Although the term "arts education" conjures up competing images and definitions for different people, for the purposes of this policy brief, arts education is defined as incorporating four distinct subject areas: (1) music, (2) dance, (3) theater arts, and (4) visual arts, as taught by certified arts educators. The policy brief provides information about the integration of the arts into K-12 curriculum as a mechanism to improve the performance of all students, particularly in the basic areas of reading, writing, and mathematics. This brief reports on selected research information in brain development and cognition (learning styles) as they relate to arts education and selected findings on the effectiveness of arts education as a curriculum reform effort. Sample arts education standards from the National Standards for Arts Education (1994) are described. The brief also discusses policy issues concerning arts education and its present place in public education. Contains 37 references. (BT)
Improving Basic Education for all Learners: The Role of Arts Education. 1998 Policy Brief.

by Victoria A. Mikow-Porto
The term arts education conjures up competing images and definitions for different people. One person may hear the phrase and visualize a pottery class, while another may envision a lesson on the violin. The arts encompass a wide range of diverse skills and activities; thus, for the purposes of this policy brief, arts education is defined as incorporating four distinct subject areas: music, dance, theater arts, and visual arts, as taught by certified arts educators.

The purpose of this policy brief, undertaken in collaboration with the Southern Arts Federation, is to provide information about the integration of the arts into K-12 curriculum as a mechanism to improve the performance of all students, particularly in the basics: reading, writing, and mathematics.

This brief describes the current legislative status of arts education in the states served by the SouthEastern Regional Vision for Education (SERVE)—Alabama, Georgia, Florida, Mississippi, North Carolina, and South Carolina—and the three additional states served by the Southern Arts Federation (SAF)—Kentucky, Louisiana, and Tennessee.

The public has clearly set an expectation that the prime focus of K-12 education must address students’ mastery of the basics: reading, writing, and mathematics. This reflects the belief that these functional skills are necessary both for academic success and success as productive workers. As an integral component of education reform, it has been argued that appropriate arts education instruction, reflecting national achievement standards, can enhance the acquisition of basic skills as well as other higher-order learning skills. An expected outcome of such instruction is improved academic performance of all students.

The Goals 2000: Educate America Act of 1994 identified the arts as indispensable to education reform because the arts engage students in learning in a variety of ways that encourage the disciplined development of skills necessary to academic performance. As defined by the National Endowment for the Arts (1997), the arts

- Assist students in building both basic and advanced skills
- Reach students who may be at risk for academic failure in the more traditional modes of instruction
- Help students to build connections to core subject areas and integrate their learning experiences
- Promote an understanding and tolerance of population and cultural diversity
- Enhance linguistic and nonlinguistic symbolic communication

This brief considers several theories on how children develop cognition and learn and then links these explanations to research findings that con-
Brain Development Research

In the field of brain research, advances in molecular biology, genetics, and imaging technology have provided an inside picture of how the brain actually works. Imaging technology now permits identification of the chemical tracings of thoughts and emotions as they are formed. As findings accumulate, the emerging knowledge of how the brain develops and works has implications for policy issues in education, particularly in the primary grades.

Neuroscience research on animals has shown that, at birth and continuing into early life, the development of neural connections (synaptogenesis) proliferates, followed by a period of elimination of unused connections. Research suggests there are critical periods when the brain gets “wired” for specialization—such as in vision and language development (Daw, 1995; Kuhl, 1994; Rakic, 1995). Further, there is some evidence that synaptic structures not formed through early brain stimulation during critical periods may be difficult or impossible to form later (Weisel & Hubel, 1965). However, research with lab rats has shown that enriched environments allow for development of new synapses (Greenough, Black, & Wallace, 1987).

This may or may not be generalized to humans; however, these findings have been extrapolated to young children in the popular press. It has been reported, for example, that the development of synaptic structures of the human brain is believed to occur most rapidly in the first three years of a child’s life. Generalizing from the animal research on rats to young children, it has been argued that development of additional synapses may be assisted through particular types of early stimulation as provided through specific educational programs (Newman, 1996; Ounce of Prevention Fund, 1996; Sousa, 1998).

