

Enhancing Student Learning Through Arts Integration: Implications for the Profession

David E. Gullatt, Ph.D.
Louisiana Tech University

Introduction

The purpose of the present review of literature and research is to examine the numerous benefits the arts provide as enhancements for teaching and learning provided for both educators and students in PK-12 school settings. The relationship between exposure to the arts and student achievement within the academic disciplines such as mathematics, English/language arts, science, and social studies has, until recently, received mixed reviews (Winner & Hetland, 2000, Gullatt, 2007). Writings related to this topic have been typically theoretical in nature with little empirical support.

Over the past 10 years prominent theorists and practitioners such as Catterall, Eisner, and Gardner have begun to argue that the arts are integral to the education of the “whole child” (Catterall, 1998; Eisner, 1998; Gardner, 1999a). These noted theorists have recognized and supported the lifelong benefits that the arts have provided students as they became adults. If research and best practice identify benefits to the academic curriculum provided by the arts which can enhance academic gain, then why are the arts so often blatantly overlooked as a ready medium of assistance for teaching and learning in schools across America?

The recent slowdown noted in the U. S. economy, which among other things has been attributed to high oil prices, stagnant housing markets, taxpayer revolts, and skyrocketing costs of the operation of both public and private institutions, has resulted in educational budget cuts causing the redistribution of remaining funds. These economic conditions have both immediately and seriously impacted, in a negative way, the attentiveness of many school and school system leaders toward the arts as a means of increasing the opportunities for student learning. In spite of what is actually happening in educational circles, past and more recent research call for serious consideration about curricular offerings prior to reducing programs in the arts due to the positive teaching and learning effects provided (Goldsmith, 2003).

Presently, there is a sharpening of focus by both national and state educational policy planners

to aggressively address school and school district accountability associated with student academic success. Efforts by school district officials to positively impact student academic achievement are being better coordinated with more stringent methods utilized to determine student academic success. As a result, those making curriculum decisions about ways to enhance student academic gain will find the arts to be a research-based mechanism with which to provide assistance and enhancement for achieving increased student academic success, not an area to receive either an indirect or direct cut in funding (Goldsmith, 2003; Finch, 2004). This article will provide major talking points for both educational policy and curriculum leaders either searching for rationales to (a) continue or to prepare for providing a functional, productive arts program supporting the school educational mission of student success and/or (b) address ways to enhance the present school district teaching and learning environment through the arts. Implications for PK-12 educational professionals are also provided from summarized research addressing best practice in the area of arts integration into the PK-12 curriculum.

Development of the Arts in Schools

In order to appreciate the role of the arts in the present PK-12 academic curriculum, one must note the role that the arts have played in the history of education. Darby and Catterall (1994) cite two chronological events that led to modern thinking about the arts in education. First, researchers began their perspective with Horace Mann in the late 1800s, stating that Mann demanded that visual arts and music be taught in the common schools in Massachusetts as an aid to the curriculum and an enhancement to learning. His theory and recognition as a researcher gained the first major entrance of the arts into curricular offerings within a state. Second, they noted that Dewey posited the correlation between instruction in the arts and cognition to be positive, which had a profound effect on curriculum decisions of the time in many locations.

In addition, Bresler (1995) noted that the roots of integration of the arts into the curriculum could be traced back as far as Dewey with his

views on progressive education. Bresler further stated that during the 1930s and the 1940s, behaviorism was introduced and gained popularity within American school systems. Bresler continued by stating that Vygotsky challenged this belief and insisted that students constructed cognitive knowledge through the active process of learning, and that the arts were integral to that process. Regardless of the philosophical disposition of the previous researchers, though, the arts were considered by each noted educational expert to serve a positive role in assisting with the teaching and learning process.

Arts Programs in Other Countries

School leaders in Europe and Asia have successfully infused the arts (especially music) into their educational institutions (Kelstrom, 1998). Japanese students receive instruction in choral and instrumental music starting with the elementary grades and continuing through the secondary years. Educational leaders in the Netherlands have mandated that both art and music be integral parts of the standard curriculum since 1968. Hungarian students are involved with a planned and sequential music program for vocal and instrumental training twice a week for the first eight years of schooling. Students in secondary schools may also elect to participate in a music program daily, and these same students can even receive training on a different musical instrument each year. According to Kelstrom, these three countries have been ranked at the top of an international list of seventeen countries for scientific achievement by secondary students.

Universities in England contain Departments of Art Education, Drama, and Theater which are usually housed within their Colleges of Education. Pre-service teachers are required to enroll in content classes within these Departments as part of their core curriculum for graduation. Teachers in England use this medium to teach history and to advance both interpersonal and intrapersonal communication, while in the United States, the arts are typically connected with those who are particularly gifted in aesthetics (Catterall, 1998). The inverse is true of this U.S. paradigm in foreign countries such as China and Germany (Perrin, 1994).

Educational leaders in these countries require that arts programs be offered to all children. The assumption is that students can become proficient in the arts just as they can become proficient in other disciplines, thus enhancing their life-long skills and creative ability. Perrin further noted that because the arts are not widely offered to American students, many potential artists remain unidentified.

Thought Processing and the Arts

Arts-integrated programs are associated with academic gains across the curriculum as reflected in standardized test scores. Further, these programs appear to have a more powerful effect on the achievement of struggling students than more conventional arts education programs targeting the more advanced student (Rabkin & Redmond, 2004). Recent developments in cognitive science and neuroscience help explain the power of the arts as enhancing teaching and learning in numerous ways. These developments have shown that the mind is embodied and that the brain and body make up a single, fully integrated cognitive system. Scientists have found that most thought occurs on a level well below conscious control and awareness and that it involves the processing of a continual stream of sensory information. Abstract thought is consistently represented through metaphors that are associated with physical experiences and emotions. As an example, numbers are spoken of as going up and down or of ideas flowing from person to person (Damasio, 2003). Physical sensation and emotion are essential components of the mind, as integral to thought and learning as logic is. In fact, some researchers note that logic may not be possible without sensation and emotion (Lakoff & Johnson, 1999). It is ironic, then, that the arts are frequently dismissed as merely emotional, not cognitive. Thus, the very emotional and personal content of the arts are part of what causes the arts to become cognitively powerful (Rabkin & Redmond, 2006).

