KINETIC LITERACY: MOTIF WRITING IN K-5 DANCE EDUCATION

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This article offers an approach to teaching kinetic literacy through Laban Motif Writing. This research was conducted over a two-year period in both New York and New Jersey Public Schools. It advocates a form of symbolic learning called Motif Writing, a literacy tool for children in dance making, dance analysis, and dance inquiry. Symbol systems such as mathematics and music are comparable to Motif Writing, as they entail movements, pictures, signs, and sounds and provide a "language" with which to describe and elicit ideas. Symbol systems guide the development of intelligence, present children with numerous choices for communicating, and can greatly expand children's capabilities to think. This research examines the acquisition and development of symbolic modes of representation using Motif Writing, which provides a foundation for intellectual perception.

This article includes a review of literature on dance notation as applied to K-12 dance education and presents a brief look at the development of Motif Writing. An explanation of the rationale and methodology applied in the research, as well as personal conclusions, practical application, and frameworks for a curricular-based, dance-literacy program called Literacy in Motion are included. The Literacy in Motion curriculum is designed for professionals in the fields of K-5 curricular education, physical education, and dance education.

At a small K-3 public school, minutes north of New York City, something unusual is happening. Voices and bodies stir with excitement in a classroom. Children are moving from resource table to wall chart, from teacher to small work groups. Unrestricted by linear arrangements of desks and chairs, they find new meaning in their bodies. Creating nouns, verbs, and adjectives in moving sentences, the children are building connections through the creative process. The personal investment, commitment, interest, and enthusiasm are contagious and clearly visible. Children are moving in conjunction with their curriculum, discovering a long-abandoned resource their kinetic literacy. As class continues, the children create, organize, and share original movement scores. Themes that they have physicalized include prey and predators, glaciers, icebergs, and properties of water. They feel the importance of their work because they have tapped their kinetic intelligence and are using it to bring their curriculum alive.

Why is this unusual? These third-graders have had five 45-minute dance classes, and in a short time, they have found new ways to express, expand, and organize their knowledge. They are spirited, with an understanding of the basics of moving safely in space; creating and remembering movement; cooperating with a partner in developing movement ideas; observing and analyzing other students' creative work; and writing their work in a special "secret" dance language called Motif Writing. They can create a movement score (similar to a music score) to organize, record, document, and analyze their dances. In short, they feel the power of their own creations embodying their curriculum and have found a new language, a kinetic language.

A baby's developmental milestones are measured by acts such as bending, twisting, rolling, standing, and walking, which are based on muscular sensations of tension and relaxation. Movement is the basis of early intellectual development; without physical stimulation, infants fail to thrive and eventually die. Cognitive psychologist Jean Piaget's research in child development cites the intellectual importance of kinetic experience in the Sensory Motor Stage in which a child learns to deal with physical existence exclusively from the five senses and motor activity. Kinetic interactions assist our perceiving and structuring of our world. Therefore, we can presume that kinetic expression is a child's first language.

Kinetic literacy has received little recognition in current educational circles. Most of our nation's classroom curriculum is set up for verbal and analytic structures. Children with aptitudes in reading, reasoning, and conceptual skills thrive, whereas children with strengths in creative imagination, mechanical reasoning, and intuitive perception may fail. Through this research, I investigate movement as a kinetic language and develop a curricular framework, which leads to the development of K-5 kinetic literacy. In this article I will discuss a form of symbolic learning called Motif Writing, a literacy tool for children's knowledge construction in dance, and share a K-5 interdisciplinary dance curriculum called Literacy in Motion.

Over a two-year period I taught this material in both New York and New Jersey Public Schools. The student population was varied: The participants cited were kindergarten-5th grade with about a 50/50 mix of girls and boys. Class sizes ranged from 19 to 27 students. Each lesson was between 50 and 60 minutes long.

Individually and in small groups, students created short Motif dances based on curricular themes by manipulating Motif symbol cut-outs. At the end of each class, the children shared their creations, cited their observations, and discussed future possibilities. The following was a typical class format:

- Movement exploration and discussion on the curricular theme of the day;
- Improvisation and directed activity to introduce the Motif vocabulary;
- Introduction of the symbols which may have included a short writing or reading activity;
- Development of movement phase and documentation through Motif;
- Writing or ordering cut-out symbols and, on occasion, reading their scores to another student;
- Presenting dances and
- Discussion; reflection.

Activities in each thematic unit were created, including dance sharing with friends and family, homework assignments, worksheets, art projects, and movement practice (to be done before or after movement sessions). A homework sheet could contain a review of material covered in a previous class, a glossary of Motif, a variety of activity games, or visual arts assignments. These were used to stimulate reflection and promote synthesis of the material.

In this research I am interested in defining viable applications of Motif Writing and to observe its use with various curricula. Using children's class work, symbolic recall, and dance documentation through their artwork, dance making, movement scores, and discussions, I noted their comprehension of material through observation, cooperative learning groups, and reflective comments. I interviewed many children and their teachers regarding their experiences and insights with Motif Writing to ascertain its effectiveness. The research culminates with a curriculum framework covering three unit themes to support the incorporation of Motif Writing into the public school curriculum.

My approach in developing curricular applications for Motif Writing across the K-5 curriculum began with a thorough review of all related written materials. This provided a valuable understanding of the applications and research materials in the fields of interdisciplinary education, movement analysis, and dance education. I observed educators utilizing Motif Writing in dance and other subject areas and evaluated their teaching strategies. I interviewed leading dance educators in the field of Motif Writing about current developments to identify trends in the application and acceptance of Motif. I had the privilege of training with three of the prominent leaders in Motif Writing: Ann Hutchinson Guest, Lucy Venable, and Ann Kipling Brown.

RATIONALE

The field of dance in public education has been suffering. The arts are often thought of as extravagant and, in tough economic times, funding ceases, resulting in the elimination of arts programs. Currently movement and dance education has experienced a resurgence of interest and an increase in scholarship. The three factors driving this

resurgence are: The Goals 2000: Educate America Act, and the National Standards for Arts Education (1994); Howard Gardner's theory of multiple intelligence, which specifies the importance of bodily-kinesthetic intelligence (1993); and the ceaseless efforts of dance educators, university professors, school boards, parents' organizations, classroom teachers, and students. These efforts provide encouragement for dance educators in their fight for credibility in a largely unknown field.