Also well established through empirical observation is that children exposed to harmful substances or who are emotionally neglected or physically abused early in life often have difficulty with such brain-mediated functions as intellectual capability, empathy, attachment, and emotional expression. Nevertheless, the basic brain mechanisms for such findings are not yet well understood (Shore, 1996).

In 1996, the Carnegie Corporation, the Charles A. Dana Foundation, and others sponsored a conference on brain research and the potential implications of that research for education. Insights on brain development were summarized thus: “...how humans develop and learn depends critically and continually on the interplay between nature (an individual’s genetic endowment) and nurture (the nutrition, surroundings, care, stimulation, and teaching that are provided or withheld).”

Current knowledge about brain research has led researchers to hypothesize that instruction in the arts may stimulate brain development in areas that are critical to higher-level thinking, emotional maturity, and social functioning. Some recent empirical research appears to support this notion. For example, those preschoolers exposed to piano keyboard lessons and group singing scored higher than control groups on tests of spatial reasoning—a skill needed for math and science (Rauscher, F., et al., 1997).
However, some researchers (e.g., Bruer, 1997; Caine & Caine, 1998) caution that it is too early to link findings on brain development and neural functioning to specific practices in the classroom. Thus, the policy implications of neuroscience research for classroom practice have yet to be fully articulated.

Cognition Research and Learning Styles

Although there are a number of theories in cognition research associated with how learning takes place and typologies of learning styles (e.g., Dunn, Dunn, & Price, 1985; Gardner, 1983), empirical findings suggest that all children have distinctive ways of learning. The National Association of Secondary School Principals defines learning styles as: “the composite of characteristic cognitive, affective, and physiological factors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment” (Keefe, 1979).

Studies of learning styles also demonstrate a clear connection between cultural norms and values and the ways in which students learn. That is, cultural values influence how children perceive the world, organize their thoughts, and prefer to learn.

What is the relevance of learning styles to arts education? Increasing levels of cultural diversity, socioeconomic disparity, and other individual factors place many students at risk of poor academic performance and poor school experiences. All students—but especially at-risk students—may be more successful as learners when using learning-style strengths. Instruction in the arts that is developmentally appropriate addresses the entire spectrum of the senses including the kinesthetic, auditory, and visual. Thus, distinct variations in learning styles may be engaged through arts instruction and meet the needs of diverse populations of students to improve their school experience (Swisher, 1994).

Several studies have demonstrated that when children are exposed to the arts early in life and on a regular basis, arts experiences provide students with opportunities to learn in ways that may be best suited to their strengths (e.g., Gaffney, 1995; Gardner, 1983; United States Department of Education, 1997).

Effectiveness of Arts Education: Selected Research

A review of selected research on the effectiveness of arts education to impact specific student outcomes such as increased student performance in reading, mathematics, or science shows somewhat mixed or limited findings. However, in the areas of parental involvement, disciplinary actions, and student engagement in the learning process, the evidence shows some promise.

A longitudinal study of Chicago Arts Partnerships in Education (CAPE) schools in Illinois found that although students’ scores increased, there were no statistically significant differences in reading and mathematics for students who participated in arts-infusion programs when compared to control groups (North Central Regional Education Laboratory, 1997). However, the students were exposed to the arts by an artist-in-residence for three hours per week. It is possible that more extensive exposure to the arts may result in greater differences in academic performance.

In Kentucky, the Basic Arts Program (BAP) was implemented in three elementary schools over a four-year period. The major goal of the program was to “drive the implementation of the Kentucky Education Reform Act (KERA) using the arts and multiple intelligence at the core of the school program” (McLaughlin, 1996). The program required instruction in music, dance, theater arts, and visual arts by trained arts specialists. Howard Gardner’s (1983) theory of multiple intelligences was used as the basis for designing the integrated, thematic arts curriculum. The results are promising: all three schools made improvements on test scores, attendance, writing, and portfolio scores, and there was a decrease in disciplinary referrals.