The Infusion of the Arts into the Present American Curriculum

J. Davis (1999) discussed eight ways that the arts are included in present U.S. school settings. The first, *arts-based*, involved the arts as a required core subject in the school curriculum.

Using this medium, skills taught through the arts are transferred to skills in other academic areas. The second, *arts-injected* (or infused), included those arts activities that are integrated into the general curriculum in order to enhance a particular study with no requirement of specific content studied. *Arts-included* was the third type of integration. This notion involved arts instruction being offered alongside other subjects with or without integration into these subjects. *Arts-expansion* was the fourth approach. Through this process, the arts were taken outside the school setting. Students explored the arts at museums, performances, or concerts. The fifth, *arts-professional*, was designed to train students who are seriously preparing for careers in arts.

The *arts-extra* approach, the sixth of Davis' approaches, referred to the use of the arts in an ancillary role. Students who participated in extra-curricular arts activities such as school plays or piano lessons were involved in the arts-extra approach. The seventh, *aesthetic education model*, referred to the type of instruction where the arts were viewed as ways of knowing and where students were encouraged to construct their knowledge. Davis further stated that the previously mentioned seven roles may exist alone or in combination with one another in the teaching or curriculum approach to learning. He also cited that the eighth role, *arts-cultura*, was based on the premise that the arts connect the cultures of the world. This last model implied that students can be empowered to create their own meaning of content through the arts. This model further encouraged risk-taking, critical thinking, and diligence.

J. Davis (1999) also noted that the arts helped to emphasize what must or is mandated to be learned in schools. He supported the notion that the arts should be used as a means of making meaning of all that is learned. The arts may also be used as a response to what has already been learned and to help to synthesize what had been taught in schools. Finally, the researcher stated that in order for interdisciplinary instruction with the arts to be successful, discipline experts must share in the interest of the arts as a means of communication and of the traditions in the arts.

M. Davis (1999) noted that because the arts are typically taught as separate subjects providing regular classroom teachers with planning times as a special teacher provides arts instruction, little collaboration exists between teachers of the arts and the traditional classroom teacher. Because arts teachers and classroom teachers are not usually afforded the time to collaborate, arts-integrated instruction is difficult to plan and implement to the fullest. Without this type of integration, students may view school as a place where they learn isolated, unrelated content facts and miss the opportunity for infusion of the arts into the learning process.

Discrete Arts Programs

Eisner (1998) proposed a three-tiered system of outcomes concerning arts education. First, the arts-based outcomes of art education were used to assess the arts curriculum taught in an arts program. Second, arts-related outcomes of arts education consisted of those aesthetic features that students transferred outside of the school day within their own environment. Third, ancillary outcomes of arts education were those outcomes that affected the general curriculum. Eisner advocated that the goals of discrete arts programs should lie within the first two tiers. He further suggested that to proclaim that ancillary outcomes should be the most important goal of arts education would lower the worth of the arts programs in schools. Other researchers agreed and have noted that the arts should not be a means to a cognitive end but rather an end in themselves (Eisner, 1998; Oddleifson, 1994).

Aprill (2001) concurred with Eisner stating that the arts should be taught for their own merit. While he advocated the use of the arts as an entry point to other subject areas, he stated that he also realized the danger of inflated claims on the contribution of the arts to academic achievement. Aprill acknowledged that if arts programs are adopted simply for the gains of academic success, they would be disposed of just as quickly if the signs of increased test scores are not visible.

In Eisner's opinion, the arts should make a difference both in school environments of students as well as in their environments beyond school. He proposed the following outcomes in a statement describing effective arts programs:

1. Students should acquire a feel for what it means to transform their ideas, images, and feelings into an art form;
2. Arts education should refine the student's awareness of the aesthetic qualities in art and life; and,
3. Arts education should enable students to understand that there is a connection between the content and the form that the arts display and the culture and time in which the work was created.

Finally, I wish to identify a particularly important [fourth] ... outcome for arts education. This pertains to dispositions that are difficult to assess, let alone measure, but they are dispositions that *appear* to be cultivated through programs that engage students in the process of artistic creation. I speak of dispositional outcomes such as the following:

- A willingness to imagine possibilities that are not now, but which might become;
- A desire to explore ambiguity, to be willing to forestall premature closure in pursuing resolutions; and,
- The ability to recognize and accept the multiple perspectives and resolutions that work in the arts celebrate. (Eisner, 1998, pp. 14-15)

Hatfield (1998) stated that the arts disciplines provided necessary skills that all children should acquire. The knowledge gained from arts programs included the analysis of differing means of communication within cultures and time periods. Hatfield further suggested that arts programs in all schools should have a clear, substantial focus that would include the inculcation of higher order thinking skills and complex problem solving routines. He also supported providing resources to encourage professional development of faculty and educational planners to properly align the curriculum for all students so that the inclusion of the arts will enhance teaching and learning to the maximum. Day (1998) cautions, however, that in order to provide the quality arts programs necessary for the needs identified by Hatfield to be met; only qualified arts teachers should be employed.

