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ABSTRACT

Human potential includes at least seven intelligences--only two, linguistics and mathematics/logic, typically are taught in elementary schools. Researchers in the field of multiple intelligences believe the arts represent the other intelligences, i.e.: music, spatial reasoning, kinesthetic, interpersonal, and intrapersonal. A study explored the relationship of arts education to emotional literacy, which includes interpersonal and intrapersonal intelligences. Much of an individual's success depends on the abilities generated within these latter two intelligences. Although schools have typically attempted to change undesirable behaviors through social programs, a growing body of evidence indicates a lack of success with this approach. Instead, arts education is being proposed by some social scientists as a means of developing positive self-esteem, self-expression, trust, self-acceptance, and acceptance of others. The positive effects of arts education on emotional literacy are observable but often not measurable. This study compared elementary school student responses at one school providing arts education and one that did not. A survey was administered to second through sixth graders at two West Virginia schools. The data revealed that students with education in the arts make more emotionally literate decisions and are more aware of their feelings and of the feelings of those around them. The judgment of educational systems to cut funding for arts education has deprived children of access to intelligences of equal importance to those currently taught in schools. (Contains 2 tables of data and 43 references). (Author/BT)

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THE EFFECTS OF ARTS EDUCATION  
ON EMOTIONAL LITERACY

A Thesis

Presented to

The Faculty of the Master of Arts Degree Program  
Salem-Teikyo University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

SO 029 865

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## **Abstract**

Human potential includes at least seven intelligences: only two, linguistics and math/logic, typically are taught in elementary schools. Researchers in the field of multiple intelligences believe the arts represent the other intelligences: music, spatial reasoning, kinesthetic, interpersonal, and intrapersonal. This thesis researches the relationship of arts education to emotional literacy, which includes interpersonal and intrapersonal intelligence.

Much of an individual's success depends on the abilities generated within these latter two intelligences. Schools have typically attempted to change undesirable behaviors through social programs. A growing body of evidence indicates a lack of success in this approach. Instead, arts education is being proposed by some social scientists as a means of developing positive self-esteem, self-expression, trust, self-acceptance, and acceptance of others. The positive effects of arts education on emotional literacy are observable but often not measurable.

This research study compared elementary school student responses at one school providing arts education and one that did not. The data revealed that students with education in the arts make more emotionally literate decision and are more aware of their feelings and the feelings of those around them. The judgment of educational systems to cut funding for arts education has deprived children of access to intelligences of equal importance to those currently taught in schools.

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## Chapter 1

### Introduction

A limited notion of intelligence may lead educators to ignore a range of skills and abilities that serve students well in pursuing success in life. Gardner's theory of multiple intelligences proposes that there are several intelligences besides the math/logic and language addressed in public school education. An individual's success often is based on intelligences other than traditional academic skills (4:73). The connection of arts education and those lesser acknowledged intelligences was explored by the Missouri Arts Education Task Force. That organization showed that the arts improve a child's academic achievement by enhancing test scores, attitudes, social skills, and critical and creative thinking (38:4).

Despite proven academic benefits from arts education, in 1992 the West Virginia legislature ceased funding instruction of the arts in the state's elementary schools (25:3). Individual counties and schools within counties have dealt with this dearth of funds in many ways. Weberwood, a Charleston, West Virginia, elementary school, through its parent/teacher organization, funds a full-time art teacher and supplements the half-time music teacher so that the position is also full-time.

Weberwood's inclusion of arts education in its curriculum offers an opportunity to study the affects of arts education on an elementary age child's emotional intelligence. The major purpose of this study will be to investigate the premise that education in the arts increases an elementary-age child's emotional intelligence. Using the school that includes arts education in its curriculum, the study will compare Weberwood students'

responses to student responses in a school whose curriculum does not include arts education.

Emotional intelligence, as defined by Mayer and Salovey, includes five domains. These domains include knowing self, managing emotions, motivating self, recognizing emotion in others, and handling relationships (5:43-4). This study will involve surveying students at Weberwood and at a control school which, as is representative of other West Virginia schools, does not fund arts education. There is anecdotal evidence to indicate a positive correlation between art education and emotional intelligence but little research on this issue.

