human cognitive competence is better described in terms of a set of abilities, talents, or mental skills, which we call 'intelligences'" (Gardner, 1993 p. 15). The seven identified are the musical, bodily-kinesthetic, logical-mathematical, linguistic, spatial, interpersonal and intrapersonal. Gardner and his colleagues hold that students will benefit from instruction incorporating more than the verbal and logical intelligences.

This thesis examines the aforementioned trends of teaching thinking skills and utilizing a multiple intelligence approach in the classroom. It then presents creative movement as a classroom activity which stimulates "intelligences" often overlooked in the classroom while also promoting critical and creative thinking skills in children. It has been shown in studies that movement can stimulate a child's interest in school (Fowler, 1994). Creative movement stimulates decision making, problem solving and communication skills as well as the creative affinity needed to produce excellent thinkers.

All of this research culminates in the development of a workshop for elementary school teachers. The workshop is designed to introduce teachers to creative movement so they have the knowledge and confidence to utilize creative movement as an educational tool within their own classrooms.

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CHAPTER I

INTRODUCTION

In 1983, Howard Gardner published his book *Frames of Mind: the theory of multiple intelligences*. This theory, the theory of multiple intelligences (MI), supported what many teachers have said for years; not all children learn the same way. His theory pinpoints seven different intelligences: verbal, logical/mathematical, spatial, musical, bodily-kinesthetic, interpersonal and intrapersonal intelligences. Although many children have strengths in the intelligences touted by the school system, logical/mathematical and verbal intelligences, there are also those who have stronger musical intelligences and others with stronger bodily-kinesthetic intelligences. Gardner's theory has been a breakthrough for the arts community which believes all of the Arts, dance, drama, music and the visual arts, should be basic to every child's education. The Arts foster growth in many of the intelligences identified by Gardner; specifically, the five not nurtured in the traditional classroom. The idea of teaching for different intelligences, as implied in Gardner's theory, has quickly spread through the educational community.

With the education in American schools as a top priority, the educational community has established a trend toward the teaching of thinking skills. In order for children to have the tools to survive in our modern world, they must be given more than

information and knowledge. They must be taught how to think, how to use knowledge. For thinking to be advanced in the schools, it must be practiced. Teachers must challenge their students and provide them with opportunities to make decisions, solve problems and be creative. All of these opportunities to think can develop a child who will hold his/her own in today's society.

It is my intent to bridge these two educational trends with the Arts, specifically, creative movement. Because movement is inherent to life especially the life of the young child, it is my hope that teachers see creative movement as a useful educational tool. I would like to see creative movement used as a way to tap into other intelligences while also promoting critical and creative thinking skills in children. Because creative movement involves the entire child, the mind, the body and the spirit are working together.

One problem with this vision is the lack of teachers who know what creative movement is and why it should be included in the elementary school classroom. Even teachers who understand the usefulness of creative movement often feel uncomfortable presenting creative movement in their own classrooms. The common misconception is that a specialist is needed.

In order to develop creative movement as a worthwhile classroom endeavor, this thesis connects creative movement to both thinking skills and to Howard Gardner's theory of multiple intelligences. I then presents a workshop for teachers who would like to use creative movement in their own classrooms. With a basic understanding of the elements of movement and the creative process, any teacher can teach creative movement.

The workshop gives teachers the opportunity to personally experience creative movement and develop the skills and knowledge necessary to use it in their own classrooms. Teachers are familiarized with the idea of integrating creative movement into the curriculum to stimulate critical and creative thinking while tapping into other intelligences not drawn upon in the traditional classroom. Creative movement is introduced as a tool for teaching critical thinking and problem solving while stimulating creativity which children can employ for the rest of their lives. The workshop is designed to give teachers the skills, confidence and "expertise" needed to incorporate creative movement into their own lesson plans. Sample lessons are included to show how movement can enhance the teaching of a number of subjects in the classroom curriculum.

This workshop is more than a one time intervention. The purpose of this workshop is to familiarize teachers with the components of creative movement, therefore workshop sessions are held twice a week for three weeks. Each session is 2-3 hours long. This schedule allows the participants to gain confidence in their creative movement skills which might not be mastered in one session. Furthermore, after ten weeks the teachers meet one last time in order to share how they have utilized creative movement within their classrooms. This opportunity to discuss struggles and successes and get productive feedback from colleagues as well as the workshop leader reinforces the confidence teachers have in their own abilities and their competence in using creative movement skills in their own classroom.

The workshop allows teachers to develop strategies for gradual infusion of another type of learning into their curriculum. The workshop gives teachers the tools needed to develop a primary course of study integrating creative movement into many of their classroom subjects. This in turn gives students the opportunity to continually explore other modes of learning. It is not necessary for the workshop participants to be specialists in the field of dance. The concepts are presented so teachers will be able to experience creative movement themselves and then focus on the utilization of the various intelligences and on creativity. There is no emphasis on versing the students in techniques of dance or any dance style.

Movement can actually tap into all of the intelligences not already focused on in the schools. Depending on its context, it can enhance the uses of musical, spatial, bodily-kinesthetic, and the personal intelligences. This teacher workshop will not only promote creative movement as a means of tapping into all of the intelligences, but it will also promote the cognitive abilities used in the arts and relate them to both critical and creative thinking skills.

Movement should be integrated into the curriculum because it is inherent in all human beings. Movement can help develop or alter the quality of the students' lives because it involves the whole self. Not only can movement teach a child about him/herself, it can extend and enhance a child's learning process. Having movement integrated within the curriculum would free students from the sit, listen and learn style of education prevalent in today's schools. This author holds that in a disciplined yet open

atmosphere, movement challenges children to think both creatively and critically encouraging them to make decisions which builds self-confidence.

Studies show that movement can stimulate a child's interest in school (Fowler, 1994). It develops concentration which then transfers into other subjects. Experiencing multiple ways of understanding material can promote learning in students who are not reached by the conventional verbal modes of education in school systems today. Creative movement stimulates decision making, problem solving and communication abilities as well as the creative affinity needed to produce the kind of thinkers necessary for the technological world we live in (Murray, 1963).

CHAPTER II
CREATIVE MOVEMENT AND LEARNING
IN THE ELEMENTARY SCHOOL CLASSROOM

Since the mid 80s, teaching thinking has become an integral part of school reform efforts everywhere. Critical thinking skills are now touted as a means of educating our children. In 1983, the College Board listed reasoning as a basic competency while the Rockefeller Commission on the Humanities (1980) stressed critical thinking as a need in education. Across the nation, critical thinking is being interjected into the curriculum of public schools. As early as 1980, the California State University system inaugurated a critical thinking graduation requirement (Paul, 1984). This requirement was driven by evidence that the American education system is not propagating skills necessary for America to compete with the economic powers of other countries. In the *U.S. News and World Report* "The Brain Battle," (1987) America's schools were blamed for the weakening situation of our country as a top power in the realm of world economics. Although this article only implied the need for greater critical reasoning, educational committees and leaders everywhere have made a commitment to this type of education.

As part of this consciousness for an enhanced American education system, Congress issued National Educational Goals 2000 formulated by the Educate America Act. These new national educational goals to be realized by the year 2000 include:

1. All children in America will start school ready to learn.
2. The high school graduation rate will improve to at least 90%.
3. All students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, Mathematics, Science, Foreign Languages, Civics and Government, Economics, Arts, History, and Geography, and every school in America will ensure that all students learn to use their minds well so that they may be prepared for responsible citizenship, further learning, and productive employment in our Nation's modern economy.
4. United States students will be first in the world in mathematics and science achievement.
5. Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.
6. Every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and will offer a disciplined environment conducive to learning.
7. The nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century.
8. Every school will promote partnerships that will increase parental involvement and participation in promoting social, emotional and academic growth of children (The Center for Arts in the Basic Curriculum, p. ii).

Although none of these goals specifically addresses the need for critical thinking in the schools, goal number three was established to "ensure that all students learn to use their minds well so that they may be prepared for responsible citizenship, further learning, and productive employment in our Nation's modern economy"(p. ii). All of these are aims of the critical thinking movement.

Another aspect of goal three is the inclusion of the Arts within the "challenging subject matter" to be learned by all students. It is this combination of critical thinking and the arts which I wish to address. As part of goals 2000, the arts are targeted as a discipline which can aid the development of the minds of students while preparing them to be responsible citizens and productive employees. Although many art advocates believe each of the four Arts, music, dance, drama and visual art, need to be addressed as stand alone subjects in order to maintain integrity, there are others who see the arts integrated within other classroom subjects as beneficial in teaching creativity and thinking skills.

I would like to separate creative movement from the other Arts and connect it to the ever increasing battle to infuse critical thinking into the education of our children. Before this connection between critical thinking and creative movement can be made, it is necessary to look at the idea of critical thinking more closely in order to establish its goals and intentions in the education system. Creative movement will also be discussed as a tool within other curriculum subjects such as math, language arts and science. The target population of this work and its ensuing workshop will be elementary school teachers who are interested in promoting critical as well as creative thinking skills within their classrooms.

A Brief Overview of Critical Thinking

Although Critical thinking has been prevalent in recent educational reform, it is still a term which is misused and sometimes vague. Various researchers and theorists have different ideas about exactly what critical thinking is and what it means. J.E. McPeck

describes it as "reflective skepticism" (1981, p. 67). Robert H. Ennis defines critical thinking as "reasonable reflective thinking that is focused on deciding what to believe or do" (1987, p. 10). In his article "A Taxonomy of Critical Thinking Dispositions and Abilities" Ennis equates critical thinking to the previously mentioned "reason" established as a basic competency by the College Board. He also equates critical thinking with informal logic.

Ennis's definition of critical thinking is further defined by critical thinking dispositions and abilities which he believes are necessary and important aspects of critical thinking. Ennis lists fourteen dispositions and four basic areas of critical thinking ability. In a later article "Critical Thinking Assessment," Ennis unites these dispositions and abilities into ten concise elements of critical thinking. He writes,

In reasonably and reflectively going about deciding what to believe or do, a person characteristically needs to do most of these things (and do them interdependently):

1. Judge the credibility of sources.
2. Identify conclusions, reasons, and assumptions.
3. Judge the quality of an argument, including the acceptability of its reasons, assumptions, and evidence.
4. Develop and defend a position on an issue.
5. Ask appropriate clarifying questions.
6. Plan experiments and judge experimental designs.
7. Define terms in a way appropriate for the context.
8. Be open-minded.
9. Try to be well informed
10. Draw conclusions when warranted, but with caution (1993, p. 180).

Robert Sternberg defines critical thinking as "the mental processes, strategies and representations people use to solve problems, make decisions and learn new concepts" (1985, p. 46). Matthew Lipman states, "critical thinking is thinking that (1) facilitates

judgment because it (2) relies on criteria, (3) is self-correcting, and (4) is sensitive to context" (1991, p. 116). Lipman goes on to describe critical thinking as a liberator which defends us from being "brainwashed into believing what others want to compel us to believe" (144). Another theorist, S.D. Brookfield expresses critical thinking as "identifying and challenging assumptions and imagining and exploring alternatives" (1987, p. 229).

It is evident that an abundance of definitions for critical thinking exist. While each theorist offers his/her own personal angle on the subject, each definition remains vague outside of specific context. In an effort to formulate a critical thinking definition which will stretch across curricular borders, Shari Tishman and David N. Perkins suggest,

Critical thinking is a matter of directing our minds along paths more likely to yield sound products of thought--sound beliefs, decisions, solutions to problems, plans, policies, and so on (1995, p. 25).

This definition remains broad in order to have meaning in everyday life as well as in the classroom. To achieve this, the definition does not exclude creative thinking. It allows creative thinking to be seen as an aspect of critical thinking. This definition is not centered around philosophical aspects of logic or deductive reasoning but rather on ordinary types of thinking such as problem solving and decision making. Furthermore, the Tishman and Perkins definition is not dependent on high intelligence. Critical thinking is opened up to all. "Anyone can learn to explore more options in a decision-making situation or to look more carefully at both sides of the case" (1995, p. 25).

The implications of the Tishman and Perkins definition are that all children can think and all subjects can enhance both critical and creative thinking skills. Critical thinking is not seen by most theorists, as separate from creative thinking. The two fit together and enhance each other. Aspects of creative thinking are part of critical thinking and vice versa. Creative thinking is necessary for students to think of alternatives and consequences, formulate hypotheses and definitions, and develop strategies. Each of these are thought to be critical thinking abilities and goals. Additionally, critical thinking does not have to be based in philosophical logic, but instead should stress problem solving and decision making. This type of critical thinking can be taught within every subject. An activity such as creative movement, a creative activity as its name suggests gets children actively involved in the learning process. Creative movement is beneficial in teaching both critical and creative thinking skills to elementary school children.

The Arts and Creative Movement

With the inclusion of the Arts (Dance, Music, Visual Art and Theatre) in the National Goals 2000, each art discipline and its educators have begun to lobby to insure a place within schools across the nation. In the spring of 1994, the Consortium of Arts Education Associations finalized the *National Standards for Arts Education: What Every Young American Should Know and Be Able to do in the Arts*. This document was developed in order to present U.S. schools with guidelines and benchmarks for a quality education in the Arts. Although these guidelines, like Goals 2000, are not federally

mandated, Art educators hope that the clear and concise production of such guidelines will encourage schools to designate the Arts as a means to overall education reform.

The Arts as distinct disciplines could be extremely useful in improving schools. As outlined in the National Standards for the arts, an arts education,

benefits the student because it cultivates the whole child, gradually building many kinds of literacy while developing intuition, reasoning, imagination, and dexterity into unique forms of expression and communication...helps students by initiating them into a variety of ways of perceiving and thinking...the arts cultivate the direct experience of the sense; they trust the unmediated flash of insight as a legitimate source of knowledge (1994, p. 6).

An arts education also benefits society because the student gains the vehicles of:

- understanding human experiences, both past and present;
- learning to adapt to and respect others' very different ways of thinking, working and expressing themselves;
- learning artistic modes of problem solving, which bring an array of expressive, analytical, and developmental tools to every human situation;
- understanding the influences of the arts...in the interdependence of work in the arts with the broader worlds of ideas and action;
- making decisions in situations where there are no standard answers;
- analyzing nonverbal communication and making informed judgments about cultural products and issues; and
- communicating their thoughts and feelings in a variety of modes, giving them a vastly more powerful repertoire of self-expression (1994, p. 6).

Although the worth of the Arts as an academic tool is slowly being recognized, it is unlikely that in the highly technological mechanical society of today, the Arts will be given the credit they deserve or that they will be valued in educational reform. Because educators are not ready for reform by art, it is necessary to address teachers and the schools at a level which they are able to conceive. It is at this level that educators can use

the arts as educational tools within other subjects. The arts can be integrated within other subject areas in order to produce cognitive benefits and enhance learning.

Integration is a term which is controversial in the world of arts education. Most art educators believe the arts are most beneficial when they are treated as stand alone subjects. Integration jeopardizes the power of the arts (Irwin and Reynolds, 1995). Interdisciplinary and integrative work with the arts "endangers the integrity of discipline-specific knowledge and understanding" (1995, p. 16).