I believe that Motif coupled with children's curriculum brings intellectual understanding and a heightened awareness of the power of kinesthetic literacy in the schools, whether in the classroom or in the gymnasium. Dance educators probe for techniques to lend credibility and clarity to their profession. Motif is a method of dance notation utilizing symbols to communicate human movement. Motif provides a system of organizing movement, allowing children to communicate in a "language" much the same as the languages of math and music. Through Motif a child can the elements of movement into meaningful visual patterns. By including Motif in the dance curriculum, students are educated as well as their teachers, parents, principals, and superintendents, in the understanding of dance within an educational framework.

Although there is little research on the benefits of Motif Writing with K-12 curriculum, literature on Labanotation, dance education, and curricular interdisciplinary education is extensive. Scholarship exists in each of the distinct subject areas, but there is little documentation on the integration of Motif with curricular-based K-5 dance education. The following literature and hands-on training with specialists in the field of dance notation and motif writing have been essential in the development of this curriculum.

An author, researcher, scholar, and international guest speaker on dance notation, Ann Hutchinson-Guest trained at the Jooss-Leeder School, (where Laban frequently lectured), in England. Hutchinson-Guest notated Jooss's *The Green Table* and other seminal works advancing the field of Labanotation around the world. Her books, journals, teacher training seminars, and interviews have been essential to this research. Of her many books examining the development of notations systems, *Choreo-graphics* (1989) Hutchinson-Guest examines the multitude of notation systems in particular strengths regarding the premise of each system, the elements of timing, and the level of movement analysis. Each notation system is presented through identical movement material so direct comparison can be made.

In addition to Hutchinson-Guest, Valerie Preston-Dunlop worked to explore the concept of Motif Writing, and both published material on the application of Motif to analysis and education. In 1967 Preston-Dunlop wrote a series of four workbooks called *Readers in Kinetography Laban*, which presents a methodology for learning and dance making using Kinetography Laban (known as Labanotation in the United States). Although not specifically called Motif Writing, Preston-Dunlop's methodology states that the purpose of Kinetography Laban is individual interpretation consistent with contemporary definition of Motif Writing. Preston-Dunlop emphasizes bodily kinesthetic intelligence in recall, stating that a person must physicalize to understand, since the "body" memory is more powerful than the "brain" memory of the series of symbols on a page.

Your Move: A New Approach to the Study of Movement and Dance (1995), by Hutchinson-Guest, is a three-part handbook for movement analysis and description. The text provides clear insight into the Motif Writing notation system and teaching approach utilizing a textbook, a workbook, and an audio tape for reading studies. Hutchinson-Guest states that Motif Writing is not based on, or limited by, any one form or style of movement, but on the basis of all movement, exploring its fundamental truths. Your Move builds a framework for kinetic literacy and also provides an introduction into the exploration of movement, information as to what the student is doing and why, tips for technique and performance, and an initial venture into movement composition and choreography. In my opinion, this text is the handbook for Motif Writing. Each chapter includes an in-depth analysis, with useful and humorous illustrations, and several reading studies and homework sheets to solidify concepts. On several occasions, I had the opportunity to observe (and later assist) Hutchinson-Guest while she was working with students

Also influential was the work of Ann Kipling-Brown, professor and scholar of children's dance, who has written articles on the application of Motif Writing and Labanotation for the dance educator. During the summers of 1994 and 1995, I had the pleasure of participating in two teacher training courses at Ohio State University and Teachers College, Columbia University, during which Kipling-Brown presented her methods. Kipling-Brown's work assisted in an application of the Motif as it applies to children.

Also important was the research and instruction of Lucy Venable. Venable's work in the field has ranged from dancer with the José Limón Company to rehearsal assistant for Doris Humphrey, from past president of the Dance Notation Bureau to professor Emeritus at Ohio State University. Her lectures, writings, and interviews have been integral to my technical understanding of Motif and its application to dance literacy.

In addition to reading the published material on notation and Motif, I gained much insight into this field from the observation of distinguished dance educators who work with Motif and children. In a Motif workshop, I observed Karen King-Calvin, a primary school dance educator from Ohio, teach a fourth-grade interdisciplinary Motif lesson on the Underground Railroad, and Linda Yoder, also a dance educator from Ohio, present a Motif class on interpersonal skills and relationships for high school students.

Next, I will discuss Rudolf Laban, artist, educator, and inventor of Labanotation; explore how he invented this movement language; and investigate the usefulness of this system for K-5 dance education.

Writing Dance

For more than 500 years, dance enthusiasts, professionals, and scholars have tried to devise a system of recording dance onto paper. Today there are 124 notation systems, 53 of which have been successfully used to a limited degree to contribute to the recording of movement and dance (Hutchinson-Guest, 1984). Each system had been devised with the intent of providing a clear terminology to adequately represent the nonverbal language of movement and dance. In the last century, the symbol system called

Labanotation has led to the development of nonverbal dance notation and is considered a comprehensive codified "language of movement."

Rudolf Laban (1879-1958) developed Labanotation, a system of identifying, investigating, and recording all forms of human movement from the simplest to the most complex. Labanotation presents an objective record of movement, and as Causeley (1969) explains, provides "a common denominator for thinking and communicating, independent of any theory, style or technique" (p. 13).

Movement consists of actions: to wave, to nod, to squint; each action expresses meaning which may be cultural or specific. Complex physical actions and human gestures have multiple symbolic and cultural meanings. As complex beings we have constructed elaborate systems based on signs, which may be oral, visual, or written, to communicate. The human body holds a powerful kinesthetic intelligence that is innate. The significance of movement in life and dance has been investigated in depth by Laban, whose system of notation harvests this body intelligence and presents methods for the observation, evaluation, analysis, documentation, and creation.

Laban was not the first to develop a system of notation. Others, such as Raoul Auger Feuillet and Beauchamp, founded their own notation systems over 300 years before Laban (Laban, 1956, p. iv). In fact, the French parliament recognized Beauchamp, the ballet master of Louis XIV, as the inventor of dance notation in 1666, and Feuillet published dances written in this notation around 1700 (Laban, 1956, p. v). Laban, in his book *Dance Script* (1928), states that his notation and movement language uses the principles in Beauchamp's and Feuillet's notations. Laban spent years exploring the benefits of other notation systems before founding his own.

Laban was interested in finding the common denominator of all human movement and in bringing dance to the same prominence as all other art forms, arguing "that no temporal art can achieve a full development without the notation which can capture, preserve and examine its ephemeral creations" (1922, p. 675). Moreover, Laban (1920) wrote, "It is necessary to determine the symbols of dance in writing because a tradition which will make possible a deeper evaluation of artistic achievements in dance can only arise from comparison, examination, repetition and recreation" (p. 65).

