

**Current Issues and Evidence Based Practices
In Using Art to Teach Literacy Skills**

Introduction

This document is submitted in partial completion of the contract between *VSA arts* and SPEC Associates to conduct a research study and literature review of Start with the Arts.

The purpose of this literature review is to provide updated information about current best practice thinking and research related to the use of art to teach literacy skills to children in early childhood settings.

Methods

This review began with resource documents already known to the content expert for this project, Dr. Shannan McNair, Ed.D. at Oakland University, a Professor of Early Childhood Education. Dr. McNair's resources were augmented by a literature search using three online search engines: (1) ERIC, (2) Education Abstracts, and (3) PsychInfo.¹

The following search terms were used:

- Best practice
- Evidence based practice
- Early childhood/preschool
- Arts/drama/visual arts
- Literacy/reading/writing

Documents were selected if they were:

- a. Relevant to early childhood (ages 0 through 8 years)
- b. Related to the use of arts to teach literacy skills within early childhood education settings

The abstracts of selected articles and book chapters were reviewed and further screened for:

- a. Publication date as 2000 or later
- b. Being an empirical study or a review of empirical studies

¹ The original plan also called for the use of GoogleScholar as a search engine. However, it was believed that the three search engines listed above encompass all of the major scholarly work in this area and that GoogleScholar would yield redundant information.

Findings

Current Issues in Using Art to Teach Early Childhood Literacy Skills

Our review identified the following issues being discussed by researchers related to the integration of arts into early childhood education:

Research findings on the early influence of music are mixed, but there is agreement that human beings are "musical" from birth and music experiences that are active and social have an impact on babies and toddlers.

Educators and researchers point to a dynamic model of arts and learning, such as drawing to learn/learning to draw, dancing to learn, and/or dramatic representation to enhance the learning of a concept.

Artistic growth is developmental and a wide range in ability and interest is to be expected.

Children have artistic competencies at earlier ages than was previously thought.

Artistic expression broadens communicative and representational capability as it enables children to use, for example, drawing, dancing, singing, painting and pretending to communicate ideas.

The use of arts to bring curriculum subject matter to life promotes engagement and interest. Integration is important to increased understanding, and for the inquiry approach with scientifically correct information. For example, imitating the tones of spring peepers and bullfrogs is useful to explore sound and nature rather than singing songs about frogs that may include words that reinforce misconceptions.

Early childhood educators and professional organizations recognize artistic representation as important for child growth and development, that it is developmental, and wide variation in individual background experience, ability, and interest is expected.

Regular access to real tools and materials for creating art, tools that are used by artists, particularly materials such as clay, wire, weaving looms, and a variety of paint colors and brushes is recommended.

Mediation of learning in the arts and literacy is important to learning, but skill and care must be taken to ask open (versus judgmental) questions to help children to reflect on their own work, and to provide mediation in use of artistic strategies, skill building without sacrificing child self-expression and artistic identity. Too much or the wrong kind of adult direction takes away from the cognitive benefit (thinking about and representing a concept using artistic means) of the experience for the child.

Process is more important than product, performance and audience for young children.

The importance of performance as an opportunity to reflect and refine skills, or to get the perspectives/interpretations of others, becomes more important as the child grows older and/or more self reflective.

Children should be allowed and encouraged to create what is unique and their own, without judgment or comparisons, in an environment where diversity is celebrated.

Cooperation and collaboration with other children is valued over competition.

Best Practices in Using Art to Teach Early Childhood Literacy Skills

Our review revealed that the use of arts in teaching early childhood literacy skills is more effective when:

- (a) the arts instruction/experiences are integrated in the early literacy learning
- (b) arts instruction and/or facilitation of experiences should be individualized to meet the learning needs of different age groups (i.e. infants and toddlers) and differences in prior experience, ability and interest.
- (c) materials for creative artistic expression should be plentiful, realistic, lend themselves to modification for use by children with special needs, and support open-ended exploration
- (d) a balance exists between opportunities for exploration and adult mediation/scaffolding on the use of art tools and/or techniques
- (e) there is active engagement of the child
- (f) the role of the teacher as active, knowledgeable, and intentional in arts and literacy teaching
- (g) the arts allow for the use of different modalities to support learning among diverse students and assume that there will be variation in the range of abilities in young children
- (h) art experiences promotes critical thinking, creativity and problem-solving across the curriculum
- (i) the act and process of creating is presented as more important to the young child than the product

Summaries of Documents Reviewed

Follari, Lissana M. (2007) *Foundations and best practices in early childhood education: history, theories and approaches to learning*. New Jersey: Pearson

Key points:

Multiple Intelligence theory is important and should impact practice.

