

THE EFFECTS OF ARTS EDUCATION ON ACADEMIC ACHIEVEMENT  
AND SELF-CONCEPT

by

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## ABSTRACT

This paper reviews current research that investigates connections between academic achievement, self-esteem levels, and education in the arts. The first chapter provides the reader with an introduction to this topic. Chapter two provides background by looking at the history of arts education in the United States. Chapter three critically reviews literature that explores links between achievement, self-esteem, and arts education. Chapter four concludes with a summary and implications for the classroom and further research. Major findings include substantial evidence for including the visual arts, dance, music, and theater into the public school curriculum.

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## CHAPTER 1: INTRODUCTION

Education in the arts has been sporadic and ever-changing throughout the history of schooling in the United States. The reasons for and against inclusion of the arts in public school curriculum have varied with each generation. The arts, at times, were held in high esteem only to falter in the following decades to an extra-curricular activity of no importance. The current state of the arts in public education is in a precarious position. The *No Child Left Behind Act*, signed by President Bush in 2002, includes the arts as a core academic subject and will soon become part of the Essential Academic Learning Requirements in the State of Washington. Yet, many schools that do not produce high scores on the standardized tests are eliminating the arts, among other subjects in favor of an exclusive reading and mathematics curriculum. A nationwide survey by a nonpartisan group “indicates that the practice, known as narrowing the curriculum, has become standard procedure in many communities” (Dillon, 2006, p. 1). Subjects being cut are social studies, the sciences, and the arts. In many of our country’s schools, students who are considered to be the low achievers are prohibited from taking anything but reading, math, and gym. This intense focus on reading and math for approximately six to seven hours a day is thought to enhance a student’s learning and result in higher scores on standardized tests (Dillon, 2006). Is this a reasonable assumption? Will

eliminating some subjects in a curriculum increase learning in the other subjects? That has yet to be proven.

These are important questions that need to be addressed by thorough research in order to place the arts in a more prominent position in the school curriculum if, indeed, the arts belong in that position. The main focus of this paper is an examination of the current research on the effects of arts education on a student's academic achievement and self-concept. This paper also investigates the connections between academic achievement and self-concept. Ultimately, what will be compared are the benefits and detriments of an isolated curriculum focused on reading and mathematics versus the benefits and detriments of a curriculum that includes the arts and other important subjects.

#### Rationale

In this current age of increased diversity in the public school classroom, the time has never been more crucial to examine the role that the arts might play in reaching students from various cultures and differing learning styles. The arts can be a vehicle through which ESL and special needs students can express themselves when verbal or written communication is found to be challenging. It is important to discover how the arts might support learning not only for ESL and special needs students but for all students in the public school classroom. If indeed there is a connection between learning through the



arts, academic achievement, and self-concept, that possible connection should be explored.

According to the National Endowment for the Arts (NEA)(1988), there are four primary reasons why arts education is important: to help students understand civilization, to develop creativity, to learn the tools of communication, and to develop the capacity for making wise choices. Conant (1964) added that art education provides improved emotional stability and mental alertness, improved concentration, interest span, and patience. Loyacono (1992) claimed that learning the arts can help to better prepare students to achieve in the future, excites students and keeps them in school, enhances critical thinking skills, offers a mechanism to link or integrate all subjects, and engages traditional and non-traditional students equally. According to Hobbs and Rush (1997), art can have therapeutic effects on students. They claimed that the self-expression the arts provide promote self-esteem and later success in life. Taken together, these assertions about the benefits of the arts to a young person's developing sense of self and achievement in school serve to justify the inclusion of the arts in the public school system.

On the other hand, Remer (1990) felt that the arts in education should not require justification. She claimed that the arts are nourishment for the spirit and the intellect that invigorate, heal, and express our thoughts and feelings. Remer argued that the arts need to be integrated in general education programs. She cited four modes of

instruction in comprehensive arts in general education programs: art for art's sake (the study of, about, and in the individual disciplines of art), arts at the service of other studies (arts concepts, ideas, themes, strategies, and processes integrated into the study of other disciplines), other studies at the service of the arts (educational concepts, ideas, and methodologies from other disciplines integrated into the study of one or several art forms), and arts as equal partner in a holistic, humanities/global education or multicultural approach (the arts relate to or correlate with the study of other topics, trends, movements in world history).

Over the years, the arguments for strengthening the arts in public education have grown. Currently, it has been accepted by a majority of artists and educators that the arts do provide students with many benefits and a concerted effort is in place to incorporate the arts more prominently in school curriculum. However, *how* the arts should be utilized is still a hotly debated topic. There are proponents of using the arts as a lens through which all other subjects might be taught (Efland, 1990; Gardner, 1985; Goldberg, 1997; Loyacono, 1992; Remer, 1990; Walling, 2000). Advocates for art integration claim that the arts can improve academic achievement across the curriculum. They do not dispute that art has its own intrinsic value but they argue that the arts can be useful beyond “art for art’s sake.”

Supporters of discipline based art education (DBAE) (Eisner, 1982; The Getty Center for Education in the Arts, 1980) on the other hand, believe that the arts have their own value and should be taught as separate disciplines. They argue for teaching four areas of the arts; art criticism, art history, aesthetics, and art production. DBAE is gaining ground and many schools around the country are implementing arts programs that are now part of standardized testing. DBAE supporters do not argue that the arts are beneficial when integrated with other subjects; they simply feel that when the arts are “used” for purposes other than for their own value, it diminishes or de-values their rightful place and importance to society.

#### Definition of Terms

For the purposes of this paper, the term art will primarily focus on the visual arts. However, when speaking of an integrated art curriculum, my intention is to include not only visual arts but theater/drama, storytelling, music, dance/movement, poetry/creative writing, photography, and/or computer graphics. Most of the research I present focuses on visual arts with the exception of a few that address theater and music.

When I use the term academic achievement it is meant to address cognitive abilities such as critical thinking skills, performance levels measured by grades, rubrics, and/or projects and portfolios, and overall academic success. The term self-concept or self-esteem is meant to

describe a student's perceptions of his or her intrinsic value to self and to society, ability to achieve at school and in life, and level of confidence in his or her ability to achieve. Critics might suggest that measuring levels of self-concept have nothing to do with a student's ability to achieve in school. However, there is much research that links academic achievement and self-concept (Byer, 2000; Craven, McInerney, & Marsh, 2000; McInerney, 2001). The claim states that the better a student feels about him/herself, the better her/his academic achievement. It can also be viewed as the better the student's academic achievement, the greater the concept of the self will be. This paper will investigate how the arts might help to strengthen a student's academic achievement and self-concept.

#### Limitations

The objective of this paper is to examine the research that claims to link arts education with academic achievement and self-concept. For that reason, the studies presented in this paper are limited to those that examine the possible impact that arts education might have on self-concept and academic achievement.

As previously stated, a majority of the research studies presented will focus primarily on the visual arts with a few that address other forms of art such as dance, theater/movement, and music. In addition, the majority of the studies focus on elementary level arts education.

This paper, for the most part, limits studies to those conducted in the United States with a few that include research conducted in other countries such as Australia and France. The focus, however, is to examine the effects of arts education in the United States public school system.

### Statement of Purpose

This paper will investigate and analyze the current research that addresses the possible connections between including the arts in public school curriculum and students' self-concept and academic achievement. The purpose of this paper is to discover what the arts contribute to education. As a future art and/or elementary teacher, it is important for me to know how, why, and when to use the arts. Is it better for the arts to be kept as a separate discipline in order to maintain their integrity or is of greater value to view the arts as valuable in and of themselves *and* as a helpful tool to aid in achievement across the curriculum? It is also beneficial to uncover the research that claims to link higher achievement and self-esteem to learning in and through the arts. Does the research support the claims? The answer to that question is the purpose of this paper.

### Summary

Chapter one stated that the purpose of this paper is to discover what role, if any, the arts have in education. Do the arts increase academic achievement and boost self-esteem? Is there research to prove

that? How are individuals and society benefited by the inclusion of the arts in public education? Chapter two explores the historical background of art education in United States. It begins with a brief overview of pre-colonial art education and end with current practices. Chapter three will critically examines the current literature about the links between the arts and academic achievement and self-concept. Chapter four provides suggestions about the future of the arts in public education.

## CHAPTER 2: HISTORICAL BACKGROUND

### Introduction

This chapter presents an overview of the historical background of art education in the United States. It traces the evolution of art education in the public schools and explains the social and economic contexts that influenced how and why art was taught. This chapter also provides some insights about the connections between historical issues related to art education and the current situation of arts education in today's public schools.

Historians (Conant, 1964, Efland, 1990, Spring, 2005) recognize that art education in this country officially started with the establishment of the common schools in the mid-1800's with the inclusions of basic drawing skills as part of the curriculum. However, long before the 1800's there was significant art education taking place within the boundaries of what later would become the United States. Thus, this chapter begins with a brief description of art education in pre-colonial times and then more thoroughly examines the origins of art education as we know it today.

### Pre-Colonial Indigenous and African Art

When considering the history of art education in this country, it seems proper to trace it back to when it first appeared in public schools since that is what has led us to where we are presently. However, this disregards the art education of those who lived here before the

Europeans arrived and Horace Mann established the common schools. The Native American people had produced artwork that demonstrated great skill that could only be accomplished by people who had undergone intense training. Even though that education was not tied to formal schooling as we know it today, it still has a place in America's art education history. In addition, groups such as Africans brought to the United States as slaves contributed greatly to the legacy of art education in this country.

#### Indigenous Art in Pre-colonial America

Native Americans produced artworks that required careful training which could only be developed through some form of art education (Smith, 1996). Tribes produced works of art such as paintings, jewelry, pottery, sculptures, carvings, weavings, and basketry. Many of the art objects embodied deep, symbolic meaning for both the creators and their communities. For example, the Iroquois created sacred masks from wood and corn husks that held great power and were often used for medicinal purposes ("Iroquois," 2002). The masks were not only aesthetically significant but had a practical, everyday use as well. Many Native American tribes carved enormous totem poles symbolizing various aspects of their lives. Many totem poles were constructed to tell a story and others were carved to record a family's history. Whatever the reasons, those great works all symbolized a rich education in the arts deeply



entrenched in America long before the Europeans invaded the country (Smith, 1996).

#### African Slaves and the Arts

Another group of people often ignored in the discussion of American art education history are Africans brought to the United States as slaves. Their artistic talents were often used for the benefit of white slaveholders. Their creativity they possessed was most often embodied in the form of skills such as iron works, silversmithing, vessel and quilt making made for their white masters. White slaveholders also enlisted many slaves to paint family portraits. On occasion those talents could buy slaves their freedom and provided them with a way to make a living (“African Americans,” 2006). Unfortunately, it wasn’t until the Harlem Renaissance, in the early 1900’s, that African Americans received real recognition for their contributions to the arts in this country.