### **Assumptions**

Assumptions of the study include that the population is adequate in size, that Weberwood Elementary in Charleston, West Virginia, teaches the arts and the control school does not, and that the instrument devised to query the students' responses to emotional issues is valid. A simple random sample, high sample size, normal distribution, and normal population are also assumed.

### **Limitations**

The limitations of the study are that the survey relies on the honesty of the respondent because the respondent is not under pressure when answering survey questions but is being surveyed to determine his/her predicted response in a time of emotional stress.

### **The Definition of Terms**

**ACT** is an acronym for Advanced Core Test, an instrument used in the college admission process to measure academic performance.

**Affective education** values the child's emotions and attitudes in the learning process.

**Domains** are organized sets of activities within a culture.

**Emotional intelligence** includes five domains: knowing oneself, managing emotions, motivating oneself, recognizing emotion in others, and handling relationships (1:43).

**Emotional literacy** is the quality of having emotional intelligence.

**Empathy** is the ability to sense how someone else feels, to read and respond to unspoken feelings.

**Field** is a set of individuals and institutions that judge the acceptability and creativity of products fashioned by individuals within established or new domains.

**Intelligence** is the biological and psychological potential to learn.

**Intelligence quotient (IQ)** is a number meant as a measure of a person's intelligence. It is obtained by taking the ratio of a person's mental age as measured by a standardized test, and the person's age in years, and multiplying the ratio by 100.

**Interpersonal intelligence** is the ability to understand other people: what motivates them, how to work effectively with them, and how to lead or follow them.

**Intrapersonal intelligence** is knowing self.

**Management of feelings** involves controlling impulses, soothing anxiety, and having appropriate anger.

**Mindfulness** is the quality of attention that takes in happenings with awareness but impartiality.

**Motivation** is zeal, persistence, and optimism in the face of adversity.

**Multiple intelligences** are areas of different human potentials of abilities. They include language, math and logic, spatial reasoning, music, movement, interpersonal and intrapersonal intelligences.

**Project Zero** is a group of individuals at Harvard University who for the past twenty years has been examining the arts as cognitive domains. They assert that the arts represent the six other intelligences besides linguistic and math/logic.

**Prosocial** refers to behavior positively regarded by society, exhibiting emotionally intelligent responses.

**SAT** is an acronym for Scholastic Aptitude Test that is process to measure academic achievement.

**Self-awareness** is knowing what one feels and trusting self to make wise decisions for life's satisfactions.

**Social skill** is handling emotional reaction in others, interacting smoothly, and managing relationships effectively.

## CHAPTER 2

### Review of Related Literature

#### Introduction

##### Elements of Emotional Intelligence

An individual's intelligence provides the basis for creativity. A child will be most creative in the fields where he has the greatest strengths. Gardner proposed eight different kinds of intelligences. These include linguistic, logical (4:73-4), musical (4:75), spatial (4:75-6), kinesthetic (4:77-8), interpersonal, and intrapersonal (4:78-9).

Intelligence quotient or IQ tests assess only two of Gardner's eight intelligences yet they may be used as sole predictors of a child's potential (6:296-7). Goleman observed that an individual's IQ predicts only a small part, from 4 to 20 percent, of success. He reported that emotional intelligence predicts about 80 percent of a person's success in life (29:12).

Emotional intelligence includes Gardner's interpersonal and intrapersonal intelligence. Salovey and Mayer outlined the elements of intrapersonal intelligence. These elements include being self-aware - knowing one's emotions; handling or managing feelings - controlling distress and gloom, having hope; and motivating oneself -delaying gratification, controlling impulse in the service of a future goal. Interpersonal intelligence involves recognizing emotions in others - from which empathy arises, and handling relationships, which might be perceived as managing emotion in others (5:43).