Role of the Arts in American Education

Learning through the arts, such as the use of drama to re-enact historical events or the use of paintings to introduce and analyze life in historical periods, allows students to learn beyond the rote recall of information (Catterall, 1998). In order to teach for true understanding, the researcher stated that teachers should consider activities that allow students to appreciate and apply (both in and out of the classroom) newly acquired information. The curriculum should be designed to enable students to apply what has been taught. Through this application, higher order thinking skills, risk taking, and creativity are enhanced. Utilizing the arts and reporting around historical themes, for example, were useful activities that enabled students to apply the historical content they had acquired in constructive, meaningful, and multi-sensory ways.

Some educators view integration of the arts into the curriculum as simple activities that may be used as extras or time fillers. This misrepresentation or simplistic view of the arts tends to trivialize the importance of the process. Students should be immersed in meaningful ways with the arts throughout their school day (Collins & Chandler, 1993). According to the researchers, arts projects should be an extension of student understanding of the curriculum content, not merely a “color sheet” for early finishers.

While the arts should be recognized as subjects that can stand alone and be important in their own rights, one researcher stated that parents and educators should also embrace the concept that the arts can enhance the true understanding of a content area, thus assisting with student learning (Oddleifson, 1994). Aprill (2001) also noted that the arts may be used as highly motivating entry points for content area instruction. He described the arts as a symbol system for other subject areas. He also suggested that it was essential that art teachers and content teachers be given time to plan together to ensure that the integration of the arts into the classroom was successful and meaningful for students.

The Arts Integrated Into the Classroom Setting

Bresler (1995) proposed four styles of arts integration in classrooms. First, she defined the subservient approach. Educators who endorse

this approach used the arts as a “spice” or an “extra” for their curriculum. This style of integration offered little or no outside support from arts experts. This approach was likened to a craft-like approach where a quick arts activity was used as filler for a particular content area. Second, the co-equal cognitive integration approach also involved the arts being integrated with other aspects of the curriculum. However, with this approach, students were required to use higher order thinking skills and aesthetic qualities to gain further understanding of a particular academic concept. An example of the co-equal cognitive integration approach would include studying composers and music that paralleled historical events.

Bresler's third approach was called the affective approach. Through this approach students were immersed in the arts while the arts complimented the classroom curriculum. Background music, reactions to music and art pieces, and the arts as self-expression were three examples of this type of integration. The fourth approach was social integration. This approach and the subservient approach were the two most common approaches used in PK-12 schools. The social integration was performance-based. This approach complemented the curriculum only insofar as it is used as a vehicle to increase participation in parental involvement activities. School plays and performances were examples of this particular integration style.

Catterall (1998) suggested that educators should consider the involvement of the arts in schools as two-fold. First, learning through the arts would involve activities such as the dramatization of stories or historical events and the use of paintings to investigate different aspects of time periods. In contrast, learning in the arts would include specific skills acquired through arts classes such as music, visual arts, or drama. Clinard and Foster (1998) provided evidence of these two aspects of art education as they described the involvement of Montana's Framework for Aesthetic Literacy. These standards included the goal that students will learn to perceive and analyze information while working toward connecting arts to cultures and to other content areas. The arts also were viewed as instrumental in enhancing student

communication while increasing student ability to interact and to reflect.

Reardon (2005) reported that public school teachers and administrators in Dallas, TX are boosting student achievement by directly integrating arts into the school curriculum. Since Texas educational policymakers adopted a statewide curriculum in 1998, Dallas fourth graders in the James S. Hogg Elementary School have spent several weeks each fall studying 19th century pioneer lives in the American Southwest. Their understanding of this dynamic era initially came from classroom discussions and library books. But now the school is teaming up with local artists and cultural institutions to make this history theme more arts-enriched. Students are involved in group and individual projects to help them understand deeper the meanings of culture, tradition, and historical significance. They noted that learning is more fun and their Texas state test scores in social studies are rising.

Reardon further quotes Larry Groppel, Superintendent of the school district:

In Texas there's almost as much pressure for teachers to boost test scores as there is for coaches to win football games. Here in Dallas there's probably more. If anyone wants to criticize [our arts program] as fluff, they should look at the test scores. (p. 5)

Initial analysis of standardized tests administered throughout the district show that students in the above program achieved a 10-point gain over a control group that achieved only a 3-point gain on the same material.

The Arts and Mathematics

In a project titled "Escher's World," named after M. C. Escher, a Dutch printmaker and master visual mathematician, mathematics and visual-spatial activities were integrated while mathematics and the visual arts kept their respective identities (Cossentino & Shaffer, 1999). During this project, high school students explored symmetry and composition from both a mathematical and an aesthetic perspective. Upon completion of this project, students were able to describe works of art in a meaningful way. In addition, the spatial skills of students were

enhanced as documented by authentic test scores.

Besides the relationship between spatial and logical mathematical intelligences, there is also a strong relationship between spatial and musical intelligences. Hetland (2000) explored the Mozart Effect to determine the specific connections between these two intelligences. She stated that the Mozart Effect resulted in the ability of students to visually rotate a picture or symbol of an object. Hetland's research supported other findings that this effect was not limited exclusively to Mozart but to other composers as well. However, not all types of music enhanced this effect. The particular properties of music that enhanced the spatial skills of participants in this study are still being explored.

The Arts and Language Arts Instruction

Smith and Herring (1996) described literature activities that provided multiple entry points for a variety of students. They argued that in order to make literature meaningful, students must be given aesthetic opportunities to respond to the printed text. Smith and Herring further shared five activities designed to create an active learning environment. First, students used expressive writing to respond to the themes in a novel. Next, students engaged in creative movement to maneuver through the setting of the story. Third, students were encouraged to use visual arts to illustrate their feelings or knowledge of the book. Fourth, students used exploratory music to respond to a segment of the text. Through this activity students selected a portion of the text to share. Once they had made their selections, the students chose music that would reflect the mood of the passage. Then, the students played the music or provided sound effects in the background while the passage was read orally. The fifth activity involved the use of informal drama. This was a type of improvisation theater in which pairs of students re-created dialogue from the text. While Smith and Herring did not provide quantitative data to defend their project, they did provide comments from students after the activities. Each of the responses from the students indicated that their comprehension of the text was increased and that their motivation for reading was enhanced.