Laban's research has categorized Labanotation into three forms of movement description: Structural, Effort Shape, and Motif Writing. Structural Description depicts movement in clearly defined and measurable terms and is essential for the preservation of choreographic works. Effort-Shape Description, which describes movement in terms of its quality and expression. Motif Writing, describes movement as a broad and general statement, noting only the most salient features of a movement.

Motif Writing

Motif Writing is a system of notation used to record, analyze, document, generate and create a movement *without* capturing all the details. It is symbolic vocabulary, that is easy to learn. It can be thought of as an elementary form of Labanotation, and can be used to varying degrees of complexity (Hutchinson Guest, 1995; Venable, 1996; Kipling-Brown, 1989). Motif provides a tangible means of representing the "raw materials" of movement, which are body, effort, shape, and space, as well as the elements of

composition. It can be compared to a painter's primary colors, a musician's scales or a poet's words. Laban Motif Writing is a language of movement used to assist in the communication, creation, and education of dance, thereby advancing dance literacy. Hutchinson-Guest (1996) furthers the endowment of Motif as an essential tool of dance literacy when she says,

composing dance sequences, creating movement through the use of the basic alphabet opens, the door to greater exploration and hence to greater creativity. Like the sculptor who must get to know his materials—how clay reacts to his handling, how wood responds to his chisel or stone to his hammer, so the dancer needs to have an intimate knowledge of the raw materials of dance. (p. 2)

Motif's symbol system states the general idea behind a movement and allows for exploration, improvisation, and composition of that basic idea or theme. In relation to Labanotation, Hutchinson-Guest (1995) states, "In Motif, you are writing very little because you want the interpreters to bring their own ideas and improvisation, their own creativity to it; whereas with a structured score, there will be a personal interpretation on a clearly established choreographic form." Valerie Preston-Dunlop (1967) addresses the plasticity of Motif when she states,

Motif Writing is a system of notation which gives the outline of a movement, its motivation without describing in detail how the action is to be performed. ... The interpretation of motif writing is left up to the reader, so that it is a perfect vehicle for describing movement, as is the case in educational work. (preface)

Motif Writing has numerous applications in the fields of movement studies and dance education. Students and teachers alike benefit from integrating Motif Writing into their lessons (Dunlop, 1966; Topaz, 1972; Chilkovsky, 1976; Venable, 1978; Redfern, 1978; Kipling-Brown, 1986, 1989; King-Calvin, 1994; Yoder, 1994). Motif provides a way to communicate basic movement concepts. In teaching, it can help the educator organize and structure lessons. Preston-Dunlop (1966) states that Motif Writing "clarifies [the teachers'] point of view on movement education and helps them to see how they might aid their students more than they have been doing, and how their range of teaching methods might be enlarged" (p. 19). When integrating the symbolic representation of Motif Writing, students become kinetic explorers, grasping ownership of the tools of dance and, therefore, becoming less dependent on teacher supervision and direction. Venable (1994b) concurs by stating that as educators become more articulate, "Our students get clearer and seem to have more resources independent of the teacher. The ability to symbolize movement ideas seems to help support this independence and to challenge new explorations, new combinations" (p. 2).

In addition to teacher education, preparation, and organization of lessons, Motif Writing displays the components of dance composition, which can be sequenced, revised, analyzed, and documented. Consequently, a student can create a dance score in one lesson and revise and complete it in future lessons. Because Motif Writing provides the

vocabulary to study all aspects of human movement, it especially assists in compositional and analytical skills for choreography and the development of an aesthetic appreciation of dance. Lucy Venable, who has employed Motif Writing in dance composition courses at The Ohio State University, states:

Motif is a great aid for exploring movement, ordering movement, sticking to the theme or motif, sorting out the main ideas, critiquing one's own movement and that of others. It is giving a stronger underpinning to what and how we teach dance, no matter what the form. (Venable 1994b, p. 2)

When Motif Writing is used as a tool for movement examination, analysis, and dance composition, the notation presents a language which we can use to articulate concisely the basis of movement. As Betty Redfern (1978) states, "Not only as a tool for recording any form of dance, but as a means too of learning to think in terms of movement and thus to compose dances other than by improvisation or spontaneous response to stimulus" (p. 10).

Motif Writing has provided university, secondary, and primary school students with an aesthetically enriching experience: they benefit from both the plastic nature of the symbols and the immeasurable possibilities for creative stimulus. It is highly valuable in the field of dance education; as Venable (1994a) states, "[the] interpretation of Motif Writing is left to the reader ... it is a perfect vehicle for describing movement activities where the creative invention of the mover is of prime importance" (p. 1). She (1996) continues, "Motif is more prescriptive, so it gives you an outline of what you might then fill up. It can be used in more of a creative way. You are not going to get into the facts and in a way, you don't want to."

When used as an integral element in designing a dance education curriculum, Motif Writing has several advantages. It:

- provides a visual aid to comprehension, giving a fresh look at movement for those with or without training.
- provides an introduction into the exploration of movement and allows and encourages freedom in interpretation.
- assists in developing a child's creative resources for movement possibilities.
- assists in the increased development of motor vocabulary by providing the student with the knowledge of what he is doing and why, which can help further technique and performance.
- assists in movement observation, thereby increasing a student's awareness and range.
- provides a vehicle for learning about the structure of composition and choreography.

The symbolic representation found in Motif Writing fosters a recognition and keen understanding of the value of kinesthetic literacy, whether united with a curricular

base or as a separate dance content area. There is increasing interest in the application of Motif Writing in classroom education, physical education, and dance education. Dori Jenks, a dance educator using Motif, said, "Students at all grade levels became more articulate about their dances, both physically and verbally. The symbols helped to make abstract concepts of time, space and energy more tangible to the elementary students" (1994, p. 2).

In conclusion, the Motif Writing symbols provide an "alphabet of movement" which allows the student to remember and document movement ideas for later performance or study, to enhance compositional analysis, to heighten aesthetic awareness, to build esteem through authorship, and to unite the historic concepts of dance to children's dance scores. By incorporating this unique nonverbal symbolic language with the process of creation, students receive the tools necessary to articulate themselves and their thoughts in movement. Their kinesthetic intelligence has voice, which leads to innovation in other forms of literacy.

