

Child Development and Arts Education:

A review of Current Research
and Best Practices



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Executive Summary

Introduction

In recent years, there has been great interest among educators in the links between arts-based learning and human development. Research initiatives of the past decade have linked arts participation to cognitive growth and academic skills, including the strengthening of long-term memory and reading ability (Gazzaniga et al., 2008), creative thinking skills, and writing fluency (Deasy et al., 2002). Arts participation has additionally been linked to positive social outcomes, including overall engagement in school (Deasy et al., 2002), increased graduation rates (Israel, 2009), and increased community engagement and pro-social activities (Catterall, 2009). In an effort to strengthen research efforts linking arts to overall health and well-being across the lifespan, the National Endowment for the Arts established an interagency task force on the arts and human development in the fall of 2011 (Hanna et al., 2011), ensuring that such research continues to inform and strengthen arts educational practice nationwide.

Although the body of research is growing that links arts participation to ever-widening developmental gains, there appear to be fewer resources available that explain the ways in which the latest research in cognitive, social, and emotional development in children and young adults may inform the instructional practices of arts educators. The following series of literature reviews aims to address the need for this particular type of information, linking current developmental research with recommended best practices for educators of dance, music, theatre, and visual arts students from grades PreK-14.

More specifically, this report is additionally intended as a resource document in the revision of the National Standards for Arts Education, ensuring that these forthcoming goals and benchmarks for learning in the arts will be developmentally appropriate and aligned with current knowledge in the field.

Structure

This report is divided into a series of four literature reviews, addressing the disciplines of dance, music, theatre, and visual art. The reviews are further divided by grade band. Within each grade band, information on both general and discipline-specific developmental characteristics of students are offered, as well as a series of recommendations of specific pedagogical practices that address social, emotional, and/or cognitive needs and abilities of students of that particular discipline and grade band.

Summary of Research and Recommendations

Naturally, researchers in each discipline did not have an equal pool of resources to draw upon; the amounts of information available on child development and the arts varies greatly by discipline, as well as by grade band. Nevertheless, the following reviews aim to present the most complete picture possible as to the currently accepted best practices in arts education as they relate to research on child development.

The following summary highlights the key findings associated with the research in each grade band; more comprehensive information can be found in the individual reviews.

Early Childhood

There is a wealth of information available on all aspects of development related to this age level. It is widely accepted that arts experiences bolster development in multiple areas, and arts-based explorations are often seamlessly integrated into educational experiences for preschool and early elementary learners. In early

childhood, arts experiences present students with a primary means of communicating their understandings of themselves and their world.

Physical

Early childhood learners are mastering gross motor skills, but fine motor coordination (including skills like writing) are still a bit beyond their grasp. Students of this age level are whole-body learners who need to learn through active exploration, involving lots of physical activity. The recommendations for instruction at this level focused on this fact of limited motor ability as a primary concern. Dance instruction at this level typically involves high energy movement, an introduction to basic dance skills, focuses on gross motor skills including balance and coordination. At later stages, students can begin to invent their own movements. Drawing, painting, and other art-making at this age should be viewed as a record of what is primarily a kinesthetic experience, as students explore the marks they can make with art materials. Arts educators are advised to focus on using tools that students can easily operate with limited motor ability, including large paintbrushes and crayons that are easy to grip, and basic musical instruments that students can manipulate themselves.

Cognitive

The research in all disciplines indicates that early childhood learners have very short attention spans and need routines involving a variety of activities to sustain their interest. They are striving to understand the world around them and need experiences that allow for learning through exploration and discovery. This balance of a structured classroom environment that also allows for open-ended, exploratory work was emphasized in the literature related to instruction in all four arts disciplines. Dance instruction for this age should include repetition of basic concepts, but still allow freedom for students to invent their own movements; similarly, music instruction may allow for guided as well as unguided “improvisational” work, as spontaneous music making (inventing songs, etc.) is typical of students at this age. Theatre instruction may involve structured call-and-response activities as well as time for less-structured fantasy play, and art experiences should emphasize exploration and creative manipulation of materials, as opposed to more structured assignments with a goal or subject dictated to students by the teacher.