#### Art Education in Colonial America

The purpose of developing schools in the 17<sup>th</sup> century was primarily to teach children to read and write so they could follow the laws of God and the state (Spring, 2005). Any form of art instruction was deemed unnecessary especially by the Puritans who learned arts and crafts at home in extended families that consisted of children, servants, and apprentices (Smith, 1996). Education in the colonies perpetuated class disparities among the lower, middle class, and wealthy citizens. The children whose families did not have money were usually sent to serve as

apprentices when they were still quite young. The reading and writing schools served primarily the middle class families and the elite enjoyed what was known as grammar schools which sought to educate the future leaders of society. It was only in the grammar schools that any kind of exposure to the arts (mostly through literature) was present (Spring, 2005).

Schools not only varied by social class but also by geographic region. In New England, primarily a colony of self-sustained families, the schools reflected a religious purpose and were divided by social and economic status. In Virginia, where most of the citizens were agrarian, the middle class and poor did not receive a formal education. Education in the South was primarily for the wealthy. In between those two areas was the area known as New Amsterdam, now known as New York. New Amsterdam developed a system of private schools that served a diverse population and offered a variety of subjects, including the arts (Spring, 2005).

Any art instruction that could be found in Colonial America was primarily reserved for those of elite status. The Puritans saw the fine arts as elitist, aristocratic, and an unnecessary luxury. The principal goal for developing schools was to teach reading and writing to children so they could read and understand the laws of God. Anything beyond that was reserved for the wealthy (Smith, 1996).

### Art Education in the Common School Era

By the mid 1800's, the Europeans had planted themselves firmly in American soil. What it meant to be American began to take on a new meaning.

Americans came to identify themselves as a nation of white persons of European origin. While this was hardly just or a complete description of reality, the dominant culture formed this definition and had the power – perhaps the blindness – to try to make it true in practice. The African Americans, the Native Americans, and the Hispanic Americans were in the territory of the U.S., but the voices of their cultures were not listened to by those of power or influence. What the dominant culture regarded as worth heeding came from Northern Europe, or from white Americans of Northern European derivation. (Smith, 1996, p. 19).

It was within that particular mind-set that the common school was born. The common school reflected the values of the society in which it was created.

Horace Mann, known as the father of American education, transformed the failing public school system into what he termed the “common school.” Mann sought to improve the public school system by equalizing educational opportunities for all children (School: The Story, 2001). In reality, his efforts were more than likely a response to the

enormous influx of immigrants entering the country at the time. His new common schools were designed to bring discipline and order to the changing faces of the working class. The common schools placed a great emphasis on standardization, strict classroom drills, obedience, and moral training (School: The Story, 2001). In addition, the goals of the common school movement were to serve public goals such as resolving political, social, and economic problems (Spring, 2005). According to Spring, the common school movement embodied three distinct features; educating all children in a common schoolhouse, using those schools to promote government policy, and the creation of state agencies to control local schools.

It was within the environment of the common school that drawing instruction was first introduced in the United States. Mann was one of several men who traveled to Prussia in the early 19<sup>th</sup> century to observe Pestalozzi's method of drawing instruction. Pestalozzi's method began with having students master simple forms before they moved onto more complex forms. His method incorporated the study of lines from which he believed the student could adjust his perception and learn about proportion. Pestalozzi devised a grid of sorts upon which the students would estimate distances and hone their judgement skills. The method was very tedious and rigid, leaving no room for self expression or creativity.

Mann brought Pestalozzi's method to the United States for a variety of reasons. First, he claimed, that Pestalozzi's method would improve the handwriting of American students. Second, he believed that the ability to draw well was an essential industrial skill needed in the workforce. Third, Mann argued that learning to draw was a moral force (Efland, 1990). One of the many faults of the Pestalozzi method was its emphasis on two dimensional drawing that offered no sense of depth. When Mann visited Prussia again in the mid 19<sup>th</sup> century, he discovered another method gaining recognition developed by Schmid. Schmid's method provided individual instruction and implemented three dimensional shapes and forms. Mann found this method to be superior to Pestalozzi's and proceeded to replace the old method with the new. According to Smith (1996), Mann wanted drawing instruction to be part of the curriculum of the common schools but the type of drawing instruction Schmid proposed was rigid, logical, and the "product of a Protestant culture in which art had lost all association with an esthetically formed liturgy and deeply moving, spiritually based imagery" (Smith, 1996, p. 19).

### The Industrial Drawing Movement

In the latter part of the 19<sup>th</sup> century, the Eastern seaboard of the United States began to shift from an agrarian society to a bustling, industrial society. Drawing instruction was now mandated by law in

Massachusetts and took on added importance in the new industrial society. Following the Civil War, America's textile business faltered. This was especially evident when, at the 1867 Paris Exposition, it became apparent that the United States could not compete within the international textile market. Most Americans, seeing the superiority of European textiles, began to buy overseas products rather than inferior American products. Needless to say, textile manufacturers were anxious to find ways to improve their products and become competitive once again in the international and domestic markets (Efland, 1990).

The only way for New England to become competitive again in the international textile market was to improve the drawing instruction in schools. It was reasoned that the better the drawing the better the products would be (Hobbs & Rush, 1997). Therefore, the Massachusetts Board of Education passed the Drawing Act of 1870 and in 1871, Walter Smith, a professional drawing master, accepted the position of art supervisor for the state of Massachusetts. Smith took on the task of improving industrial drawing in schools. He devised his own system of drawing instruction and also implemented art training for classroom teachers (Efland, 1990). Smith was the first to "institutionalize art in the schools" (Hobbs & Rush, 1997, p. 6). Smith's objectives were to devise a plan of drawing instruction that would be clearly industrial and to have regular classroom teachers teach it rather than specialists (Efland, 1990).

Not everyone was a supporter of Smith's approach to teaching industrial drawing in schools. There were many who felt that drawing, or art for that matter, belonged in school. There were others who criticized Smith's emphasis on mechanical drawing because it lacked authentic artistry and aesthetic appeal. Lastly, there were the teachers themselves who, often begrudgingly, had to spend extra hours learning how to teach their students Smith's methods of drawing (Efland, 1990). Smith was a perfectionist and it had to be done exactly as he instructed. Needless to say, Smith had many critics. His heyday was over by the end of the 19<sup>th</sup> century.

#### Early 20<sup>th</sup> Century

By the turn of the century, enthusiasm for industrial drawing had all but disappeared. New theories about child development and what was important to teach students about the arts were emerging. American art paled in comparison with that of Europe. This was never more obvious than at the Armory Show of 1913, when American art was displayed along with masterpieces from European artists. Next to the art from Italy and France, American art appeared "plain, stilted, and underdeveloped" (Efland, 1990, p. 151). A new wave of art instruction was put into practice in public schools and was named "Picture Study."

Picture Study was developed to bring art to the masses and away from its exclusivity to the upper classes of society. The movement "at one time or another related to a number of other features of American society

and education” (Smith, 1996, p. 80). Picture Study was popularized by Oscar W. Neale who wrote *Picture Study in the Grades* (1927). The method focused on the aesthetic rather than the skills of basic drawing. Students studied works of art concentrating on their beauty and aesthetic value. It was thought that bringing in new appreciation for the arts would expand the mind and cultivate the senses.

Coinciding with the introduction of Picture Study were new theories of child development. Psychologists began to emphasize putting the child at the center of the educational process. Child-centered education was first initiated by Pestalozzi. He believed that the needs of the child were more important than the subject matter (Hobbs & Rush, 1997). Pestalozzi based his beliefs on the theories of Jean Jacques Rousseau, who declared that children were inherently good and that any immorality acquired was due to contact with an evil society. Pestalozzi applied those beliefs to his education of children that emphasized a “hands-on” approach and active learning (Hobbs & Rush, 1997). It was taken a step further by Froebel who created the first “kindergarten” where he placed an emphasis on the importance of play (Hobbs & Rush, 1997). Students were taught to be expressive and creative. That was a quite a change from the rigid skill building of industrial drawing in the previous century.



## Progressive Education

One of the most prominent innovators of progressive education was Dewey (1934). He saw children as holistic learners who did not benefit from a static, disconnected curriculum (Walling, 2000). Instead he believed that children constructed knowledge through a variety of connected experiences. In 1896 Dewey opened the Laboratory School in an effort to reform education and implement his belief that children learned by being involved in social interactions. His school was to be the laboratory for studying that phenomenon and he hired teachers who were to serve as mentors and guides rather than disciplinarians and deliverers of rote information (Walling, 2000).

Dewey took his “learning through experience” further when, in 1934, he published *Art as Experience*. In his book, Dewey extolled the benefits of active learning and saw art as an integral part of the curriculum through which other subjects could be taught. Mayhew and Edwards (as cited in Efland, 1990) quoted Dewey as saying that art is an attitude of spirit, a state of mind – one which demands for its satisfaction and fulfilling a shaping of matter to new and more significant form. To feel the meaning of what one is doing and to rejoice in that meaning, to unite in one concurrent fact the unfolding of the inner life and the ordered development of material condition – that is art (Efland, 1990, p. 170).

Dewey maintained that art is best understood when a child is actively involved in transforming experiences into personal creations that display newly constructed knowledge (Dewey, 1934).

#### Late 20<sup>th</sup> Century

In 1985, Howard Gardner released his book, *Frames of Mind: The Theory of Multiple Intelligences*. His theory proposed that there are at least seven areas that make up human intelligence, located in different parts of the brain and work independently of each other. Those areas of intelligence he identified were: linguistic (the art of creative writing), spatial (visual arts), logical/mathematical, musical (the art of music), interpersonal (knowledge of self), intrapersonal (knowledge of others), and bodily-kinesthetic (the art of dance) (Fowler, 1988). Twelve years later, Gardner added another area of intelligence, the naturalist, which recognizes natural and human made phenomena. Recently, he added a ninth, existential intelligence, which refers to the type of intelligence that pursues the ultimate questions and meaning of life (Campbell & Campbell, 1999). Gardner raised an interesting issue when he observed that traditional schooling focused primarily on the logical/mathematical and linguistic areas of learning which missed a great opportunity to develop the whole child (Loyacono, 1992).

Before Gardner's theory of multiple intelligences, art was not considered as a way of knowing or an avenue to learning. The general public believed that the arts were not academic and were merely acts of

production that belonged in the extracurricular category. Gardner's theory proposed that the arts are *acts of intelligence* and are of no less importance than other subjects (Fowler, 1988). His theory helped to elevate the arts to a new level of importance in the classroom and many teachers began to adjust their curricula to accommodate all the intelligences and subsequently became more aware of the importance of incorporating the arts in the classroom (Goldberg, 1997).