It is my belief that the Arts need to find a place in U.S. schools even if that place is as an educational tool within other subjects. I strongly believe in the power of the Arts for teaching young children and feel the arts stimulate the thinking skills advocated by educational reformers. Integration of the Arts into other curriculum subjects will benefit children and begin to open the minds of educators and administrators to the power of the Arts in education. This could lead to a time when each art is taught independently within the school curriculum. Until that time, I believe the Arts have a place in the classroom even if their discipline specific knowledge is somewhat compromised.

Though all of the arts are worthy of mentioning, this document will focus on the art of dance.

All of the arts provide ways in which man can bring shape and order to his fragmented and rapidly changing world. But dance provides a primary medium for expression involving the total self, not just a part, like the voice, or totally separated from the physical self, like painting or sculpture. Dance and the movement that produces it is "me" and as such, is the most intimate of expressive media. A child's identity, self-concept, and self-esteem are improved in relation to such use of the body's movement (Murray, 1973, p. 5).

Although dance is the discipline, creative movement will be the aspect of dance used as an educational tool in this teacher workshop.

What distinguishes creative movement from dance? Within dance, there are different forms. Some examples are: ballet, jazz, modern, tap, ballroom dancing and improvisation. Improvisation is not usually defined as an entity separate from the other forms. It is used within each of these forms. However, I am setting improvisation apart from the other forms of dance in order to stress its creative aspect and to help in defining creative movement.

Improvisation is defined within the National Standards as,

movement that is created spontaneously, ranging from free-form to highly structured environments, but always with an element of chance. Provides the dancer with the opportunity to bring together elements quickly, and requires focus and concentration. Improvisation is instant and simultaneous choreography and performance (1994, p. 76).

Improvisation does not require dance technique. Likewise, creative movement is not grounded in dance technique. The child needs no exposure to or experience with any of the dance forms. An open mind and an active imagination are the only requirements. Both of these are consistently found in the young child.

Many dance educators believe creative movement should be the only type of dance experience given to elementary school children. Ballet, jazz, modern or tap technique are seen as unnecessary for children. Exposure to dance technique at a very young age can not only strain a child's body, but can also curb his/her imagination (King, 1968). Because creativity is one of the most important outcomes of creative movement, the processes of

exploration, improvisation and invention are more likely to obtain creative results than is the imposition of dance technique (Murray, 1963).

For the child, creative movement is often seen as a symbolic representation of the child's ideas, feelings and sensory impressions. To many, the benefit of creative movement is only seen as the child's familiarity with his/her own body; his/her awareness of how the body moves, how strong it is and how it can express feelings and emotions. However, it is more than mere movement and body mastery, it is freedom for the child to be expressive, imaginative and sentient. Each child can express his/her inner wondering through the movement of his/her body (Murray, 1963).

Many psychologists and educational researchers such as Jerome Bruner (Sample, 1992), James Asher (Hooks, 1994), and Francis Wayland Parker (Korzenik, 1984) see movement as more than motor development; they believe it is basic to the learning of the child. It is thought that children connect with diverse experiences through movement. This allows them an extraordinary avenue to comprehension of the world (Murray, 1963).

Dance educators hold that creative movement is holistic, integrating the mind, the body and the spirit of each child. No other discipline can bear this claim. It is the creative expression of movement which is thought to develop the whole child, the child's self-image, self-awareness and the child's self-direction (Joyce, 1973).

Though creative movement is not considered technique, there are elements of dance found within it. As in any discipline, domain knowledge is necessary for creative movement to be an effective tool for learning. Although integration does not allow for the

most complete study of creative movement, it is important that the elements are thoroughly explored before true integration begins in order to unlock the child's creative capacities.

Creative movement is based in the elements of dance: time, space and energy. Because the basic ingredients of creativity are invention, rearrangement and integration (Murray, 1963), children need to understand the basic elements of dance before they can create dance with their own movement. It is the exploration of these elements which frees children and promotes use of the imagination. In exploration of each element, children are allowed to explore their own natural movement and can begin to build their own personal movement vocabularies. Each child's movement vocabulary will be different from his/her peer's because creative movement is the expression of the being and each child is unique.

In creative movement, time, space and energy are broad categories which children can explore. Time is essential to creative movement because it is necessary for children to develop a sense of timing within their bodies. Until this is done, they cannot move on to understanding music or other abstractions of time. Time in creative movement deals with the relationship of one movement to another. Aspects of time such as pulse, speed, rhythm and phrasing need to be explored. Space, as an element of movement, deals with where the child can explore movement. Direction, size, pathways, levels and focus must be introduced as facets of space. This element produces freedom to explore all of the space available to the child, not only within the area of the dance space, but also the space where each individual body resides. Energy is the last element. This element deals with

the amount of energy used in movement. The children need to explore tension/relaxation, flow: bound/free, and weight: heavy/light (Stinson, 1988). Each of these elements provides a tremendous amount of opportunity for the child to open up his/her imagination and explore. A more thorough description of the elements of dance and ideas for exploring them can be found later on in the workshop.

The Connection Between Critical and Creative Thinking and Creative Movement

Increasing implementation of critical thinking in the classroom has begun to enhance school curriculum. Children are now, more than ever, encouraged to think instead of memorize. Critical thinking teaches students to be effective problem solvers and thoughtful decision makers. With the popularity of critical thinking, various programs to encourage critical thinking abilities have been developed. One such program is Matthew Lipman's Philosophy for Children program (Lipman, 1995). It is the belief of this author that a program utilizing creative movement within other curricular subjects would also be beneficial in teaching critical and creative thinking skills because it not only taps into the mind but also into the body and the spirit of each child.

Creative movement helps to humanize the curriculum (Fowler, 1994). It brings the whole child together in learning and allows a child to become familiar with him/herself. Without such familiarity, a child will not engage him/herself in his/her education and the learning process. Eric Oddleifson reports in work done for the Center for Arts in the Basic Curriculum, that all of the arts, although usually seen as nonessential, do promote

"the kind of thinking, enthusiasm, self-esteem and discipline that are necessary requisites for learning" (1990, p. 1).

Although everyone is aware of art as a finished product, many don't realize there is more to the arts than talent and inspiration. The arts develop a person's faculties for creative thinking and imagining and also for critical thinking abilities such as problem-solving, critical judgment, decision making and a multitude of other mental processes (Oddleifson, 1990). These skills, taught in other critical thinking programs, are used within the creative process of creative movement.

There is more to creativity than a product. The process of creativity is one often underestimated and under recognized. When involved in creative movement, children not only think about the dance they are creating, they make many decisions in the process. Dorn states in his article "Art as Intelligent Activity," "creative thinkers search more extensively for problems worth solving and show greater flexibility in defining problems" (1993, p. 3). From the beginning, being creative involves risk taking. When the outcome or path in which the dance is taking doesn't seem right, it is abandoned; or sometimes, it is simply altered or even simplified. "It is the essence of problem solving...the creative person must continually rethink, reconsider, replace, refine, redo, reaffirm, reprocess, rewrite, and reconceptualize" (Balkin, 1990, p. 32). Critical thought is needed for the child to create and to explore through creative movement.

Furthermore, creative movement fosters the development of divergent thinking. Unless a school is already incorporating critical and creative thinking the focus is probably

on convergent thinking. There is only one way to be right but infinitely many to be wrong.

The convergent thinking process is focused or structured toward finding the correct answer. In contrast, by utilizing divergent thinking through creative movement, children can say the same thing in many different ways. The thinking process is founded, structured and reinforced; it can produce unlimited answers. Problem solving can be extended into creative movement when the teacher presents a movement task and asks each child to solve the problem in two or three different ways. Each child will develop his/her own personal interpretation and solve the problem his/her own way.

This type of creative problem solving gives children a chance to participate in their education. "The arts engage the minds of students to sort out their own reactions and articulate them through the medium at hand" (Fowler, 1994, p. 5). When children are taught how to think instead of what to think, they take some ownership in their learning process.

The child's ability to discern problems and make decisions also uses analysis, judgment and other critical thinking skills. Independence in thinking fostered by critical thinking is essentially the basis for creativity. It is through this independence that children learn to take risks and set goals. The experiential decision making process used in creative movement can bypass the verbal discussion of such skills and transfer the skills into knowledge for children.

Not only can creative movement reinforce the teaching of critical thinking for everyday problem solving and decision making, it fosters many of the reasoning and

problem-solving skills needed for critical thinking. Creative movement helps develop these skills and gives the child the chance to experience more than a verbal education. It enables the development of a child of experience; one who learns through experiencing the world first hand as through creative movement.

CHAPTER III

INTELLIGENCE: THE PAST AND THE PRESENT

The theory of Multiple Intelligences espoused by Howard Gardner of Harvard University's Project Zero has been visible in the education community for the past thirteen years. This theory advances the belief that there is more to intelligence than an inborn general intelligence factor known as *g* which is resistant to change regardless of experience or training. The Multiple Intelligences (MI) theory believes "that human cognitive competence is better described in terms of a set of abilities, talents, or mental skills, which we call 'intelligences'" (Gardner, 1993, p. 15). The seven identified are the musical, bodily-kinesthetic, logical-mathematical, verbal, spatial, interpersonal and intrapersonal intelligences. Gardner and his colleagues believe that each person is born with some ability in each intelligence. This basic level of each intelligence is thought to be independent of education and universal to all humans in every culture (Gardner, 1993).

With the proposition that these intelligences can become further developed through nurturance, educators are examining the basic school system. Today, the majority of students are taught via the verbal and logical-mathematical intelligences alone. It is the hope of many schools across the nation which have adopted Gardner's Multiple Intelligences theory as a foundation for teaching, that all of the intelligences can be

fostered within the school system. This does not necessarily mean teaching each of the intelligences as their own stand alone subject but more often, using the different intelligences as a means of instruction. If a child attempting to learn a math problem is not skilled in the logical-mathematical intelligence, the teacher can tap into other intelligences as metaphors giving the student a secondary route to the problem. Although most often the linguistic intelligence is used as an alternative, bodily-kinesthetic, spatial or musical intelligences could also be useful metaphors in such a situation.

Here is where creative movement fits in. Creative movement is a means of representing bodily-kinesthetic intelligences in children. Using creative movement in an elementary school classroom provides students with the opportunity to tap into other means of learning. Creative movement can be used as a metaphor for learning concepts in other disciplines such as mathematics and the sciences. Because learning in young children is connected to experience and movement (Sample, 1992; Korzenik, 1984), creative movement should be utilized as a tool for instruction. At first creative movement must be explored in itself to familiarize children with their bodies and with the possibilities of movement. Later, creative movement can be a tool for integration. It can be used within a subject to bridge concepts, teach thinking skills and to allow students to take part in their own education.

In light of research done by Gardner and his colleagues, it is evident that educational reform using a multiple intelligences approach will enrich and facilitate the learning experience for all children. No longer will only those gifted with verbal and

logical-mathematical intelligences succeed in our school systems. Each child will be able to recognize his/her own skills and abilities within each intelligence. This in turn, has the power to foster self-esteem and a willingness to learn which will extend to all areas of learning. The curriculum will be opened up to all students.

Although Gardner's theory has been widely accepted by educators and educational researchers who seek improvement in the classroom, the theory of multiple intelligences is not as widely revered by other researchers of intelligence and cognitive psychologists. This chapter will first look at the history of the term intelligence and summarize intelligence research. Next it will move to the theory of multiple intelligences and discuss Gardner's definition of intelligence, his evidence and his intentions. At this stage, other learning theories which also support the use of bodily-kinesthetic activities and activities involving children in the learning process will also be touched upon. Finally, this chapter will examine the idea of multiple intelligences as defined and discuss how creative movement can be a worthwhile tool in nurturing the bodily-kinesthetic intelligence while also tapping into other often ignored "intelligences".

What is Intelligence: Theories and Definitions

In the mid nineteenth century, anthropologists and doctors began comparing the size and shape of individual heads across culture and race in order to determine the general worth of each person. In 1961, a professor of clinical surgery, Paul Broca stated that the work of anthropologists and their fascination with the measurement of human

skulls was being done in order to "find some information relevant to the intellectual value of the various human races" (quoted in Gould, 1981, p. 83). At the same time, Louis Pierre Gratiolet challenged this view arguing that degree of intelligence was not related to the size of an individual's brain. However, the Broca data seemed to confirm the theory that brain size and intelligence were related.

In general, the brain is larger in mature adults than in the elderly, in men than in women, in eminent men than in men of mediocre talent, in superior races than in inferior races...Other things equal, there is a remarkable relationship between the development of intelligence and the volume of intelligence and the volume of the brain (quoted in Gould, 1981, p. 83).

Hence the beginning of studies on intelligence. Although this theory was eventually defeated, a priori beliefs of scientists prolonged the craniological theory as evidence and measurement of intelligence for decades.

In fact, the next psychologist to study intelligence, Alfred Binet, began his endeavors with the measurement of skulls. He based his research on the conclusions of Broca. However, after three years of research, he found his results unsatisfactory and abandoned the notion of cephalic measures of intelligence. From there, in 1904, Binet turned from medical practices of measuring intelligence to the psychological. He set out to establish tasks which might enable him to assess reasoning abilities. At this time, he was commissioned by the Minister of Public Education in Paris to develop a test which would allow for the recognition and placement of children not succeeding in the classroom. This test was to be exclusively designed for diagnostic purposes of the placement of slow learners. Binet's test was a "hodgepodge of diverse activities. He

hoped that by mixing together enough tests of different abilities he would be able to abstract a child's general potential with a single score" (Gould, 1981, p. 149). From this score eventually came the term IQ and the idea of a general intelligence.

Although Binet's tests used a single score to assess children for educational placement, he did not want to use the results to comment on intelligence.

The scale, properly speaking, does not permit the measure of intelligence, because intellectual qualities are not superposable, and therefore cannot be measured as linear surfaces are measured (quoted in Gould, 1981, p. 151).

Binet not only rejected IQ as an inborn intelligence, but also spurned the idea of using his test to rank children.

After Binet's death, psychologists such as H.H. Goddard, Lewis M. Terman and Charles Spearman brought his tests to America. They used the scores as a means to measurement of a single, inborn entity, intelligence. Goddard used this power of IQ in order to show inferiority of other races and to discourage breeding of the "inferior". Terman used IQ to sort all children into appropriate walks of life. Spearman, on the other hand, began studying correlations between mental tests. From all of his research, he developed the "two-factor" theory which reduced all common attributes of intelligence into a single underlying, general intelligence.

All branches of intellectual activity have in common one fundamental function...This *g*, far from being confined to some small set of abilities...may enter into all abilities whatsoever (quoted in Gould, 1981, p. 261).

Spearman insisted that the only reason the IQ tests of Goddard, Terman and other psychologists were working was because, unbeknownst to them, they were measuring this

general intelligence, g . In order to explain g further, Spearman turned to the idea of intelligence as energy activating the brain. The more energy a person's brain had, the more intelligent was the person (Gould, 1981).