Morado, Koenig, and Wilson (1999) reported on the successes of a series of mini-performances with early grade students that featured dramatic recreations of literature using drama, music, and movement. These mini-performances were primarily used with at-risk kindergarten, first, and second grade students. Because these performances were geared toward spatial, bodily-kinesthetic, and musical intelligences, many students who had not enjoyed much success with the written word could find an entry point in one of these intelligences, thus increasing the desire of the students to read more. The results of the mini-performances were positive. Students who were not successful in the linguistic area suddenly felt successful, as they had recreated a story through dramatics. In some cases, students who had participated in these mini-performances built stronger working relationships with their instructors, which led to a more productive school experience.

Edwards and Craig (1990) stated that drama was an effective learning tool as students became actively engaged in a learning project. This research team investigated the success of an after-school drama program in which the teacher employed not only dramatics but also visual artwork techniques as well. The after-school teacher, who was a more traditional classroom teacher, began instruction in this drama program in a more teacher-directed fashion. What the teacher soon began to realize, however, was that the students needed to be more empowered in their dramatic activities. Once students were encouraged to visualize through illustrations, their stories and scripts became more elaborate. As the teacher allowed students to use more of their authentic ideas, as opposed to commercially constructed dramatic activities, it was noticeable that students became more engaged and focused on their learning.

Drama also can be used to enhance intrapersonal intelligence. McMaster (1998) described drama as a way to develop metacognitive strategies. While students are dramatizing a particular narrative, they are continually analyzing and evaluating their work to decide whether they

are convincing enough in their role. Teachers assisted with this strategy by providing questions that helped students reflect on their performances and plan for improvement on future performances. Students employed the use of visualizing as they planned for dramatic reenactments of a particular part of the text. Because visualization was an effective strategy to store information for retrieval, this process inevitably aided in comprehension.

Eisner (1992) stated that while detachment and distance allowed most people to think objectively and not become emotionally involved with decisions in their day-to-day occupations, these two characteristics contributed little to furthering the education of students. The researchers further noted that much of the curriculum presently taught for accountability purposes in U. S. schools tended to lend itself to these characteristics. Eisner supported the notion that students were not asked to become emotionally involved in their learning. They were left distant and remote from the isolated facts they were asked to recall to authenticate mastery of the curriculum. Instead, Eisner suggested that the more intelligences students were required to use for learning, the deeper their understanding of the content presented.

Dramatic Arts Integrated Into Academic Disciplines

The arts as a medium to enhance teaching and learning has been studied in relation to discipline-based subjects such as language, history, science, civics, and mathematics (Day, 1998; Hamblen, 1997). Drama, because of its requirement for active student involvement, encourages risk-taking while allowing students the opportunity to transform themselves into characters representative of the material they have read (DuPont, 1992; Hamblen, 1997). This teaching strategy activity enabled students to claim ownership of the newly processed information in addition to becoming a tool for application for the new knowledge to other areas. Researchers have also noted that drama encouraged the use of skill of writing, speaking, and performing as well (Martin, 1998). The art of drama lies within the process as opposed to the product. It is through the process that students

become actively involved. Researchers also note that drama is not outgrown. This form of art should be embraced by those of all ages, not just those in the PK-12 arena (Warren, 1993).

Readers Theater is an example of a dramatic technique used to facilitate reading instruction. Through the reenactment of a selected story, students not only became familiar with the plot, setting, characters and other story elements, but also the fluency of the story. Students who were instructed using this technique scored significantly higher on tests of reading fluency than those that did not receive instruction in this technique (Martinez, Roser, & Strecker, 1998).

Heller (1995) also stated that dramatic activities provided students with authentic opportunities to apply what they had learned and to integrate this knowledge with other subject areas within their curriculum. The researcher further noted that students learned best by a multi-sensory approach to learning. Dramatizing afforded students opportunities to see, hear, and create learning opportunities. Dramatic activities also enhanced critical thinking skills of students. As Heller stated, "Drama activities help transform school from a place where we tell students what to think to a place where we help them experience thinking" (Heller, 1995, p. 13).

Heller further suggested that in order to create and execute dramatic performances, students must learn a concept in more detail. In order for these performances to, indeed, enhance instruction; the teacher must be familiar with the steps of the dramatic process, which are elaborated upon as follows. First, the teacher reinforces to students the importance of learning and showing what they know as they transfer content into drama. This requires the students to conduct extensive research. The teacher is then responsible for setting time and space limits while allowing students to initiate dramatic work within those limits. Once students have completed their performance, the class is debriefed. The debriefing is necessary to ensure that all students have learned from the dramatization. Since the teacher is charged with the direction of dramatic presentations, efforts may be taken to focus student learning toward any and all mandated curriculum elements.

Music to Enhance Classroom Instruction

Page (1995) suggested that music was necessary to strengthen memory and to increase attention spans. Because the sense of hearing is one of the first senses developed in children, babies actually begin to hear sounds (primarily high notes) in the womb. Although low sounds such as the heartbeat of the mother and low notes are not heard, they are felt by the baby and provide a steady rhythm. Page further stated that the act of listening is of the utmost importance in the school setting. Students who employed active listening gained more knowledge than those students who did not employ such strategies. Students who have been exposed to learning through music are more attentive listeners, thus more successful students.