Eisner, in *Cognition and Curriculum: A Basis for Deciding What to Teach* (1982) further emphasized the need to dispel the belief that the arts are nonintellectual or a temporary diversion from the real academic subjects. He asserted that "the realization that the arts represent one of the ways through which humans construct and convey meaning and that the creation of art forms requires the use of judgment, perceptivity, ingenuity, and purpose – in a word, intelligence – seems to have escaped most of those who have commented upon the state of education..." (Eisner, 1982). It was the theories of Gardner and Eisner that brought about a new way of viewing art education.

In the 1980's, the Getty Center for Education in the Arts conducted research into the status of art education in the United States to discover why the arts were held in such low esteem. They found that art was regarded as a "frill" or extracurricular activity because it was not being used to its full potential. The child-centered, learn-by-doing approach that had dominated art education for years did not access the

areas of higher-order thinking and problem solving that art education could benefit. The solution, they believed, was to make art education discipline-based. They developed art programs that included four areas of study: art criticism, art history, aesthetics, and art production (Fowler, 1988). The Getty center “set out to make art programs more academic, to develop courses in art that ‘stress thought, reason and ideas.’ In other words, the intent [is] to counter the public notion that the arts are mindless play and pleasure” (Fowler, 1988, p. 63).

Just as Gardner (1985) advocated, DBAE perceived the arts as a way of knowing; as a valuable cognitive process that elicits higher order thinking. That sentiment echoes that of Martin Engel, advisor for Arts and Humanities for The National Institute of Education. In 1977, when commenting on the relationship between the arts and cognition, he noted that

the arts are a form of knowledge, a symbolic and expressive system or structure. Whether painting, sculpture, music, dance, theatre, literature, film, industrial design, architecture, or any other form of aesthetic endeavor, the activity takes place within the form of a symbolic structure-set which both is and contains knowledge. The arts can therefore be understood as cognitive processes. (as quoted in Madeja, 1978).

The idea that the arts should be viewed in such a structured way met with some criticism. There were those that saw DBAE and the cognitive

approach as being too structured, overly teacher centered, Eurocentric, and too elitist due to the emphasis on teaching the fine arts (Hobbs & Rush, 1997). Those criticisms are being addressed to this day.

Supporters of DBAE insist that the discipline-based approach to teaching the arts is not a narrowly devised curriculum nor does it advocate a specific method of teaching. Instead, they argue, that “DBAE is perhaps best understood as a unifying approach or concept...” (Young & Adams, 1991, p. 99). Young and Adams (1991) go on to note that “DBAE can bridge the gap between essentialistic, subject-centered learning and the problem-solving focus of progressive or student-centered education” (p. 100). If that is truly the case then it may be possible that DBAE can save the arts in schools and elevate it to its proper place in the curriculum.

#### Current Situation of Arts Education

In 2001, President George Bush signed the *No Child Left Behind Act*, his signature education reform act. The law is the basis for most federal school funding and also allows the states greater authority to run their own programs. There are four major areas of the law: accountability, programs implemented based on research, the arts as a core academic subject, and an emphasis on highly qualified teachers (“No Subject Left,” 2005). On the surface the act might sound like a triumph for arts education since it was designated, by law, as a core academic subject. However, this has not been the case.

With NCLB's emphasis on accountability, schools are frantically trying to keep standardized scores up so they will not lose their funding. The law might include the arts as a core academic subject but when it comes to accountability all the law requires states to report on are the subjects of mathematics, reading, and since the school year of 2005-2006, science. The states may, if they wish, include test scores in other areas but it is not required ("No Subject Left," 2005). Therefore, schools tend to focus only on the subjects they are mandated to report.

In many states across the country, the response to the reading and math testing requirements outlined in NCLB has been to reduce or eliminate class time spent on other subjects, especially the arts (Dillon, 2006). Instead of using the arts to boost academic achievement, schools are cutting the arts altogether. In one junior high school in Sacramento, California, about 150 students out of 885 spend five out of six class periods on math, reading, and gym. That leaves only one period for all the other subjects. In the same school about 125 of the lower performing students are prohibited from taking anything other than math, reading, and gym (Dillon, 2006). What is that saying to children and parents about the importance of a well-rounded curriculum that includes or integrates the arts? Its importance is diminished.

Advocates for the arts as a discipline-based, core subject are still fighting for the respect they feel the arts deserve. There is a push for using the arts as a lens through which to view all other subjects as well

as teaching art for its own sake. Goldberg (1997) believed that students can “learn *about* the arts, learn *with* the arts, and learn *through* the arts” (p. ix). Goldberg makes a claim for art integration; combining the arts with the study of all subjects. The philosophy that advocates art integration in school curriculum is beginning to gain strength. Goldberg continued by claiming that the arts are powerful tools “for motivating students to apply their knowledge, work cooperatively, and make connections across content areas; and arts integration can become a natural tool for everyday learning” (p. xi).

### Summary

Chapter 2 described the history of art education in the United States. It began by addressing cultures often excluded in the reporting of art education in America. Long before the Europeans came to America, Native Americans were engaged in their own, unique form of art education. Also often neglected is the contribution that African Americans made to the art of the United States. It was unfortunate that African Americans did not receive recognition until the early part of the 20<sup>th</sup> century. The chapter went on to discuss art education history in America after the arrival of the Europeans; it ended with a new paradigm: art integration. Chapter three will describe and critique current research linking self-esteem, academic achievement, and the arts.

### CHAPTER 3: CRITICAL REVIEW OF THE LITERATURE

As discussed in the previous chapter, inclusion of the arts in education has not been consistent. While some considered the arts unnecessary, other American educators and policymakers have claimed that the arts can have powerful effects in education and that these effects may reverberate far beyond the arts (Goldberg, 1997; Hobbs & Rush, 1997; Walling, 2000). These educators have argued that arts education has social, motivational, and academic repercussions. But are such claims rooted in empirical evidence or are they unsupported advocacy (Winner & Hetland, 2000)?

This chapter will critically review the current literature linking three major areas – self-concept, academic achievement, and art instruction. Researchers (Arsenault, 2001; Byer, 2000; Craven, McInerney, & Marsh, 2000; McInerney, 2001) have speculated that the integration of arts education into the public school curriculum has a significant impact on the self-concepts and academic achievement of its students. A question often asked is, what does self-concept have to do with academic achievement? Is there evidence of a correlation between the two? The research (Arsenault, 2001; Byer, 2000; Craven, McInerney, & Marsh, 2000; McInerney, 2001) shows that there is, perhaps, a connection. The nature of that possible connection is explored in the first section of the chapter. Subsequent sections analyze the potential



connections between academic achievement and education in and through the arts.

### Self-Concept and Academic Achievement

Before attempting to evaluate art education in relation to self-concept and academic achievement, it is important to see if and how self-concept and academic achievement relate to each other. Does an increase in academic achievement raise levels of self-concept? Or does a positive self-concept raise levels of academic achievement?

One study attempted to compare the relationships between academic achievement, motivational goals, and sense of self for a sample of Australian Aboriginal students as compared to a group of Australian non-Aboriginal students (McInerney, 2001). According to the author, the differences between those two cultures parallel differences found in the country's public schools between the cultures of minority and immigrant students and the majority, white, middle class students. The Aboriginal students faced economic hardships such as bad health, high unemployment, poverty, racial prejudice, and poor job prospects. There was also the geographic factor that placed poorly prepared, inexperienced teachers in remote areas with a high teacher turnover and isolation from the mainstream. Those factors had a definite impact on the quality of education experienced by those children. There were also differences in learning styles, social interactions, and language skills. As with many immigrant children in the United States, the Aborigines of Australia

value submissiveness, group orientation, and non-competitiveness. Those directly contradict what was valued by the majority in both countries; competitiveness, individuality, and aggression.

The study was grounded in achievement and self-concept theory which argued that the goals and expectations set by the school have an impact on children's development of a positive self-image and their willingness to meet challenges. The participants were from three urban and rural high schools (n = 939). Participants included 484 males and 433 females (22 were missing data). The average age was 13 years old. However, the data reported and analyzed in this study was specifically from a subset of Aboriginal students from four of the high schools. The subset included 129 Aboriginal children (67 males and 62 females) with the average age of 13. The authors gathered information from the students through the use of a voluntary, multiple choice survey, administered without the involvement of teachers (McInerney, 2000).

The survey was The Inventory of School Motivation Revised (ISMR) and consisted of 114 questions that related to the following motivational goals and sense of self values influencing learning: task-effort, competitiveness, social status, praise, extrinsic, affiliation to a group, affiliation due to influence, social concern, self reliance, self-esteem, and sense of purpose (McInerney, 2001). Based on the results of the survey concluded that Aboriginal children, even in remote locations, were motivated by the same motives and self beliefs that influence children

from non-Aboriginal in urban areas (McInerney, 2001). In other words, the study claims to have proven that the reasons why children succeed in school are not much different from each other. High expectations increase motivation which increases self-esteem and academic achievement. McInerney suggested that the results were positive regarding the ability of Aboriginal children to do well at school if given the right type of motivational school environment. He goes on to point out that the results call for further research that addresses the question of why Aboriginal children continue to perform poorly in school.

One problem with this study is that it relies on the responses to a written survey. Given that the student participants in the survey were only 13 years of age, their answers could have been formulated by what they thought would be the correct answer instead of what they really believed.

Byer (2000) investigated the relationships between the motivation-related independent variables of absences and academic self-concept and the dependent variable of academic achievement. The research was a correlational design that was used to measure the association between the study's variables. The study participants were 34 eleventh graders; 17 African Americans, 17 Caucasian, 19 males, and 15 females. The participants were assigned to two different U.S. History classes that were taught at a high school in Alabama by the same teacher. The instrument used in the study was the teacher's gradebook which recorded the

number of absences and the participants grades. The academic self-concept scores were measured by using the Academic Self-Description Questionnaire II (ASDQ II). The ASDQ was made specific to social studies (Byer, 2000).

The results of the study were analyzed using the Pearson correlation coefficient to quantitatively test hypothesis one which stated that academic self-concept in social studies would be significantly correlated with academic achievement ( $p < .05$ ). Byer (2000) found the correlation ( $r = .50$ ) statistically significant ( $p = .008$ ). However,  $r = .50$  is not a substantial relationship.

Hypothesis two predicted a statistically significant relationship between the independent variables of students' academic self-concept in social studies and the number of students' absences and the dependent variable of academic achievement in social studies (Byer, 2000). According to Byer, the results revealed a significant relationship ( $p = .041$ ) between the independent variables of academic self-concept and the number of students' absences and the dependent variable of academic achievement. That result is a bit stronger than the result of hypothesis one. "The mean number of absences was 2.25 and the standard deviation was 1.86. The mean academic self-concept score was 24.85 and the standard deviation was 8.08. The average grade was 76.50 and the standard deviation was 11.16" (Byer, 2000, p. 8).