### Mechanics of Emotional Response

The responses in emotional life according to Goleman come from an area of the brain called the limbic system, specifically the amygdala. Millions of years ago the neocortex (the thinking brain) was added. The primary focus of the limbic system is response to delight, lust, fear, or anger. This alarm system works in a few milliseconds, much more quickly than the thinking brain. It takes charge of the response. The more connections between the limbic and neocortex, the more emotional responses are possible. The emotional reactions, after being sent from the amygdala, are organized by the prefrontal cortex. While one may not control the emotional response one has or when one has it, one can determine how long it lasts. That is voluntary (5:17-8).

The basic skills of this emotional intelligence - self-awareness, managing intense feelings, and empathy, as observed by Goleman - are governed by this limbic circuitry. A premise of emotional literacy is that these critical skills become second nature when repeated. While the circuitry of emotional response is shaped by chance through childhood experience, the brain is malleable until age fifteen to sixteen. Children, then, can learn healthy emotional responses, ones which strike a balance between the thinking and feeling parts of the brain and lead to a manageable and productive life. The goal is emotional literacy, the development of both mind and emotion and maintenance of their equilibrium (5:27-8).

### Consequences of Emotional Intelligence

Knowing how to handle emotions, upsetting feelings or impulses is the root of emotional intelligence (29:7). In a longitudinal study begun in the 1960's, Mishel explored the importance of the emotionally literate trait of self-regulation in a Stanford University preschool setting. Preschool children were told they could have a single treat now; but if they could wait for the experimenter to run an errand, they could have two when he returned. The children who were able to delay gratification developed over the years into more socially competent, self-assertive, and personally effective adolescents than the children who impulsively grabbed the one treat, the marshmallow. Mishel noted that fourteen years later the preschoolers who waited for the second marshmallow scored 210 points higher on the SAT than did their fellow students who lacked impulse control (5:81-2). These findings hold implications for today's stressed youth.

### Need for Emotional Literacy Skills in Children

According to Elias, today's children face more choices than ever before. Stress within the family and economic obligations have vested children with more possibilities of exercising independence but also have left them with greater frustration. This plight burdens children's age-appropriate capacity for sound judgment (11:56).

Researchers including Compas who have studied coping, an emotional skill which involves managing feelings and having hope, have observed that when problem-focused coping skills are developed in childhood, they lead rapidly to emotion-focused coping

skills in late childhood and early adolescence (40:23). McIntyre and Dusek noted that prosocial coping is a healthy emotional response that helps a child control his social world (20:309). Cognitive coping using awareness of self and others includes efforts to restructure occurrences by trying to grow from the experience or by accepting it. This problem solving coping strategy keeps one from being consumed by an event (21:502).

As Mishel's experiment showed, success now and as an adult calls for life skills and social and interpersonal intelligence as much as it does for academic ability. Young people enter the community of responsible citizens ready to take on a variety of social roles. To do this effectively, they must possess critical thinking and problem solving skills (11:56).

### Implications for Education

Gardner, who introduced the multiple intelligence theory which includes the development of academic and social skills, felt that educators are in the best position to determine the uses to which the multiple intelligences theory can and should be put to develop the individual. He suggested that schools cultivate skills and aptitudes that are valued in the community and society and that a variety of methods be used in approaching concepts or subject matter (12:206). Csikszentmihalyi, Rathunde, and Whalen believed that all children are talented in one way or another, even though their gifts may not be ones formally recognized by teachers or school curricula. Education, they indicated, should be individualized to maximize the development of each student's potential (2:5).



## **Current Trends Promoting Emotional Literacy**

### **Social Programs**

A variety of courses offered in today's schools have their roots in the affective education movement of the 1960's and 1970's which advocated honoring abstract concepts, such as, the child's attitudes, values, and emotions. However, Goleman believes that experience-based learning (which affects brain circuitry) teaches psychological lessons more successfully than abstract concepts. One avenue early educators did not explore was that emotional and social skills could be educated (5:262).