In North Carolina, 27 schools have implemented the A+ program of daily arts instruction through interdisciplinary teaching, based on Gardner’s (1983) theory of multiple intelligences. A+ schools align the North Carolina Standard Course of Study through thematic, interdisciplinary instruction, combined with daily arts integration and hands-on, experiential learning. Arts instruction integrates a thematic curriculum that makes connections to common themes in other areas. The goal of the curriculum integration is to help students develop and apply new ideas across the boundaries of traditionally separate subjects. Students may create a visual or dramatic representation of something they have been studying. A+ teachers report that “active” learning through the arts fosters more complex understanding and thinking skills in students.

The A+ program incorporates a strong, ongoing professional development component which establishes collaboration between arts instruc-
tors and classroom teachers in developing learning experiences which connect different subjects to assist students' understanding of academic material. Although assessment of the A+ program on academic performance is not yet available, preliminary evidence from the first two years of implementation suggests that arts-infused instruction contributed to increased parent involvement, increased student involvement in the learning process, improved attendance, and reduced numbers of disciplinary actions (Wilson, Corbett, Adkins, & Noblit, 1996). In 1996, an A+ school was named as one of the top 25 schools in North Carolina meeting exemplary status in the state's accountability system.

Gardiner, Fox, Knowles, and Jeffry (1996) investigated the effects of music and visual-arts curricula that emphasized sequenced skill development on spatial reasoning. Compared to control subjects, those in the arts classes started out behind control groups, but after curriculum exposure, the students caught up on reading and were ahead on learning mathematics.

Other studies have shown that at-risk youth demonstrated increased motivation to learn, increased commitment to school, and improved academic performance when participating in after-school and weekend arts education programs (Spodek, 1993).

Arts Education: The National Assessment of Education Progress

The arts have a long history as a central component of general education, particularly in elementary schools. The Goals 2000: Educate America Act of 1994 recognized the arts as a core subject area. Subsequent development of the voluntary National Standards for Arts Education established expected levels of competency for students in the arts.

In 1996, the National Assessment of Educational Progress (NAEP) added assessment in the arts to the voluntary national monitoring of students' progress in what they know and can do. NAEP is the only nationally representative, continuing assessment of America's students in various subject areas. This assessment has been conducted regularly since 1969, but the arts had not been assessed since 1980. Students in grades 4, 8, and 12 will be monitored for competency in the arts by the year 2000. In 1997, selected pilot sites in grade 8 were assessed in dance, music, theater, and visual arts. The NAEP report card on arts proficiencies for 8th-grade students is expected to be released in the fall of 1998. South Carolina and Kentucky are participating in the NAEP arts assessment. Although the primary purpose of NAEP is to document patterns and trends in student achievement, it can also inform educational policy in showing where students are not proficient and, thus, how instructional practices may be adjusted to address the lack of proficiencies. These important and complementary efforts—Goals 2000, NAEP, and National Standards—have helped to bring arts education into national focus.

Although the importance of arts education is clearly evident in these major legislative initiatives, some policy controversy concerning the appropriate role of arts education in public education continues. Summarizing these issues, the Arts Endowment (1997) identified three critical policy concerns regarding the role of the arts in K-12 education. "The arts are in triple jeopardy: they are not viewed as serious; [arts] knowledge itself is not viewed as a prime education objective; and those who determine school curricula do not agree on what arts education is."

National Standards: Examples of the National Standards for Arts Education (1994) established standards for what students should know and be able to do in the arts as an integral component of a general education. Developed to improve the quality of education for all children, these standards were released to guide state policymakers and schools. They address the fundamental issues of accountability and quality that infuse all education reform issues.

Figures 1 and 2 are examples of the National Standards in music and the visual arts for grades 5-8; these selections describe the cumulative skills and knowledge expected of all students upon exiting grade 8.