Byer (2000) concluded that the study found a positive relationship between academic self-concept and academic achievement in the range between  $r = .20$  to  $r = .57$ . Are these numbers strong enough to substantiate a strong connection between self-concept and academic achievement? Byer admitted that “correlational designs are weak in providing evidence that the independent variables actually had a causal influence on the dependent variable” (Byer, 2000, p. 10), however he maintains that correlational designs “are strong for theory building and for increasing understanding of variables that are related to academic achievement” (Byer, 2000, p. 10). Perhaps that is the most we can take from that study.

Craven, McInerney, and Marsh (2000) looked at the structure and development of young children’s self-concepts and their relationship to academic achievement. Their participants were limited to 5 and 6 year olds. They based their results on responses to the Self Description Questionnaire and the Wide Range Achievement Test 3. The study was conducted at two different times: November, 1998 ( $n = 691$ ) and July, 1999 ( $n = 993$ ). The study had its difficulties mainly with the fact that it is hard to measure self-concept and academic achievement among very young children. The researchers suggested that longitudinal studies be conducted so that better results can be obtained.

One such study that took the previous research one step further was conducted by Arsenault (2001). Arsenault did not limit the study to

just 5 and 6 year olds, but researched the self-concept and academic achievement of children over a period of time. Arsenault's study asked if academic self-concepts influence students' future academic achievements. The study participants were 104 adolescents; 57 male and 47 female who participated in the Fullerton Longitudinal Study between the ages of 18 months and 17 years of age. The original sample included 130 infants selected from birth notifications in hospitals in Orange County, CA and who were free of neurological and physiological abnormalities. Of those infants, 52% were male, 90% were Caucasian, and all were normal term and weight. The sample represented a wide range of middle-class families. Approximately 84% of the original sample remained at age 16.

A questionnaire (Self-Description Questionnaire II) was given to the participants when they were 16 years old to measure academic self-concept. The mothers reported the behavioral adjustment of their child from ages 6 to 15 with the Child Behavior Check List. Social factors included family environment and temperament. Family environment was measured with the Cohesiveness and Conflict scales of the Family Environment Scale when the children were 7, 8, 10, 12, and 14. Mothers rated the temperament of their child at age 14 with the Dimensions of Temperament-Revised. Using a stepwise multiple regression analysis, data composites were created to yield three time periods: ages 6-9 (middle childhood), 10-12 (pre-adolescence), and 13-15 (adolescence).

The basic model was Academic Self-Concept = Constant + Behavior + Social + Cognitive (Arsenault, 2001).

The findings showed that children with low academic self-concept were reported to exhibit less persistence and higher distractibility than those who reported high academic self-concept. Also, children with higher intelligence and greater academic achievement displayed higher ratings of academic self-concept than did their counterparts. Arsenault (2001) argued that the study suggests that educators should evaluate students as early as age 6, rather than waiting until later periods so that developmental factors which might hinder later academic achievement can be addressed and appropriately managed.

This study is flawed in several ways. Questionnaires can be problematic; they are always answered subjectively by the person filling out the questionnaire. When the mothers filled out the questionnaires, they were most certainly biased toward their own child which could have resulted in partiality. The study participants were not very diversified; they were primarily white, middle-class children. That leaves out children of color, ESL students, children with lower socioeconomic status, etc.

Based on the research studies reviewed in this section, the link between self-concept and academic achievement seems uncertain. However, that does not mean there is no link at all. A low level of self-esteem could interfere with a student's academic achievement. Taken

together, the results of these studies do not provide a strong correlation between self-concept and academic achievement.

#### Academic Achievement and the Arts of Dramatization, Theater, Role-Playing, Music, and Dance

When considering the arts and their place in education, it is important to differentiate between the various types of art that are being referred to. The focus of this paper is primarily the visual arts which will be covered exclusively in the next section. However, before I move on, I feel it is important to uncover what other forms of art might reveal about academic achievement. The areas to be covered in this section will be dramatization, theater and role-playing, music, and dance.

##### Dramatization/Theater/Role-playing

The role of imaginative play (or role-playing) in cognitive development was addressed in a study by Fink (1976). Fink examined the potential roles that imaginative play might have on two cognitive abilities of children; conservation and perspectivism. The concept of conservation is the awareness that objects may remain constant when those things take on additional attributes. Perspectivism is examined in two areas: physical perspectivism and social perspectivism. Physical perspectivism refers to the understanding that the physical environment remains the same even though one looks from different vantage points. Social perspectivism is being able to differentiate between various roles a



person can play (a mother can also be a sister who can also be a daughter) (Fink, 1976).

The study participants involved 36 kindergarten students who were randomly assigned to one of three groups: (1) adult-structured group training in imaginative play processes, (2) free-play activity in the non-directive presence of the experimenter, and (3) a control group. Each of the children was observed before, during, and after the experiment by each of the trained observers (Fink, 1976). The study consisted of a pre-assessment to gauge the children's aptitude for conservation and perspectivism. The pre-assessment showed that the children were "relatively weak" in both areas at the start of the study (relatively weak was not substantiated by any concrete evidence).

After one month, the children were again assessed. The results found that the children who participated in the adult-structured group made significant gains on the post-assessment in understanding conservation and perspectivism. The other two groups did not make significant gains. This study had strong implications for structured, teacher directed role-playing. It seemed to suggest that simply allowing children to free-play or even participate in normal kindergarten activities did not yield the type of positive results that a well-structured, teacher led activity in imaginative play could provide (Fink, 1976). The sample in this study was confined to children of kindergarten age and for this reason it is difficult to take the results and apply them to older children.

The same procedure could be employed in a study that included children in the first and second grades as well. This would make the study more credible not only because it would include children in all primary grades but also because it would provide a much larger sample size. As it is, a sample size of 36 is not very substantial.

Another claim that was addressed by several studies was the use of drama/theater to aid in the development of story comprehension. It was proposed that when children were given the opportunity to act out stories rather than just listening to a teacher read them, the comprehension was much greater. Pellegrini and Galda (1982) set out to discover what the effects of thematic-fantasy play, teacher-led discussion, and drawing had on children's story comprehension. The study was conducted on 108 children in grades K-2 in a rural area in Georgia. The participants consisted of 18 boys and 18 girls in each of the three grades. A story was read to the children by an adult and afterward the children were given the opportunity to process the story by acting it out in a thematic-fantasy play, drawing pictures, or participating in a discussion. The researchers used systematic content assessment tests and formal guides to assess stories told by subjects and to measure outcomes (Catterall, 2002). The study concluded that the children that engaged in thematic-fantasy play had higher levels of comprehension than the other two groups. However, the study raises some concerns. First, the sample size of 108 children was relatively small. Second, the researchers did not

examine what in particular about the dramatic re-enactment played the greatest role in story comprehension. Was it the physical aspect of kinesthetic movement or was it the social interaction that helped the most? (Catterall, 2002). Lastly, the study took place in a rural community and the results may not be applicable to other types of communities.

Page (1983) conducted a study that tested for effects of story understanding through dramatization versus listening to adults reading stories. Page (1983) studied children in first, second, and third grades. One group listened to an adult read a story and the other group listened to a story on an audiotape and then participated in a dramatic re-enactment of the story. The children were tested for story comprehension through a 10-item test of comprehension, a picture sequencing instrument, and a telling of the story by each child to an interviewer. The two stories were relatively equal in important elements such as length, structure, and vocabulary level. The study reported that the children involved in the dramatic re-enactment were much more involved in the story than the other group. The authors stated that they found several components of story comprehension are better conveyed through drama, for instance, main ideas, character identification, and character motivation (Catterall, 2002). The study also discovered that dramatics seemed to benefit younger students more than the older students. What does that tell us? Perhaps, as speculated by Catterall (2002), story re-

enactment benefits students more who are just learning to read or are at a lower reading level. A concern about this study, therefore, is that older children were not included in the sample.

DuPont (1992) studied children in the fifth grade for story comprehension through the use of creative drama. The study participants were three groups of 17 fifth-graders in three different schools. All the students had been placed in remedial reading programs. Pre-assessments were administered (California Achievement Test –CAT - and the Metropolitan Reading Comprehension Test of the Reading Diagnostic Test –MAT6) and they showed the three groups to be equivalent in score levels. For the treatment group (group one), DuPont (1992) engaged the students in a structured daily program that consisted of reading selected non-illustrated children’s stories and then participating in creative drama activities. Group two had the students reading the same materials which were followed by vocabulary lessons and a group discussion of the stories. Group three was the control group which met with their normal remedial reading group and participated in the normal activities of the group (no drama used). All three groups participated in a post-test using the MAT6. The results showed that group one showed a significant increase in mean score while group two actually decreased. The control group’s scores stayed the same as recorded in the pre-test. DuPont did not adequately describe the particular drama techniques or literature used. That is a significant

detail missing from the study. DuPont acknowledged that the novelty effect might have influenced the results but argued that the two groups used the same lesson plan objectives and learning outcomes so that any effect would be minimal.

The previous three studies all tested creative drama as a way to enhance story comprehension. Page's (1983) study seemed to suggest that the use of dramatics was most beneficial for younger students who are just beginning to read. DuPont's (1992) study showed that the use of dramatics worked in a class of fifth graders who were in remedial reading programs. Pelligrini and Galda's (1982) study showed the benefits of dramatics on children from grades K-2. Each of the studies had important details missing but overall, the results showed increased levels of comprehension when creative dramatics were used.

The following three studies tested for strengthened verbal skills, student attitudes and achievement, and overall benefits for students in the use of creative dramatics. Gourgey, Bosseau, and Delgado (1985) studied the effects of creative self-expression between drama skills and literacy for disadvantaged urban elementary school students. The students participated in the Arts Alternatives Program which engaged children in role-playing and story writing activities. They were tested against students who did not participate in the program. The students who were involved in the Arts Alternatives Program were subsequently given the Comprehensive Test of Basic Skills (CTBS) which tested their

reading comprehension and vocabulary. They showed a significant improvement when compared to the non-participants. Those results were combined with reports on students' attitudes and overall academic progress in other classes. By the end of the year, the treatment group scored 9 NCE points higher than the control group in vocabulary and 5 points higher in comprehension

A meta-analysis was conducted by Kardash and Wright (1987) which applied statistical techniques to the results of many empirical studies on creative drama used as an aid in story comprehension. Podlozny (2000) tested verbal skills through the use of dramatics in another meta-analysis. All three studies showed many advantages for using drama/theater/role-playing to aid communication, verbal skills, and attitudes.

Jackson (1997), in a case study, researched creative dramatics as an effective teaching strategy. The question to be answered was if the use of creative dramatics in the classroom could improve students' cognitive and social development. To conduct the case study Jackson (1997) used two teachers; Chris, a male teacher in his thirties, and Janet, a female teacher in her twenties. Chris had been teaching for at least 12 years and during the 1996-1997 academic year he taught 6<sup>th</sup> grade math and remedial reading at the middle school level. He has an acting background and believes in using creative dramatics with his class. Janet completed her student teaching during the 1996-1997 academic year and received

her Master of Teaching in Elementary Education as well as her Bachelor's degree in drama. Janet student taught in a 6<sup>th</sup> grade language arts and social studies classroom, as well as a self-contained 3<sup>rd</sup> grade classroom. She has a dramatic background and strongly believes in the use of creative dramatics in her classroom.