Page (1995) recognized the rhythms prevalent through the disciplines. Rhythm existed in reading, mathematics, problem solving, and intrinsically within students as they monitored their own comprehension and attention spans. Music aided in the flow of these rhythms. Teachers who recognized the existence and the importance of rhythms in the everyday classroom lives of their students could plan their instruction accordingly to take advantage of these cycles. By using the concept of entertainment, which is the ability of one rhythm to imitate another rhythm, teachers could use music to smooth transitions in the classroom. Additionally, Page cited examples from actual school settings of using music to create a classroom of learners who are unified in a rhythm and who are learning at a faster pace.

Visual Arts and Classroom Instruction

Gee (2000) stated that because the arts are considered communication systems, students are able to construct new knowledge and use the arts to express it. Just as spoken and written language is made up of parts of speech, the language of the visual arts consists of a vocabulary known as the elements. These include line, texture, shape, space, and color.

Another component to the language of the visual arts is the principle of design. The principles of design include the following: (a) balance, (b) rhythm, (c) repetition, (d) pattern, (e) contrast, (f) theme, (g) variation, and (h) unity. Gee con-

tinues by noting that students should be exposed to this new language and encouraged to explore and experiment with these elements and principles of design in activities throughout the curriculum. Thus, the arts enhance instruction by allowing students to ask questions, explore for answers, and generate new questions from recent learning experiences. Finally, according to Gee, visual stimulation is one more way to enhance the thinking and creative learning process of students.

Arts to Construct Meaning

Students naturally depend on the arts to construct meaning of the world around them (Berghoff, 1998). From early childhood experiences, students have dramatized, drawn, danced, or sung about new material presented to them. While the arts are valued in the early childhood classroom, they are not as treasured in schools beyond that point (Martin, 1998). Schools may have arts programs in place for upper grades, but students in these grades were generally not taught that the skills learned through these programs can be transferred into the classroom as a tool to assist them to construct meaning of unfamiliar material (Reardon, 2005; Gullatt, 2007).

Catterall (1998) has further suggested that students construct meaning for themselves by creating representations. He stated that the traditional representations in schools are verbal or visual. For example, students may write a report and draw a diagram to accompany it. Cossentino and Shaffer (1999) support the notion that students should be given the freedom to choose the routes to their destination of meaning, thereby enhancing their reasoning and problem solving capability.

Berghoff (1998) further discussed the use of additional representations for the arts to be used by students in the classroom. These were called multiple sign systems. These systems are rooted in the arts. They are modes of communication other than the traditional spoken or written word. These sign systems included visual arts, music drama, language, and mathematics. Berghoff also suggested that students may be able to construct meaning from new information if they are given the freedom to communi-

cate the material through an alternative sign system that makes sense to them. In order for students to use these signs effectively, they must be used in the classroom as well as reinforced in the arts-disciplined based instruction. Researchers alike, support the belief that knowledge can be gained in more than one way (Godfrey, 1992; Aprill, 2001; Gullatt, 2007). As the ability to learn is derived from multiple sources, students increase the capability to broadly sort through various strategies to pick the one best serving their immediate needs. The application for this multiple-source solution technique may pay big dividends for students on state and federal high stakes testing agendas now popular in most regions of the country (Damasio, 2003).

Chilcoat (1991) described how the dramatic sign system can be infused into the history classroom. He wrote that students were given a selected historical time period to thoroughly research. The participant students were then asked to create a panorama to illustrate the time period. The audience was given a questionnaire to complete as the presentation was made. Participants were then required to dramatize events from their panorama. Chilcoat further noted that students were motivated to learn more about history because it became meaningful to them through this project. Students tended to remember the information from these projects more than they did information from tests and standard classroom teacher lectures.

In a research summary authored by Clinard and Foster (1998), one student observed that when he studied for a test, he memorized material and forgot it as soon as the test was over. Yet, when he constructed a project the knowledge remained with him. Warren (1993) also stated that during dramatic experiences, children are constantly called upon to solve problems and to create new plans for solutions. Through the dramatic communication system, student ideas were valued as much as teacher ideas. Students and teachers were regarded as equals.

Edmiston (1993) cited that reflection was another important educational asset embedded within the dramatic arts. Reflection allowed students to examine and to evaluate what they

have produced. Meaning may be enhanced as students are then given time to alter their scripts or drama to meet their needs.

Researchers note that literature comes to life in more exciting ways through the arts (Gardner, 1999a; Day 1998). When students use the visual arts, dramatic reenactments, and group discussion, the text becomes more meaningful to them (Hoyt, 1992). The role of the teacher in Hoyt's research was to assist the students with finding the communication system that best met their needs while introducing them to alternative forms of communication systems. Researchers also state that in order to make sense of the written word, students must be encouraged to actively interact with it (Grainger, 1998).

In the constructivist classroom, the arts take on the role of both discovery and expression (Eisner, 1992). Most adults regard the arts as expressive forms. However, the arts as tools for discovery should not be underestimated. Through the arts, students are able to journey through the aesthetic world to discover new information. This form of learning allows students the opportunity to expand their imaginations and creativity while gaining new information.

Because living and functioning in the world is a complex activity, students should be encouraged to participate in the process from multiple perspectives (Martin, 1998). The arts can also assist students with new ways to view and appreciate opportunities for interaction within the world around them. The arts can enable students to comprehend that there are many ways of problem solving. If one perspective does not meet a particular need for comprehension, students realize that they can approach the comprehension problem from another direction utilizing the arts (Damasio, 2003).