Social/Emotional

In the earliest stages of this age range, parents and teachers are often the most important individuals in a student’s life, but by ages 5-7, friendships within students’ own peer group gain increasing social importance as well. Learners at this stage are very social and talkative, and arts experiences are often primarily social experiences. In the visual arts, students are often very interested in “re-telling” pictorial accounts to peers and adults, especially as their images become more representational. Students are beginning to explore the relationship between themselves and the world around them, and may begin working in small groups or participating in full-class activities in theatre or dance instruction, fostering their cooperative skills and communication abilities.

Elementary

In the elementary grades, students will begin to rely more on verbal means of communication. Arts-based experiences are becoming somewhat decentralized as primary means of understanding and relating to the world around them, and communicating their ideas.

Physical

The literature reviews indicate that as fine motor coordination increases, elementary-aged students may be increasingly interested in precision and technique in their artistic endeavors. Dance instruction may introduce more sophisticated techniques, involving diagonals, curves, twists, and asymmetry, while music instruction can take advantage of students’ improving vocal accuracy. Elementary students may use a

broader range of visual art tools, including finer pencils and paintbrushes, which make use of their fully developing fine motor coordination.

Cognitive

As students' understandings of the world around them become increasingly more complex and their intellectual curiosity widens, the research indicates that arts assignments can become increasingly sophisticated, perhaps overlapping into other subject areas. Students are eager and able to refine skills: recommended music practices include introducing practice strategies involving repetition and mastery of skills, and possibly the inclusion of computer software that allows students to further hone their skills. Theatre-based instruction can enhance students' understanding of story structure, cause and effect, and ability to write creatively and with detail. Recommendations for several disciplines involved the use of reflection and critical thinking activities into arts instruction; for example, visual art teachers are encouraged to conduct guided conversations about selected works of art with students, using strategies meant to increase their observation and critical thinking skills. Interestingly, the research also reinforces the value of open-ended exploration and improvisational play; although student assignments may be increasingly structured, classroom instruction should allow for student improvisation, or exploration with materials and processes.

Social/Emotional

The research indicates that elementary students have a deepening interest in their own role in relation to the world, and have an increasing sense of independence. At this age level, friendships take on an increasingly important role in their lives. The reviews of recommended best practices in arts instruction reflect an understanding of the importance of social bonds to elementary students: it is recommended that dance practices include collaborative activities in duets, trios, and small groups, and group theatre activities can enhance social and emotional skills including conflict resolution and empathy.

At the same time, levels of students' confidence in their creative abilities often begin to decrease at this age level. The literature related to music instruction recommends the introduction of a variety of practice strategies for instrumental music, to strengthen students' technical skills and confidence; and the dance and theatre reviews stress the importance of educators creating a space where students can feel free to express themselves and experiment with new ideas.

Middle School

The research available that relates arts instruction to development of middle school learners places a much greater emphasis on social/emotional development than any other aspect of growth. It is important to note that this is a stage where required arts instruction in K-12 schools often comes to an end, and students will be making decisions as to whether they wish to continue with arts-based learning in the future.

If students have been studying the arts consistently throughout elementary school, they may now be at a point of refining and perfecting basic concepts and being introduced to more specialized techniques. For example, the recommendations in the literature review for dance advise educators to introduce lengthier and more complex movement phrases, as well as practice and master basic techniques in specific modes of dance, including ballet and jazz.

Cognitive

Middle school students are still primarily concrete thinkers. Research in all four arts disciplines indicates that they are capable of learning increasingly more sophisticated artistic techniques, and can also return to more basic concepts in the context of an expanded understanding of a discipline. Students of this age are more interested than ever in precision and accuracy in their work – in realism when drawing, or in precision while singing or playing instruments.

Students of this age are intellectually curious as well, and can be interested in a wide range of topics. In addition to recommending classroom practices that may refine technical skills, the research presented in the literature reviews emphasized the importance of using the arts as a way of investigating ideas of interest to students. Educators may teach theatre concepts that stimulate intellectual curiosity, for example, or organize thematically linked visual art projects that encourage students to explore ideas of personal significance.

Social/Emotional

Middle school students are increasingly self-focused, and the arts can provide an outlet for them to explore ideas and themes of personal significance. The recommendations of arts-based best practices addressing this need are especially rich, and emphasize the range of ways that arts experiences can speak directly to students' social and emotional needs during these years. For example, dance educators are encouraged to have students create their own dances with peers, while the music literature review recommends that middle school students may be ready to compose their own original music. Theatre-centered activities can allow students to evaluate their own ideas, needs, and beliefs in relation to others. In visual arts courses, the opportunity for individual choice-making is emphasized in the recommendations; students must feel that their work represents their own original point of view.