Social programs for youth have been developed in an attempt to educate social and emotional skills. Current social programs for young people often are aimed at preventing a host of social problems from teenage pregnancy and dropouts to substance abuse and violence. The programs are in response to findings by researchers such as those in Montreal who found that boys who are impulsive in kindergarten are three times as likely as others to be in trouble for fighting and to have a criminal record as teenagers. Other findings show that impulsive grade school girls do not become violent; they get pregnant at a rate of about three times their peers. Leon of the University of Minnesota observed that girls who at ten years of age were confused about the difference between boredom, depression, anger, and hunger - an inability to recognize and name emotions - were at a much higher risk as early adolescents of developing symptoms of eating disorders in reaction to emotional storms (5:248).

According to Achenbach and Howell children who in grade school have social dyslexia, such as misreading interpersonal clues, have three times the rate of school

dropouts as their more socially adept peers. Social and emotional deficits contribute to drug abuse. Heroin and cocaine use has tripled in white youth in the past two decades; in black youth it has increased by thirteen times (5:232). Homicide has become the third leading cause of death for children between the ages of five and fourteen and is the leading cause of death for African American young men (42:386).

Wassef and his researchers looked for effective programs to address these students' emotional distress and behavioral problems. They observed that modern schools have attempted for more than two decades to prevent these students' emotional distress and behavioral problems without little success. The magnitude of the issue demands attention (37:764). School management and mental health intervention have had limited success in halting the increase of emotional difficulties and behavior problems in today's schools (37:774). Additionally, Boss noted that there is sufficient evidence showing that moral intelligence cannot be equated with logical/verbal intelligence. Just because a young person understands ethical issues does not mean he will act ethically (9:413).

### The Challenge to Educators

Because social programs have failed to alleviate children's emotional distress and behavioral problems, teachers face additional challenges in the classroom. Kessler writing in "A Great Idea in Education" commented that when a teacher begins work with today's young, the child's capacity to learn is no longer a given; that "abilities such as listening, concentrating, and a free flow of imagination, as well as the very desire to

learn, have been seriously impaired during these last few decades"(19:1). Foshay described teaching as bringing to consciousness (41:50). Teachers are more eager to go beyond traditional methods to seek ways which help students develop their potentialities and reawaken the motivation to learn as well as understand, express, and control their own feeling and relate effectively to others (19:1).

Weissberg advocated capitalizing on what the schools already do: promoting the personal and social development of children. He questioned the purpose of suspending disruptive students from school and transferring the violence from the school into the community. Rather he proposed that schools create programs to support children's full development socially and emotionally (33:33). Eisner commented that providing a place for the arts in the schools may be one of the most important first steps to be taken in bringing about genuine school reform. Art education provides an opportunity for active learning in a problem-centered, cross-disciplinary, multi-cultural curriculum that encourages evaluating alternatives, taking risks, thinking creatively, and making decisions (17:579).

#### Arts Education, Not Social Programs, Foster Emotional Literacy

Surace also advocated promotion of social and personal development in children through arts programs. Arts education is a way not of solving delinquency, drug, and dropout problems but of avoiding them by motivating students through creative activities (36:612). Observing that individuals do not progress when constantly reminded of their failures in the past, Mertes, a volunteer in the arts and crafts program at the Illinois Youth

Center, a correctional facility for teenage boys, felt the arts program she worked in built self-confidence, cooperation, patience, the ability to trust one's own strengths and the opportunity to believe in other people (22:57).

Oddleifson stated that the arts enable children to achieve academically far beyond current expectations. These same children respect their peers and treat them well. Education in the arts results in children's motivation to learn, to enjoy coming to school, and to work and succeed. Additionally, rapport between students and teachers improves (26:447).

Anecdotal evidence comes from Ron Berger, a sixth grade teacher in western Massachusetts, who reported that the outcome of using an arts-integrated approach to instruction had a marked effect on student understanding, investment, and standards. As a whole, students not only did well on standardized measures, but more importantly demonstrated real-life measures of learning. They became capable, confident readers, writers, and users of math. They also became strong thinkers and workers who treated others well (26:447).