To develop the case study Jackson (1997) used a method called "purposeful sampling." Patton (1990) described the method as "information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of research, thus the terms purposeful sampling" (p. 169). Jackson explained that there are many ways in which a researcher can choose his/her purposeful sample and that she chose two purposes: one based on convenience and the other based on criterion. Her method was to interview the two teachers on the type of dramatics they used in the classroom and the effect on cognition and social skills they witnessed. There was not any data or evidence provided to support their judgments. The case study reveals the interviews Jackson conducted with each teacher.

Jackson (1997) concluded that, after the interviews with Chris and Janet, both of them had seen positive results in their student's behavior and achievement. Jackson goes on to say that even though the teachers did not state the specific cognitive and social gains their students made, it could be gathered from their comments that those gains were taking

place. Those results are not based on any kind of real evidence. Jackson does not seem to draw conclusions that are congruent with her goal which was to see if incorporating creative dramatics in a classroom would improve cognitive and social development. She stated in her findings that the teachers she interviewed saw a positive change in their students' *behavior* and *achievement*. Jackson continues, "although the teachers did not state the specific cognitive and social gains their students made, it can be gathered from their comments that these gains are taking place" (Jackson, 1997, p. 42). Basically, we are left to the interpretation of the researcher based on two very short interviews with teachers who already believe in the use of creative dramatics in the classroom. The study was not very convincing.

In *Champions of Change: The Impact of the Arts on Learning* (2000), a compendium of research conducted on the role arts education play in academic achievement, the authors (Catterall, Chapleau, & Iwanaga, 2000) wrote an introduction that revealed findings from several studies. They compared students who were actively involved in arts programs (mainly theater) in grades 8 and 10 (high arts) with students who were not involved in arts programs (low arts). They compared all students, high arts and low arts, and low SES students, high arts and low arts. They tested them in the areas of academic performance, attitudes, and behaviors for grades 8 and 10. The researchers claim in their results that the arts play a enormous role in broadening access to meaning by



“offering ways of thinking and ways of representation consistent with the spectrum of intelligences scattered unevenly across our population – for example, resonating with the multiple and differing intelligences identified by Howard Gardner at Harvard. The arts have also shown links to student motivation and engagement in school, attitudes that contribute to academic achievement” (Catterall, Chapleau, Iwanaga, 2000, p. 3).

In grade 8, the academic performance of all students showed those with high arts earning mostly A’s and B’s in English were 79.2% versus those with low arts at 64.2%. With low SES students, those with high arts earning mostly A’s and B’s were 64.5% compared with those with low arts at 56.4%. Scores on standardized testing showed a more significant disparity in the measurement of all students from 66.8% for those with high arts to 42.7% for those with low arts. The difference for low SES students was not as significant with the high arts having 29.5% on standardized test scores versus those with low arts at 24.5%. The drop out rate also showed a significant difference in all students with high arts at 1.4% for dropping out by grade 10, to low arts at 4.8% drop out rate. For low SES students the drop out percentage for those with low arts was 9.4% compared to those with high arts at 6.5% (Catterall, Chapleau, Iwanaga, 2000). The discrepancy in achievement as measured by grades versus test scores points out a concern about using simple letters or numbers to represent academic achievement.

In the areas of attitudes and behaviors, the researchers tested television watching and students' beliefs on the importance of community service. For all students with high arts the percentage that considered community service of great importance was 46.6% compared to those with low arts at 33.9%. The difference was not as great for students with low SES with high arts students at 49.2% believing community service in very important versus those with low arts at 40.7% believing it is not very important. The study also shows that television watching was greatly decreased for those with high arts in both categories (Catterall, Chapleau, Iwanaga, 2000).

More studies should be conducted that connect the use of drama/theater/role-playing with academic achievement and story comprehension. The studies discussed in this paper reveal that the use of creative dramatics certainly benefits students in particular ways. It would be beneficial to look more closely at using role-play/dramatization for future applications.

## Music

The use of music is often discussed in helping students understand mathematics. However, there are other studies that address music's ability to raise levels of self-esteem, increase cognitive development, and aid in reading comprehension. Those will be addressed in this section as well. Vaughn (2000) researched the connections, if any,

between music and mathematics. Her research questions included: 1). Is there a relationship between music study and mathematics achievement? 2). Does music instruction cause increases in mathematics achievement? 3). Does listening to background music while thinking about mathematics problems enhance mathematics ability?

Vaughn (2000) conducted a meta-analysis that began with a collection of 4,000 studies. Eventually, that was reduced to 25 studies. Those that were disregarded were studies that were advocacy pieces, studies that used music as a reward for high math performance, studies that used musical jingles to aid in memorizing, and studies that focused on music and math aptitude rather than achievement. The remaining studies were assigned to one of three groups: correlational, experimental-music instruction, and experimental-music listening. A separate meta-analysis was performed within each group (Vaughn, 2000).

The research participants were mostly high school students with ten of the twenty studies in the correlational group comparing participation in music classes with SAT mathematics performance. The studies included over 300,000 high school students. The other studies were not as large with the number of participants ranging from 34 to 1,969. "Correlations between mathematics and music study ranged from  $r = -.05$  to  $.37$ . Only six studies were in the experimental-music instruction group with sample sizes from 28 to 128, all from preschool or elementary school. Effect sizes ranged from  $r = -.04$  to  $.31$ . The

experimental-music listening group also had smaller sample sizes than the correlational group of studies. There were 15 studies with 10 to 200 subjects. Effect sizes were widely dispersed, ranging from  $r = -.18$  to  $.82$ . These studies compared music predicted to enhance mathematics performance (i.e., classical or ‘mood calming’) with music or sound predicted to interfere (rap, rock, industrial noise)” (Horowitz, 2000, p. 130). An effect size of  $r = 1$  would be a 100% correlation. If we compare that with the effect sizes listed above, there does not seem to be a strong enough correlation to link music with mathematic achievement. Yet, in the results section of the study, Vaughn (2000) claimed that the meta-analysis of the correlational group indicated a significant relationship between music study and mathematics achievement.

In 1998, Kennedy sought to find the effects of musical performance, rational emotive therapy, and vicarious experience on the self-esteem and self-efficacy of juvenile delinquents and disadvantaged children. The ultimate research question was: Does the performance of songs on guitar and singing boost self-esteem and self-efficacy in at-risk youth compared to therapeutic treatments that do not include performance? The study participants were forty-five 8 to 19 year olds living in residential homes and juvenile detention centers for at-risk youths. All of the youths were labeled “at-risk” or had been arrested for petty or serious offences. None of the participants had experience with the guitar. From these participants five groups were formed: performance

only (group one), performance/cognitive strategy (group two), cognitive strategy (group three), vicarious (group four), and control (group five). All of the groups received 30 minute weekly guitar lessons and all but the control group then received 30 minutes of additional instruction depending on the group (Kennedy, 1998).

Group one received instruction in performance etiquette, strategies for achieving peak performance, memorization, and musical expression. They followed that with solo performances conducted for their peers. Group two received instruction in mental strategies for performing and how to deal with anxiety and they also performed solo before their peers following the instruction. Group three was given the same instruction as group two but they were not offered the opportunity to practice the techniques or give performances. Group four were observers that watched the performances and then participated in a discussion about the success and failures of the performances. The participants were pre-tested and post-tested on self-esteem using the Rosenberg Self-Esteem Scale and musical self-efficacy which tested how confident they felt about their musical ability (Kennedy, 1998).

The results showed that the students who learned to give solo performances showed improvement in self-esteem (groups one and two). This result could be attributed to overcoming fears and having successful performances (Winner, 2000). The study claims to show that musical performance and musical performance with cognitive strategy instruction

improves self-efficacy in at-risk youth but not necessarily improvement in self-esteem. A concern of the study is the background of the students in the sample which may make the results not generalizable to a typical school setting. Overall, this study provides an impetus for further research in improving the levels of self-efficacy and self-esteem by musical instruction and performance.

Bilhartz, Bruhn, and Olson (2000) attempted to find if early music training had an effect on a child's cognitive development. Their guiding question throughout the research was: Does music training not involving the keyboard enhance spatial-temporal, mathematical, and verbal reasoning? The study participants were seventy-one 4 and 5 year old preschoolers from low and high income families. The children were pre-tested on six subtests of the Stanford Binet. The children were given two visual tests: Bead Memory which is a visual memory test where the child must recall and reassemble sequences of beads and a Pattern Analysis, a visual test where the child uses blocks to reproduce patterns. They were also given two verbal tests: Vocabulary and Memory for Sentences. One quantitative math test was also administered (Bilhartz, Bruhn, & Olson, 2000).

The results were not overly significant. The music group outperformed the control group on the Bead Memory test but not on any of the other tests. That result also was only recorded for children from middle and high income levels ( $F(1.43) = 6.29, p < .016$ ). The researchers

had problems with the lower income groups due to low attendance, little to no parental involvement and non-completion of home assignments. That might be the reason the results showed less significance for the children of lower income families. Children in the music group who were most involved in the program improved on Pattern Analysis more than the other music children ( $p < .01$ ). There was no difference between the music and control groups on that test (Winner, 2000).

Winner (2000) went on to insist that:

future studies should advance clear hypotheses about which tests should be expected to improve as a result of music training, and a plausible explanation for these hypotheses should be developed. It would be helpful to provide a suggestion for why the kinds of visual – spatial skills used in the Bead Memory subtest were sensitive to music training, while those required by the Pattern Analysis subtest were not (p. 104).

One more study conducted by Butzlaff (2000) asked the question: Can music be used to teach reading? Butzlaff performed a meta-analysis on a set of research studies that met three criteria: they used a standardized measure of reading performance, the reading test followed music instruction and sufficient statistical data were provided to estimate effect size. 30 studies were included in the meta-analysis that met the criteria; 24 were correlational because the studies did not provide pre-testing and the students were not randomly assigned. The

remaining 6 studies were experimental with randomly assigned music and control groups and both pre and post-tests (Horowitz, 2000).

The results claim to demonstrate a strong and reliable association between music instruction and standardized measures of reading ability ( $r = .17$ ). However, Horowitz (2000) revealed that a “reliable causal link between music and reading was not found... although a positive mean effect size was still found within the experimental group” (p. 106).

Horowitz went on to emphasize that the studies the meta-analysis was based upon contained many different types of musical interventions and they each used a different test of reading ability. That inconsistency along with the lack of specific data on effect sizes and reliability make the meta-analysis weak.