The importance of a students' personal investment in arts experiences is examined from another angle as well: the music research indicates that by middle school, many students' preferences in music narrow, and they increasingly see a disconnect between the "real music" that they are interested in and "school music" that they perform in their music classes. This disconnect may point to a need for a widening of options for types of music that students may study in school.

High School and College

Research on child development at the high school and college level is less abundant than it is for the earlier grades; additionally, the recommendations of arts-based practices assume a certain level of experience on the part of students.

Cognitive

The research on cognitive development at this level focuses to a large extent on students' abilities to think critically about their own work and the work of others, make informed and deliberate decisions in their work, and to draw connections between disparate ideas or areas of study.

From an artistic standpoint, cognitive development plays a significant role in students' ability to articulate their own unique point of view in their creative pursuits. The recommendations for dance educators point to the importance of viewing and analyzing dance performances regularly, and making connections between dance and other disciplines. The music literature review recommends encouraging students to compare their work to an ideal, or professional model, and to compose their own original works whenever possible. Theatre students should be given understanding of, and the opportunity to participate in, decision-making processes at every level of theatre production. Visual arts researchers identified eight "studio habits of

mind” that high school art students engage in while creating and responding to artwork. These skills include *envisioning, engaging and persisting,* and *developing craft,* among others, and similar language was echoed in the literature reviews of other disciplines.

On the whole, the cognitive skills addressed at the high school and college levels are connected to students’ abilities to “put it all together” – to refine their technical skill, create work with an original point of view, and understand their work and the work of others within broader contexts.

Social/Emotional

The research on social and emotional development related to secondary and postsecondary arts learning is unified in expressing the importance of creating *authentic* arts learning experiences for students. Learners of this level need to be able to choose areas of specialization, develop their own point of view, and feel that they are a part of a community of artists. Specifically, dance recommendations included the need for students to initiate, plan, and produce works independently, while developing their own aesthetic. The music research emphasized the social importance of choirs and other music ensembles, and the importance of this group identity in contributing to one’s own self-identity as an artist. Theatre recommendations included the importance of moving productions beyond the classroom when possible, to larger public venues, and the recommendations for both theatre and visual art stress the need for arts experiences to address issues that are personally relevant to students.

A chart detailing the recommendations specific to each arts discipline can be found on the following pages.

Conclusions/Discussion

Throughout all disciplines and grade bands, the research found a continued, pronounced emphasis on the value of the arts in helping students to make sense of their world, make connections between disparate ideas, and make connections between the self and others. This social and emotional value of arts experiences is emphasized in every discipline at every level, whereas concrete links to specific aspects of cognitive development appear to vary somewhat between disciplines and grade bands.

The research also presents an interesting overall balance between the importance of structure and experimentation, and recommendations throughout this report emphasize the importance of learning tools and techniques and aspiring toward ever more sophisticated practice, while simultaneously encouraging experimentation and risk-taking in developing one’s own personal voice.

Although certain disciplines had more research to draw on in the creation of these literature reviews, it is interesting to note that this doesn’t necessarily correlate with a richer store of recommendations for arts educators. The music literature review, for example, places a much greater emphasis on the acquisition of technical skill, whereas the recommendations for dance, theatre, and visual art offer a wider range of expected outcomes of arts practice and related instructional strategies.

Given the levels of similarity between recommendations associated with different arts disciplines, it would make sense for practitioners in any area to look at the examples of the recommendations in other disciplines for cues that might inform their own practice.