The Arts and Diversity/Multiculturalism

Hatton (2003) examined the position of cultural theory and multiculturalism in British art education. She found that it is not enough to acknowledge cultural pluralism or multiculturalism as a defining model if no contact is ever made between the artistic theories and practice of non-western cultures and those of the

European. She also stated that throughout much of British art education, it is evident that multiculturalism, both in artistic theory and in practice, has largely remained apart from the major curriculum policies and their implementation.

de Silva and Villas-Boas (2006) report that there were significant differences between pre- and post-tests in an experiment focusing on development of student attitudes regarding respect towards different ethnic/cultural groups. The results revealed that stereotypical and other negative influences stemming from the broader community could be better neutralized with an aggressive arts-based approach. Student attitudes toward diversity can be enlarged through drawing and photographic enriched lessons accompanying peer presentations about civic issues.

Stinespring & Kennedy (2006) write that now and in the future, arts educators need to know what role the arts have played in minority groups in order to develop a personally meaningful arts education program. These researchers also state that it is not enough simply to add an occasional work by, say, a black artist to the curriculum. It is important to include works by women, blacks, Hispanics, Native Americans, and Asians, to point out the ethnicity of the artists, and to discuss the unique experiences these people have had. It is not necessary to be so aggressive as to adopt all the current ideological language (e.g., referring to those artists as the "oppressed peoples"), but providing insight into the inequities and injustices of minority experiences can be very useful in explaining the perspective of these groups.

Communication Systems within Academic Disciplines

Berghoff (1998) suggested that students should be able to communicate through the use of the multiple symbol systems within the language arts context. This involves the use of dramatics, music, and visual arts within reading and writing. Students are able to use the drawing of pictures for prompts for writing. As one researcher noted, this transference from one communication system to another is called transmediation (Hoyt, 1992). Hence, those students who are

weak in one communication system were able to express themselves through another. This connection is empowering and serves to strengthen the weaker systems. While drama and visual arts were once saved for the high achievers, the issue of transmediation illustrates the need to integrate all communication systems within the classroom.

Hanna (1992) stated that humans communicate in a variety of different formats. These multiple ways of communication are found in the arts. If the arts are not provided for students in schools, they may be denied a preferred mode of communication, hence yielding or stunting their academic potential. Schools should be concerned with integrating “head, heart, and hand” (Oddleifson, 1994, p. 448). The arts have the power to integrate these three. Through this integration true understanding and meaningful curriculum will prevail.

Multiple Intelligences and the Arts

Gardner (1999b) stated that humans are unique in their intelligence. While he argued that no intelligence exists alone (except in those people with severe learning disabilities), he acknowledged that people possess strengths in combinations of multiple intelligences. School instruction caters to the logical-mathematical and linguistic intelligences ignoring the other six potential intelligences possessed by students. The additional six intelligences are identified by Gardner as (a) bodily kinesthetic, (b) musical, (c) spatial, (d) interpersonal, (e) intrapersonal, and (f) naturalistic. Gardner supports the notion that these intelligences are strongly rooted in the arts. Based on these intelligences, he suggested the use of multiple entry points with which to engage students. These entry points are designed to be just that, a way to engage students in making connections across the curriculum. By involving students in learning catered to their specific intelligence strengths, they will become more active participants in the learning process. The aesthetic entry point, the narrative entry point, and the hands-on entry point are housed within the arts (Gardner, 1999a). Recognizing that students have different strengths and providing activities to accommodate those strengths while bridging to the weaker areas is at the heart of diversified

instruction. Middle school students commented on their experiences with diversified instruction based on Gardner’s theory of multiple intelligences (Gardner, 1983).

In some instances, students described success stories in math and reading as a result of visual-spatial activities that accompanied their lessons (Strahan, Summey, & Bowles, 1996). These researchers noted that the participating students noted that their math journals guided them to a true understanding of the math concepts presented through lecture and the math textbook. Students involved in the research were responsible for illustrating and for putting math concepts into their own words in their journals. Through these notes, students were able to commit to memory those skills necessary to be more successful in mathematics. Similar examples were cited in reading. Students actually interacted with the text as they illustrated and wrote response notes to the passages read. The reading projects involved several spatial activities such as creating shoeboxes that housed particular items symbolic to the story. These visual activities enhanced student reading comprehension. The results of the post-test indicated that these students gained almost two Grade Equivalents in reading and three Grade Equivalents in mathematics (Strahan, et al, 1996).

Considerations for Attention by Educational Planners and Policy Makers

As a result of the summary of literature provided in this article, the following areas are listed for serious consideration by those charged with developing and/or directing instructional programs supporting the arts as an enhancement to the teaching and learning environment:

- **Funding:** As indirect reaction to *No Child Left Behind* legislation further tightens the grip on educational budgets, educational planners must be mindful to consistently plan for the arts as an avenue to enhance teaching and learning. The district and school budget must be protected for the arts through conscious and methodological monitoring. Otherwise, past history has shown that existing funds will be diverted to other curriculum and support areas that have been the focus of the movement.