## Dance

Dance is another art form that researchers have studied in connection to cognitive skills, reading ability, and creative thinking skills. Rose (1999) researched the connections between reading and dance through a program implemented in three Chicago public elementary schools. The program was called Basic Reading through Dance (BRD) and was used in the 1998-1999 school year. The program covered 20 sessions which were conducted by dance specialists. The sessions included teaching students to physically represent sounds by making shapes with their bodies that represented letter and letter combinations.



Nine schools served as control groups. In all, the twelve schools were predominantly African American poverty level children. A total of 174 BRD children and 198 control group children were pre and post assessed in reading using the Read America's Phono-Graphix Test. The test assessed the ability to recognize sounds for letters as well as phoneme segmentation ability (Winner, 2000). The results showed that both groups improved but those in the BRD group improved more significantly on all the measures of the reading test. The study could be used to look further into how to teach reading and sound/letter relationships to low income, at-risk students. This study raises a few concerns. One is that the study was conducted only in one city and could be strengthened by further research in other parts of the country. Also, the sample of students was predominantly low SES, African American students. The study could also test their hypothesis with a range of SES levels and ethnicities. For example, might the dance movements that help children recognize sounds for letters help struggling ELL students as well?

A meta-analysis of seven studies was conducted by Keinanen, Hetland, and Winner in 2000. Their objective was to find if cognitive skills were increased by the teaching of dance. The seven studies used had quantified outcomes in the area of dance and cognition, used control groups, and were conducted on non-impaired populations (Bradley, 2000). Bradley (2000) stated that the studies span a period of 26 years and vary greatly in sample size, measurement techniques, and dance

activities applied as variables. The results showed evidence for near but not far transfer. Because of the wide variety in the methodologies of these studies, results are not very convincing. Four of the studies looked for effects of dance instruction on reading skills and the remaining three studies concentrated on non-verbal reasoning. Given the small number of studies, the variety in types of dance instruction, and the time span between the studies (16 to 18 years) also makes it difficult to draw any significant conclusions. The authors admit that future dance studies in which cognitive outcomes are measured should be more exacting, separate out motivational factors, and should have larger sample sizes.

Minton (2000) researched the question: Is there a relationship between dancing and creative thinking? Minton assessed 286 high school students who were enrolled in dance class (experimental group) and not enrolled in dance class (untreated control group). Dance participants were involved in the class from 5 to 8 hours a week for one semester. The control group students participated in classes such as business accounting, English, health, interpersonal communications, and psychology. Both groups were pre and post tested on three parts of the Torrance Test of Creative Thinking (TTCT), Figural Form A: picture construction, picture completion, and creation of recognizable objects. Reliability of the tests are  $r = .66 - r = .99$  with retest reliability of  $r = .60 - r = .70$  (Hetland, 2000). TTCT is norm-referenced on five factors: fluency (number of ideas), originality, abstractness of titles, elaboration

(detail identification), and resistance to premature closure (completing figures in non-simplistic ways). One strength of the study is that the responses were scored blind by the investigator (Hetland, 2000). Group equivalence at pre-test was determined by a *t* test. “Repeated measures of ANOVA on change scores were computed for experimentals vs. controls for all subjects and by school for each of the six schools” (Hetland, 2000, p. 8).

The results showed that in the categories of elaboration, originality, and abstractness were higher when connected with dance instruction. The results are presented in bar graph form. Hetland (2000) continues by stating, “It is puzzling that patterns of effect across factors of the TTCT are inconsistent, with different schools demonstrating significant differences ( $p < .05$ ) for different creativity factors. The author reasonably suggests that the variation may result from differences in teachers or in school cultures – variables that should be assessed in future studies” (p. 8).

In summary, the studies that examined drama, music, and dance in connection with academic achievement and self-concept provided a number of positive results. There is significant evidence that providing kindergarten students with a structured, teacher directed role-playing can help develop and strengthen cognitive skills. In addition, the use of drama and theater aid in the development of story comprehension more so than simply listening to a teacher read a story. Studies also showed

that the use of dramatization/theater/role-playing helps to strengthen students' verbal skills, communication, and attitudes.

Music instruction showed a link, albeit a weak link, between the study of music and increased mathematics achievement. Also, students who participated in a group that learned to give solo performances with a musical instrument showed increased levels of self-esteem. There is also some evidence that shows that an association between music instruction and standardized measures of reading ability.

The use of dance can be used to teach children letter symbols and sounds. One study showed that children who received the dance instruction performed much better on reading tests than those who did not receive the dance instruction. Several studies also showed a link between dance instruction and creative thinking such as elaboration, originality, and abstractness.

#### Academic Achievement and the Visual Arts

The visual arts have been linked to academic achievement in many areas. This section will present three studies that connect visual arts/drawing with better comprehension, reading, and overall achievement.

DeJarnette (1997) researched the idea that combining writing with drawing would increase achievement and comprehension in sixth grade students. The participants were 98 sixth graders from four world history classes. The classes were taught by two teachers and the students were

randomly assigned to either teacher. There is no mention of the students socio-economic status, ethnicities, location, and gender. DeJarnette also made no mention of a pre-assessment.

Both groups of students studied Mesopotamia and ancient Egypt for four weeks each. After each unit, student learning was assessed either by writing alone or a combination of writing and drawing. Each student received both assessments, one for each unit and half received the writing/drawing assessment for Mesopotamia and half received this for Egypt. In both assessments students were asked to describe, through words or words and drawings, important aspects of the region and note the most important people, events, and artifacts and explain why they were important. Responses were scored by the researcher in terms of content knowledge (on a 4 point scale) and in terms of interdisciplinary knowledge (on a 2 point scale). A second researcher scored a third of the responses and after disagreements were discussed, 100% agreement was reached (DeJarnette, 1997). What were the disagreements and did the original researcher persuade the other to reconsider a possible lack of evidence?

Students used 3 types of responses in the writing/drawing assessment. Some students wrote their response and then illustrated it, some first drew and then added text, and some only drew. Drawings included maps and charts as well as illustrations of people, places, events, or objects to convey historical facts. Students received higher

scores for content knowledge when they both wrote and drew (mean score = 1.99) than when they only wrote (mean score = 1.38). students also received higher interdisciplinary scores (showing that they brought in more information from other subjects) when they both wrote and drew, compared to when they only wrote (0.66 vs. 0.22). LEL students (n = 20) also scored higher on the writing/drawing assessment (mean score = 1.58) than on the writing alone assessment (mean score = 1.03). Neither of the scores were very impressive.

This study has the potential of being quite biased. What criteria did they use to grade the drawings? How does one grade illustrations? Since the researcher did the grading, it could have been very easy for her to sway the points in favor of a positive result. Knowing how she graded the drawings would have given the study more weight as well as having someone other than herself do the grading. Another flaw in the study is the teaching ability of the two teachers. One of the teachers might simply have been a better teacher than the other. That could certainly affect the results of the study.

Wilhelm (1995) and Burger and Winner (2000) all looked at how the visual arts might aid in reading. Wilhelm (1995) specifically studied reluctant learning-disabled readers on a small scale while Burger and Winner conducted two meta-analyses of ten studies. Wilhelm's participants were two 7<sup>th</sup> grade boys who were learning disabled as well as considered reluctant readers. The boys participated in a nine week

session where they were helped to visualize stories with the aid of visual arts. The boys were to create cutouts or find objects that would represent characters and ideas in the story they were reading and then to use those objects to dramatize the story. They were also to draw pictures of visual impressions they got from the story. Afterward, they engaged in a discussion about how illustrations in books help to tell the story. They also participated in visual maps to help them construct the story and pay attention to details such as plot, characters, and theme. The final activity was to create a collage that represented their responses to the story (Winner, 2000).

The results showed the boys became more sophisticated readers through the course of the nine week session. They began to take a more active role in reading and interpretation of the stories. I am left wondering if the boys are then released back into their regular reading program, will the results last? Will they continue to take a more active role in their reading or will that fall to the wayside when they are no longer engaged in the same way? The study is interesting but does not prove much in the way of lasting results.

On the other hand, Burger and Winner (2000) asked if reading skills could be enhanced by instruction in the visual arts by conducting two meta-analyses. Meta-analysis 1 asked if art instruction alone can improve reading and meta-analysis 2 asked if teaching reading through art is more effective than teaching reading alone. For meta-analysis 1,

eight of the nine studies focused on elementary school subjects from 1<sup>st</sup> to 5<sup>th</sup> grades and one assessed pre-elementary aged subjects. Seven studies included average SES students and two assessed low SES students. Duration ranged from ten days to one full academic year. Meta-analysis 2 examined four studies comparing art and reading integrated studies with reading instruction alone. Two were reading readiness and two were reading achievement studies. Three were 1<sup>st</sup> to 5<sup>th</sup> grade classes and one was pre-elementary. Duration ranged widely from 27 days to one full academic year. The study neglected to specify grade levels, gender, ethnicity, or location of schools (Burger & Winner, 2000).

The researchers reviewed over 4,000 individual recorded studies and 41 journals, and sent out invitations to over 200 arts education researchers to submit unpublished research. From this they selected ten studies that met their standards of being empirical with control groups and that tested the basic hypothesis that some form of visual arts instruction improved some aspect of reading ability. They calculated 13 effect sizes from those 10 studies. Two of the studies required separate effect size calculations because of the nature of the participant groups. Each of the groups was considered as a separate meta-analysis. Meta-analysis 1 focused on nine studies examining cognitive relationships between arts instruction and reading achievement, and meta-analysis 2



included four studies of motivational connections. Four studies is not a very extensive meta-analysis (Burger & Winner, 2000)

In the findings of the study, meta-analysis 1 did not support the hypothesis that there was a relationship between the arts instruction and reading improvement except in the area of reading readiness. The effect sizes ranged from  $r = .3$  to  $r = .54$  and the confidence interval spanned zero. For the reading readiness group with an average positive effect size of  $r = .25$ , the confidence interval ranged from  $r = .04$  to  $r = .48$  and did not span zero. In meta-analysis 2 the effect sizes were homogeneous, indicating that the studies were similar. The mean effect was  $r = .21$  and the confidence interval range was  $r = .03$  to  $r = .45$ , did not span zero and suggested that the effect sizes would likely be the same in another sample of like studies. The authors concluded that on the basis of the small number of studies found, there is only marginal support for their hypothesis (Burger & Winner, 2000).

Other questions remain after looking at this study, for example; What kind of arts instruction did they provide? How often was it used? How did it connect with reading instruction? What were the ages of the children? What were their reading abilities to begin with? What were the ethnicities of the students and were the schools urban, rural, or suburban? What criteria did the chosen studies have to meet? What skills, if any, might be transferable? Further studies addressing those questions are needed.