Creativity involves the ability to make something new out of stored information, the ability to brainstorm new ideas that are flexible and relevant to the task at hand, to elaborate on those ideas in useful ways, and to communicate the results of the process.

Creativity, applied to real life situations, is the ability to solve problems by seeing new solutions, to create new problems or scenarios, and to find new uses for existing products, ideas or tool or invent entirely new products, ideas or tools.

A verbal/linguistic child may learn best through listening, storytelling, poetry, riddles and plays.

A child with linguistic delays or disabilities can call on other intelligences and still create.

Children with musical intelligence actually hear music in everyday experiences and situations.

Visual/spatial intelligence involves: (a) the process of creating images in one's mind, (b) the ability to use visual images to express ideas and tell stories, (c) the ability to recognize and discriminate among visual input, (d) the ability to accurately visually represent the world, (e) the ability to move through complex paths, and (f) the ability to manipulate images.

Children who learn through body/kinesthetic intelligence will often: (a) gravitate toward materials and experiences that they can manipulate and touch, (b) show sensitivity to physical stimuli in the environment, (c) demonstrate skill in handcrafting or moving, and (d) appear graceful and fluid in their body movements.

Best practices for teaching young children include: (a) many opportunities to represent what they think or know, (b) environments that allow for moving, (c) the use of open-ended materials (d) scaffolding by adults in a way that expands children's thinking, (e) an environment that encourages collaborative construction of understandings, (f) teaching methods that promote activities fostering higher level thinking, (g) a coach that guides their investigations and creations, (h) methods that support reflective, deliberate decision-making, and (i) environments that facilitate children's exploration.

The roles of the teacher are to: (a) facilitate children's interactions with one another, (b) provide interesting, creative materials, and (c) make thoughtful observations and documentation of children's interests and processes.

The chapter provides a number of examples of using the arts – singing, listening to story telling and poetry, speaking, composing, playing instruments, visualizing/mental imagery, photography, visual art, and body for expression. The key principles in all of the examples are: (a) importance of having knowledge of individual children, (b) importance of knowing the child's unique social and cultural background, (c) the inclusion of some teacher-directed, skill-based learning experiences such as cooking, art classes, and handicrafts, (d) the inclusion of interaction in relaxed social groups, (e) children having some choice even within teacher-directed experiences, (f) a balance of teacher and child-directed activities, (g) daily exposure to authentic literacy experiences, (h) active inquiry supported, in part, through investigation of questions within the context of long-term, in-depth projects, (i) planning and reflection time, and (j) inclusion of children in the observation, documentation and assessment process with reflection, revisiting documentation and posting documentation of their processes.

Runco, M. (2006) The development of children's creativity. In Spodek, B. and Saracho, O.N. (Eds.) *Handbook of Research on the Education of Young Children*, 2nd Edition. (pp. 121-131) Mahwah, New Jersey: Lawrence Erlbaum Associates.

Key points:

Children's creativity may not result in a product.

Children's play and imagination provide a base for later skills.

Parents should be encouraged to provide children with opportunities for them to think for themselves at home.

Children's creativity depends on home, school and the wider cultural context within the media and other informal experiences.

Children's creative potentials are related to autonomy and self-expression.

Thompson, C. M. (2006) Repositioning the visual arts in early childhood education. In Spodek, B. and Saracho, O.N. (Eds.) *Handbook of Research on the Education of Young Children*, 2nd Edition. (pp. 223-233) Mahwah, New Jersey: Lawrence Erlbaum Associates.

Key points:

Young children make meaning as they do art.

Young children are competent artists and, as early as 3, can express beliefs about their competencies and the competencies of others.

There are gender differences in drawing as visual narratives, where boys and girls draw similar things but for different reasons or purposes.

Children can use graphic language (drawing, painting, collage, construction) to record their ideas, observations, memories; to explore understandings and reconstruct previous understanding; and to co-construct revisited understandings.

Art can be a way of examining the world.

Art can be used as a symbolic language.

Adult intervention is essential to children's learning. Adults are needed for scaffolding, providing materials, instructing or modeling how to use tools, posing questions, asking for reflection, pointing out details and asking for elaboration. Adults can expose children to a wider range of media and artistic experiences than would be discovered by the child alone.