Berger's observations are confirmed by those teaching in the Artists in Residence Program of the Music Center of Los Angeles. Experts there observed that the skills learned in the program translated into improved written and oral communication, better grades in academic courses, and increased problem solving skills. Children learned, maintained, and generalized the knowledge and skills the artists demonstrated (38:2).

Researchers working for over two decades with Howard Gardner's Harvard Project Zero concluded that the arts represent the five intelligences, which are not taught

in schools - verbal and math/logic. Project Zero recognized and developed three principles. The arts are cognitive domains that stimulate many forms of learning. They involve long-term open-ended programs that incorporate critique and reflection on the student's own work. Arts education can enrich the community by building pride and ownership and involving mentors (26:447).

Psychologist Abraham Maslow believed that the arts are much closer to the core of education than most subjects and David Rockefeller echoed that notion in 1977 when he stated, "The arts are fundamental to the learning process"(10:31). Geohegan commented that the arts, properly taught, are basic to individual development, since they, more than any other subject waken all the senses (13:458). Oddleifson also observed that through the arts, children connect with a perceptive reality by learning to use different symbol systems like lines of drawing or musical notes. For many students these systems are more real than the constructed reality on which academic topics focus (26:450). According to Eisner, those who manage human relationships well, who draw, dance, paint, or sing well, do their thinking within the medium in which they work (10:593).

Scientists have reiterated the value of the arts as recounted by Oddleifson in his conversation with Vassar College's Morton Tavel. A physicist, Tavel, stated the belief that the future of the sciences is dependent on the arts. Albert Einstein defined the aim of science as connecting the intellect with the senses - this is what aesthetic awareness does. Eugene Ferguson, historian for Science magazine expressed,

"Pyramids, cathedrals, and rockets exist not because of geometry, theories of structures or thermodynamics, but because they were first a picture - literally a vision - in the minds of those that build them" (26:448).

## **Implications of Arts Education**

### **Academic Implications**

The College Board Profile of SAT and Achievement Test Makers also reported that education in the arts improves a child's academic scores. Students with course work or experience in the arts scored fifty-nine points higher on the verbal portion of the SAT and forty-one points higher on the math portion of the SAT than students with no coursework or experience in the arts. Students with four years of arts education scored one whole point higher in math and also one point higher in verbal on the ACT than did students with no instruction or experience in the arts (25:3).

The consequence of arts education on academic scores was observed in Sampson, North Carolina, where two years in a row standardized test scores rose and the only change in instruction was the addition of arts education. The National Center for Education Statistics reported that grade point averages for students who concentrate in the arts are higher than those of the general school population(18:603). This finding was consistent with the results of the Mishel longitudinal "marshmallow" study (5:82). Schools that have an extra teacher in the arts registered male student self-esteem 5 to 10 percent higher than schools which did not have the additional teacher (18:603).

Education in the arts stresses the value of higher-order thinking, risk-taking, collaboration, and creativity. These elements of aesthetic education achieve several of the national education objectives for the year 2000. The arts also help keep children in school thereby reducing the dropout rate, offering challenging subject matter, and providing a disciplined environment (18:602).

Creating artwork, that is art in a broad sense: drawing, movement, or music, is a familiar and comfortable way of expressing understandings as well as exercising imagination. Mickey Hart, drummer for the "Grateful Dead" related in his book, *Drumming at the Edge of Magic*, "My imagination has always been fed by sound and by that higher craft of sound, music. I have always been synesthetic, which means I see sound and hear images." Public school harbors many "Mickey Harts" who without education in the arts will lose the best opportunity to express themselves (9:623).

Plato said that music "is a more potent instrument than any other for education" (3:52). Music, as it is now known, trains the brain for higher forms of thinking. New research in neurobiology revealed that young children who were given weekly piano lessons and daily group singing lessons dramatically improved the type of intelligence needed for higher level math and science. In this study, titled *Music and Spatial Task Performance: A Causal Relationship*, a 46 percent boost in spatial reasoning IQ scores resulted from eight months of traditional music lessons (32:1). According to Langer, music has the power to be "true" to feeling in a way which language cannot. Its forms convey an ambivalence that words cannot. It can articulate feeling. Imagination responds to music in ways that are "personal, associative and logical...making things conceivable" (3:52-3).