State Policy Positions on Arts Education: An Overview of SERVE and SAF States

Additionally, 47 states have or are in the process of revising their arts education curricula; many use the National Standards for Arts Education as the basis for their revisions. Thirty-four states are now implementing new arts education standards.

The current status of arts education in the six SERVE states (Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina) and the three additional states that SAF serves (Kentucky, Louisiana, and Tennessee) are summarized in the chart beginning on page 6.
Summary of State Legislative and Policy Positions in Arts Education

Little over half (five of nine) of the states that are served by SERVE and SAF have high school graduation or college entrance requirements in the arts; the remaining four states have none. Although some states developed K-12 standards for arts education prior to the development of the National Standards, six states used the National Standards as a reference in their development or adopted them in their state curriculum frameworks. In the area of performance measures in the arts, only one state has developed these measures; two states are in the process of developing them; and one state permits local districts to develop them in the arts.

Nearly all the states have some arts certification requirements for teachers. One state requires certification only in music; two states require certification in music and visual arts; and five states require certification in all four arts forms.

Five of the nine states have education legislation that specifically includes arts education in curriculum requirements.

In summary, states’ progress toward arts education benchmarks and standards implies both the importance of and interest in the central role of the arts in education.

Implications for Education Policy

A fundamental issue for arts education policy is that the public perception of the value and purpose of arts education is ambiguous. In contrast, while there may be debate about what kind of public education is needed, how well it is working, how much the public is willing to pay for it, and what roles schools are expected to perform in society, education policy is widely supported and valued by the public. Thus, interest in arts education in public schools has periodically waxed and waned over time.

A second policy dilemma for arts education concerns the ongoing debate that exists within the arts community itself about what constitutes arts education, how the arts should be taught, and who should teach the arts. Third, a calculation of the costs versus the benefits of arts education instruction should inform education policy. This research should also include the promising link between brain research and arts education. Fourth, many of the claims made concerning the value of the arts in assisting education reform in general and specifically increasing student performance need further research.

At present, it appears that the public acceptance and institutionalization of the arts in all schools at all grade levels is not universal. The public places its highest educational value on instruction in the basic skills, school safety, job preparedness, and discipline. The arts are treated with ambivalence because the connections between the arts and their impact on student achievement and other student outcomes are not yet fully apparent.

Nevertheless, policymakers are interested in increasing student performance and actively engaging all students in their learning experience. The available research suggests that arts education is a viable option for helping reach that goal.
Alabama
Arts Requirements for High School Graduation and/or College Entrance
- One semester of fine arts in grades 9-12 is required for high school graduation.
- There are no college requirements.

State Standards for the Arts
- In 1995, the Alabama State Board of Education was directed by the Legislature to establish a core curriculum that includes instruction in music and visual arts. Standards are being developed in dance and theater arts and being rewritten in music and visual arts for implementation in 1999-2000. The Fine Arts Course of Study for K-12 provides the curriculum framework. Alabama has not adopted the National Standards for Arts Education.
- Students in grades K-8 receive 60 minutes of instruction per week in music and art, taught by a certified specialist. Since 1997, music and visual art have been offered in public high schools as electives.

Teacher Certification Requirements for Arts Teachers
- Elementary and secondary schools—music and visual arts certification.

Performance Measures in the Arts
- No statewide performance measures exist; however, many local districts use performance measures.

State Arts Education Legislation
- In 1995, HB 466 established the Education Accountability Plan requiring the development of a public school core curriculum that included the arts.

Florida
Arts Requirements for High School Graduation and/or College Entrance
- One credit in performing fine arts to be selected from music, dance, drama, painting, or sculpture, or a course in speech or debate; or one credit in practical arts career education or exploratory career education; or one-half credit each in practical arts career education, exploratory career education, or performing fine arts is required for high school graduation. Practical arts include shop, computer technology, home economics, and office skills.
- There are no college entrance requirements.