During the Depression, psychologist L.L. Thurstone set out to dismantle Spearman's theory of g as scientifically fruitless. He didn't believe that children should be labeled by a singular number or that a general ability even existed to be measured. Thurstone developed his theory of Primary Mental Abilities and grasped the idea that some children are good in certain areas whereas others excel in different areas. He urged that people should not be characterized by the outcome of a single measurement but rather by a profile of their significant primary factors (Sternberg, 1988).

Thurstone did more than increase the scope of individual intelligence, he also showed how the theory of general intelligence, g , might be fallacious. He used the same factor analysis and data of Spearman, but by placing the factor axes in a different location, he received evidence to support his own theory of primary mental abilities (Gould, 1981). This didn't entirely eradicate the reliability of Spearman's g , however, it showed factor analysis and the general idea of relying solely on numerical data as an unreliable method of theory development (Gould, 1981; Sternberg, 1988).

More contemporary psychologists have since then, developed numerous other theories of intelligence. J.P. Guilford continues to rely on psychometrics. In his structure-of-intellect model as many as 120 factors intersect in various ways to make up intelligence. Other psychologists began to take another direction on theories of intelligence. These

researchers such as Arthur Jensen, Earl Hunt and Robert Sternberg utilize the information processing approach to intelligence. "The information-processing approach to human intelligence seeks to understand intelligence in terms of the underlying processes that in various combinations constitute intelligent task performance" (Sternberg, 1983, p. 3).

Arthur Jensen proposes understanding intelligence in terms of speed of neural conduction. He believes the smart person is one who has rapid neural transmission. Earl Hunt and Marcy Lansman theorize a connection between intelligence and a persons ability to divide attention between two things. Piaget saw intelligence as based on the development of increasingly broad and complex cognitive functions which develop in a certain logical order. His focus was on internal maturation. In contrast to Piaget, Lev Vygotsky sees intelligence as developing from the outside in. He believes that "intelligence has its origins in social processes-in the individuals interaction with other persons-and is internalized only after it is manifested socially" (Sternberg, 1988, p. 50).

Sternberg also has developed his own theory of intelligence. He believes that intelligence cannot be understood unless its relationship to the "internal world of the individual, the external world of the individual, and the experience with the world that mediates between the internal and the external worlds" (p. 57) is acknowledged. An assumption of the Sternberg theory is that intelligence is not unalterable; it is malleable. Sternberg states in his book *The Triarchic Mind*, "To me, the whole point of testing is not to obtain an immutable score but rather to suggest strengths upon which the individual can capitalize and weaknesses that he can remediate" (1983, p. 71). He defines intelligence as

adaptation to and shaping of the world relevant to a person's life. He views intelligence as not a single entity but as many and sees intelligence as in part biological or inherited and in part due to a person's experiences (Sternberg, 1988). This view represents a new way of looking at intelligence. On the surface, it seems to have much in common with Gardner's theory of multiple intelligences.

Howard Gardner's Theory of Multiple Intelligences: An Overview

In a study done by Sternberg, Conway, Ketron and Berstein in 1981, individuals were surveyed on their conceptions of intelligence. The results of the study showed that people viewed three aspects of intelligence: practical problem-solving ability, verbal ability and social competence. They used such phrases as "reasons logically and well," "keeps an open mind," and "reads widely" as criteria of intelligence and phrases such as "not tolerating diversity of views," and "not displaying curiosity" as characteristics of unintelligence. In general, this study revealed that the attributes of intelligence categorized by various people corresponded with views held by experts in the field of psychology. These narrow conceptions of intelligence are exactly what prompted Howard Gardner's multiple intelligence theory.

Unfortunately, these narrow conceptions of intelligence also exist in most school systems today. For this reason, it is important to start elevate children by honoring all of their strengths and exercising different ways of teaching and learning in order to stimulate maximum growth and understanding. Creative movement, often seen as a frivolous talent

rather than as a tool for education can be employed in schooling to touch many children and promote learning.

Much controversy has arisen in the past decade over Gardner's allocation as intelligences such abilities usually referred to as talents. The intelligences named by Gardner include verbal, logical-mathematical, spatial, musical, bodily-kinesthetic, interpersonal and intrapersonal. He attempts to "replace the current, largely discredited notion of intelligence as a single inherited trait" (Gardner, 1983, p. 284). In the later publication on his theory, *Multiple Intelligences: the Theory in Practice*, Gardner furthers this idea.

There is nothing magical about the word "intelligence". I have purposely chosen it to join issue with those psychologists who consider logical reasoning or linguistic competence to be on a different plane than musical problem-solving or bodily-kinesthetic aptitude. Placing logic and language on a pedestal reflects the values of our Western culture and the great premium placed on the familiar tests of intelligence...To call some "talent" and some "intelligence" displays this bias. Call them all "talents" ...or call them all "intelligences" (1993, p. 35-36).

Gardner's point in relegating musical and bodily-kinesthetic abilities as intelligences seems to be a statement that other areas of cognition besides the logical and verbal are important to life and should be recognized as more than frivolous talents. He even concedes that what he defines as intelligences could also be termed, "intellectual capacities," or "cognitive skills or capacities". "What is crucial is not the label but, rather, the conception," (1983, p. 284) that each individual has more than verbal or logical intellectual potentials which he/she can develop.

Gardner's theory was developed after research reviews in areas in and out of psychology. Because of debate over the use of factor analysis in psychological theories of the mind, Gardner relied on research from various fields of study. He surveyed much independent research including research on special populations like prodigies and idiots savants, anthropology, gifted individuals, patients with brain damage, normal adults and children, experts in different lines of work and individuals from diverse cultures. The synthesis of all of his studies led to a single outcome which Gardner states, "does not confirm the theory(of multiple intelligences) but does support that this theory is on the right track" (1993, p. 38). Furthermore, Gardner does not claim the intelligences to be scientifically verifiable entities he sees them as useful scientific constructs (1983).

In the development of each intelligence, Gardner followed distinct criteria. If a certain candidate satisfied all or a majority of these criteria, it was then selected as an intelligence. The criteria were distinguished to provide evidence that each intelligence was first and foremost "genuinely useful and important, at least in certain cultural settings" (1983 p.61).

The criteria continue in that each intelligence must: be represented in a specific area of the human nervous system, exhibit its own developmental history, be highly specializable in special populations, have at least one basic information-processing operation to deal with specific inputs, be present in cognitive evolutionary data, support from psychometrics and experimental psychological tasks and be susceptible to encoding

systems (1983). Other important factors are the value of the intelligence by cultures and the opportunities it ensures for its use in problem solving and finding (1993).

As is evident, the multiple intelligence view of intelligence is different from the traditional view of intelligence. Traditionally intelligence is thought of and defined as the ability to answer questions and hence receive a high score on specific intelligence tests. Intelligence is seen as a general factor which is innate and minimally affected by age, training or experience (Gardner 1993).

In contrast, the multiple intelligence theory views intelligence as inborn yet quite malleable. It is seen as the ability to solve problems or construct products which have importance within a community or a culture. The multiple intelligence theory provides several routes to this ability instead of the traditional verbal logical approach (1993).

Gardner advances the notion that each individual is born with a level of each of the seven intelligences. He labels the intelligences, "raw, biological potentials" (1993, p. 9). Depending on each individual's experience with and exposure to each intelligence, Gardner believes that each individual probably differs in his/her intelligence profile. Gardner states,

I think of intelligence as a biopsychological potential. That is, all members of the species have the potential to exercise a set of intellectual faculties of which the species is capable (1993, p. 36-37).

When an individual is thought to have a certain intelligence, s/he has developed the potential for that intelligence in his/her environment.

This approach to intelligence is not centered within the head of the individual but, rather, it is centered on the individual and his/her relation to the culture within which s/he

lives. Intelligence is seen as more than biological, it is seen as cultural. "The life of the infant after birth is inextricably bound with the practices and assumptions of her culture" (Gardner, 1993, p. 220). Gardner believes that the values of the culture will help determine what intelligences an individual will realize. This is termed contextualization.

Along with contextualization comes the idea of the distribution of intelligence. This proposes that not only are individuals affected by their cultural context, but they are also influenced by the human and inanimate objects with which they work or learn. "These entities become so integral to their activities that it is reasonable to think of them as part of the individual's intellectual armament" (Gardner, 1993, p. 223). This conviction changes the vision of intelligence as a single entity which works in isolation to a broader more general interaction of a person's biological propensity with his/her culture and other environmental and situational factors.

Another area Gardner's theory has come under attack is in its claim that each intelligence is relatively autonomous. This comes from research with brain damaged adults done by Gardner and others which supports his claim that the intelligences are to a certain extent, independent. These studies demonstrated particular faculties can be spared while others are lost. This intimates that high levels of ability in one intelligence are not dependent on high levels of ability in another intelligence. Although Gardner makes this claim, the critiques of other intelligence theorists such as Sternberg seem to be taken out of context. For example, Sternberg comments that the intelligences identified cannot be

seen independently. "Logical-mathematical and spatial abilities are remarkably difficult to test for separately because they tend to occur together" (Sternberg, 1988, p. 41).

If Sternberg were to go further with the multiple intelligence theory, he would see that even Gardner believes it would be hard to measure an intelligence independently. The independence of each of the intelligences arose from his research findings with prodigies and idiots savants in which independent intelligences can singularly flourish (Gardner, 1983). The notion of independent intelligences was not based on Gardner's attempt to isolate intelligence through testing in normal individuals. Gardner further states, "in ordinary life...these intelligences typically work in harmony, so their autonomy may be invisible" (1983 p. 9).

A further distinction Gardner makes with his theory of multiple intelligences is that such psychological processes as memory, perception and knowledge acquisition should not be viewed as general processes across the intelligences. Gardner cites neuropsychological evidence to support his position that each intelligence has its own operating procedures and its own rules by which it functions (1983). A heightened memory in one particular domain (a discipline utilizing a specific intelligence) does not imply anything about the mnemonic capacities of other domains (Gardner, 1983b).

Although Gardner's theory of multiple intelligences initiates a new view of intelligence, one made up of many different abilities, the idea that children learn in different ways is important for the continuation of this thesis. This idea posited by Gardner and other theorists yet to be mentioned, opens up the curriculum to new and interesting ways

of teaching. These methods approach each student as an individual and reveal a world of knowledge easily accessible to all children. Creative movement is just one way to tap into the available resources of different "intelligences" and "other ways of knowing".

Other Similar Learning Theories

Other learning theories also support the use of creative movement in the classroom. These theories, like Gardner's, promote other ways of knowing besides the verbal and logical. Many of them advance movement as an important part of learning. The learning theory most similar to that of Howard Gardner was developed by Jerome Bruner in the 1960s.

Through brain-mind function research, Bruner determined that depending on the sensory system engaged, the human brain processes experience differently. He identified three classes of knowing: the iconic, the enactive and the symbolic. Iconic processing deals with visual and spatial ways of knowing, enactive with movement or kinesthetic ways of knowing and symbolic with coded symbols such as letters and numbers (Sample, 1992). These different processing systems were labeled Learning Modalities. Each Modality was thought to be a biologically designed sensory and processing system which could stand on its own as a distinct domain of thought and reason.

Bruner's research led him to the conclusion that via a diversity of assignments, classroom teachers could manipulate the distinct processing systems of individuals. For example, an assignment about the solar system could be approached from different angles

to promote different processing. The children could write a description of the solar system to stimulate symbolic processes, draw a portrait of the solar system to stimulate the iconic and create a dance about the solar system to stimulate enactive processing (Sample, 1992). Like Howard Gardner, Bruner believed that each child is born with a certain amount of each processing ability. In order for each to evolve, continual nurturance is a necessity (Korzenik, 1984).

Another approach to learning introduces Francis Wayland Parker who developed ideas about learning in the late nineteenth century. Parker believed that children learn when they can relate school to their everyday experiences. If teachers continually bombard students with knowledge they cannot identify with, information will not be absorbed and retained. Only when connections are made for the students will real learning occur. According to Parker, connections can be made with the mind if children are allowed to attend to information with attention and expression. He posited that "we attend with our senses. We attend by looking, listening, touching" (Korzenik, 1984, p. 290). Parker insisted that sensory experience was the basis for the building of all mental concepts.

A third theory of learning is based on work by Anthony Gregorc. He observed that people combine concrete or abstract perceptions in either random or sequenced ways in order to get four significant "mindstyles". Concrete sequential is logical, analytical, predictable and thorough. Abstract sequential is logical, analytical, conceptual and

studious. Abstract random is sensitive, sociable, imaginative and expressive and concrete random is intuitive, original, investigative and able to solve problems (Butler, 1988).

Another learning theory known as the Total Physical Response (TPR) was developed by James Asher in the 60s. This theory was originally applied to the teaching of a second language. It holds that if students are engaged in physical activities, they will be more engaged and hence will gain a more complete understanding of concepts. In the foreign language classroom, TPR is used in vocabulary lessons. When a new command is heard the students act it out. This physical response aids long term retention of information. "Understanding is best developed through movements of the body" (Hooks, 1994, p. 500). When students are able to carry out an action or experience the concept, they can better understand the effects of the concept and the general principles of the concept. Finally, TPR facilitates transfer of learned information to new situations or circumstances.

A similar, and final, learning theory to be discussed is the theory of play. In a study by Saltz, Dixon, and Johnson (1977), the strong motoric component of learning knowledge and concepts in children was explored. The characteristics of play studied were a "break with the concrete stimuli of the environment...(and) the motoric component of concepts" (p. 378). Some theorists speculate that the motoric feedback of the experience actually becomes a key part of the concept and might symbolize it in memory. Others believe it is not the experience but the "fantasy of imagination and of internal mental manipulation that positively correlates with children's academic abilities" (Hamblen,

1993, p. 195). Either way, data from the studies suggests play helps increase intellectual performance in children.

All of these learning theories support the fact that the schools teach one way and children often learn in others. It is through teaching strategies which nurture other "ways of knowing," "learning modalities," or "intelligences" that students are able to develop positive self-images and respect for themselves and for others (Butler, 1988). However, it is when only traditional means of nurturing the verbal and logical abilities of children occur that some students lose motivation and perceive themselves as failures. By approaching curriculum from various angles, "students discover that they often have highly complex understanding of concepts that they previously could not put into words" (Samples, 1992, p. 64). Creative movement is one way which a classroom teacher can cultivate the potential of his/her students. By allowing them to create and explore beyond verbal and logical work, their minds are opened and they can draw upon abilities which once lay dormant. Furthermore, as many of these theories suggest, creative movement also gives children a physical outlet which is often beneficial to the process of learning.

Although each of these learning theories has its own distinctions, Howard Gardner's theory of multiple intelligences will be focused on for the remainder of the paper not as a contrasting theory but, rather, as a body embracing and expanding upon these learning theories and their contributions.