Notation and Expression

Kinesthetic experiences intrinsically bring together artistry and cognition. When combined with a conceptual approach to dance education, Motif presents children with a broad knowledge base and capability for significant personal expression. When dance experience combines both written and physical learning modalities, it empowers children with information to convey their ideas. Moira Logan comments on the impact of artistic kinesthetic experience by stating,

Like the other arts, dance gives us access to a nonverbal, metaphoric dimension of experience, one that has to be experienced to be understood.... The realm of sensory experience ... forms the basis for aesthetic experience.... When movement activities and the sensation of moving are connected to the expressive and imaginative powers of the mover, dance begins to happen. Dance and its appreciation involve a heightened kinesthetic awareness, a bodily intelligence and a sharpened perception of movement as a dimension of aesthetic experience. (Tuttle, 1985, p. 38)

In addition, Motif allows for multiple interpretations, fostering individual voice and style. Motif can encourage the child to be a historian, a critic, a notator, or a creative artist. Dance literacy serves as a catalyst for a variety of cognitive functions, as noted author and educator Gladys Fleming states:

Movement experiences can be initiated and presented in such a way that children are eager to respond to new complex situations. Dance is ... concerned with developing, inventing and controlling movement simultaneously with thinking, sensing, responding, feeling and inquiring. (Krause, 1981, p. 269)

Logan and Fleming, recognize that the doing and the making of dance fosters kinesthetic intelligence, which is found in no other learning modalities. When blended with symbolic language such as Motif, a transformational learning or literacy in learning occurs.

Notation as Language

Language, whether symbolic, physical, or written, is designed to communicate. When written, language is a vehicle to transmit and receive ideas, information, and knowledge across space and time. Motif Writing is a vocabulary of tangible symbols to document any style or form of dance, thus offering users a versatile mode for communicating their ideas. As Kipling Brown (1987) states, "The importance of using symbols to attain and to organize ideas and beliefs has altered the conception of intelligence from the acquisition of factual and sense data to the ability to use data in building concepts and communicating expressively" (p. 13). Motif gives children a language they can use to create, communicate, and document their thoughts and ideas through dance. These actions and ideas are conveyed through a selected symbolic vocabulary, and authorship (choreography) is achieved by converting movement ideas to symbols and writing them on paper or by translating actions from a score (notation on paper) and creating a movement representation. Motif provides a mental exchange between concept and creation. This written symbolic vocabulary propels children to artistry and provides intrinsic satisfaction, since their ideas can be shared and understood. By communicating in a common language, children become more enthusiastic as they acquire and master new concepts and symbols and learn to communicate more creatively and effectively.

Motif Writing provides students as young as three with a language to assist their inquiry and communication through movement. Contemporary educational belief is that children be presented with diverse modes of learning. It should not occur simply by spoken word or teacher-directed actions, but through the use of concrete materials and engaging activities; therefore, the integration of physical, kinesthetic action and plastic hand-held manipulatives increases a child's intellectual stimulation and development. The tools found in Motif assist the concepts of ordering, sequencing, designing, and facilitating cooperative learning strategies that produce greater class participation.

It has been my observation that the integration of Motif in the dance curriculum increases student interest and commitment by providing a framework for them to organize their movement ideas. For example, when students shy away from a dance-making activity due to the unfamiliarity of using the body as a tool for creative expression, or hold the common misconception that dance is *ballet* and, therefore, "only for girls," motif captures their attention and gives them the freedom to explore without stereotype. It is my experience that students find Motif intellectually challenging, artistically empowering, and physically enjoyable. In one class I taught, a fourth grade boy wrote, "If you think dance is ballet or some other thing, you are wrong." Another fourth grader wrote, "We have to work very hard.... We learn a lot of symbols like twist and turn. ...I enjoy making dances, sharing, and performing for an audience." Another

student wrote, "Dance makes you feel free and it's not just for girls.... The kinds of things you do in dance is express yourself, make dances, learn symbols, and have fun" and "I learned in dance how to use symbols [in] making dances." Students commented on preferences for creative process or physical action with observations such as, "I like making dances and sharing them with everybody," "I enjoy making dances because you can use your imagination.... Sharing dances can be fun too," and "In dance, you do dances you never saw or did [before], you make up a title and learn a special dance language.... I enjoy making the dances because you have to make up your dance and memorize it."

Notation and Interdisciplinary Education

Interdisciplinary units are dynamic learning situations where several educational disciplines are blended together to enhance cognition. Interdisciplinary education is defined as a curriculum approach that consciously applies methodology and language from more than one discipline to examine a central theme, issue, problem, topic, or experience (Hayes-Jacobs 1989, p. 8). When dance is linked with curricular themes, the rewards are immediate through sensations, connections, and insights. Participants physically invest (embody) themselves in the process, communicating their learning through the whole self. Heidi Hayes Jacobs, a noted author on interdisciplinary education, concurs that there is validity beyond the discipline, and the layering of two subjects can create dynamic learning environments. Jacobs (1989) states, "Students can learn not only the usual concepts (and perhaps learn them better), but they can also get a metaconceptual bonus—'a powerful idea,' a cross-cutting idea, a perspective on perspective taking a dimension of experience that may be of great value" (p. 29).

Through dance the "powerful idea" is physicalized and is retained longer than usual by the participants. The linking of learning domains can act to elevate the relevancy of a subject. Jacobs (1989) asserts,

No matter what the content, we can design active linkages between fields of knowledge.... Integrated curriculum attempts should not be seen as interesting diversion but as a more effective means of presenting the curriculum.... The curriculum becomes more relevant where there are connections between subjects rather than strict isolation." (p. 5)

Jacobs (1989) states further that when subjects are taught in isolation, "accumulation of knowledge is the focus", and when subjects are taught in tandem they "demand higher-order connection making and synthesis that promote real, long-term understanding" (p. 43). Interdisciplinary experiences present an opportunity for pertinent and stimulating moments for students. When these experiences are well designed, students may break from the conventional conception of learning and begin to foster a philosophy which will help them in the working world.

In the Literacy in Motion curriculum, dance is used as a vehicle for illustrating and embodying another subject. This pedagogical perspective is outlined by the *Minnesota Dance Education Curriculum Guide* (1993), which states that through interdisciplinary dance education, "students may problem solve through movement exploration, then create a dance which may be shared and discussed with others. This experience combines many levels of physical, social, and intellectual activity" (p. 104). Throughout this research I have chosen several themes and designed the learning experiences to teach dance and curricular content areas simultaneously, working with the premise that students will integrate knowledge better by experiencing the different disciplines together than by experiencing them alone.

An essential aspect of the Literacy in Motion curriculum is the cultivation of new learning modalities and development of links between dance and the classroom curriculum. Interdisciplinary learning is fostered in the Literacy in Motion framework by:

- Forming connections between content (curricular classroom knowledge) and dance making through inquiry of topic and exploration.
- Fostering levels of abstraction in students' thinking skills that they are not likely to reach in other parts of the curriculum.
- Engaging in thinking strategies for analysis and understanding.
- Developing inventive solutions through physicalizing their knowledge.