Overview of Recommended Pedagogical Approaches

	Dance	Music	Theatre	Visual Arts
Early Childhood	<ul style="list-style-type: none"> Dance classes should include high energy movements, as well as repetitive movement phrases and patterns that include stillness. Create opportunities for social development by encouraging exploration of feelings in movement explorations including imagery, stories, sounds, words, and games that build articulation and confidence by making connections with peers. Introduce and repeat basic dance skills including gross and fine motor skills. While most activities at this level are full-class, students can begin partner dances. Very short solo explorations may begin. 	<ul style="list-style-type: none"> Play music of various styles with students. Use instruments they can manipulate themselves, in guided and unguided “improvisational” ways. Teach songs that fall comfortably within students’ vocal range. Body movements are effective in teaching songs, especially hand gestures indicating pitch and other characteristics of the music. The strongest foundation for music literacy is a music education that includes singing, dancing, playing by ear, and inventing ways to represent familiar and original songs. Potential for technology-based music instruction, including a computer-based program called the <i>Continuator</i>. 	<p><i>The following recommendations apply to Pre-K through elementary:</i></p> <ul style="list-style-type: none"> Leverage theatre tools to help children explore and understand the world around them. Expand students’ literacy capacities through active participation in representational play. Foster activities that engage students in imaginative play and increase their understanding of self in relation to others and their surroundings. Provide authentic theatre activities and experiences that help young people value artistic processes. Early childhood learners: Even when they volunteer, children at this age should not be asked to perform spontaneously in front of the class or an audience. Performances at this age should be in intimate, safe spaces, for small audiences only. In upper elementary grades, students need to practice and rehearse, to focus and stay in character in improvisational performances. By the end of elementary school, students are developing inhibitions; may be self-conscious and uncomfortable on stage. 	<ul style="list-style-type: none"> Provide a range of materials; expose students to new materials routinely. Offer a visually and spatially rich environment in which students can interact with materials. Look at art with students in addition to making art. Adults should not insist on “decoding” images in terms of the presence of things and objects. At early stages, drawings are often not meant to be representational, but rather are records of movement. Young students can use sketchbooks. “[V]oluntary drawings offer children a form of engagement in art-making which is different from that which they experience in lessons initiated by the teacher.” Offer multiple activities simultaneously, so students can move from one to another if their attention for the first exploration begins to wane. Design experiences for children that are focused on the exploration and creative manipulation of materials. These explorations do not always need to be geared toward the creation of a finished product.

	Dance	Music	Theatre	Visual Arts
Elementary	<ul style="list-style-type: none"> Expand upon the concepts and elements learned in early childhood and deepen movement awareness through explorations that include diagonals, curves and twists, moving into asymmetry. Students of this age should be able to execute isolated as well as coordinated dance movements, maintaining alignment and balance, as well as more complex and contrasting body movement patterns. Teach through repetitions to increase strength and coordination. Facilitate kinesthetic explorations that require improvisation of movement phases. Both genders should be given the same range of activities at this level to avoid stereotyping. Performance considerations that are appropriate for this level are collaborative activities in duets, trios, and small groups that strengthen emotional and social awareness and foster confidence. 	<ul style="list-style-type: none"> Select singing material of a comfortable range for students, and of subject matter that appeals to them. Include student participation in accompaniment with instruments and add kinesthetic movements. Bridge the gap between what children perceive as "real music" and "school music." For instrumental study: begin to develop practice strategies that work to build skills and confidence. Use aural models: YouTube is a good source for finding music performances for music students of all ages. Use computer programs that allow students to hone their musical skills, including interval recognition, study of scales and chords, rhythm practice, knowledge of terms, recognition of styles, etc. Allow for spontaneous play with instruments, which develop into exploration and risk-taking. 	<p><i>See recommendations above, which apply to early childhood through elementary-age instruction.</i></p>	<ul style="list-style-type: none"> Broaden use of materials to include those that require more fine-motor coordination. Involve art history, aesthetics and criticism into art classes. Strategies might include the creation of personal "art collections" of postcards, visiting museums and holding guided conversations about works of art with students. Integrate art into the regular classroom so students can learn in context. Encourage real world and cross-disciplinary connections. Students of this age are interested in and are able to do drawing from observation. Promote imagination and critical reflection. Do not assume that exposure to materials is enough.