- **Supplies and Equipment:** Budget planners should note that utilization of the arts to enhance teaching and learning requires additional dedicated consumable supplies and equipment. Dedicated budget lines must be established to support any newly established projects for the arts.
 - **Personnel Certification/Qualification:** Teachers who are expected to provide instruction utilizing the arts must be professionally trained and have sufficient content knowledge in the arts. Too often classrooms are staffed by less than certified personnel who are required to teach in fields for which they are not trained or to utilize instructional methods unknown to them. For example, in some states a certified elementary teacher with two or fewer art or music courses found in the required teacher preparation program may be expected to teach arts classes or utilize a variety of methodology to incorporate the arts into a specific subject within the curriculum.
 - **Time:** Schedule planners must be mindful that the arts must be allowed an appropriate share of the daily or weekly academic curriculum.
 - **Professional Development:** School and school district administrators and supervisors must provide professional development for both those teachers utilizing the arts in the classroom as well as those coordinating the arts with other academic subject teachers. Otherwise, the arts will not be taught utilizing best practice or may even be viewed as an “extra” frill which is distinct from other academic courses.
 - **Diversity/Multiculturalism:** School and district administrators should encourage arts teachers to connect local interests of the community into the curriculum and to include works of the culturally disenfranchised and ethnically astute scholars.
 - **Preparation Time:** Planning and/or preparation time must be provided for arts teachers if they are to truly provide instruction by themselves as single teacher subjects within the school curriculum. Even more time will be needed for collaborative planning if the arts teacher is to coordinate teaching with a classroom teacher targeting a specific academic area.
 - **The Actual Program:** Arts programs will differ in look and funding within and between schools and school districts. Planning for uniformity of all programs will cause efforts to work less efficiently since the needs of students and the experiences they bring to the classroom differ. Teachers, themselves, bring varying strengths to the classroom. Cookie cutter planning will stifle the implementation of creativity and diversity of an arts program.
 - **Funding Assistance:** Many external agencies provide support for worthy causes for schools and districts. Some districts fund their arts programs entirely by external donations or grants solicited by a staff member whose salary is supplemented by the support provided externally.
 - **Evaluation:** Caution is advised as academic score is the only gauge used for the success of the arts program. Researchers note that at times, there may be unexplained flux in academic scores due to circumstances outside the control of the classroom teacher or school district leaders. Longitudinally, research has shown that the arts support and enhance the academic programs for all students.
- Implications for the Profession**
- Implications for the educational profession are numerous. Some of the most salient and research-based considerations distilled from this research review are provided below. Findings of researchers in the field point to the following benefits of arts programs:
- Promotes the concept that teachers are facilitators of learning and not dispensers of knowledge;
 - Allows students to more deeply understand by doing and becoming more involved in the learning process;
 - Enhances higher order thinking and learning;

- ☐ Provides additional entry points for content discussion and discovery;
- ☐ Expands curriculum to other cultures of the world;
- ☐ Reinforces aesthetic qualities of students;
- ☐ Promotes visualization of the content and promotes imagination;
- ☐ Encourages multi-sensory approaches to teaching and learning;
- ☐ Engages intrapersonal and interpersonal communication;
- ☐ Encourages collaborative work by students (and, at times, teachers);
- ☐ Infusion of the arts into the curriculum may be accomplished in a variety of ways;
- ☐ Improves spatial and logical mathematical reasoning;
- ☐ Encourages risk-taking by students expressing creativity;
- ☐ Enhances communication skills of students;
- ☐ Is adaptable to all areas of the curriculum;
- ☐ Provides an avenue to encourage diversity/multiculturalism.

Summary

Standards movements of the past two decades have focused educational planners on the fundamentals of the curriculum. Additional fear of a larger achievement gap between American children and those of foreign countries has fueled the fire for more rigorous content and curriculum. As a result, the arts are competing for existence within the curriculum of many schools.

The arts play a variety of roles in PK-12 schools. Learning through the arts provides students the opportunity for constructing meaning of content related material through the use of the visual, dramatic, and musical arts while learning in the arts gives students the exposure to specific skills gained through instruction in these art forms. Both roles of the arts are desired in a school based program. Varying levels of art integration are found in schools that embrace the arts as entry points to content material.

Teachers should move from the role of dispensers of knowledge into the role of facilitators of learning. Students are not merely receivers of the given information, they should be encouraged to construct meaning for themselves. The arts provide students with the tools for this construction of knowledge. The arts encourage students to apply their arts-related intelligences to perceive and organize new information into concepts that are used to construct meaning. While the arts should be recognized as subjects that can stand alone and be important in their own rights, parents and educators should also embrace the concept that the arts can enhance true understanding of a content area. Researchers also point to the availability of the arts as a vehicle to promote and encourage learning about diversity and multiculturalism throughout the curriculum at all levels.

As program planners and budget experts plan for future academic programs addressing the needs of all students, it becomes imperative that they take into account the volumes of research findings crediting the arts as a valuable enhancement vehicle for the teaching learning environment. The arts do not come without a price, though. Proper budgeting, professional development, and planning will provide the best opportunities for the arts to be incorporated into the school schedule.

References

- Aprill, A. (2001). Toward a finer description of the connection between arts education and student achievement. *Arts Education Policy Review*, 102(5), 11-14.
- Berghoff, B. (1998). Inquiry about learning and learners: Multiple sign systems and reading. *The Reading Teacher*, 51(6), 520-523.
- Bresler, L. (1995). The subservient, co-equal, affective, and social integration styles and their implications for the arts. *Arts Education Policy Review*, 96(5), 31-37.
- Catterall, J. (1998). Does experience in the arts boost academic achievement? *Art Education*, 51(597), 6-11.
- Chilcoat, G. (1991). The moving panorama: An approach to teaching American history. *Southern Social Studies Journal*, 17(1), 17-25.
- Clinard, J., & Foster, L. (1998). Putting arts standards in practice with aesthetic literacy. *NASSP Bulletin*, 82(597), 18-29.
- Collins, E., & Chandler, S. (1993). Beyond arts as product: Using an artistic perspective to understand classroom life. *Theory into Practice*, 32(4), 199-203.
- Cossentino, J., & Shaffer, D. (1999). The math studio: Harnessing the power of the arts to teach across disciplines. *Journal of Aesthetic Education*, 33(2), 99-109.