The Literacy in Motion curriculum places strong emphasis on the process of learning. Students not only study about the dance they make, but they experience cooperative learning and higher-order thinking skills. Interdisciplinary work can be interesting and stimulating; it encourages children to want more from their study. Interdisciplinary work also has school-wide influences. Interdisciplinary classroom teacher Judith C. Gilbert noticed that attendance rose and that "[there was] greater student, teacher, and parent involvement, increased cooperation among teachers, and student development of life-long learning skills such as responsibility and self-direction, independent study, research, and time management" (Hayes-Jacobs, p. 47). My experiences concur with Gilbert's, as the enthusiasm in interdisciplinary dance was inspiring in the schools, and administrative, community, and parental support rose. Funding increased following the supervisor's visit, 60 parents attended their children's dance sharing, and parents donated time and transportation of costumes and sets for school interdisciplinary dance units.

As noted dance educator Mary Joyce (1980) states, "When [children are] exposed to more than one art form concurrently, it is reasonable to assume that a dynamic interaction of perceptions takes place" (p. 5). This curriculum integrates current interdisciplinary educational practices and presents how dance can be employed to augment curricular literacy.

Curriculum

Dance is kinetic expression, artistry, cognition, and communication. Dance conveys ideas which cannot be rendered in sounds, in words, or in pictures, or communicated in any other form than through a moving body. Dance is a kinetic human language that we can use to reach and empower our children and in which instantaneous pedagogy gives children voice in their expression.

An interdisciplinary model for teaching is employed in Literacy in Motion. It uses Motif Writing to provide the tools for intellectual inquiry and analysis, and it is based on the belief that dance provides an opportunity for linking our kinetic physical development and intellectual development. Experiences in dance are presented for exploration, discovery, analysis, communication, expression, and interpretation, which gives children opportunities to work physically, socially, and intellectually as well as to discover their own artistic originality.

The framework is grounded in the educational philosophies of John Dewey (the importance of the nature of experience and the experimental continuum, 1938), Howard Gardner (the theory of multiple intelligences, 1993), and Jean Piaget (stages of cognition and construction of knowledge, 1973). Literacy in Motion educates through the experience of dance itself, which is immediate and engages children in the learning process.

Goals

Literacy in Motion goals are the following:

Children will be able to comprehend that dance is a kinesthetic means of communication, with its own language of Motif Writing, and that the body is the vehicle for expression.

Children will be able to comprehend the connection between dance and classroom curriculum.

Children will be able to learn to create original dances and celebrate the value of a student's own choreography.

Children will be able to learn the elements of dance and compositional tools used for dance making.

Framework

The Literacy in Motion framework is designed for teaching children's dance in the elementary school. It focuses principally on grades K–5, providing a medium for teachers to use in their classrooms, but can successfully be implemented in grades 6 to 8. It employs interdisciplinary constructs as a vehicle for student inquiry, exploration, and the introduction of Motif Writing. Students learn, manipulate, and create dance by using the Motif Writing symbol system of notation.

The framework reflects a conceptual approach to dance education in which many content areas: elements of dance, dance inquiry and exploration, dance making, dance

sharing, and dance analysis are fostered. The center for the framework is Motif Writing, which feeds all the content areas. This curriculum can be conceptualized as mobile, with dance content areas flowing from the center to the endpoints and back again expanding participants' knowledge as their experiences grow.

This framework embodies five conceptual content areas, grouping each element presented in all units and classes in varying degrees. These are:

- **Elements of Dance:** The elements of energy, time, space, and relationship, are basic to the appreciation of dance as an art form.
- **Inquiry & Exploration:** Inquiry and exploration provide the ideas that become the dance.
- **Dance Making:** The creation of original dances and movements is a method for students to communicate. Movement experimentation, problem solving, improvisation, and composition assist students in making choices and in discriminating and forming movement phrases.
- **Dance Sharing:** Dancing with and for other students, assists in the development of group unity and cooperation. Individual encouragement is achieved through reciprocal supportive comments during class and informal group sharing, which results in successful creative work.
- **Dance Analysis:** The act of observing and reviewing dance works fosters analytical skills necessary for students to evaluate their own individual and other group efforts.

Instructional Method

The students experience dance through the five content areas, with Motif Writing and curricular theme woven into the framework. The curriculum is designed to provide experiences that enable the students to learn and apply selected symbols and principles of notation within the context of the dance experience. In each class students examine an aspect of a curricular theme, explore modes of embodying that theme, learn new Motif Writing symbols relating to the theme, and create dances. Each class ends with an informal dance sharing or performance followed by students' observations and reflections.

Numerous instructional methods can be employed within this framework. However, in this research two methods were most successful as a way of evaluating participant retention: Compose-then-Move method and Move-then-Compose method. Compose-then-Move experiences call for students to be skilled in the reading of notation materials. In this method, students from one dance class would conceptualize and notate a dance on a curricular theme (e.g., properties of water) and send it to another class for them to read and perform, thereby creating "e-mail dances" and "postcard dances." This activity not only facilitated interaction between classes, but it presented historical references regarding the development of the notation system. The "e-mail dances" served as a means of re-creating the original purpose of this notation system as its creator Rudolf Laban, had intended.

The Move-then-Compose experiences call for one individual to create and share a very short dance while two other students observe and notate the movement sequence. While it is usually employed in small work groups, Compose-then-Move method can also be implemented in large groups. In this method, the class would form a large circle and individual children would volunteer to create a short dance to perform in the center. Other classmates, using a packet of laminated symbols, would notate and comment on the dance they had seen. Immediate reward was thereby granted, and each child was made to feel valued by receiving personal attention for originality, phrasing, and physical prowess. Participants were equally interested in the observation, analysis, and scoring as well as the physical creating and dancing. This experience was called "Name that Dance."

Other teaching materials employed in this framework included videos of Native American dancers, and time lapse footage of plants growing, penguins swimming, and glaciers and icebergs changing shape. Children's literature and poetry were chosen for themes and movement investigations, and photographs and illustrations were employed to foster visual references and stimulate imagination for active embodiment. A variety of music assisted in setting the atmosphere for inspiration and assisting in the dance sharing portion of class.