Overall academic achievement was researched in connection with children's clay models in students from kindergarten and 3<sup>rd</sup> grade. Bezruczko (1997) examined that connection in a 6 year longitudinal record of achievement test scores for one cohort of students at schools that did or did not provide visual arts instruction. In Study 1, the participants were 201 kindergarten age students and 3<sup>rd</sup> graders from four urban public schools that matched on school characteristics and neighborhood demographics. Two of the schools offered some visual arts education, one school emphasized arts learning including dance, drama, music, and visual arts, and the fourth school provided no arts instruction. The judges of the clay models produced by the children were three trained judges who rated the models for 13 different features including height, shape, clarity, texture, and details. The ratings were compared between grade levels and visual arts emphasis in the schools. Nationally standardized student achievement scores on the Iowa Tests of Basic Skills were compared for those with arts instruction and those without (Bezruczko, 1997).

The results claim to indicate that art-trained children produced better clay models that showed great detail, shaping, and position but not expressive qualities. Why were the models lacking in expression? The kindergarten children showed a more significant difference between arts trained and non-arts trained clay models. Often, the models created by the non-arts trained children remained 2 dimensional and laid flat on the

table, where the arts-trained children produced 3 dimensional models that stood in a vertical position. By the 3<sup>rd</sup> grade, there was less of a difference between the models of the non-arts trained and arts trained. Bezruczko (1997) claims that “some of the most important results from this research concern a pattern of correlations between features in clay models and elementary school learning” (p. 23).

To summarize, DeJarnette (1997) attempted to link drawing with writing to see if it would increase achievement and comprehension in sixth grade students. Although some of the results showed a positive connection between the two, the results overall were quite weak. Another study examined how the visual arts might aid students in reading. The study showed that the participants did become better readers through the course of the study. This could be further studied by conducting research that includes a wider range of students of various backgrounds. Burger and Winner (2000) also examined the links between visual arts and reading skills. Their meta-analyses did not show significant support for their hypothesis that the visual arts could increase reading comprehension.

### The Arts and Learning

The following studies attempt to answer the question: Do the arts make a difference and if they do, what kind of difference do they make? The studies analyzed in this section address the arts in curriculum integration (Schubert & Melnick, 1997), the connections between the arts

and learning (Darby & Catterall, 1994) and arts and cognition (Fineberg, 1991), the differences an arts education might make (Luftig, 1994), talent development through the arts (Oreck, Baum, & McCartney, no date), learning in and through the arts (Burton, Horowitz, & Abeles, 1999), using art processes to enhance academic self-regulation (Baum & Owen, 1997), and the possible connections between study in the arts and SAT scores (Vaughn & Winner, 2000).

In 1997, Schubert and Melnick researched the arts in curriculum integration. They sought to answer if including the arts as an integrated component of the regular school curriculum would have a significant impact on students in typical elementary, middle, or high schools. One is left to speculate about how the researchers might define “significant impact” and “typical schools.”

The study participants included 11 school districts in Pennsylvania who participated in a federally funded program to create an interdisciplinary curriculum. The 11 districts consisted of rural, urban, and suburban settings and included elementary, middle, and high schools. The study did not address socio-economic status or ethnicities of the students. The focus was on the integration of the arts, history, civics, English, and geography with each district having one or more of the arts (including dance, visual arts, music, or theater) as the focal point of the unit or program they developed. Duration lasted from a few weeks to an entire school year. Data was gathered from in depth,

structured interviews with 70 teachers and administrators and 25 students over a one year period (Schubert & Melnick, 1997). The researchers were not clear whether the 70 teachers and 25 students were from each district or if that was the entire sample. If the students were from one district, which one and why were they chosen to represent everyone? Interviews were conducted and transcribed for further analysis.

The findings indicate that there was an increase in students' self-concept and positive attitude toward school. Those results were substantiated by the teachers and administrators. However, there is no mention of pre or post "testing" of any kind; just the interviews and our acceptance of the reports from the researchers, teachers, and administrators. The reports included stories of students suddenly blossoming when the arts were introduced in the curriculum. What exactly did they mean by blossoming? Could the students have blossomed for reasons other than experience with the arts? It seems entirely possible. The authors go on to discuss a particular student in high school who had a bad reputation among staff and other students and once he entered the art integrated course of study, his attitude changed. He was able to share his knowledge and speak intelligently using words like "analysis" and "interpretation" which impressed his teachers and peers. He became respected and, in turn, he made connections between the arts and his academics and ultimately, became

a better student (Schubert & Melnick, 1997). That is a very nice example but it is only one student out of 17 school districts.

The researchers also noted that there was a decrease in absenteeism with one school marking a 34% decrease in absenteeism for the same group of students during the previous school year. The students were overheard saying things like, “we hate to miss school” and “we don’t like when subs come in.” Many teachers reported higher quality work which is a vague statement. Teachers also commented that students were more likely to comment during class discussions with more authority reflective of knowledge gained from related understanding of the topic. The authors point out that it is too early to tell whether there will be long term gains in student achievement but they have gained a greater understanding of content in all related subject areas (Schubert & Melnick, 1997).

In June of 1995, the National Endowment for the Arts (NEA) released a research compendium of studies titled, *Schools, Communities, and the Arts: A Research Compendium*. The following studies were included in that compendium. The first study is called “The Fourth R: The Arts and Learning” (Darby & Catterall, 1994). The authors reviewed research and practices in arts education. Their results derive from a blend of theory, research, and practice that they claim makes a strong argument for integrating the arts into a regular school curriculum, especially students deemed at-risk. The authors reviewed four programs:

Arts PROPEL, Discipline-Based Art Education (DBAE), Different Ways of Knowing, and the Shakespeare Education Programs. Darby and Catterall (1994) concluded that art activities can help students find satisfaction and success in school, two essential elements for the learning process. They also point out that the arts give minority cultures the opportunity to express themselves fully and help promote better understanding and less prejudice.

The authors use Gardner's theory of multiple intelligences (1983) to back up their research. Gardner stressed the importance of instruction in schools appealing to the many types of intelligences human beings possess. He argued that traditional schooling supports only the logical-mathematical and linguistic types of intelligences. The authors claim that through the use of the arts, students with other types of intelligences can be reached. The authors also use support from Eisner (1982) who claimed that learning is best acquired through process and the use of imagination. Emphasis on the arts, claimed Eisner, would result in a better system of education that would be better equipped to serve a diverse student body with various learning styles and needs. One major concern of this review of research and practice in arts education is that the authors' conclusions have the potential of being quite biased due to their strong arts advocacy positions. However, that does not mean their conclusions should be dismissed. Certainly, Gardner and Eisner made valid claims.

Hamblen (1993) examined the theories and research that support art instruction for instrumental outcomes. She did find support for many advocacy claims however she cautioned educators not to exaggerate the potential academic benefits of an arts curriculum. She warned that unless the claims were based in sound theory and research they could potentially weaken the case. She also warned that arts education sometimes becomes valued solely for its use in other subject areas. On the one hand, she advocated for art integration while holding steady to the “art for art’s sake” argument.

Trusty and Oliva (1994) reviewed 57 studies that attempted to connect the arts, academic achievement, and self-concept. They claimed to have found sufficient evidence that artistic creation raised levels of self-concept as well as aided in language acquisition, cognitive development, critical-thinking ability, and social skills. Fineberg (1991) looked at the relationship between the arts and cognition in the Arts Partners program that began in 1984 in New York City. The researchers collected several types of qualitative data; teachers’ and artists’ reports on student use of critical thinking skills; student work; student interviews; concrete examples taken that demonstrated proof of higher-order thinking and problem solving skills. The findings of the study were not conclusive but the study did provide a starting point for evaluating the connections between arts education and critical thinking skills (Fineberg, 1991).



From the SPECTRA+ Program is a study entitled, "The Schooled Mind: Do the Arts Make a Difference?" SPECTRA+ is a four year model arts education initiative that yielded valuable data in the area of the arts and academic achievement. In the research compendium, Luftig (1994) studied the program's effects on students in five areas. Two schools participated with 615 students in grades two, four, and five. Three groups were formed; SPECTRA+, modified control group, and a full control group. The modified group engaged in a whole language program that did not include the arts while the full control group participated in the traditional curriculum. The study tested self-esteem using the Culture-Free Self-Esteem Inventory, locus of control using the Bialer-Cromwell Locus of Control Scale, creative thinking using the Torrance Tests of Creative Thinking, appreciation of the arts with the Arts Appreciation Scale, and academic achievement using the Iowa Tests of Basic Skills and Stanford Achievement Tests. The results were reported by program type, grade, and gender. Both pre and post tests were administered (Luftig, 1994).

The SPECTRA+ program studies did run into some problems when gathering results. There were inconsistencies in the standardized tests used and not all children were tested consistently. However, the reported results showed that creative thinking and appreciation of the arts appeared to strengthen through the SPECTRA+ program. Gains were made in total reading scores, reading vocabulary, and reading

comprehension in comparison to the full control group. On the other hand, there were no improvements shown in self-esteem levels or locus of control. Luftig (1994) recommended that the program be continued and expanded.

In the research compendium, *Champions of Change: The Impact of the Arts on Learning*, released in the year 2000, the following studies were gathered. Oreck, Baum, and McCartney (no date) explored the development of artistic talent for urban youth and Burton, Horowitz, and Abeles (1999) considered the implications of learning in and through the arts. In the study by Oreck, Baum, and McCartney (no date), the study participants were students that were selected from a group of 400 students who were all graduates of the Young Talent Program in New York City. Twenty three were ultimately chosen for participation. The sample included 12 girls and 11 boys and the racial make-up was 16 African Americans, 5 Latinos, and 2 Caucasians. SES was not available for all the families, however, approximately 19 of the 23 students were or had been eligible for free lunch in school (Oreck, Baum, & McCartney, no date).

The study was a longitudinal multiple case study in which a variety of data were collected over the course of a two year study. “These multiple perspectives allowed for triangulation of data that could confirm or reject hypotheses” (Moon, 1991). The cases included interviews with students, arts instructors, and members of the ArtsConnection staff.

They also used field observations. A summary of key findings was provided which include the following: 1) a large majority of students in the study achieved high levels of success in the arts in talent development, academic progress, and personal development; 2) students reported being totally absorbed in the material presented; 3) strengthened self-regulation skills; 4) stronger identities; and 5) increased resilience. The authors concluded that the arts had clearly taken a central place in the education and identity of the students involved, despite whether or not they were looking for a career in the arts (Oreck, Baum, & McCartney, no date).

The findings from the research disclosed many interrelated factors and outcomes that were common across cultural groups and SES levels. However, the fact that the sample was chosen from students in a specialized program does raise concerns about how generalizable the results could be. The students in the program were already involved in the arts which could sway the findings in their favor.

In the study conducted by Burton, Horowitz, and Abeles (1999) the artistic experiences of over 2,000 students in public elementary and middle schools were examined. The goals of the study included looking at what cognitive, social, and personal skills were developed through arts education and if the arts had an effect on learning. The study also attempted to find what particular conditions in schools supported that

learning. The authors examined learning in connection with the arts of dance, music, drama, and visual arts.