The balance between teacher-directed and child-directed or "voluntary" work is important in order to build skills while simultaneously reinforcing self-expression and competence.

Bradley, K. with Szegda, M. (2006) The dance of learning. In Spodek, B. and Saracho, O.N. (Eds.) *Handbook of Research on the Education of Young Children*, 2nd Edition. (pp. 243-252) Mahwah, New Jersey: Lawrence Erlbaum Associates.

Key points:

Mastery of rhythm supports the kind of thinking, action and interaction that reveals the complex nature of active learning.

Rhyming games of children are not only for community building, but also set children up for learning.

Moving offers forms and allows for encounters in order for children to know.

Children who have an expressive range can acclimate to tasks more readily and they learn this through the quick and sustained time efforts involved in most artistic endeavors.

Having a range of expressive choices supports innovative thinking.

Children can learn to observe unique patterns in others and appreciate the subtle differences in how each of us negotiate our way through interactions.

There have been no studies that focus on the teaching of dance techniques and the role of the audience specific to young children.

There is some evidence that learning subject matter using movement, “reading through dance” is effective.

The National Dance Education Organization has early childhood standards for dance published in 2003.

Welch, G. F. (2006) The musical development and education of young children. In Spodek, B. and Saracho, O.N. (Eds.) *Handbook of Research on the Education of Young Children*, 2nd Edition. (pp. 251-268) Mahwah, New Jersey: Lawrence Erlbaum Associates.

Key points:

Research points to infancy and early childhood as critical periods for the development of musical abilities and the formation of musical identities.

Assuming normal development, all children are musical and capable of a diverse range of musical behaviors.

Musical development can be fostered by an appropriate range of experiences throughout early childhood.

The first year of life is characterized by socialization into the dominant music culture(s). The broader the range, the greater the likelihood of enhancing musical skills development.

Caregivers, both parents but especially mothers, are critical agents in their children’s musical socialization and development.

Early experiences of singing are linked to the development of musical competencies.

Encouraging participation in musical activities can have non-musical benefits such as the development of verbal memory, motor control, emotional awareness and communication skills.

Teachers of young children should look for, encourage and celebrate diversity of singing behaviors from 2 years old on.

Children progress through a variety of phases in their musical development and adults need to be sensitive to behaviors that characterize those phases. Rich musical experiences can foster progression and may accelerate development.

Young children should be provided opportunities to compose and improvise, such as invented songs and exploratory play with simple musical instruments.

If sung to from birth, young children are likely to demonstrate good singing skills.

Early, inappropriate disapproval can lead to negative lifelong labeling.

Girls often appear to develop musical skills before boys, making it important to look for early opportunities for boys to develop musical skills also.

Parental participation is important in children developing musical skills.

Kavanaugh, R. D. (2006) Pretend play. In Spodek, B. and Saracho, O.N. (Eds.) *Handbook of Research on the Education of Young Children*, 2nd Edition. (pp. 269-278) Mahwah, New Jersey: Lawrence Erlbaum Associates.

Key points:

Deep involvement in particular expressions of pretend play may lead to better understanding of mental states. It could also be that youngsters skilled in understanding mental states are better at playing a variety of roles.

There is a link between role play and improving perspective taking and deepening children's involvement with reading and literature.

Christie, J. (2008) The scientifically based reading research approach to early literacy instruction in Justice, L.M. & Vukelich, C. (eds.). *Achieving excellence in preschool literacy instruction*. Guilford Press: New York, NY

Preschool children's oral language, phonological awareness, alphabet knowledge and print awareness are predictors of reading readiness/ability in primary grades.

Bilhartz, T., Bruhn, R., & Olson, J. (2000). The effect of early music training on child cognitive development. *Journal of Applied Developmental Psychology*, 20(4), 615-636.

A positive relationship was found between music training in preschoolers and cognitive growth in non music areas.

Butzlaff, R. (2000). Can music be used to teach reading? *Journal of aesthetic education*, 34(3/4), 167-178.

The results of the study were a small effect size but association was found between music study and performance on standardized reading and verbal tests.

Gromko, J.E. (2005). The effect of music instruction on phonemic awareness in beginning readers. *Journal of Research in Music Education*, 53(3), 199-209.

Children in kindergarten who received 4 months of music instruction showed significantly greater gains in development of phoneme segmentation fluency than the children in the control group.