Educational Implications of the Learning Theories From a Multiple Intelligence Perspective

Western society, that on which the American educational system is based, has long employed verbal and logical methods of instruction and assessment. These two abilities have shaped our society's view on intelligence. If an individual can perform well on paper and pencil tests, which simply measure these two abilities, then the individual will more than likely perform well on intelligence tests. This in turn is characteristic of an individual with a high IQ. Parents, administrators and teachers alike, often hold the misconception that only such abilities as verbal and logical or mathematical, those which can be tested directly by paper and pencil tests, are worthy of attention in educational goals and classroom instruction time. In contrast, Howard Gardner agrees with the aforementioned learning theorists that it is time for our schools to spend less time ranking students and promoting rote learning and more time focusing on the abilities of individual students and educating for understanding (1993).

The multiple intelligence theory can play a major part in the realization of this goal by giving educators multiple lenses through which to view their students and the ways in which they each learn. The MI theory points out that the "contemporary construct 'intelligence' fail(s) to explain large areas of human endeavors" (1993, p. 15).

An exclusive focus on linguistic and logical skills in formal schooling can shortchange individuals with skills in other intelligences. It is evident from inspection of adult roles, even in language-dominated Western society, that spatial, interpersonal or bodily-kinesthetic skills often play key roles. Yet, linguistic and logical skills form the core of most diagnostic tests of "intelligence" and are placed on a pedagogical pedestal in our schools (1993, p. 31).

Gardner furthers the importance of his theory for educational purposes with the point that every cultural role requires the utilization of a variety of his intelligences. For this reason, it becomes important to consider each individual as a "collection of aptitudes" (1993, p. 27) rather than as a person with a singular, uniform problem solving faculty. In fact, Gardner believes that all of the intelligences are genetically inherited at a basic level. Therefore, teachers who tap into each of the intelligences not only improve their students' connections to learning but also help the students develop their abilities more fully (Gardner, 1993). The magnitude of this view is essential to Gardner's fight for multiple intelligences as an impartial tool for teaching and learning.

This point is very important when considering creative movement as a tool for encouraging the seven intelligences and thinking skills. Creative movement helps young children become confident about their bodies and about their creative abilities. If children are not taught at a young age that movement and creativity are valid, they will grow up thinking these things are merely childish and unimportant. In preschool, children have no problem expressing themselves physically. However, with each year of schooling that students are forced to sit in their chairs and are rarely given the chance to move about or to use their minds creatively, children lose a freedom and an independence they once knew. Creative movement can restore this confidence and teach children to value their bodies and their minds collectively. Unless the bodily-kinesthetic intelligence is nurtured, it will later become inaccessible to older students.

Using a multiple intelligence approach to teaching and learning while establishing a child-centered education system can transform students from programmed machines of rote learning to individuals of understanding. The MI framework can be helpful in recognizing strengths as well as weaknesses of each student.

If a weakness is identified early, there is a chance to attend to it before it is too late, and to come up with alternative ways of teaching or covering an important skill area (1993, p. 19).

In this way, a multiple intelligence classroom focuses on the abilities and inclinations of all of the students. The spotlight shifts from an emphasis on logical and verbal ways of teaching and encompasses methods of teaching which cannot reach all of the students and their individual ways of learning.

Assessment in the multiple intelligence approach to education is much different than the standard measures of verbal and logical intelligences used profusely in most schools. Because the seven different intelligences are revealed in disparate ways, they cannot be assessed by the traditional paper and pencil examination. Instead, multiple intelligence tests rely on materials, equipment, interviews, etc. for assessment. It is thought that the assessment and nurturance of the seven intelligences must occur simultaneously. In order for students to employ their true intelligences, they need to have time to manipulate and gain familiarity with the equipment used to stimulate the intelligences. For this reason, multiple intelligence assessment needs to be done while children are in a natural, playful, and comfortable environment. This environment is found

continuously within the classroom. The observance of students throughout the year is to be culminated by the emergence of an intelligence profile for each student (Gardner, 1993).

Although Gardner believes in his theory and seems to have much evidence to support his claims of a pluralistic intelligence, he is the first one to sight possible flaws in his own theory (1983, 1993). Gardner also does not try to falsify previous theories of intelligence but, rather, envelops the traditional view of intelligence as well as other pluralistic views of intelligence within his own theory. Furthermore, although Howard Gardner is trying to broaden the traditional view of intelligence, he by no way sees his theory as an end but rather as a beginning in a new approach to human intelligence.

I want to underscore that the notion of multiple intelligences is hardly a proven scientific fact: it is, at most, an idea that has recently gained the right to be discussed seriously (1983, p. 11).

The Multiple Intelligence Connection With the Arts

In the past decade, Gardner's research and theory of multiple intelligences has been the brightest light in the dark tunnel for art educators. Although Gardner does not recognize an "artistic" intelligence, he states, "each can be used to create or to understand artistic works, to work with artistic symbol systems, and to create artistic meanings" (quoted in Fowler, 1990, p. 25). Artists do not use a single intelligence. For example, the dancer not only accesses his/her bodily kinesthetic intelligence but s/he also utilizes spatial intelligence, musical intelligence, and frequently interpersonal intelligence when dancing in

a group or relating to an audience and intrapersonal while understanding what s/he is expressing.

According to Gardner's theory, it is important for children to have exposure to all of their intelligences from early on. Because the brain is more malleable at this time, encounters with the intelligences at a young age allow the advancement of abilities which might be harder to attain later in life (Hatch and Gardner, 1989). For this reason, it is important for America's schools to shift the major emphasis away from the verbal and logical ways of knowing to a more synthesized curriculum commissioning all of the intelligences. The arts can be used as a powerful tool in this process.

The bias of verbal and logical abilities carries over to our society's ideas about the cognitive domain and cognition. Elliot Eisner points out in his article "The Role of the Arts in Cognition and Curriculum" (1981) that cognitive tasks are those which employ words and numbers. However, Eisner shares the definition of cognition in the Dictionary of Psychology. This definition deals with an individual's process of becoming aware of his/her environment, it says nothing about words or numbers. This definition would seem to necessitate the senses as a part of cognition. Still, "cognition or 'knowing' is too easily construed as solely a matter of words and their silent manipulation" (Perkins and Leander 1977, p. 2).

The common notion that the arts grow out of the soul or the heart, while mathematics is the business of the mind, is a fallacious duality...our physical, as well as our mental skills, reside within our minds. Our language, as well as our music, or dance, or architecture, emerges from..our minds (Engel, 1983, p. 7).

Eisner makes a case for the arts as cognitive activity by arguing that concepts are formed through sensory experience. No concept can exist without sensory information and the senses utilized affect the kind of concept formed. Without some type of image representation (be it visual, auditory, or kinesthetic) the words used in procuring the concept are meaningless (1981). "While the sensory system provides us with information about the world in sensory form, our imaginative capacities-when coupled with an inclination toward play-allow us to examine and explore the possibilities of this information" (p. 49). The combination of the senses, imagination and play can all be found in the arts hence, they aid in concept formation and can therefore be legitimized as aiding in cognition.

Still today, the Arts and art education are seen in a purely affective light. While other cultures embrace the arts as a way of life, our culture has lost its roots connecting it to the arts and to a strong part of human potential. Somehow, other cultures keep their holistic ties and live a more amalgamated life where all modalities are legitimate social interactions (Hamblen, 1983). With a broader view of intelligence as provided by Howard Gardner, an understanding of the Arts as cognitive activity and as matters of intellect can begin to materialize.

Furthermore, the Arts can provide different ways of knowing and understanding the curriculum. As Gardner suggests, the Arts which encompass the intelligences can function as pathways to learning for all students. For example, creative movement, rhythm patterns and painting can all be used as metaphors for learning in curriculum

content areas such as mathematics, language arts and science. For this reason, the Arts can be seen as a "mind-builder" (Hamblen, 1993, p. 193) and should be given a larger role in school curriculum.

If the Arts are used at all it is usually within the special education classroom or with remedial students (Sample, 1992). However, if troubled learners can excel through the Arts, then why aren't the arts be used in a regular classroom in order to enhance education in general. Arts education trains students to set goals and discover solutions and alternatives to problems when they are encountered (Gardner, 1983b). Education through the arts improves sensitive perception, insight, and fosters imagination, invention and divergent thinking (Eisner, 1981). Numerous researchers have found that Arts education also increases reading scores (Dalke, 1984; McGuire, 1984; Silver & Lavin, 1977). Furthermore, arts education has proven to promote reading skills while enhancing creativity in other disciplines and imparting democratic principles and moral behavior (Hamblen, 1983).

Focus on the Bodily Kinesthetic Intelligence and Creative Movement

Kinesthetic response has always been the basis for acquiring knowledge in humans (Hamblen, 1983). Because movement is integral to living our lives, we often move about without conscious thought. For this reason, the body as a means to conceptualization, feeling, physicality and intellectual stimulation is customarily disregarded (Hanna, 1983).

On the other hand, the theory of multiple intelligences includes the kinesthetic intelligence.

The relegation of this sphere as an "intelligence" highlights movement and its educational value.

In order for bodily kinesthetic ability to be recognized as an intelligence by Gardner, it has to meet the previously outlined criteria. First, in children, movement has a developmental schedule through which it unfolds. In the brain, movement can be isolated to the motor cortex. In evolutionary history, clear signs of the use of movement through dance have been found as symbolic drawings on the walls of Paleolithic caves (Gardner, 1983). Furthermore, in recent years, psychologists "have discerned and stressed a close link between the use of the body and the deployment of other cognitive powers" (p. 208).

Most importantly, bodily-kinesthetic abilities are prized among most cultures outside of the Western tradition. Non-western cultures have more holistic societies. There are no distinct lines between the roles of the body, the mind and the spirit. In both Africa and India, movement and dance are instrumental in worship. In India, dance is used as a type of metaphorical union between god and the people while in Africa, dance is used for physical union with the gods through trance dancing. Movement and dance are essential to life in these cultures. It is used not only in celebration and worship, but also in all expanses of daily life (Jonas, 1992).

In the past dance and movement, like all arts, were seen only for their affective, emotive powers. Today, however, creative movement is seen as an educational tool. The experience of creating through movement in a classroom utilizes analytical and sequential processing controlled by the left hemisphere of the brain and analogic and spatial abilities

controlled by the right hemisphere. The use of rhythm in movement further involves both of the hemispheres (Hanna, 1983).

Many people do not recognize the educational effectiveness of using the body and creative movement to promote learning. However, a dancer with Ballet Russe, Anatole Vilsak, talks about the process behind the creation of movement. As the creator "you must learn, you must think, you must have your opinion about something. . .And after, you ask, 'Am I right?'" (Hanna, 1983). Incorporating creative movement within the classroom can develop the critical thinking skills of analyzation, empathy and reflection along with the creative thinking skills of divergent thinking, tolerance of ambiguity and multiple perspectives. It also nurtures many ways of learning not focused on in the typical school setting.

Conclusion

With the theories of learning provided by the multiple intelligence theory as well as the physical learning and play theories of Parker and Asher, the Learning Modalities of Bruner and the mindstyles of Gregorc as the foundation, the existence of a well rounded, equitable education can exist for our children. Teachers can use creative movement activities which tap into other ways of knowing in order to promote learning and understanding by their students. Without these diverse avenues to knowledge, many children are short changed. The continual focus on verbal and logical abilities with the

neglect of other, often artistic, abilities does not allow many children to develop to their full learning potential.

The role of teachers in an equitable education is to develop classroom activities which stimulate a variety of abilities. They should present different examples, descriptions and experiences in order to stimulate a single concept formation. This variety of media can stimulate and reach out to even the poorest learner (Zubrowski, 1991). The teacher does not have to be an expert with each way of knowing. The only prerequisite is that the teacher should be "a student of the child mind. The teacher who knows and respects the child mind can" (Korzenik, 1984, p. 291) respect the differences of all children and promote stimulation from various experiences.

Although Howard Gardner's theory of multiple intelligences remains suspect among psychologists and other intelligence theorists, its power as a learning theory validates the nurturance of different abilities in addition to verbal and logical. Because each child is different and has strengths and weaknesses in different areas, it is important for a teacher to assess the learning needs of the children in his/her classroom. This assessment can then be used to implement a plethora of opportunities for each child to have experiences with not only their strengths but also to nurture and more fully develop their weaknesses. Experiential learning involving the whole student will encourage students to be excited about school and the process of learning. This excitement will transform classrooms from sterile teacher centered classrooms to living and flourishing child centered learning environments.

CHAPTER IV

THE WORKSHOP

This chapter is a guide for dance educators who would like to lead a workshop on creative movement for elementary school teachers. It can also be used by teachers who have had experience using creative movement within their own classrooms. Each session is outlined and is followed by rationale and discussion and activity tips for each topic to be discussed. Instructional materials or fact sheets explaining many of the topics can be located in the Appendix for quick reference. This is done so that these fact sheets are easily accessible for use as overheads or handouts for workshop participants. Much of the material within this chapter has been adapted from the books *Dance for Young Children* by Sue Stinson and *First Steps in Teaching Creative Dance to Children* by Mary Joyce. Both of these books are wonderful resources for creative movement activities. They both contain excellent exercises and lessons for use with children and explain the following topics in further detail.

Although this workshop covers many of the most important topics for creating a creative movement classroom, it is still a work in progress. This workshop has not been explored through presentation. It is likely that when it is used, adjustments will be made depending on time scheduled for each session, the number of sessions actually used or the

space available. The workshop presenter, the workshop participants or the school district within which the workshop is being presented might also affect this workshop.

A lot will be determined by the dynamics of the workshop sessions themselves. It is possible that a session might flow better if it is reorganized. Sometimes supplementary information might need to be added whereas other times, a topic discussed thoroughly might be touched on more briefly. Anyone using this workshop should make adjustments to make it comfortable for him/her self as presenter and for their participants.

Session I

Goal: This session will introduce elementary school teachers to creative movement and give them an understanding of what creative movement is and why it is important in the elementary classroom.

- I. Welcome: Goals and objectives of the workshop introduced
- II. Personal creative movement questionnaire
- III. Class participant introductions
- IV. Creative Movement
 1. What is creative movement?
 2. Why should we teach creative movement?
 3. How does creative movement enhance thinking and learning skills?
- V. The Basics
 1. What are the elements?
 2. Why are they called elements?
 3. Time, space and energy
 4. What is a personal movement vocabulary?

include many different action words as well as adjectives and pictures demonstrating the element and its components.

Another idea might be to create a movement in life board where the teachers will assemble pictures or stories of ways they use movement in everyday life. An important aspect of this visual board would be to analyze the pictures and accounts in order to break down each movement into the elements. This will display how important a variety of movements are in everyday life. A final poster might assemble together the eight locomotor skills (run, skip, walk, gallop, hop, leap, jump and slide) along with their definitions for easy reference by the participants. This list might also include nonlocomotor movement such as stretching, bending, twisting, turning, circling, collapsing, swinging, swaying, etc.

Goals and objectives of the workshop. At this time, give a brief overview of the workshop and make goals and objectives of the workshop clear. Do not go into much detail at this time.