- Damasio, A. (2003). *Looking for Spinoza: Joy, sorrow, and the feeling brain*. Orlando, FL: Harcourt.
- Darby, J., & Catterall, J. (1994). The fourth r: The arts and learning. *Teachers College Record*, 96(2), 299-328.
- Davis, J. (1999). Nowhere, somewhere, everywhere: The arts in education. *Arts Education Policy Review*, 100(5), 23-28.
- Davis, M. (1999). Design's inherent interdisciplinarity: The arts in integrated curricula. *Arts Education Policy Review*, 101(1), 8-13.
- Day, M. (1998). Art education: Essential for a balanced education. *NASSP Bulletin*, 82(597), 1-7.
- de Silva, J., & Villas-Boas, M. (2006). Research note: Promoting intercultural education through art education. *Intercultural Education*, 17(10), 95-103.
- DuPont, S. (1992). The effectiveness of creative drama as an instructional strategy to enhance the reading comprehension skills of fifth-grade remedial readers. *Reading Research and Instruction*, 31(3), 41-52.
- Edmiston, B. (1993). Structuring drama for reflection and learning: A teacher-researcher study. *Youth Theatre Journal*, 7(3), 3-11.
- Edwards, J., & Craig, T. (1990). A teacher experiments with drama as a teaching tool: A collaborative research project. *The Alberta Journal of Educational Research*, 36 (4), 337-351.
- Eisner, E. (1992). The misunderstood role of the arts in human development. *Phi Delta Kappan*, 73(8), 591-595.
- Eisner, E. (1998). Does experience in the arts boost academic achievement? *Art Education*, 51(1), 7-15.
- Finch, A. (2004). Poll shows public support for art in schools. *Teaching Art Journal*, 2(1), 50-55.
- Gardner, H. (1999a). *The disciplined mind: What all students should understand*. New York: Simon and Schuster.
- Gardner, H. (1999b). *Intelligence reframed*. New York: Basic Books.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. (10th Ed.). New York: Basic Books.
- Gee, K. (2000). *Visual arts as a way of knowing*. Bangor, ME: Stenhouse Publishers.
- Godfrey, R. (1992). Civilization, education, and the visual arts: A personal manifesto. *Phi Delta Kappan*, 73(8), 596-600.
- Goldsmith, S. (2003). The liberal arts and school improvement. *Journal of Education*, 184(3), 25-36.
- Grainger, T. (1998). Drama and reading: Illuminating their interaction. *English in Education*, 32(1), 29-37.
- Gullatt, D. (2007). Research links the arts with student academic gains. *The Educational Forum*, 7(3), 211-220.
- Hamblen, K. (1997). Theories and research that support art instruction for instrumental outcomes. *Arts Education Policy Review*, 98(3), 27-33.
- Hanna, J. (1992). Connections: Arts, academics, and productive citizens. *Phi Delta Kappan*, 73(8), 601-607.
- Hatfield, T. (1998). The future of art education: Student learning in the visual arts. *NASSP Bulletin*, 82(597), 9-17.
- Hatton, K. (2003). Multiculturalism: Narrowing the gaps in art education. *Race Ethnicity and Education*, 6(4), 357-372.
- Heller, P. (1995). *Drama as a way of knowing*. Bangor, ME: Stenhouse Publishers.
- Hetland, L. (2000). Listening to music enhances spatial-temporal reasoning: Evidence for the Mozart effect. *Journal of Aesthetic Education*, 34(3/4), 105-147.
- Hoyt, L. (1992). Many ways of knowing: Using drama, oral interactions, and the visual arts to enhance reading comprehension. *The Reading Teacher*, 45(8), 580-584.
- Kelstrom, J. (1998). The untapped power of music: Its role in the curriculum and its effect on academic achievement. *NASSP Bulletin*, 82(597), 34-43.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to western thought*. New York: Perseus Books Group.
- Martin, A. (1998). Why theater should be integrated into the curriculum. *NASSP Bulletin*, 82(597), 30-33.
- Martinez, M., Roser, N., & Strecker, S. (1998). I never thought I could be a star: A reader's theater ticket to fluency. *The Reading Teacher*, 52(4), 326-334.
- McMaster, J. (1998). Doing literature: Using drama to build literacy. *The Reading Teacher*, 51(7), 574-584.
- Morado, C., Koenig, R., & Wilson, A. (1999). Miniperformances, many stars: Playing with stories. *The Reading Teacher*, 53(2), 116-123.
- Oddleifson, E. (1994). What do we want our schools to do? *Phi Delta Kappan*, 75(6), 446-452.
- Page, N. (1995). *Music as a way of knowing*. Bangor, ME: Stenhouse Publishers.
- Perrin, S. (1994). Education in the arts is an education for life. *Phi Delta Kappan*, 75(6), 452-453.
- Rabkin, N., & Redmond, R. (February, 2006). The arts make a difference. *Educational Leadership*, 60-64.
- Rabkin, N., & Redmond, R. (2004). Putting the arts in the picture. In N. Rabkin & R. Redmond (Eds.). *Putting the arts in the picture: Reframing education in the 21st century*. Chicago: Columbia College.
- Reardon, C. (2005). Deep in the arts of Texas. *Ford Foundation Report*, 36(1), 23-29.
- Smith, J., & Herring, J. (1996). Literature alive: Connecting to story through arts. *Reading Horizons*, 37(2), 102-115.
- Stinespring, J., & Kennedy, L. (2006). Meeting the need for multiculturalism in the arts classroom. *Clearing House*, 68(3), 139-145.
- Strahan, D., Summey, H., & Bowles, N. (1996). Teaching to diversity through multiple intelligences: Student and teacher responses to instructional improvement. *Research in Middle Level Education Quarterly*, 19(2), 43-65.
- Warren, K. (1993). Empowering children through drama. *Early Childhood Development and Care*, 90, 83-97.
- Winner, E., & Hetland, L. (2000). *Reviewing education and the arts project (REAP)*. [On-line]. Available: <http://www.pzweb.harvard.edu/Research/REAP.htm>



Copyright of High School Journal is the property of University of North Carolina Press and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.