State Standards for the Arts
- None required.

Teacher Certification Requirements for Arts Teachers
- Elementary schools—music, dance, drama, and visual arts certification.
- Secondary schools—music, dance, drama, and visual arts certification.

Performance Measures in the Arts
- The 1996 Arts Curriculum Framework incorporates the National Standards for Arts Education, establishing suggested benchmarks for student performance at grades K-2, 3-5, 6-8, and 9-12 in all four arts forms. Under the new curriculum guidelines, each district is held accountable for student performance. Assessments are not required, so each district establishes performance measures.

State Arts Education Legislation
- In 1991, the Florida Legislature adopted legislation comparable to the current National Goals 2000 legislation. The legislation, known as the Educational School Improvement Reform and Accountability Initiative, set forth eight goals and directed local districts to design plans for improving student performance. As a result, curriculum frameworks for seven subject areas, including the arts, have been developed; these are now known as the Sunshine State Standards and were implemented in 1996. The standards are required for grades K-2, 3-5, 6-8, and 9-12.

Georgia
Arts Requirements for High School Graduation and/or College Entrance
- There are no specific arts requirements for high school graduation, but core requirements include one elective credit selected from computer literacy, technology/career, or fine arts courses. Also, the Board of Regents requires four additional elective credits which provide additional fine arts options for students. The arts are electives.
- There are no college entrance requirements.

State Standards for the Arts
- The Quality Core Curriculum, which includes fine arts standards in content, is scheduled for implementation beginning in the 1998-1999 school year. A number of references were used in revising the Quality Core Curriculum, including The National Standards for Arts Education, Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education, and arts curricula from a number of other states.

Teacher Certification Requirements for Arts Teachers
- Pre-K-12 certification in art, dance, drama, and music.

Performance Measures in the Arts
- None required.

State Arts Education Legislation
- The Quality Basic Education Act includes competencies, both required and optional, that each student should master prior to completing a Georgia public school education. Mastery of fine arts competencies applies only to students who elect fine arts programs of study since no arts education is required for high school graduation.
Kentucky

Arts Requirements for High School Graduation and/or College Entrance
- One credit in the arts (may include arts appreciation) is required for high school graduation.
- No college entrance requirements in the arts.

State Standards for the Arts
- The Kentucky Education Reform Act (KERA) of 1990 requires the inclusion of arts education for all students, but local districts determine how to fulfill the mandate. A revised Core Content for Arts and Humanities Assessment, created for grades 5, 8, and 11, was sent to schools for review in 1997. The arts are included in the Kentucky curriculum framework, which outlines broad learning goals established for all students to know. The Core Content serves as a guideline.

Teacher Certification Requirements for Arts Teachers
- Elementary schools—music certification (K-12) and visual arts certification (K-12).
- Secondary schools—music and visual arts certification (K-12).

Performance Measures in the Arts
- In Kentucky, a statewide assessment in the arts is based on academic expectations defined by the state standards. A state assessment committee for arts assessment (in visual arts, dance, music, and theater) developed open-response questions and performance events that were administered to grades 4, 8, and 11 through 1996. The arts assessment counts for seven percent of a local school’s accountability index. Performance measures are undergoing further research and development. The arts assessment committee used the National Standards for Arts Education, Kentucky’s Arts and Humanities Core Content for Assessment, and Kentucky’s Academic Expectations to develop test items. Kentucky is one of 16 states participating in the NAEP arts assessment project facilitated by the Council of Chief State School Officers.

State Arts Education Legislation
- There is no specific arts education legislation.

Louisiana

Arts Requirements for High School Graduation and/or College Entrance
- There are no high school graduation requirements in the arts.
- College-bound students are required to take a one-semester course known as “Fine Arts Survey” that provides instruction in art, music, dance, and drama.

Mississippi

Arts Requirements for High School Graduation and/or College Entrance
- One credit in fine arts (dance, music, theater, or visual arts) will be required for high school graduation in the 1998-1999 school year.
- There are no college entrance requirements for the arts.