Personal creative movement questionnaire. In a study done by Colla MacDonald in 1991, 20 elementary school teachers were interviewed on the subject of integrating creative movement into the elementary school classroom. MacDonald uncovered attitude issues of confidence, priority, time and apathy; knowledge and skill issues of content, methods of integration, music and rationale; and issues of resources including relevant reading materials, equipment, lack of previous experience and lack of support from administrations.

The personal questionnaire found in the Appendix, p. 89, should be given out with the registration form and returned completed to the workshop leaders as each participant registers to take part in the workshop. The questionnaire will provide an opportunity for each participant to relate his/her own knowledge of creative movement. It will uncover each participant's experiences, hesitations, uncertainties and attitudes toward the use of creative movement within the classroom. With this information, focus can be placed on the needs and conceptions of the current workshop participants. The workshop leaders can also highlight personal concerns making the workshop valuable for each participant. If the workshop can meet the needs of its participants, it will give them each a firmer ground on which to build creative movement experiences for the classroom.

Participant introductions. It is important to make sure all of the participants get to know each other. Break the group up into pairs. Each person should ask his/her partner three questions about him/herself. It will be the job of that person to introduce this participant to the class. Next, each participant should set his/her name to movement. For example, the name Bob might be taking an unusual shape. Or, Bob might extend his name out so he can fit in a right arm swing and a hop ending with an unusual shape. After about ten minutes, bring the whole class together in a standing circle. Move around the circle pair by pair with the introductions. After a participant introduces his/her partner to the group using the answers to the questions s/he asked, then the two of them together will teach the whole group that person's name with the movement.

When the group participants already know each other, the questioning can be bypassed and the circle of movements can be expanded. After each introduction, attempt to go back to the first name and repeat each of the participants' name movements up to that point. Continue through the entire circle.

What is creative movement? It is important to introduce creative movement to the group before further discussion on the subject begins. It might be helpful to discuss certain questions from the previously administered personal questionnaire or to simply ask the participants to share with the group what kinds of experiences, if any, they have had with creative movement. It also might be interesting to have each participant give his/her definition of creative movement. Although a very brief definition was given on the questionnaire, it is possible that people's attitudes and experiences might allow them to maintain opinions and conceptions inconsistent to the definition provided and contradictory to the meaning of creative movement to be conveyed through the workshop. A brief explanation of creative movement for workshop purposes can be found in the Appendix, p 92.

Why should we teach creative movement? Helping teachers understand why creative movement should be taught is one of the most important goals of this workshop. Without the knowledge of why creative movement is effective for children's development physically as well as mentally, teachers will not utilize creative movement in their classrooms. If creative movement is not seen as a worthwhile addition, they will not

allocate time in their already busy schedules to allow children the opportunity to explore their bodies, their imaginations and take part in creative learning.

Information in the Appendix, p. 92 should be used as overheads for presentation to the group in order to give them some visual stimulation and evidence of research findings on the use of the arts as educational tools.

How does creative movement enhance thinking and learning skills? At this point, the Arts and creative movement in particular should be introduced as cognitive activity which promotes learning and as a way to engage learners who have trouble with verbal instruction. If the Arts are only seen by teachers as an appeal to the affective side of the child and as a means of communication, they will not include it in their classroom. For a new subject or educational tool to be introduced, it will need to be seen as a powerful adjunct to learning and important to the lives of children. Creative movement will have to be seen as an activity which can promote thinking skills and can be an avenue of instruction reaching children not touched by traditional teaching methods.

What are the elements? Presentation of and discussion on the elements (time, space and energy, Appendix, pp. 93-95) are important for laying a foundation from which teachers can build. At this point, get the participants up and moving. Utilizing the poster of the elements, introduce time, space and energy focusing on each component within every element (i.e. space->direction, size, pathways, levels and focus). If the elements are not represented as the backbone of creative movement, creative movement will not be fully explored and will not gain the strength it needs to be a powerful tool in the

classroom. It is important to introduce the elements in such a way that teachers see them as indispensable to creative movement in the classroom. They must understand that full exploration of the elements is what gives children's minds and bodies the potential to be investigative with creative movement. In order for children to use movement creatively, they must first understand the basic elements of dance and learn how to use them to create and combine movement phrases.

Why are they called elements? Time, space and energy are called the elements because each of these is elemental to movement of the body. Time, space and energy factor into any action our bodies perform whether it be walking down the street, dribbling a basketball or lying on the couch reading a book. Begin to discuss movement situations and help the participants analyze what aspects of the elements of creative movement are used in each situation. Have the participants act out a personal everyday activity they do at home or at work and then analyze the motion according to the elements of creative movement.

Time, space and energy. At this point, a rather thorough discussion of the elements has occurred. Now it is time to get the workshop participants to explore the elements further. Take about 20 minutes with each element. Do not try to explore each element completely, there will be time for that next session. Get the participants moving.

Start with space because this element introduces the participants to locomotor and nonlocomotor/axial skills. Make sure the teachers understand the locomotor and nonlocomotor skills and can define them. The full twenty minutes could probably be filled

by discussion of and experience with locomotor and nonlocomotor/axial skills. If time remains, begin talking about shapes and levels.

Next move to time. Take the twenty minutes on this element to explore fast and slow. This is a good place to have the participants explore all of their body parts (hands, feet, legs, hips, head, fingers, shoulders, etc.) Have them move the body parts in isolation and simultaneously; move them slowly and fast.

Finish with exploration of energy. Because the concepts of free and bound are more complex, begin heavy and light. Have them continue exploration of the different locomotor skills through heavy and light. This will enable them to use concrete skills as an aid to exploring abstract concepts.

What is a personal movement vocabulary? Gather the participants into a circle and ask them each to think of a movement which they used frequently in their explorations. This could be a locomotor skill or an axial movement or a shape they found themselves coming back to. Explain that all of these movements are a part of our personal movement vocabularies. Talk about how a movement vocabulary is a collection of all of the movements a person can do.

The goal is for each participant and each child they teach to develop an unlimited movement vocabulary. When all of the elements are put together, people can find different ways of combining movements with different rhythms or different energies in order to create endless possibilities. This is a goal of creative movement: to allow each child or in this case participant to develop as many movement possibilities as they can.

Later on, these movement vocabularies will allow children to explore other subjects through creative movement. They will be able to concentrate on making connections between their movement and the subject rather than worrying about what movement should come next.

Introduction to journal writing. Another important step in the workshop process is metacognition. Utilizing journal writing is an effective way to encourage the participants to reflect upon the sessions and to chronicle progress and questions. This journal writing might also be seen as portfolio assessment for the period of the workshop. The point of this journal writing is to provide teachers with the opportunity to reflect on what is taught within each session and to verbalize the value of the material and to think of ways in which this material might be useful to him/her in his/her classroom teaching.

The last fifteen minutes of the session will be dedicated to beginning such a reflection on the material covered in that session. At that time, the teacher should use the provided assessment (Appendix, pp. 96-99) form to begin the process. Space is provided for the teacher to continue reflection throughout the period in between sessions. It is hoped that the teacher will note instances where creative movement could have been or was used within his/her classroom. Instances where creative did not work or might not work should also be included. If creative movement experiences are used, it is important for the teacher to keep a detailed journal of what worked, what didn't work and of the attitudes and struggles of the teacher as well as of the students.

This type of portfolio assessment through metacognitive journal writing will allow teachers to review and relate growth in their attitudes and skills and frequency of use of creative movement within their classrooms. This type of reflection is important for teachers to see their own progress and assess their strengths and weaknesses. The broad reflection is structured to allow teachers the opportunity to keep track of the learning process and their development as teachers utilizing creative movement. It should also help them to extract meaning from the workshop sessions and to make connections to their own teaching.

Outcomes of Session I

1. Workshop participants experience what creative movement is and why it is beneficial to the child.
2. Participants understand how creative movement can be used to promote learning and thinking skills in children.
3. Participants are introduced to the elements of creative movement and begin building a personal movement vocabulary.
4. Participants explore time, space and energy.
5. Participants learn the value of metacognitive journal writing.

Session II

Goal: This session will introduce workshop participants to the creative movement experience. It will allow teachers the chance to have creative movement experiences and to help open them up to the possibilities of using creative movement with elementary school children. Example lessons will be provided for teachers to view.

- I. Back to the elements
 1. Space
 2. Time
 3. Energy
- II. Exploring your personal movement vocabulary
- III. Creating a Dance
 1. Theme
 2. Imagination
 3. Structure
- IV. The importance of variety
 1. What makes creative movement interesting/boring?
 2. Can creative movement be used successfully without variety?
- V. Discussion and journal writing

Session Design

Back to the elements. This session should begin with a comprehensive exploration of the elements, one at a time. Although there is substantial crossover of all of the elements in movement, it is necessary to allow the participants the opportunity to explore each element singularly in order for them to see that there is a wide variety of movement available for each element.

At the beginning of each element be sure to review what was learned about that element in the previous session. After review is done, take another 30-40 minutes to further explore each element and its movement possibilities. Touch on all of the components of each element as stated in the Appendix, pp. 93-95. Once all components have been introduced, it is time to discuss how all of the elements overlap. Ask the participants for examples they discovered.

Exploring your personal movement vocabulary. After the discussion on overlap of elements, get the participants moving again. Give them the opportunity to explore combinations of elements. Make sure that the participants are given the chance to combine movements they might not think of such as "Try to twist and hop together". By sometimes asking for certain combinations of movement and adding questions such as, "Can you slide backwards or to the side," you will help push the participants beyond the movements which are comfortable. This will help expand the movement vocabularies of each participant.

Make sure to discuss this with the participants. Ask them how they felt when they attempted combinations they might not have thought of or when you challenged them to move beyond their comfort zone. Emphasize that they understand this is how children expand their movement vocabularies as well.

Creating a dance. At this point, the participants are familiar with the elements and have begun to really explore creative movement. Now it is time for them to begin combining all of the elements into their own personal dances. The workshop leader should develop a story in which the participants must use creative movement to explore each element of the plot. For example, if it is near Halloween, the story might be about a witch and her adventures. A winter idea might be to create a snowflake story for the participants to make their own snowflake dances. Examples of these two stories can be found in the Appendix, p. 100.

The workshop leader should begin by setting the scenario and asking for a beginning shape from each participant. As the leader makes his/her way through the story, the participants should follow along with exploration of the elements. As the story concludes, the leader should ask the participants to conclude their dance by forming an ending shape. Three necessary parts in any dance are a beginning, a middle and an end. After all have created their dances, ask the participants if they can describe these three important parts of their dance. These parts should be common in the dances of all of the participants. Try leading them through the same story to see how their exploration changes. At this time, ask one of the participants to create a story for the entire group to interpret into dance.

Discuss imagery when introducing the concept of creating a dance or a movement phrase. When working with creative movement, it is essential for the participants and later their students to think in movement terms. Utilizing imagery too soon can reduce exploration of movement and may encourage students to simply pantomime or mimic (Joyce, 1994).

After thorough investigation of the elements, a movement phrase or a dance can be developed by each individual child. The three essential parts to a dance are the beginning (starting shape), the middle (varied movement) and the end (finishing shape). Although the development and skill level will vary from grade to grade, with the help of the teacher, all children are capable of structuring their movement in this way.

encouraged, it will help each participant explore him/herself and his/her movement vocabulary while also elevating the level of enjoyment for each participant (Joyce, 1994).

Discussion and journal writing.

Outcomes of Session II

1. Participants fully explore the elements of creative movement.
2. The idea of personal movement vocabulary is explored. Each participant is challenged to expand his/her vocabulary.
3. Participants are introduced to the importance of structure and variety in creative movement.

Session III

Goal: This session will provide teachers with the background to organize creative movement in their own classrooms. Discussions will deal with the classroom environment (i.e., where can creative movement be done, how long does it take, etc.), the ground rules for a successful classroom and establishing discipline. This session will also discuss how the classroom teacher can prepare his/her students for creative movement in the classroom.

- I. The creative movement classroom
 1. Where is it?
 2. What does it look like?
- II. Ground Rules
 1. What do children need for creative movement?
- III. Creating an atmosphere of respect
 1. Who needs to be respected and how do we show this?
 2. How can children learn to respect the teacher, themselves, and their peers?
 3. Who should make the rules? Sharing responsibility with the children.

- IV. A sample first class
 - 1. How can the teacher command control?
 - 2. What and where is the dance space?
 - 3. What is personal space?

- V. Discipline: dealing with problems
 - 1. The disruptive child
 - 2. The non participant
 - 3. Contagion

- VI. Stimulating interest and variety in your students

- VII. Discussion and journal writing

Session Design

The creative movement classroom. Have a discussion regarding how to assemble a creative movement classroom. The creative movement classroom can be any classroom. Often teachers feel their own rooms are not big enough or are too cluttered for creative movement. Actually, a space which is too large can diminish focus and might encourage children to take off running. Fortunately, every classroom can be a creative movement classroom. First, it is important to move tables and desks back to the corners of the room. Chairs should be placed on top in order to make the most space available. The space that is left is considered dance space. If your space seems too small for the number of students in your class, you might try splitting the group in half and having them take turns. If the area seems too large, make a dance space outline from tape upon the floor. This will help keep students within a predetermined area while they move. Your space should have a smooth surface.

Try to create a square space to ensure that all students will be visible. Make sure to put boundaries upon this space so you do not have students crawling on bigger objects or hiding under desks. Also cover items which might be distracting to the students. At the beginning of each session you should have the children remove their socks and shoes and place them in a spot outside of the dance space. This is done to decrease injury and to give the children a freedom which socks and shoes inhibit.

Ground rules. Setting the ground rules is one of the most important parts of using creative movement in the classroom. The children should help establish these ground rules. Allowing them to participate in rule making shows them they have responsibilities to themselves, their peers and to the teacher. A few essential ground rules include:

1. There is a time for quiet and a time for making noise. As a teacher, you should have some signal for the children that it is time for them to stop moving and listen with their mouths closed. Many teachers use the word **FREEZE** to indicate when the children should stop and listen. Other ideas might be a certain number of claps or the beating of a drum. Any signal will work as long as the children understand its meaning.
2. Stay in the dance space. An activity to defining the dance space should be presented. This will inform children as to where they are and are not allowed to move. This can be as simple as walking a boundary line of the dance space and then asking the children to give examples of when they are within the dance space and when they are not.

3. Each person has their own personal space within the greater dance space. It is important to help students understand the concept of personal space. This is the space each individual occupies. A child should not invade the space of another. That means no holding hands, no pushing and no touching each other (Stinson, 1990).

Creating an atmosphere of respect. Although the teacher needs to have the respect of his/her children, the children also need to have respect from their peers. Listening activities can help establish respect for the teacher. If the children are good listeners and show respect when the teacher speaks, it will be much easier for him/her to lead the class through successful movement experiences. To help children build respect for each other, let them take turns watching each other make shapes. Pointing out and enjoying differences will help students see that their own ideas are not better or worse than the ideas of another.

A sample first class. At this point, the workshop leader will lead the participants through a sample first class. This class should include the establishment the dance space verbally and then physically with exploration exercises. See the Appendix, p. 101. The class should work together to establish ground rules and discuss some consequences of not following these rules. It should also include listening exercises to promote respect for the teacher and for other students. See the Appendix, p. 102.