Handwriting the notation symbols was time-consuming and difficult; therefore, at the beginning of the sessions, children used laminated hand-held Motif symbols to expedite the dance analysis and the creative process. In later sessions, students recorded by hand their dance scores complete with illustrations. On occasion the children's dances were videotaped and viewed in class (figure 1-2). The classroom was decorated with large, colored, Motif Writing symbols with English subtitles that provided a dance glossary for quick reference. The students' illustrations brightened the walls, publicizing the activity in class. Flip charts were used for brainstorming.

Children's movement possibilities were more developed compared to their notation vocabulary. Sometimes children requested additional symbols for particular actions in their dances, for example, rolling, which was not covered in the syllabus. I provided these without great explanation. The additional symbols seemed to heighten the appeal of Motif Writing without hindering the creative work. As the class progressed, the children grew fascinated with the history and development of this language and consequently developed their own symbols. They became invested as owners of their language of dance by actively furthering its usage.



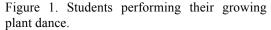




Figure 2. Students reading their motif dance score.

Different children bring different aptitudes to the dance class. One child might explore kinetically before beginning to create, while another might need to write the dance before exploring with movement. Whether or not a child is quick to innovate, explore, and memorize, his/her method is as acceptable as another child's. In this research, I observed that a child's creative processes in dance making are unique and personal.

The class format included exploration of movement concepts, discussion of curricular themes, explanation and manipulation of symbols, dance making, and dance sharing. Covered within this framework are symbols for the basic movement action of the body (Basic Body Action); symbols for level change, directional movement, and pathway (Spatial Indications); as well as the sequencing of symbols on the staff, sequence of action, either simultaneous or successive, and intensity of action (Graphic Design); and duration of actions (Duration of Actions). Below is a list of the symbolic vocabulary covered within Literacy in Motion.

SYMBOLIC VOCABULARY

Basic Body Actions:

- to move and to find stillness
- to contract and to expand
- to contract a lot and to expand a lot
- to jump and to wiggle
- to turn and to twist
- to balance and to fall

Spatial Indications (shown by symbol shape and shading):

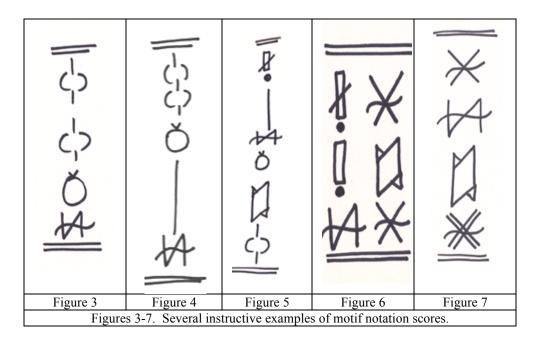
- <u>levels</u>: low, middle, and high
- <u>directions</u>: forward, backward, and sideways
- pathways: straight, curving, meandering, and circular

Graphic Design:

- notation is written and read vertically beginning at the bottom of the page and moving to the top. The dance reads: expand, pause, and two jumps.
- double horizontal lines mark the beginning and ending of the dance.

Duration of Actions:

- <u>timing</u> is indicated by the placement of the symbol on the staff. Dance notation score (Figure 3) reads: expand, pause and two jumps combined.
- <u>duration</u> is shown by the length of the symbol. Dance notation score (Figure 4) reads: expand for a much longer than the pause and two jumps combined.
- <u>sequence</u> is shown by the order of symbols on the staff. Dance notation score (Figure 5) reads: jump, turn, stillness, expand for twice as long and fall.
- <u>simultaneous</u> actions are shown by side-to-side placement of symbols on the staff. Dance notation score (Figure 6) reads: Simultaneous action of expanding and contracting, simultaneous action of turning and balancing, simultaneous action of falling and contraction.
- <u>intensity</u> of actions are show by the selection of the symbol. Dance notation score (Figure 7) reads: strong contraction followed by a turn, an expand, and a less intense contraction.



Scope and Sequencing

The Literacy in Motion framework consists of 24 classes comprised of three units of study, with eight classes in each unit. Each class is 50 minutes and is based on exploration of selected themes in the children's classroom curriculum and the related symbols and principles of Motif Writing. The Motif Writing vocabulary taught within this framework is straightforward and relates to the particular curricular concept covered. The classes are cumulative, allowing for continued manipulation and integration of the symbols acquired from previous classes. The framework is designed for ease in acquisition of new concepts. Literacy in Motion curriculum is accessible to all students whether or not they have a dance background.

Assessment

Portfolio assessment was used to evaluate students' comprehension and learning throughout the year. A journal of artifacts (chosen by each child) represented the students' efforts over the span of the classes. The portfolio contains:

- selected notations with reflective comments on their dances, including how they like to move and what they saw in classmates' dances, and constructive comments on their own choreography;
- class participation and students' reflective comments or in-class observations;
- evidence of teamwork, cooperation, and support of others;
- student drawings and artwork which represent the classroom dance experience. (See Fig. 6-7).
- written discoveries, comments, and thoughts regarding the dance class;
- video documentation of a child's process and creative dance making;
 record of parent/student/teacher conferences;
- the student's self-assessment worksheets.

Conclusion

Motif Writing, a derivative of Labanotation, can be integrated within all levels and styles of dance. In this research, I have demonstrated that using Motif Writing within a conceptual framework provides a tool for students to acquire a working knowledge of dance as a physical, intellectual, and expressive art form (figure 8-9).

The Literacy in Motion curriculum framework, for K-5 students, is grounded in an interdisciplinary partnership between dance education and classroom curriculum using Motif Writing. By uniting Motif Writing with curricular themes, the curriculum is embodied and expands into multi-layered learning. This curriculum framework targets the concepts of sequencing, cooperation, group dynamics, and communication skills.

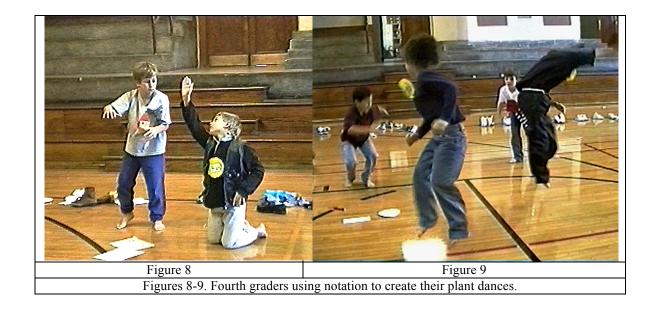
Motif Writing provides a key for elementary-age children to understand movement concepts by presenting a structured method for exploration, organization, and documentation of their work. During this process, students develop an awareness of their bodies, moving through space, in time, and with dynamic energy. Motif Writing

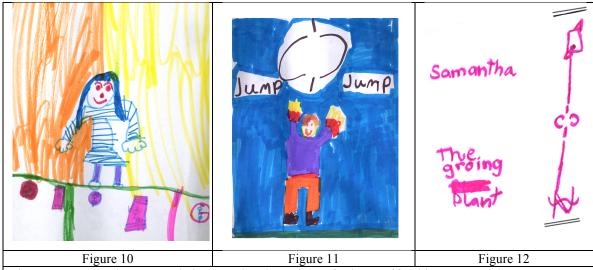
assists their inquiry and design, and prepares them to use their analytical skills when viewing other students' dances or restructuring their own.