State Standards for the Arts
- The state board of education currently requires 30 minutes per day or 160 minutes per week in visual art or music in grades K-8.

Teacher Certification Requirements for Arts Teachers
- Elementary schools—music and visual arts certification.
- Secondary schools—music and visual arts certification.

Performance Measures in the Arts
- Louisiana is scheduled to begin development of assessments of performance in visual arts, music, dance, and drama in 2000.

State Arts Education Legislation
- State statutes require the core curriculum for college-bound students to include the arts.
Mississippi is developing performance measures in the arts and will assess student performance in the arts by 1999-2000 on a statewide basis for grades 4, 8, and 12.

State Arts Education Legislation
- State statutes require a comprehensive arts education program to be administered by the Department of Education and establish an arts specialist position in the state education department.

North Carolina
Arts Requirements for High School Graduation and/or College Entrance
- There are no requirements.

State Standards for the Arts
- The Department of Public Instruction developed state arts standards using the National Standards for Arts Education as a reference. The Standard Course of Study includes curriculum and content standards for all arts disciplines; it includes content sequence and learning outcomes. The State Board of Education requires instruction in dance, music, drama, and visual arts in grades K-5. At least one of the arts must be taught each year for grades 6-8.

Teacher Certification Requirements for Arts Teachers
- Elementary schools—music, dance, drama, and visual arts certification.
- Secondary schools—music, dance, drama, and visual arts certification.

Performances Measures in the Arts
- There are no performance measures or assessment in the arts.

State Arts Education Legislation
- In 1976, South Carolina passed legislation, the South Carolina Education Improvement Act, that included the arts in a defined minimum education program and required that the subjects be taught by professionally trained teachers. In 1989, the Target 2000 legislation included the Arts in Basic Curriculum (ABC) plan to expand earlier legislation and serve as a “blueprint” to improve arts education. Target 2000 mandated that students leaving school be able to demonstrate competence in the arts, as well as other subjects. It provided over $1 million each year for arts education.

South Carolina
Arts Requirements for High School Graduation and/or College Entrance
- There are no requirements.

State Standards for the Arts
- South Carolina approved curriculum frameworks in visual and performing arts in 1993. Subsequently, professional arts education organizations helped to develop the Art Academic Achievement Standards to be presented to the state board for approval in 1998. The arts are considered one of the eight core subjects. These voluntary frameworks do not reference the National Standards for Arts Education.

Tennessee
Arts Requirements for High School Graduation and/or College Entrance
- There are no high school graduation requirements, but state colleges and universities require one unit of fine arts for entrance.

State Standards for the Arts
- Tennessee used the National Standards for Arts Education as the basis for revision of all existing arts education curriculum frameworks developed by the state. The revised frameworks include music and dance for K-12 and visual arts for K-8. The theater arts framework required little revision as it was consistent with the National Standards.

Teacher Certification Requirements for Arts Teachers
- Elementary schools—music, theater, and visual arts certification.
- Secondary schools—music, visual arts, and theater arts certification.

Performance Measures in the Arts
- Tennessee does not include the arts in the Tennessee Comprehensive Assessment Program.

State Arts Education Legislation
- None at present.
References


About the SERVE Organization

ERVE, the SouthEastern Regional Vision for Education, is a consortium of educational organizations whose mission is to promote and support the continual improvement of educational opportunities for all learners in the Southeast. Formed by a coalition of business leaders, governors, policymakers, and educators seeking systemic, lasting improvement in education, the organization is governed and guided by a Board of Directors that includes the chief state school officers, governors, and legislative representatives from Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina. Committed to creating a shared vision of the future of education in the Southeast, the consortium impacts educational change by addressing critical educational issues in the region, acting as a catalyst for positive change, and serving as a resource to individuals and groups striving for comprehensive school improvement.

ERVE Policy Briefs

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