Discipline: dealing with problems. It is very important for classroom problems to be dealt with immediately. If a single child decides to not participate or to do the opposite

of everything the teacher says, often moving the child to another spot or moving closer to the child will help him get started. Other tactics include using the child's name in discussion or having the whole class make a shape similar to the one made by the disruptive child (Stinson, 1990).

Sometimes, contagion will occur. One student, then two, then the whole class is making a noise or a shape or pretending to be an animal, it often works to meet the children where their energy is centered. Gradually, the session can be moved to a more focused level. For example, if all of the children start screaming, give them the chance to scream as loud as they can. Then challenge them to scream as quietly as they can. Even have them do a silent scream. Move back and forth between loud and quiet until you can refocus their energy to the task at hand. It is also important to return to the ground rules if students are invading each other's space or moving outside of the dance space (Stinson, 1990).

Stimulating interest and variety in your students. If the children are boring in their movement it is possible that they are bored. A creative movement teacher needs to teach with variety. The use of visual aids, instruments, props and music can all add diversity to a creative movement session. Furthermore, it is important for teachers to watch the children and to use appropriate images, words and activities to inspire children. It is the teacher's responsibility to notice what is missing from the children's movement and to add different elements or images in order to get a varied response from the children (Joyce, 1994).

Discussion and journal writing.

Outcomes of Session III

1. Teachers are introduced to the creative movement classroom and are given ideas as to how they can transform their own classrooms.
2. Teachers experience a first class establishing ground rules, dance space and respect for the teacher, self and peers.
3. Discipline problems and solutions are discussed.

Session IV

Goal: This session will introduce the idea of using creative movement as an educational tool. The aim is to make teachers aware that creative movement can be useful in teaching other subjects but that the teacher and his/her students must be comfortable with the elements before such an endeavor can be entirely useful or successful.

- I. Introduction to the use of creative movement as an educational tool
 1. How can creative movement help teach other subjects and promote learning?
- II. Howard Gardner's theory of multiple intelligences
 1. What are these intelligences?
 2. Where does creative movement fit in?
 3. What are the implications of this theory for the elementary classroom?
- III. Teaching with creative movement
 1. Why is it helpful?
 2. Do the students need the elements to use creative movement in the classroom?
- IV. Further exploration of the elements and how connections can be made to academic subjects
- V. Discussion and journal writing

Session Design

Introduction to the use of creative movement as an educational tool. Creative movement can be most valuable when children can see its connection to the world around them. Many psychologists and educational researchers such as Jerome Bruner (Sample, 1992), James Asher (Hooks, 1994), and Francis Wayland Parker (Korzenik, 1984) see movement as more than motor development; they believe it is basic to the learning of the child. It is thought that children connect with diverse experiences through movement. This allows them an extraordinary avenue to comprehension of the world (Murray, 1963). Dance educators hold that creative movement is holistic, integrating the mind, the body and the spirit of each child. No other discipline can make this claim. It is the creative expression of movement which is thought to develop the whole child, the child's self-image, self-awareness and the child's self-direction (Joyce, 1973).

Creative movement helps to humanize the curriculum (Fowler, 1994). It brings the whole child together in learning and allows a child to become familiar with him/herself. Without such familiarity, a child will not engage him/herself in his/her education and the learning process. Eric Oddleifson reports in work done for the Center for Arts in the Basic Curriculum, that all of the arts, although usually seen as nonessential, do promote "the kind of thinking, enthusiasm, self-esteem and discipline that are necessary requisites for learning" (1990, p. 1).

Movement should be integrated into the curriculum because it is inherent in all human beings. Movement can help develop or alter the quality of the students' lives

because it involves the whole self. Not only can movement teach a child about him/herself, it can extend and enhance a child's learning process. Having movement integrated within the curriculum would free students from the sit, listen and learn style of education in today's society. This author holds that in a disciplined yet open atmosphere, movement encourages children to think both creatively and critically in order to make decisions and to build self-confidence.

It has been shown in studies that movement can stimulate a child's interest in school (Fowler, 1994). It can develop concentration in students which will then transfer into other subjects. Experiencing multiple ways of knowing material can promote learning in students who are not reached by the conventional, verbal modes of education in our school systems today. Furthermore, creative movement stimulates decision making, problem solving and communication abilities as well as the creative affinity needed to produce the kind of thinkers necessary for the technological world we live in (Murray, 1963).

Creative movement can be used to help teach almost any topic. For example, if the students are studying poetry, creative movement can be used to help them remember the names of different types of figurative language. They might develop movement devices of remembrance rather than neumatic devices. Each child might have their own personal movement phrase to help them remember the word onomatopoeia. For example, every student could take six different sounds, one for each syllable in the word, and string them together to form a movement phrase. One child might choose bang crash zap

boom, crunch and smack whereas another might use swish, zoom, snap, crackle, pop and flop. This type of association between movement and a concept will help to imprint the idea of the different types of figurative language because it not only involves the child's mind but also his/her body and spirit.

Howard Gardner's theory of multiple intelligences. The theory of Multiple Intelligences espoused by Howard Gardner of Harvard University's Project Zero has been making its way through the education community for the past thirteen years. This theory advances the belief that there is more to intelligence than an inborn general intelligence factor known as *g* which is resistant to change regardless of experience or training. The Multiple Intelligences (MI) theory believes "that human cognitive competence is better described in terms of a set of abilities, talents, or mental skills, which we call 'intelligences'" (Gardner, 1993, p. 15). The seven identified are the musical, bodily-kinesthetic, logical-mathematical, verbal, spatial, interpersonal and intrapersonal intelligences. Gardner and his colleagues believe that each person is born with some ability in each intelligence. This basic level of each intelligence is thought to be independent of education and universal to all humans in every culture (Gardner, 1993).

With the proposition that these intelligences can become further developed through nurturance, educators are examining the basic school system. Today, the majority of students are taught via the verbal and logical-mathematical intelligences alone. It is the hope of many schools across the nation which have adopted Gardner's Multiple Intelligences theory as a foundation for teaching, that all of the intelligences can be

fostered within the school system. This does not necessarily mean teaching each of the intelligences as their own stand alone subject but more often, using the different intelligences as a means of instruction. If a child attempting to learn a math problem is not skilled in the logical-mathematical intelligence, the teacher can tap into other intelligences as metaphors giving the student a secondary route to the problem. Although most often the linguistic intelligence is used as an alternative, bodily-kinesthetic, spatial or musical intelligences could also be useful metaphors in such a situation.

In light of research done by Gardner and his colleagues, it is evident that educational reform using a multiple intelligences approach will enrich and facilitate the learning experience for all children. No longer will only those gifted with verbal and logical-mathematical intelligences succeed in our school systems. Each child will be able to recognize his/her own skills and abilities within each intelligence. This in turn, has the power to foster self-esteem and a willingness to learn which will extend to all areas of learning. The curriculum will be opened up to all students.

Teaching with creative movement. Kinesthetic response has always been the basis for acquiring knowledge in humans (Hamblen, 1983). Because movement is integral to living of lives, we often move about without conscious thought. For this reason, the body as a means to conceptualization, feeling, physicality and intellectual stimulation is customarily disregarded (Hanna, 1983). On the other hand, the theory of multiple intelligences includes the kinesthetic intelligence. The relegation of this sphere as an “intelligence” highlights movement and its educational prowesses.

Here is where creative movement fits in. Creative movement is a means of developing bodily-kinesthetic intelligences in children. By using creative movement in an elementary school classroom, students experience the opportunity to tap into other ways of learning. Creative movement can be used as a metaphor for learning concepts in other disciplines such as math and the sciences. Because learning in young children is connected to experience and movement (Sample, 1992; Korzenik, 1984), creative movement should be utilized as a tool for instruction. At first creative movement must be explored in itself to familiarize children with their bodies and with the possibilities of movement. Later, creative movement can be a tool for integration. It can be used within a subject to bridge concepts, teach thinking skills and to allow students to take part in their own educations.

Though many people do not recognize the educational effectiveness of using the body and creative movement to promote learning, a dancer with Ballet Russe, Anatole Vilsak, talks about the process behind the creation of movement. As the creator “you must learn, you must think, you must have your opinion about something....And after, you ask, ‘Am I right?’” (Hanna, 1983). Incorporating creative movement within the classroom can develop the critical thinking skills of analyzation, empathy and reflection along with the creative thinking skills of divergent thinking, tolerance of ambiguity and multiple perspectives. It also nurtures many intelligences not focused on in the typical school setting.

Although everyone is aware of art as a finished product, many don't realize there is more to the arts than talent and inspiration. The arts develop a person's faculties for

creative thinking and imagining and also for critical thinking abilities such as problem-solving, critical judgment, decision making and a multitude of other mental processes (Oddleifson, 1990). These skills, taught in other critical thinking programs, are used within the creative process of creative movement.

There is more to creativity than a product. The process of creativity is one often underestimated and under recognized. When involved in creative movement, children not only think about the dance they are creating, they make many decisions in the process. Dorn states in his article "Art as Intelligent Activity," "creative thinkers search more extensively for problems worth solving and show greater flexibility in defining problems" (1993, p. 3). Being creative involves risk taking. When the outcome or path in which the dance is taking doesn't seem right, it is abandoned; or sometimes, it is simply altered or even simplified. "It is the essence of problem solving...the creative person must continually rethink, reconsider, replace, refine, redo, reaffirm, reprocess, rewrite, and reconceptualize" (Balkin, 1990, p. 32). Critical thought is needed for the child to create and to explore through creative movement.

Creative movement in the classroom will open up many doors to students. Because movement is such an important way of learning for children, it can not only tap into different ways of knowing but it can also provide a tangible experience which can help students make what they are learning a part of their being. When students experience learning through movement they can grasp concepts which might be more difficult to understand when only taught verbally. Movement helps children see a connection

between what they are learning and their every day lives. Movement promotes cognitive learning.

It is very important for students to be introduced to the elements of creative movement to prevent the students from simply acting out or pantomiming on a particular theme. Only after students understand the elements and how they overlap can they make movements which represent a topic as more than imitation. With the elements of creative movement, children will move beyond superficiality and will truly explore what it is like to be what they are dancing. To make creative movement a useful tool in the elementary classroom it is important to start with the elements and then move on to imagery.

Further exploration of the elements and how connections can be made to academic subjects. At this time, get the participants up and moving around exploring the elements. Develop activities to show how connections can be made between creative movement and the elementary curriculum. Sample lessons can be found in the Appendix pp. 103-108. Present 2-3 lessons which explore this connection. Assign each participant to develop three connections with topics from their own classrooms which will be presented during the following classes.

Discussion and journal writing.

Outcomes of Session IV

1. The participants learn techniques to help them transform their own classrooms into creative movement classroom.
2. Ground rules are discussed.

3. Participants experience a sample first class and are introduced to activities they can use their own classrooms.
4. Participants discuss discipline problems and stimulating variety in students.

Session V

Goal: This session presents integration and creative movement as a tool for integration. The topic of critical and creative thinking skills is introduced along with demonstrations of how creative movement can aid in attempts to instill these skills within students. Furthermore, this session will work to establish connections between academic subjects and creative movement and will begin to give teachers a chance to explore planning lessons with creative movement.

- I. Integration
 1. What is integration?
 2. Why is it important?
 3. What are some different models of integration?
- II. Thinking skills
 1. What is critical thinking?
 2. What is creative thinking?
 3. Don't we teach thinking already?
- III. Making connections-integrating creative movement into all subjects to promote understanding and thinking skills.
- IV. Lesson Plans
 1. What can creative movement help teach?
 2. How can creative movement be used?
 3. Will it work?
 4. How can I find a connection?
- V. Discussion and journal writing

Session Design

Integration. The traditional curriculum model separates disciplines into distinct sections fragmenting them into unrelated fields of study. This type of curriculum does not allow for students to connect learning from one subject to another. Rarely will students see connections between what they learn in class and their own lives. For this reason, information is sometimes learned and then forgotten after the test.

It is possible for learning to take another road. This road allows students to see connections between different subjects. In this type of curriculum integration means that all of the subjects teach related topics at the same time. For example, if the social studies unit is on Ancient Egypt, the language arts unit deals with writing stories about the Nile River, the math unit deals with the measuring and building of the pyramids and the science unit covers mummification. This type of integration allows students to bridge different aspects of a topic to form a complete picture.

In this workshop, integration takes on yet another meaning. Creative movement is integrated into different subjects in order to give students another avenue to learning. This means creative movement is a learning tool. Creative movement might be used in one subject more than another but it has the power to open up all subjects to the student who learns better by doing. Learning by doing can encourage students to take interest in what they are learning and often makes the topic more personal for them. In this way, utilizing creative movement in the classroom can not only help students learn, it can also help them retain knowledge longer than in a traditional listen and learn curriculum.

Thinking Skills. Although Critical thinking has been prevalent in recent educational reform it is still a term which is misused and sometimes vague. Various researchers and theorists have different ideas about exactly what critical thinking is and what it means. J.E. McPeck describes it as "reflective skepticism" (1981, p. 67). Robert H. Ennis defines critical thinking as "reasonable reflective thinking that is focused on deciding what to believe or do" (1987, p. 10). In his article "A Taxonomy of Critical Thinking Dispositions and Abilities" Ennis equates critical thinking to the previously mentioned "reason" established as a basic competency by the College Board. He also equates critical thinking with informal logic.

Ennis's definition of critical thinking is further defined by critical thinking dispositions and abilities which he believes are necessary and important aspects of critical thinking. Ennis lists fourteen dispositions and four basic areas of critical thinking ability. In a later article "Critical Thinking Assessment," Ennis unites these dispositions and abilities into ten concise elements of critical thinking. He writes,

In reasonably and reflectively going about deciding what to believe or do, a person characteristically need to do most of these things (and do them interdependently):

1. Judge the credibility of sources.
2. Identify conclusions, reasons, and assumptions.
3. Judge the quality of an argument, including the acceptability of its reasons, assumptions, and evidence.
4. Develop and defend a position on an issue.
5. Ask appropriate clarifying questions.
6. Plan experiments and judge experimental designs.
7. Define terms in a way appropriate for the context.
8. Be open-minded.
9. Try to be well informed.
10. Draw conclusions when warranted, but with caution (1993, p. 180).

Robert Sternberg defines critical thinking as "the mental processes, strategies and representations people use to solve problems, make decisions and learn new concepts" (1985, p. 46). Matthew Lipman states, "critical thinking is thinking that (1) facilitates judgment because it (2) relies on criteria, (3) is self-correcting, and (4) is sensitive to context" (1991, p. 116). Lipman goes on to describe critical thinking as a liberator which defends us from being "brainwashed into believing what others want to compel us to believe" (144). Another theorist, S.D. Brookfield expresses critical thinking as "identifying and challenging assumptions and imagining and exploring alternatives" (1987, p. 229).