An early leader in the American school system, Horace Mann, believed music was essential to the education of youth because it developed thinking, aesthetic appreciation, and citizenship (23:459). One of the teaching strategies currently in use is cooperative learning. Of all the disciplines, music offers the most natural setting for

cooperative learning because most musical performances take place in settings where success depends on the cooperation of a group (23:460).

### Exemplary Arts Programs

The Laboratory for Interactive Learning at the University of New Hampshire conducted a two year study of more than four hundred children in an arts-based literacy program. Their research findings demonstrated that by adding rich visual and sensory elements to the writing process, the children gained fuller power of expression. The program provided children with means of expressing their personal story using options beyond language symbols. These complement and enrich the narrative giving the user a sense of empowerment. Jeff, who had been abandoned recently by his mother, used the metaphor of a little ship buffeted by crashing waves to relate his story about himself (27:46-7).

In New York City, a nonprofit educational organization, Learning through an Expanded Arts Program (LEAP), has had success with students whose standardized scores fall below the 15th percentile in reading and below the 9th percentile in math. Many have failed in school and have low test scores because they do not learn in traditional ways. For many of these children active learning in the expanded arts program has proven successful by raising test scores. Much of a preschool child's activity involves the pursuits of movement, play, song, and artistic activity as a means of making sense of their world. LEAP incorporates these forms of expression which are an integral aspect of human development and according to Dean and Gross



should be included in teaching and learning situations (9:614). In the schools of New Haven, Connecticut, a comprehensive program monitored by the Collaborative for the Advancement of Social and Emotional Learning, CASEL, taught that children needed first to stop and think, to develop and use verbal thought, to learn the words that help with understanding of themselves and others, and to integrate this understanding with cognitive and linguistic skills to solve problems (5:276). The PATHS curriculum, Parents and Teachers Helping Students, developed by Mark Greenberg at the University of Washington, identified language skills as critical to self-control. Children then feel bonded to their classmates, teachers, and schools. When they can handle disruptive feelings more appropriately, they are better able to absorb more of what they are taught (5:278).

#### Implications of Arts Education on the Work Place

The Georgia Arts Coalition noted that students in Japan and Germany, two of the world's most technologically advanced and economically sound nations in the world, are required to study the arts well into secondary school (32:1). In this postindustrial society, an individual can expect to have many jobs. Creativity, flexibility, and the ability to collaborate and work collectively have value in the workplace. Oddleifson's research revealed that Japan, known for its incredibly productive work force, owes this not to long hours of study but to the fact that children are taught to collaborate and work well together. He predicted that the positive effects of arts education such as flexibility and working collectively will reach into the future (26:453). Oddleifson also noted that the

head of a large accounting firm which yearly recruits from the Massachusetts Institute of Technology recently stated that they are considering using a minor in the arts as a screening technique because the employees they have hired with this background think creatively and flexibly (26:452).

In a study of 150 scientific biographies, Robert Root-Bernstein, winner of a MacArthur Foundation "Genius" award, found that nearly all the scientists he reviewed were also artists (18:606). In a study of undergraduates admitted to medical school, Thomas found that of biochemists who applied to medical school 44 percent were admitted, but of 10 music majors who applied 66 percent were admitted. This was the greatest percentage taken from any major, an indication, Thomas claimed, that medical schools recognize value of the arts in problem solving and stress management (23:460-1).

#### Future of Arts Education

As a member of the Board of Directors of the Michigan Council for Arts Education and Education Program Director of the Fetzer Institute, David Sluyter observed many instances in which children and young adults "gained greatly" in many areas other than intellectual acumen through artistic endeavors. He stated that the arts have a tremendous impact on emotional literacy and emotional intelligence (34:1). In a dance education program in New York City elementary schools, the evaluators found that participating children felt an increased sense of self-esteem. They also demonstrated self-discipline, behaved more responsibly, and delayed gratification (18:603).