	Dance	Music	Theatre	Visual Arts
Middle School	<ul style="list-style-type: none"> Middle school students are able to return to many concepts of elements learned in early childhood and elementary dance classes, yet approach them with an expanded perception of dance. Importance of creating a supporting, challenging, yet nonjudgmental environment for this stage. Introduce, practice, and master basic techniques in ballet, modern, jazz, etc. Challenge students to create their own dances with peers. Address more lengthy and complex movement phrases that include rhythmic and muscular understanding. Include time for composition and choreography to incorporate social and emotional challenges. Channel students' risk-taking proclivity into aesthetic exercises that provide students experiences in balancing, jumping, turning, and stillness. 	<ul style="list-style-type: none"> Prioritize healthy, accurate singing. Promote skills that students use also in instrumental studies. Students (especially boys) may have negative attitudes toward choral singing at this age, so broaden the range of opportunities offered to them, including smaller groups or musical theater. Structure instrumental practice in ways other than simple repetition. Allow students to choose some of their own repertoire in order to increase motivation. Add vernacular music to programs for middle school students. Students thrive musically and emotionally when given the opportunity to write original music. Technology may be useful in this effort. Technology may also assist in teaching music theory at this level, such as rhythm reading skills. 	<p><i>The following recommendations apply to middle school, high school, and college:</i></p> <ul style="list-style-type: none"> Provide students with access to knowledge through theatre tools and texts. Offer students theatre-centered opportunities to analyze and evaluate their own needs and beliefs in relation to others – including worldviews, as well as the views and beliefs of family, peers, and community members who surround them. Teach theatre concepts and skills that stimulate intellectual curiosity and encourage active engagement and creative play. Design opportunities for creative collaboration that mirror authentic processes that occur in theatre practice. 	<p><i>The following recommendations apply to middle school, high school and college:</i></p> <ul style="list-style-type: none"> Provide students choices: <ul style="list-style-type: none"> The opportunity to make choices encourages risk-taking, persistence and time management. Know the students: <ul style="list-style-type: none"> Contextualize new information to make it relevant to students' lives. Make learning relevant and meaningful: <ul style="list-style-type: none"> Make connections to the world beyond the classroom; Use figurative language; Encourage students to develop visual metaphors; Work thematically; and Use authentic assessment processes such as portfolios and process journals. Create opportunities for artistic play and exploration: <ul style="list-style-type: none"> Employ an inquiry-based approach; Frame tasks that allow students to think in new ways. Teach skill (but not as an end in itself): <ul style="list-style-type: none"> Teach skill in a way that is guided by conceptual considerations. Create a safe learning community: <ul style="list-style-type: none"> Facilitate an environment where students know one another, support one another, and have a sense of shared goals and values; Examples: peer/group dialogue; collaborative assignments.

	Dance	Music	Theatre	Visual Arts
High School	<ul style="list-style-type: none"> Students who have been taking dance since childhood are able to train as professionals from a technical perspective. Those who have not had such training still bring a level of maturity that allows them to grasp the discipline of the process of training the body. Warm-up exercises that prepare the body in strength, agility, and safety are now able to be understood cognitively, and performed with aesthetic awareness. Dance projects that support social and emotional development include opportunities to initiate, plan, and produce independently, but in coordination with others. Using critical analysis and comparison, students are able to articulate their impressions and critiques of dances they observe as active, informed audiences. Students at this level are able to understand the linkages between dance and other disciplines, literacy, other cultures, and its performance and social aspects. 	<ul style="list-style-type: none"> In addition to traditional, large school choirs, introduce smaller and more various ensembles. In small ensembles, students learn from one another, play more by ear, and give one another feedback. Include popular music and music from other cultures. (This is a recurring theme.) Use technology to enhance instruction of band students. Exchange audio files with email commentary, record home practice, and use recordings to evaluate practice. Composition is not widely taught at this level because it is difficult, but there is strong evidence that students enjoy composing in and out of school. 	<p>See recommendations above, which apply to middle school, high school, and postsecondary instruction.</p>	<p>See recommendations above, which apply to middle school, high school, and postsecondary instruction.</p>
College	<ul style="list-style-type: none"> Make rigorous, professional-level dance classes available and accessible to students who are advanced in the arts, yet committed to pursuing a liberal arts education. Include an exploratory and improvisational component to courses at all levels. Incorporate reflection as a part of the process of dance; encourage students to be reflective of their lives, goals, strengths, and weaknesses. Include critical evaluations of dance pieces with peers in composition classes. 	<ul style="list-style-type: none"> Improve students' self-evaluation abilities by developing criteria for them to compare their performances with others in specific areas. Use a wide spectrum of listening examples Use technology to teach aural skills and music theory. Integrate web-based material into teaching 		