It is evident that an abundance of definitions for critical thinking exist. While each theorist offers his/her own personal twist on the subject, each definition remains vague outside of specific context. In an effort to formulate a critical thinking definition which will stretch across curricular borders, Shari Tishman and David N. Perkins suggest,

Critical thinking is a matter of directing our minds along paths more likely to yield sound products of thought--sound beliefs, decisions, solutions to problems, plans, policies, and so on (1995, p. 25).

This definition remains broad in order to have meaning in everyday life as well as in the classroom. To achieve this, the definition does not exclude creative thinking. It allows creative thinking to be seen as an aspect of critical thinking. Furthermore, this definition is not centered around philosophical aspects of logic or deductive reasoning but rather on ordinary types of thinking such as problem solving and decision making. Finally, the Tishman and Perkins definition is not dependent on high intelligence. Critical thinking is

opened up to all. "Anyone can learn to explore more options in a decision-making situation or to look more carefully at both sides of the case" (1995, p. 25).

The implications of the Tishman and Perkins definition are that all children can think and all subjects can enhance both critical and creative thinking skills. Critical thinking is not seen by most theorists, as separate from creative thinking. The two fit together and enhance each other. Aspects of creative thinking are part of critical thinking and vice versa. Creative thinking is necessary for students to think of alternatives and consequences, formulate hypotheses and definitions, and develop strategies. Each of these are thought to be critical thinking abilities and goals. Additionally, critical thinking does not have to be based in philosophical logic, but instead should stress problem solving and decision making. This type of critical thinking can be taught within every subject. Furthermore, an activity such as creative movement, a creative activity as its name suggests activity which gets children involved in the learning process. Creative movement is beneficial in teaching both critical and creative skills to elementary school children.

Unless a school is already incorporating critical and creative thinking the focus is probably on convergent thinking. When children ask questions, they get answers. There is only one way to be right but infinitely many to be wrong. The convergent thinking process is focused or structured toward finding the correct answer. Often they are not encouraged to look for and discover answers on their own. In contrast, allowing students to think divergently gives them the freedom to be imaginative. This will "cause children to be venturesome in their thinking, confident and independent in their temperament,

courageous and appreciative of their own predictions” (Williams, 1970, p. 1). By utilizing divergent thinking through creative movement, children can say the same thing in many different ways. The thinking process can produce unlimited answers. Problem solving can be extended into creative movement when the teacher presents a movement task and asks each child to solve the problem in two or three different ways. Each child will develop his/her own personal interpretation and solve the problem his/her own way.

This type of creative problem solving gives children a chance to participate in their education. "The arts engage the minds of students to sort out their own reactions and articulate them through the medium at hand" (Fowler, 1994, p.5). When children are taught how to think instead of what to think they take some ownership in the learning process.

The child's ability to discern problems and make decisions also uses analysis, judgment and other critical thinking skills. Independence in thinking fostered by critical thinking is essentially the basis for creativity. It is through this independence that children learn to take risks and set goals. The experiential decision making process used in creative movement can bypass the verbal discussion of such skills and transfer the skills into knowledge.

Not only can creative movement reinforce the teaching of critical thinking for everyday problem solving and decision making, it fosters many of the reasoning and problem-solving skills needed for critical thinking. Creative movement helps develop these skills and gives the child the chance to experience more than a verbal education. It

enables the development of a child of experience; one who learns through experiencing the world first hand through creative movement.

Making connections-integrating creative movement. Before the discussion on lesson plans occurs, give the participants further opportunity to present connections they have been able to make to their own classroom curriculum. Giving them the chance to present their ideas and lesson plans will help them develop a greater understanding of how creative movement can be utilized as a teaching tool. Also, the opportunity to move to the ideas of their peers will help them to discover additional ways of using movement.

Lesson Plans. As teachers, the workshop participants already have an advantage in teaching creative movement. Although they may not all feel comfortable doing creative movement themselves, they are comfortable leading children in the learning process. This is the most important part to integrating creative movement into the curriculum.

Each lesson including creative movement must follow a structured lesson plan which gives children some time to explore the elements. This can be done by using topics related to the greater theme in order to get the children moving and exploring different combinations of movement. A shift can then be made toward focusing the movement onto the specific topic of instruction. In the end, it is important to give the children the opportunity to culminate their movement experience and learning in creative expression. This can frequently be done with a structured story as seen in the section on creating a dance.

Sharing your goals for the lesson with the students is also important. In the beginning tell the students what they are to learn. As the lesson progresses, talk to them about what they are learning. At the completion of the lesson review the goals and discuss with the students how these goals were met. It is more likely that a teacher will have success with lessons integrating creative movement if the teacher has in mind what goals are to be met with each creative movement experience and has structured lesson plans. A lesson plan/brainstorming format developed by Mary Joyce in her book *First Steps to Teaching Creative Dance to Children* can be found in the Appendix, p. 109.

Discussion and journal writing.

Outcomes of Session V

1. The teachers learn what integrative means within this workshop.
2. Participants can define critical and creative thinking. The need to induce students to accomplish more divergent thinking is addressed.
3. The participants share their own ideas of connections which can be made between creative movement and curriculum subjects.
4. The participants learn essential parts of lesson plans.

Session VI

Goal: In this session teachers will be given the chance to use what they have learned in order to advocate for creative movement as a worthwhile activity in the classroom.

- I. Advocacy of creative movement
 1. Why is creative movement considered nonessential?
 2. Should it be basic?

- II. A scenario activity
 - 1. Make a case against creative movement.
 - 2. As a teacher who supports creative movement, defend your position.
 - 3. What point of view might an administrator take? For or against, why?
 - 4. List some obstacles to teaching creative movement in your classroom.
- III. Final creative movement experiences
- IV. Discussion-where do we go from here, resources etc.

Session Design

Advocacy for creative movement. At this time, it is necessary to discuss another aspect of the teaching profession, the administration. Often proponents of creative movement are met with resistance from administrators because many feel there is not enough time in the school day to cover the necessary subjects. Therefore creative movement is seen as little more than an unnecessary extra.

Furthermore, creative movement and dance are thought to appeal to the affective side of the child. They are seen solely as a means of expression and feeling. It is true that creative movement does involve the spirit of each child as well as his/her body and mind. Dance and movement are rarely accepted as educational tools because the emotional side of the child is rarely nurtured in the traditional classroom. However, it is the combination of all aspects of the entire child which makes movement such a powerful educational tool. When the whole child is involved, learning becomes more personal and hence more permanent.

A scenario activity. Divide the participants into small groups of 3-4 people. Have them make a case for using creative movement in an elementary classroom. Then have

them discuss the positions an administrator might take. What factors might differ in the way creative movement is viewed by teachers versus the administration? Finish the activity by having each of them make a list of obstacles he/she might come up against when using creative movement in his/her classroom. Some obstacles might be specific to a certain district or situation whereas others might be more general. Share the different small group outcomes with the entire group.

Final creative movement experiences. Continue to explore lessons developed by the workshop participants.

Discussion-where do we go from here. This final discussion time is designed for talking about the joys of using creative movement in the classroom as well as the struggles ahead of each of the participants. Encourage participants to ask any questions which might help bring closure to the six sessions. This is also an opportunity to discuss what lies ahead of each participant. A list of resources can be found in the Appendix, p. 110-111, and should be distributed to each participant. Be sure a class contact list has been distributed to facilitate future sharing of experiences. Remind the class of the date of the final workshop session and encourage the participants to explore integrating creative movement into their own curriculums.

Outcomes of session VI

1. Participants discuss advocacy strategies.
2. Participants role play different perspectives on the use of creative movement in the classroom.
3. Final exploration of participant creative movement connections.

4. Participants receive resources to aid in further development of their creative movement connections.

Follow-up session

This is the final session. Participants will retake the personal creative movement questionnaire. The results will lead to a discussion of the workshop sessions and of how the participants' views have changed during the workshop sessions. Discussion about participant attempts to integrate creative movement will also occur. Successes and struggles will be discussed. Productive feedback will be provided by group members as well as by the workshop leader. The idea that advocacy is an important part of making creative movement successful in the classroom is reinforced.

APPENDIX

INSTRUCTIONAL MATERIALS

TEACHER QUESTIONNAIRE

Name _____

School _____

What grade do you currently teach? How long have you been teaching this grade?

What is your past experience with dance?

This workshop deals with using creative movement in the elementary school classroom. Creative movement is an activity which allows children to use their bodies to explore the world around them. It is a symbolic representation of the child's ideas, feelings and sensory impressions. Creative movement can be used as a lesson itself or it can be used to clarify a concept in math, science, language arts, etc. It is freeing children from their chairs and allowing them the chance to explore their bodies and the world around them.

Have you ever used creative movement in your classroom?

Who do you think is qualified to teach creative movement within the classroom and why?

Have you ever used projects in your classroom or other methods of involving your students in the learning process? (i.e., hands on learning activities, manipulatives, cooperative learning, art, etc.) If so, how? If not, why not?

How do you feel about using alternative methods of teaching in addition to typical verbal instruction?

What value do you see in using creative movement within your classroom?

In what ways do you think the inclusion of creative movement could help/hinder the education of your students?

If your principal or superintendent asked you why creative movement is useful in the classroom, what would you tell him/her? Could you make a case for the benefits of integrating creative movement within your curriculum?

What anxieties or worries do you have about using creative movement in the classroom?

What would you need in order to feel comfortable utilizing creative movement within your classroom?

Do you think you will use creative movement in your classroom in the future? Why or why not?

Where in your curriculum or teaching do you envision creative movement being useful? Give an example or two.

THE IMPORTANCE OF ARTS EDUCATION

- The arts are worth studying simply because of what they are. Their impact cannot be denied. Throughout history, all the arts have served to connect our imaginations with the deepest questions of human existence: Who am I? What must I do? Where am I going? Studying responses to those questions through time and across cultures—as well as acquiring the tools and knowledge to create one's own responses—is essential not only to understanding life but to living it fully.
- The arts are used to achieve a multitude of human purposes: to present issues and ideas, to teach or persuade, to entertain, to decorate or please. Becoming literate in the arts helps students understand and do these things better.
- The arts are integral to every person's daily life. Our personal, social, economic, and cultural environments are shaped by the arts at every turn—from the design of the child's breakfast placemat, to the songs on the commuter's car radio, to the family's night-time TV drama, to the teenager's Saturday dance, to the enduring influences of the classics.
- The arts offer unique sources of enjoyment and refreshment for the imagination. They explore relationships between ideas and objects and serve as links between thought and action. Their continuing gift is to help us see and grasp life in new ways.
- There is ample evidence that the arts help students develop the attitudes, characteristics, and intellectual skills required to participate effectively in today's society and economy. The arts teach self-discipline, reinforce self-esteem, and foster the thinking skills and creativity so valued in the workplace. They teach the importance of teamwork and cooperation. They demonstrate the direct connection between study, hard work, and high levels of achievement.

Adapted from the Consortium of National Arts Education Associations, *National Standards for Arts Education* (Reston, VA: Music Educators National Conference, 1994).

THE ELEMENTS OF CREATIVE MOVEMENT: SPACE

Space must introduce children to the concepts of direction, size, pathways, levels and focus.

DIRECTION: forward, backwards, sideways, up and down.

These are the directions in which a child can travel through space. However, movement does not always have to travel. Axial movements utilize space in front, behind, at the sides or above and below a child only the child remains stationary without traveling through space.

SIZE: big and small.

Size exploration helps children understand these words and also allows children to discover the limits of their bodies.

PATHWAYS: air patterns and floor patterns.

Air patterns are the use of the space around the body. They can be any pattern or shape made in space with the body. Any body part can make an air pattern. Floor patterns are made on the ground usually with the feet as they travel through space. However, just as with air patterns, any body part can make a floor pattern. They can be circular, diagonal, straight, boxed, etc.

LEVELS: high, low, middle.

Levels are the different heights a body can take in space. Levels can be done axial (stationary) or moving through space.

FOCUS: visual and bodily.

Focus is usually thought to be with the eyes however, it can also be distributed into the body. In general, focus is the capturing of space, time and energy all at once. Focus can be stationary or moving. The most elementary example of focus is "freeze". This word asks children to be still and to hold their space and energy constant.

Adapted from Sue Stinson, *Dance for Young Children* (Reston, VA: AAHPERD, 1990).

THE ELEMENTS OF CREATIVE MOVEMENT: TIME

In creative movement, time deals with the relationship of one movement to another. Children need to develop a sense of time within their own bodies in order for them to use creative movement to its full capacity. The concepts of time which should be introduced are: phrasing, pulse, speed and rhythm.

PHRASING: a movement sentence.

Phrases are sequences of movement put together to form something like a line of poetry. In creative movement even the combination of a few phrases can constitute the production of a dance.

PULSE: an underlying beat.

When children are exposed to a certain rhythm their bodies will react to the underlying beat. This external representation of the rhythm arises from an internal response. By moving to different rhythmic patterns, children learn to give in to their need to move. Their bodies will take over and guide them.

SPEED: fast and slow.

Movement can of course be done in varying degrees of slow and fast. Because children have smaller bodies and the need to move, their slow may seem closer to your fast. Many children find slow movement difficult to perform without using excess tension. However, the contrast between speeds is important to cultivate because this distinction can bestow an almost magical quality upon a child's movement and can give the child many more alternatives when developing movement phrases.

RHYTHM PATTERNS: combinations of slow and quick movements.

Variation in children's movement created by combining slow and quick movements together in a phrase can produce more interesting movement phrases, a wider movement vocabulary open the door for a child's creativity. There are endless combinations of rhythmic patterns.

THE ELEMENTS OF CREATIVE MOVEMENT: ENERGY

Unlike the previous elements energy is not easily seen. Energy is the force that drives movement. Energy is first experienced internally by the child before it is expressed through the child's movement. The concepts of flow and weight are introduced through the element of energy.

FLOW: bound and free.

In movement energy can be exerted in two ways. In bound movement energy release is controlled. It is as if the body is moving through a room full of Jell-O. A constant force is necessary because the body is bound by the Jell-O. Bound movement is often controlled by tension, however, it is possible to produce uncontrolled bound movement. Bound flow is necessary to teach the child how to control his/her own body. This is important when creative movement is done in a small area with many children. Free movement is relaxed and flowing. These movements are often continuous and hard to stop because free movements allow for the unbridled release of energy. Free flow is natural to young children and many opportunities should be provided for them to use their bodies in its exploration.

WEIGHT: heavy and light.

Heavy and light movement contrast each other. Heavy can be explored by children when they try to move with as much force as they can muster. The strong movement can help make children aware of the power of their bodies. Light movement on the other hand shows children how gentle they can be and how light their bodies actually are. Children can move as if they are a feather floating through the air or they can pretend they are walking on eggshells trying not to break any. As with the other elements of dance the concept of weight is important for children to fully develop their movement vocabularies. All of these elements work together for children in their explorations of the world around them and the world within them.

Adapted from Sue Stinson, *Dance for Young Children* (Reston, VA: AAHPERD, 1990).

METACOGNITIVE JOURNAL

What information was covered in today's workshop session?

What was your personal experience or assessment of the creative movement exercises in today's session?