Several different tests were administered including the Torrance Test of Creative Thinking, the Self-Description Questionnaire, and the School-Level Environment Questionnaire. The researchers also designed and administered their own tests. One such test was the Teacher Perception Scale which measured classroom teachers' opinions of individual students within the four dimensions of expression, risk taking, creativity/imagination, and cooperative learning.

The results of the study claims to offer empirical evidence that learning through the arts is “complex and that it is most successful when supported by a rich, continuous, and sequenced curriculum” (Burton, Horowitz, & Abeles, 1999). They also concluded that the arts aid in the development of critical thinking skills and overall learning capacity. One of the many strengths of this study is the authors' careful selection of schools included in the study and the range of ages and ethnicities of the students. The schools they examined were located in various parts of the country and involved various levels of socio-economic status. That kind of thoroughness makes the results more generalizable to a wide range of students.

Another study that looks at using art processes to enhance academic self-regulation was conducted by Baum and Owen in 1997 and published in the research compendium, *Critical Links: Learning in the*

*Arts and Student Academic and Social Development* (2002). The participants were 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> graders from New York City classrooms. The students were already interested in the arts and were participating in a talent development program. The students were observed as they participated in two instructional methods with the same content. One method was taught in the traditional way and the other method integrated the arts. The observers documented self-regulatory activities such as the ability to pay attention, the ability to persevere, problem solving skills, self-initiation, asking questions, taking risks, cooperation, utilizing feedback, and overall preparedness (Winner, 2002).

The results of the study claim to show a significant higher number of self-regulatory activities in students when the arts are integrated in the curriculum as shown by correlated *t* tests ( $p < .001$ ). No significant differences were found in content learning between arts integrated curriculum and non-arts curriculum ( $p = .26$ ). Corbett (2002) commented on the study by saying, “in order for this study, and others like it, to have a high degree of significance for schools, it would have to explore in more detail the differences among the arts programs the different groups of students in the study experienced” (p. 65).

This study raises the same concerns as a previous study by Oreck, Baum, and McCartney (no date) in which the students studied already had an interest in the arts. It seems obvious that students who are already motivated and stimulated by the arts would respond favorably to

a curriculum rich in art expressiveness. It would be interesting to administer this study to students who felt negatively toward the arts.

Overall, the studies that attempted to link the arts with higher levels of learning were interesting but many lacked substantial evidence linking the two. Also, many of the studies included in this section were conducted by researchers who had a vested interest in proving that the arts do indeed improve the learning capacities of public school students.

### Summary

Chapter 3 critically reviewed the literature in several areas: the connections between academic achievement and self-concept, academic achievement and drama/theater/role-playing, academic achievement and the visual arts, and the connections between the arts and learning.

Chapter 4 will conclude with summarizing the main focus of the paper; is there evidence to link academic achievement, increased self-esteem levels, and education in the arts? It will also summarize the findings from chapter 3. Finally, chapter 4 examines implications for the classroom and implications for further research.

## CHAPTER 4: CONCLUSION

### Introduction

Arts education has endured a long and precarious history in the United States. At times it has been heralded for its importance in the classroom only to lose clout a generation later. Currently, the debate is not about whether to include the arts but *how* to include the arts. Should the arts be integrated into the curriculum and used to enhance learning in other subjects or should it be kept separate and enjoyed for its own value? DBAE seems to have been more widely accepted with many schools across the country implementing their philosophy of arts education. However, quietly behind the scenes, many schools are not only teaching the arts according the ways of DBAE but using them to increase participation and comprehension across the curriculum.

Hobbs and Rush (1997) admit that there is enthusiasm for school reform but add there are still “differences of opinion on what constitutes excellent student performance, teacher performance, assessment, and other practices [that] continue to vary widely” (p. 357). Yet, the fact that a debate exists provides an impetus for change and an environment in which to keep the conversation going.

### Summary of Findings

Chapter 3 was divided into four sections. It began by examining research that attempted to link self-concept with academic achievement. The next section addressed the possible relationships between academic

achievement and study in the arts of dramatization, theater, role-playing, music, and dance. The third section analyzed studies that connected visual arts with academic achievement. Finally, the relationship between the arts and learning is explored.

For studies that examined self-concept and academic achievement the results were varied. McInerney's (2001) results did not adequately explain why the Aboriginal students did not perform as well as the non-Aboriginal students. Byer (2000) found a positive relationship between academic self-concept and academic achievement. Craven, McInerney, and Marsh (2000) concluded that their results supported the hypothesis that children with low academic self-concept exhibited less persistence and higher distractibility than those who reported high academic self-concept.

The next group of studies examined academic achievement and the arts of dramatization, theater, role-playing, music, and dance. In the area of role-playing, Fink (1976) found that there were strong implications that structured, teacher directed role-playing supported learning. He suggested that simply allowing children to free-play or even participate in normal kindergarten activities did not yield the type of positive results that a well-structured, teacher led activity in imaginative play could provide.

Pellegrini and Galda (1982) concluded that the children that engaged in thematic-fantasy play had higher levels of comprehension



than those who did not. Page (1983) found that the children who participated in dramatization were more involved in the story and their comprehension of main ideas, character identification, and character motivation was stronger. DuPont (1992), whose study was similar to Page's, also found greater comprehension among the group of students who participated in the dramatization of a story. Page's study suggested that the use of dramatics was most beneficial for younger students who are just beginning to read, Dupont showed that the use of dramatics worked in a class of fifth graders who were in remedial reading programs, and Pellegrini and Galda showed the benefits of dramatics on children from grades K-2.

Three studies (Gourgey, Bosseau, & Delgado, 1985; Kardash & Wright, 1987; Podlozny, 2000) revealed results that showed many advantages for using drama/theater/role-playing in aiding communication, verbal skills, and attitudes.

Four studies (Vaughn, 2000; Kennedy, 1998; Bilhartz, Bruhn, & Olson, 2000; Butzlaff, 2000) examined the links between self-esteem, academic achievement, and music. Kennedy found that students who learned to give solo performances improved in self-esteem levels. The other three studies did not reveal significant findings linking music with academic achievement or higher levels of self-esteem.

In the studies that examined the art of dance in connection with higher reading levels and creative thinking, Rose (1999) found that the

children who were involved in a program called Basic Reading through Dance improved significantly on all measures of the reading test than those who did not participate in the program. Minton (2000) found that in the categories of elaboration, originality, and abstractness were higher when connected with dance instruction.

Three studies (DeJarnette, 1997; Wilhelm, 1995; Burger & Winner, 2000) examined the links between academic achievement and the visual arts. DeJarnette's results showed that students received higher scores for content knowledge when they were able to express themselves through drawing as well as writing. Wilhelm and Burger and Winner found that the participants in their studies became more sophisticated readers through the course of a nine week session that coupled reading with visual arts.

The last section in chapter 3 considers studies that examine the arts in relation to learning ability. The findings in the study conducted by Schubert and Melnick (1997) indicated that involvement in the arts led to an increase in students' self-concept and positive attitude toward school.

Trusty and Oliva (1994) reviewed 57 studies that attempted to connect the arts, academic achievement, and self-concept. They claim to have found sufficient evidence that artistic creation raised levels of self-concept as well as aiding in language acquisition, cognitive development, critical-thinking ability, and social skills. Luftig (1994) studied the SPECTRA+ program which was a four year model arts education

initiative that yielded valuable data in the area of the arts and academic achievement. However, the reported results showed that creative thinking and appreciation of the arts appeared to have strengthened through the SPECTRA+ program.

The study conducted by Burton, Horowitz, and Abeles (1999) explored the development of artistic talent for urban youth and the implications of learning in and through the arts. The results of the study found empirical evidence that learning through the arts is complex yet successful when coupled with a rich, continuous curriculum. Baum and Owen (1997), examining the use of art processes to enhance self-regulation among students, found a significantly higher number of self-regulatory activities in students when the arts are integrated in the curriculum.

### Classroom Implications

Overall, the studies reviewed in chapter three support the case that arts education leads to higher levels of academic achievement. Many schools have begun to reform traditional school curriculum by implementing better and more effective curricula and teaching methods and the academic benefit of including a strong arts education component is supported by current research.

One major implication of the research reviewed in this paper is that teachers should incorporate some form of the arts into their curriculum, not only as a separate subject, but also embedded within the

disciplines of mathematics, science, social studies, and reading and writing. The arts allow for a range of learning styles to be recognized, strengthened, and valued.

A second implication of the research reviewed here shows when reading is combined with the use of the arts such as drama, role-playing, theater, music, and drawing, comprehension and various reading skills are strengthened. In addition, mathematical reasoning can be enhanced through the study of music. Self-esteem levels also increased when solo performances with musical instruments is taught and implemented.

Further implications show that the arts can figure prominently in assessment strategies. Evidence of learning does not always have to depend on rigorous tests in which memorization is necessary or in a written essay that can be detrimental to those students who do not write well. Assessment can take on a whole new look if final products could consist of a choice of presenting acquired knowledge through the use of drawings, portfolios, performances, music, or dramatization. This would be a way to access all the areas of intelligences and learning styles resulting in a more equitable, democratic learning environment.

#### Implications for Further Research

Many researchers emphasize the need for further research to be conducted in order to confirm the results of the findings in the most recent research compendium, *Critical Links: Learning in the Arts and*

*Student Academic and Social Development* (2002). Deasy (2002) the director of the Arts Education Partnership stated the studies in the compendium “suggest that it is a matter of equity that we make high quality arts programs part of the education and development of every young person” (p. 2). He stresses the need for more research that will reveal the types of arts instruction that “will close the achievement gap for students who are falling behind” (Deasy, 2002, p. 2).

According to Zimmerman (1995), chair of the National Art Education Association (NAEA) and released in *Schools, Communities, and the Arts* research compendium, more visual arts research is needed in nine areas:

- Demographics
- Conceptual issues
- Curriculum
- Instruction
- Program and instructional evaluation
- Instructional settings
- Student learning
- Teacher education
- Technologies

Since the NCLB act was signed in 2001, the arts were named as part of a core curriculum.

It may be time to make that a reality by incorporating the arts in the best ways possible. By looking at current research and implementing further research studies, the arts might find their rightful place in public school curriculum.

Further research could also study those schools that use the arts as the main focus through which all other subjects are taught. How successful are those schools in raising levels of academic achievement and the self-concept of their students? It would be beneficial also to acquire samples of students who feel they are not good in art and see if they benefit from an education rich in the arts. When given the opportunity to express themselves in various ways perhaps their view of the arts will change and they will discover hidden talents.

I feel the case for arts inclusion is strong especially when used in tandem with other subjects. The arts open up new possibilities not only for learning opportunities but also for assessment strategies. Perhaps those students who are often left behind because of struggles with reading or writing could be propelled further by being offered the opportunity to produce evidence of learning through a form other than the traditional ways of testing. By using the arts in this way, classrooms become more equitable and productive for all public school students.

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