In the Literacy in Motion framework, children were given opportunities for problem solving, for building independent and cooperative creative work, and for developing a means of communicating their ideas. These experiences increased students' verbal clarity and kinetic expression on the curricular topic. Following each dance class, students were eager to bring their dance experience back to their classroom. On occasion, classroom teachers would lead a visual art activity following the dance class to integrate the students' experiences. Sue Johnson, a third-grade teacher, said that the movement class carried over into her classroom activities. "Children definitely made the connection between content area ... and dance. They often asked to use dance to express what they have learned." Students' knowledge and understanding of dance concepts and their curriculum produced memorable learning experiences as a result.

While conducting this research, I discovered that Motif Writing provided a fresh approach to both the manner and the clarity of my teaching, which brought insights into the appropriate progression of this material. Using Motif Writing at the center of this dance curriculum, I was able to reach a large population of students, dissolve stereotypes of dance, and address participants' diversity of learning styles. Caryl Greenblatt, a fourth-grade teacher, commented on the transformational quality of this type of dance instruction. "Quiet unmotivated students seem to open up [while] active boys are able to channel their activity, because of the symbols, in a positive manner and shy children were not so shy... Children became aware of movement and were able to identify it in both professional performances and in their peer projects." She continues, "[Dance] was enjoyable for all involved, the symbols allowed for creative interpretation ... for various learning styles, and for the usually unsuccessful student to be successful." Students participating in these classes had greater focus and heightened participation in class and overall enthusiasm for dance, which also spread to other students throughout the school. Other classroom teachers concurred with theses statements.

The objective written structure and the unbiased acceptance of students' creative efforts and kinetic empowerment bring about this curriculum success. Motif assists sensitive children, older students without previous dance experience, non-athletic children who might queue into the logical sequencing involved, and boys who view dance as "feminine." Students experience major changes, learning the rigorous physical challenges, creative expressive potential, and special symbolic language found in dance. The Literacy in Motion framework renders meaning from classroom curricular experience and provides a link between the kinesthetic and other forms of literacy.





Figures 10-11. Students artwork documenting the process of using motif writing to create dances. Figures 12. Student handwritten motif score.

Motif Writing Vocabulary

Listed below is the Motif Writing vocabulary covered within the Literacy in Motion curricular framework. It includes the three major direction symbols, the six basic actions of the body, the three dimensions of level, the four pathways in space, and the four concepts of weight shift. The chart is organized into five categories: action verbs; pathways; directions; levels; and changes in support. It is followed by the essential principles of Motif Writing, such as scoring, duration, sequential action, and simultaneous action.

ACTION	SYMBOL	DEFINITION	IMAGERY	DESCRIPTIVE
Basic Movemen	nt Action	<u> </u>		
An action stroke		A single movement of any kind	Freedom in choice of movement	An action, a gesture or whole body movement as in a wave of the arm, a turn of the head or movement with the whole body
Stillness	X	The absence of action	Hiding trying not to be, noticed, playing freeze tag	Pause, hold, freeze
Expand	M	Actions of lengthening away from the center of the body	A turtle stretching his head out of his shell, vine growing, frog leaping for fly	Opening and reaching out growing, lengthening, unfolding, extending, stretching
Contract	\times	Form of flexion; drawing the limbs toward center of the body	Curled up kitten, folded rug, closed flower bud	Squeezing, shrinking, bending, folding, making smaller
Rotation Turn		A general rotation of the body, as a whole or parts of the body	Cartwheel, pirouette, rolling like a ball, spinning like a top	Spinning , revolution , rolling, circling, gyration, orbit
Rotation Twist	X	Specific form of rotation in which the extremity produces the turning action from a fixed base	A plant reaching to find the sun	Spiral, intertwine, corkscrew, curve, torque
Pathways in Space				
Any path		Any pathway which moves from one place to another	Any and every path is available to the mover	Any kind of path, all different paths, a combination of all paths
Curving path		A pathway describing a rounded and irregular floor plan	Waking around a pond, a winding road, water draining from tub	Turning, twisting pathway; spiraling path; curving or bending pathway; snaking

Straight path		A pathway which is composed of straight lines.	Balance beam, walking the plank	Zigzags, direct, uninterrupted, undeviating
Circular path	*	A pathway which describes a complete circle, clockwise or counterclockwise, large or small	Native American Round dance	Equidistant from the center, hoop- like; ring-shaped path, spherical path
Directions in S	Space			
Forward		Movement traveling, or a gesture which advances the body	Running in a marathon, pushing a shopping cart full of groceries	Frontward, advancing
Backward		Movement traveling or a gesture which is retreating	Tiptoeing back out of danger, fencing retreating from an attack	Rearward, backing up, retreating
Sideward	1>	Movement traveling or a gesture which is to the right or left side of the body	Hermit crab, Lippizaner horses, sidewinder snake, all travel sideways	Laterally, sideways, sliding
Levels				
High / rise		Upward movements against gravity in the process of rising	Jumping for joy, bread dough, growing plants Steam	Rise, elevated, towering, aerial, light
Middle	-	Horizontal movement a neutral place	Regular walk,	Level with the earth,

Low / sink		Downward in the direction of gravity, with actions in the process of lowering	Prowling animals crouching before a tiger pounces, a withering plant	Sink, depress, on the ground, submerge decline and lower
Change of Sur	pport			
Stepping		An action ending in a new support, stepping, a transfer of weight	Crossing a river on slippery rocks, penguins on ice, hopscotch	Stride, footprint, footfall, gait, walk
Balance		Equilibrium, centering, the center of gravity over a moving or static support	A bird on a wire	Equilibrium, stasis, stability, steadiness
Falling		The center of gravity moving beyond the base of support	Lava flows, raindrops, Waterfall	Dropping, collapsing, sinking, plunging
Jump		Any aerial step leaving the ground and returning to it	Frogs, victory celebration, bouncing off the diving board	Spring, bounce, rebound, leap, hurdle, hop