What do you see as the benefits/drawbacks of using this type of learning in your classroom?

Would this type of exercise have any value to the learning of students? How?

Is the time spent on this type of exercise well spent or do you see more efficient ways of presenting such material? If so, how?

In what subjects do you see these ideas as useful? Give examples of how they could be used?

In what subjects do you think these ideas would not be helpful? Give examples of some instances where you would not use these ideas to present curricular material.

To be used with *Creating a dance*.

The Witches Brew

Halloween is coming. Imagine yourself as a creepy scary witch. You are in a dark forest and you are fast asleep. make a starting shape as you sleep in the blackness of the forest. As the sun goes down you begin to awaken. Stretch yourself out and find your magical broom. Hop onto your broom and suddenly you are zipping through the air. Down below you see a group of figures huddling around a fire. You decide to check it out. As you move closer you recognize the other witches who are stirring a big pot bubbling over into the fire. You join the other witches and you all take turns stirring the brew. The brew is complete. To finish the cooking process each witch has to move to his/her own separate spot to dance their own magic into the brew. Find your spot and begin to dance your magic. Use as many different elements as you can. Make sure you change levels. Your dance can take you through space only watch out for the other witches. Suddenly, there is an enormous boom!!! The brew explodes!!! All of the witches tumble to the ground where they freeze in shock. Hold your shapes.

The Snowflake Flutters

One cold winter day a gentle snowflake flutters from the sky and lands on the branch of a tree. You are that snowflake. Take a starting shape which shows what you look like. A soft breeze comes upon you and you drift into the air. Slowly you drift through the air. Up and down you ride on the breeze. Sometimes the breeze grows stronger and it makes your shape change. You bend in the middle and then you fold on the edge. The breeze gets even stronger and you are whipped through the air. You see other snowflakes flying. As quickly as the breeze came it disappears. You begin to fall to the ground. Suddenly a puppy dog appears underneath you. You have no control over where you fall so you land right upon its left ear. You begin to feel a little funny, something is different. You notice that your shape is not so crisp. Your design begins to get mushy and you don't feel very strong. You are melting. The puppy dog is much warmer than you so you slowly lose your shape until you become a little drop of water hanging onto the puppy's ear for dear life. All of a sudden, SPLAT, you drop to the ground where you FREEZE.

Can be used during *a sample first class*

These exercises were adapted from *First Steps in Teaching Creative Dance to Children* by Mary Joyce.

ACTIVITY: THE IMAGINARY WALL

A way of establishing where to go and where not to go...is "Imaginary Wall". Walk the perimeter of the room, leaving any furniture or equipment outside your imaginary wall. Then have a child walk, skip, or gallop along the imaginary wall. Teach the children that dance class happens within that space. This keeps them from going up steps of a stage, near folded chairs, or under tables. Repeat this exercise whenever it is necessary (p. 51).

ACTIVITY: RUN TO THE WALL

This activity is used to help the children understand that the objects outside of the dance space, even real walls, cannot be touched while they are doing creative movement. Challenge a child to run to the wall stopping before s/he gets there. Explain how dancers can stop their bodies whenever they want to. Challenge the whole class to run in different directions always stopping before they collide with the wall or the chairs or the table (adapted from p. 51).

ACTIVITY: NEAR AND FAR

"Come as near to me as you can, without touching, of course. Now go as far from me as you can. Go as near to the tape player as you can. As far from the tape player. As near to the door. As far from the door." Think of similar directions for your room. "Now here is the test: go as far from all the walls and all the other children as you can. Can you do it? That is how you find your perfect spot" (p. 53).

ACTIVITY: MUSEUM

Giving the children a chance to see and acknowledge one another's differences can nurture feelings of respect. One group of children is making shapes. The rest are watching. At some point, when the shapes are really interesting and varied, announce that the museum is open, and allow a small group of watchers to tour with you among the still shapes. Encourage them to notice the twists, the diagonal lines, the rounded curves, and how

exciting it is to see all sides of a shape...Help the children to notice and enjoy differences in each other's shapes and moves and to learn to describe what they see (p. 58)

ACTIVITY: HUM

Listening is a way of showing respect. Have the children echo a variety of sounds and phrases that you make. Then tell them that they must make the sound exactly when you do. They must hum simultaneously with you. They must hum when you hum and stop when you stop. Try giving no cues at all, no hints from your eyes or your hands. Notice the intensity with which the children listen. One they are good listeners and show respect when you speak, you will be able to lead them in movement activities (p. 58-59).

ACTIVITY: THE ECHO

Another listening activity is the echo. Sing several phrases made of musical tones or strange sounds. Ask the children to echo whatever you sing or say. Then choose one phrase and let them know that whenever you sing it, even in the middle of class, they must echo you.

You'll be able to use this phrase to call them to attention whenever you need to. Because the children sing back to you, their talking immediately stops, and you can easily speak in the silence that follows (p. 59).

ACTIVITY: LISTEN AND GO

Here is another listening activity.

Two children quietly walk halfway across the space and face away from the group. Then two more walk out and stop quietly behind them. When the first two hear the others stop, without looking around they continue to the far side of the room. A third group then walks quietly and stops behind the second group. When the second group hears them stop, they too resume walking and join the first group at the far side of the room. Each group has their backs to those approaching, so they have to depend on their ears to hear them come and stop (p. 59).

Activities are from *First Steps in Teaching Creative Dance to Children*
by Mary Joyce, p. 191.

Sample lessons to be used during *further explorations*.

SUBJECT--Dance and Energy

- I. Process: Using the Books *Ska-tat* and *Muddigush* by Kimberly Knutson.
- II. Book 1: *Ska-tat*
 - Intent: To introduce energy through objects
 - A. Day 1: Introduction to leaves
 - a. Bring in many different types of leaves i.e. elm, oak, maple etc. Show the children the differences and explain how these differences make each leaf unique. Each leaf falls through space differently because of its different size and shape.
 - b. Give each child their own leaf and let them test it out. Have them drop the leaf and watch how it falls. Does it drift? Does it dive? Does it twirl? What other ways do the leaves fall? Have them throw the leaf in the air and see if it acts differently. Allow the children to trade leaves so everyone has a new one and repeat the dropping and throwing.
 - c. Finally have each child choose their favorite leaf to dance with. Have them toss the leaf into the air and then catch it. Can they move like the leaf? Can they swirl gently to the ground and dive ferociously through space? Make sure they interact with their leaf catching it and then sending back out into the air.
 - B. Day 2: Create a leaf dance
 - a. Solo-each child starts with his/her own leaf shape. Have the children take their leaf on a journey and develop a middle to their dance. Finally, have the children find an ending shape which finishes his/her story.
 - b. Ensemble-have the whole class be leaves. What happens to them on a fall day? When a big gust of wind comes? Do they cling to the tree or do they tumble from its limbs? Remember the leaves are not human, how will they move? What happens if you make contact with another leaf? Will one leaf break or will you bump off of each other? What

happens when another gust of wind comes? All of a sudden the air is still and they slowly drift together overlapping into a huge pile.

- c. Discuss how the children felt as leaves. Were they all the same kind of leaves? What happened when one leaf made contact with another? Did they like being a solo or ensemble leaf better?

C. Day 3: Read *Ska-tat*

- a. Have the children listen for and make a list of adjectives and action words they hear in the story which describe the leaves.
- b. Allow each child to produce a four line poem using only these words. The whole class could also produce one single poem instead. Next, have the children develop another leaf dance only this time with the poem in mind. What type of story can the children develop using these certain words? They can choreograph according to the sound of the word or by the meaning of the word. Any way is good, it is to be their own interpretation of the poem. Work on the poem one line at a time and then put it all together. Maybe allow half of the class to watch the other half and then vice versa. Point out to the children that everyone's interpretation is different and that they are all fine. No one's is better than any one else's.
- c. Finish by having the children draw pictures of their dance. Each child's drawing will be unique just as all of the dances were different.

D. Additional idea: leaves changing color

- a. Discuss the science of leaves changing color and have the children throw out the different colors the leaves can change: red, yellow, orange, brown, purplish, some stay green.
- b. Have the children talk about if they like the leaves better in the summer or the fall. Have them make two lists, one of the adjectives which describe the summer leaves and one to describe the fall leaves.
- c. Have the children develop a dance which takes the leaves from summer to fall. They will begin as a supple green leaf and gradually evolve as the weather gets cooler and their color begins to change. Make sure the children have a beginning, middle and end which clearly shows the change from green to color and maybe all the way to brown. The children can incorporate what happens to a leaf. Does it get raked up

or stepped on or does a squirrel carry it away to make a winter home?
How does the color change their dynamics? Their texture?

III. Book 2: *Muddigush*

Intent: To explore intensity and energy through a storm.

A. Day 1: Explore a rain storm

- a. Discuss rain with the children. Relate to science lessons when they learned what causes rain. What kinds of rain are there? Soft drizzle, down pour, terrible storm etc. Ask for adjectives to describe rain and its different stages. Have them explore big and small rain drops. How do their shapes differ? How does the size affect the way it moves and falls? Have the children make their own rain dance. Will they start as a drizzle and become a raging storm or will they be a down pour and slowly dwindle into nothing?
- b. Discuss thunder and lightning. Review the science behind these things. Ask the children for adjectives and descriptions of thunder and lightning. What does lightning do when you can't see it? How about thunder where is it when it can't be heard? Do they sneak around on their tip toes and then surprise you when you least expect it? What adjectives describe thunder and lightning? Sharp, cutting, booming, loud, sudden etc. Have the children dance a thunder and lightning dance which grows in intensity. Does the lightning start out scarce and then build and build until it fills the whole sky? Does it build and then die again? etc.
- c. Discuss wind. Talk about how wind can grow from a slight breeze to a huge tornado. Ask the children for adjectives describing weak and strong winds. Have them explore each. Next have them build a wind dance exploring the different dynamics of soft and harsh wind. Use different energies. Is the wind direct with a powerful destination in mind? Is it indirect with a softness that dissipates into nothing? Have the children show the contrasts and use transitions to show the changes in the wind.

B. Day 2: Putting the elements together

- a. Review the three elements and their different energy levels. Review big and small and weak and strong for each. Review some of the adjectives.

- b. Have each child choose his/her favorite element of the storm. Build a rain storm with the combination of rain, wind, and lightning and thunder. Contrast the energy starting with a soft drizzle accompanied by a soft wind and sneaky thunder and lightning which only strikes occasionally. Have the intensity grow and continue until the children have formed a full fledged storm with big strong wind and raindrops and frequent thunder and lightning. Have the storm climax and begin to diminish until it dwindles into nothing.
- C. Day 3: Read *Muddigush* and make mud monsters
- a. Have the children make a list of adjectives describing the mud. The children can then write short poems using these words or the list can simply be used for exploration. Discuss how mud is made. What is mud before it is muddy? What do we need to make mud? How is mud different from dry soil? How does the energy change when soil becomes mud? Have the children work on their own individual mud dances. They can start as dry soil or already muddy. Have each take a shape and then give their dance a beginning, middle and an end contrasting the different energies in mud and soil.
 - b. Have the children find a partner. The children will be mud monsters. Have each group develop a story which we will be able to follow through their movements. How do the mud monsters change energy as they begin to get gooier? Do the monsters become stronger or weaker? More direct or more indirect? More free or more bound? Let all the groups view the others or split the class in half and allow the children to watch their peers.

Age: This unit is to be used with fourth and fifth graders.

Goals: The goals of this unit are to introduce the children to energy in the world as well as in dance as an element. This unit will also introduce the children to the problems of pollution and garbage in their world today and give them ideas of ways they can help.

Book: *The sun* by Michael George

- I. Have a first lesson discussing the word energy.
 - A. Talk about what energy is and how we use it everyday. Discuss the types of energy being used in the classroom at that very moment, electricity, heat or air conditioning, even the energy the children get from the food they eat.
 - B. Talk about the most widely used ways of getting energy such as fossil fuels, nuclear power etc. Discuss how these forms of energy can be dangerous to the environment and to people. Talk about how many of these energy sources are unrenewable and will run out some day.
 - C. Introduce the element of energy to the class through dance. Show how energy is essential to dance as well as to life. Use different ways of moving to show how we can use different energies in movement. Use everyday steps like walking, running, skipping etc.
- II. Have science lesson on the sun.
 - A. Tell how it is a star and explore its existence. How far is it from the earth? How hot is the sun? What is the sun made of? How is the sun important to the earth? Could we live without the sun? Use the book *The Sun* by Michael George.
 - B. Talk about solar energy and the ways the sun works to give us energy. Can the sun heat a home? How can the sun generate electricity? Discuss fossil fuels and how they exist because of the sun? Discuss how the sun gives us energy through plants. Also talk about new ways to use the sun's energy.
 - C. Return to *The Sun* and have the children make a list of adjectives and action words describing the sun. Have them make a sun dance. Their dance could not only show the characteristics of the sun but it could also tell the sun's story. Even though the sun doesn't move, have the children explore the sun's energy more than the literal journey of the sun.

- III. Have science lesson on the wind.
- A. Talk about why there is wind. How is wind made? What causes winds to be hard or soft, warm or cold?
 - B. Discuss wind energy. How has wind been used throughout the centuries? What were the first uses for wind energy? Discuss ways people still use wind energy today.
 - C. Have the children make up their own wind dance. Have them be wind. The wind can move softly and float or the wind can be harsh and strong. Have the children explore their wind stories through their own personal wind journey drawing.
- IV. Have a science lesson on water.
- A. Introduce water and talk about its many forms, liquid, gas and solid. Discuss how water is different in each state.
 - B. Discuss water and energy. How can running water be used to give us energy to use in our everyday lives? What about steam energy? Can ice be used to generate energy at all?
 - C. Have the children do a water dance. Hang up three papers on the wall. One for water, one for steam and one for ice. Have each child write one adjective or action word about each state of water. Next have the children work on a dance of water in its three states using these words. At the end have the children add other words they discovered. Then allow each child to write their own water poem.

To be used with *lesson plans*

A. Preparation

1. Select just a small part of the whole subject.
2. Think through all the characteristics of this particular part and relate these to the elements of dance.
3. Go deeply and thoroughly into all possible connections. Think spatially and rhythmically. Think of qualities and relationships.
4. See in your mind's eye the children exploring these connections. Be sure your plan has action and variety. If action and variety are not inherent in the subject, add contrast, space control and extension.
5. Have the children get partners or form groups to consummate their learning.
6. Ask them to explain what they have learned.

B. Structure

1. Structure the class as usual.
 - a. Presentation: relate the subject to dance elements by questions.
 - b. Exploration: use crossovers; add contrast, space control, and extension as necessary during the exploratory time.
 - c. Form: have the children show their dances.

From *First Steps in Teaching Creative Dance to Children* by Mary Joyce, p. 191.

Where do we go from here-resource list

The following books and articles are excellent resources for anyone who would like to learn more about using creative movement with children. Many of the books contain example lessons and exercises whereas the articles deal more with the power of using movement with children. All are valuable for the teacher who would like to investigate using creative movement in his/her own classroom.

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