Lorenzo-Lasa, R., Ideishi, R.I., & Ideishi, S.K. (2007). Facilitating Preschool Learning and Movement through Dance. *Early Childhood Education Journal*, 35(1), 25-31.

Physical movement combined with pretend play/imagery can help with attention, speed, retention and enjoyment of learning.

Integrated music and movement experiences (i.e. rhythm and patterns of beat and tempo) can reinforce math and logic concepts.

In inclusive settings, movement experiences can offer learning experiences to different ages and abilities.

Creative movement and music experiences have been found to facilitate children's cognitive skills.

Preschool movement through dance programs can open up new learning for children and avenues for expression and connecting with others.

Norton, A., Winner, E., Cranin, K., Overy, K., Lee, D., & Schlaug, G. (2005). Are there pre-existing neural, cognitive, or motoric markers for musical ability? *Brain and Cognition*, 59(1), 124-134.

In this study correlations were found between music perceptual skills and non-verbal reasoning and spatial awareness.

Register, D. (2001). The effects of an early intervention music curriculum on pre-reading/writing. *Journal of Music Therapy*, 38(3), 239-248.

In a study of the use of music to teach prereading and writing skills, 60 music sessions resulted in improved, or the emergence of, prewriting and print concepts in preschoolers participating in a Head Start program. The preschoolers were from economically disadvantaged families and at least 25% were at designated at risk due to disability or other factors.

Music and rhythm are intrinsically appealing and useful in the teaching of concepts.

Music and movement are underused as modalities for learning across the curriculum.

Wiggins, D.G. (2007). Pre-k music and the emergent reader: promoting literacy in a music enhanced environment. *Early Childhood Education Journal*, 35(1), 55-63.

Educators draw many parallels between the discrimination of sounds and visual discrimination (shapes of symbols), remembering sounds and words long enough to obtain meaning and words of songs and tunes long enough to play and sing them, listening and understanding spoken language and songs.

Participation in songs (singing, listening, accompanying) helps in vocabulary development.

Phonological awareness is a sensitivity to all units of sound, phonemic awareness is identifying and manipulating the smallest sound units in written symbols, and fluency is expressing ideas clearly (verbally, music performance).

The integration of music into literacy promotes language development while promoting music development.

Combining music integrated literacy and reading aloud to children using Big Books are the top strategies suggested by the International Reading Association (IRA) and the National Association for the Education of the Young Child (NAEYC).

The ability to listen is most keenly developed in musical settings and is necessary for successful language reading.

Kern, P., & Aldridge, D. (2006). Using embedded music therapy interventions to support outdoor play of young children with autism in an inclusive community-based child care program. *Journal of Music Therapy*, 43 (4) , 270-294

Children with autism interact with others more when they are doing activities they enjoy, and they respond positively to music, showing more interest and curiosity.

Children with autism often exhibit musical strengths and interests.

Hodges, D.A. (Summer 2000). Implications of music and brain research. *Music Educators Journal*, 87(2), 17-22.

The following key ideas are derived from neuromusical research:

- the human brain has the ability to respond to and participate in music
- the musical brain operates at birth and continues throughout life
- early and ongoing musical training affects the organization of the musical brain
- the musical brain consists of extensive neural systems involving widely distributed but locally specialized regions of the brain with cognitive, affective and motor components
- the musical brain is highly resilient

Anvari, S., Trainor, L. J., Woodside, J., & Levy, B.A. (2002). Relations among musical skills, phonological processing, and early reading ability in preschool children. *Journal of Experimental Child Psychology*, 83, 111-130.

Music skills correlate with phonological awareness and reading development.

Regression analyses revealed unique contribution of musical perception to the variance due to cognitive awareness.

The importance of phonemic awareness to reading suggests that auditory analysis skills are important and may be strengthened by music skill.

Music and speech may depend on many of the same auditory processes.

Phonemic awareness correlates with simple reading ability.

Strickland, S. J. (2002). Music and the brain in childhood development. Review of Research. *Childhood Education*, 78(2), 100-03.

Brain and music studies thus far have been short term and co-relational.

One study points to active learning relating to retention.

Research suggests that music enhances the learning of non musical content.

Burger, Kristin; Winner, Ellen (2000) Instruction in Visual Art: Can It Help Children Learn To Read? *Journal of Aesthetic Education*, v34 n3-4 p277-93.

When art instruction is not integrated, gains in reading were not evident.