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UNIT ONE — LESSONS 1–8 BASIC MOVEMENT ACTIONS AND THE ARCTIC

LESSON 1	LESSON 2	LESSON 3	LESSON 4
Glaciers and icebergs	<u>Iceberg dances</u>	Penguin play	Penguin dances
Share a short video clip	Show photographs of ice	Show video of penguins	Design dances using
of the Arctic habitat,	flow & glaciers and	and their young in the	themes from Arctic
develop shape dances	develop	water,	environment: weather,
positive & negative shape	Shape relationships with	create individual penguin	rocks, holes in ice,
sequences	partner	movements, "Name that	nesting circles
		Dance"	in small groups
movement concepts	movement concepts	movement concepts	movement concepts
Basic actions and	shaping, weight sharing	sequencing and symbol	Basic actions, levels,
stillness	& buoyancy	recall	collaborative learning
symbols covered	symbols covered	symbols covered	symbols covered
an action, stillness,	rise, sink, and sequencing	wiggle	all from lesson 1-3;
shrink, grow, sequencing	of symbols	jump, turn, twist	balance, falling
of actions, beginning and		simultaneous actions	and levels
ending marks			
LESSON 5	LESSON 6	LESSON 7	LESSON 8
Prey and predators	Travel the tundra	A harsh environment	Arctic Dancing
Watch short video on	Discuss human and	Explore the elements of	Have an Arctic
Arctic environment and	animal migration, create	weather, including harsh,	environment celebration;
the concept of	small group dances based	temperatures, freezing	from use themes the
camouflage;	on traversing the tundra	cold, wind, ice, snow,	previous classes to design
create prey and predator	in relation to the hunt and	rocks	and form small group dances
pair dances	migration		dances
movement concepts	movement concepts	Movement concepts	movement concepts
time, speed, shape,	pathways	dynamics and weight	sequencing, weight
weight shift		sharing	sharing
symbols covered	symbols covered	symbols covered	symbols covered
shrink and grow, three	levels straight and curved	more complex	use all known Motif
levels, pause	pathway	sequencing using all	symbols
,1	1 ,	known symbols	
		•	

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UNIT TWO LESSONS 1–8 PATHWAYS AND NATIVE AMERICAN INDIANS

LESSON 1	LESSON 2	LESSON 3	LESSON 4
American Indian	American Indian dance	American Indian	Mapping of American
community dances	<u>movements</u>	<u>journeys</u>	<u>Indians</u>
Dance themes and	Green Corn dance harvest	Seasonal travel across	Create terrain map of
function,	Actions: picking,	long distances.	migration across the
Round dance	digging, seeding,	Consider traditional roles	country; actions and
Group formation	carrying, watering,	in the family/NAI tribe,	challenges in one the of
Arm, head isolations	tending, growing, and	the hunting process	journey in
toe-heel footwork	eating		small group dances
movement concepts		movement concepts	movement concepts
sequencing and	movement concepts	directions, sustained &	sequencing pathway and
storytelling in dance	structure, building individual dances	sudden time	levels
symbols covered		symbols covered	symbols covered
review basic movement	symbols covered	sequencing and pathway,	pathways straight,
actions and sequence in	traveling on meandering	jump, turn, rise, sink	curved, meandering and
straight or curved	pathways, rising and	while moving on a	circling found in round
pathway	sinking	pathway	dance
LESSON 5	LESSON 6	LESSON 7	LESSON 8
<u>Dancing Teepees</u>	<u>Dance Ceremonies</u> Deer,	Indians of the River	Powwow dances Name
Improvise to NAI	Eagle and	Storytelling and creating	that movement in circle
children's poetry in small	Fire dances	a sequencing map for a	share Indians of the
groups	create ceremonial dance,	perilous adventure in	flowing water dances and
Action-to-Symbol trio	in groups	small groups	drawings
quiz	share & notate		
movement concepts	movement concepts	Movement concepts	movement concepts
sequencing, elements of	strong and light weight	directional movement,	review all previous
time: sustained and	effort,	force, speed, traveling	·
sudden	formations and duration		
symbols covered	symbols covered	symbols covered	symbols covered
duration of pathway	all symbols known with a	all symbols known, with	all symbols known with a
dynamics on pathway	concentration on timing	a concentration on all	concentration on accents
		four pathways	

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UNIT THREE — LESSONS 1–8 RELATIONSHIP AND PLANTS LIFE CYCLE

LESSON 1	LESSON 2	LESSON 3	LESSON 4
Moving plants	Root systems	Secret Garden	Seasons
Study the plant life cycle	Discuss plant life,	View video and photos of	Seasonal effects on plants
for changes in form,	investigate the role of	plant environments with	including drying and
discuss contrasting	roots and how they move,	weather focus: forest,	decomposing
species, watch time-lapse	create individual plant	desert, wetlands; create	investigate shape, color
video of plants growing	dances in small group	representation of flowers,	and functional changes in
and changing shape;	sharing with name that	roots and leaves	plants during life cycles
partner dances	symbol game		
Movement concepts	movement concepts	Movement concepts	movement concepts
dynamics, duration,	dynamic elements of	Storytelling, dynamics,	sequential actions,
whole body action	lightness & strength,	levels, symbolism in	bending, dynamic
	timing, shaping	dance	elements of quick and
			sudden time
symbols covered	symbols covered	symbols covered	symbols covered
duration and review	turn, twist, expand, pause	all with focus on accent,	scatter & gather wiggle,
shrink, grow, and pause	& pathways	duration and pathway	fall, balance
	or paramaga	######################################	,
LESSON 5	LESSON 6	LESSON 7	LESSON 8
<u>Seasons</u>	<u>Sensations</u>	Forest Life Cycle	Green Garden
Spring growth and	Environmental effects:	Study the influences of	Discuss ecosystems,
pollination; discuss	how sun, rain, wind assist	fire, flood, and lightning	life cycle, seasons,
connections to insects	or hinder plants, create	on trees, choose plant	weather, groups choose
and form small group	and share dances with "Name that dance"	identity create dance	plant topic create story
dances for partner notation	Name that dance	using all previous ideas	and dances about plants
notation			
movement concepts	movement concepts	Movement concepts	movement concepts
duration, spreading	dynamics strong & light	dynamics, shaping, and	review all previous
elements of quick &	weight and free and	storytelling	lessons
sudden time	bound flow		
symbols covered	symbols covered	symbols covered	symbols covered
expand, rise, duration,	strong or weak accents	all from previous lessons	all from previous lessons
simultaneous movements	and stillness	*	*

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