Claude Levi-Strauss felt that the arts traditionally have played an important role in cultures

by allowing groups to define themselves and to assert their relationships to other groups (3:36). Arts education expands an understanding of others, Murfee declared. It fosters a feeling of connectedness with other cultures: their histories, symbols, myths, values, and beliefs (25:9). Hart reiterated that children may not love each other, but if they understand and are aware...somehow this is a bridge to appreciating one another's cultures (24:14).

In 1991 Lorin Hollander observed that many national reports on education indicated that creativity and humanity in today's youth is no longer fostered. Arts programs are being eliminated as research confirms the critical importance of music and art for children (23:460). The Rockefeller Foundation in 1980 set out not to examine education but to portray the future of history, literature, philosophy, art, and music as they were understood and enjoyed by the American public. The commission concluded these disciplines within our culture were dynamic only in isolated institutions such as museums and universities. Renyi commented that the future of the arts was at risk because most American children receive little exposure to them in school (30:439). Despite these findings the United States Department of Education currently spends less than one tenth of one percent of its budget on arts education (26:450).

### Summary

Social intelligence is an important but overlooked measure of success. While academic intelligence can be measured by performance, social intelligence, with rare exceptions such as Dr. Mishel's marshmallow experiment, is measured by observation

and by self-report (7:118). Daniel Goleman stated that there are many positive by-products to the social intelligence which he terms emotional literacy: reduced antagonism, enhanced feelings of self worth, less need for adult intervention, and the reinforcement of important lifetime skills (15:7-8).

The Fetzer Institute reported that nowhere is the discussion of emotional intelligence more important than in the schools where many students are preoccupied, not with academics, but with issues of drug abuse, teen pregnancy, and violence (15:8). Renyi has determined that the largest single barrier to getting the humanities to flourish in public school may come eventually from the very definition of the public schools as institutions designed to effect social rather than intellectual development. She regards the school as America's most important social agency in the trend of turning to the school with programs to combat drug abuse, violence, and the other ills of society. Social sciences have dominated school interworkings for years: examining interactions between students and teachers, how schools should be organized, how they should function, how people learn, and how they should be evaluated (30:443). Schools face the dilemma of providing intellectual development or social reform. In this paradox may lie a solution. While it is social scientists who create these prevention programs, the beginnings of a movement to encourage the teaching of arts in the schools are coming not from teachers or artists but a few psychologists and counselors who have achieved success with students through artistic channels. Surace felt that arts programs offer not only a way of solving some of these social problems but of avoiding them all together (36:612).

While art education, as seen by Cohen and Gainer, does not offer a simple

solutions, it is a powerful way to create and strengthen the lines of communication. It is a way of convincing children that their thoughts, feelings, and actions really matter.

Because other people react immediately to art and the observer and his surroundings are changed by of it, art transmits a sense of power. This is a crucial factor for learning and achievement because it engenders feelings of responsibility. Art develops imagination and solutions for the future. Wherever art is valued, it empowers by improving communication, and developing responsibility and imagination (1:2).

As the sixteenth century Dutch humanist Erasmus observed, "The main hope of a nation lies in the proper education of its youth" (5:261). Emotional intelligence can be educated (29:12). The arts represent the cognitive domains that include the tenets of emotional intelligence, the interpersonal and intrapersonal intelligences. Therefore, education in the arts is educating for emotional intelligence (26:447).

## **CHAPTER THREE**

### **Methods and Procedure**

#### **Introduction**

As evidenced by the review of related literature, there has been little research has been conducted on the effect of education in the arts on emotional intelligence. This hypothesis of this study was: art education in elementary school would cause subjects to react with different emotional responses to incidents of emotional literacy than peers who had not participated in art education courses. If there were no effect, the null hypothesis would be accepted.

#### **Subjects**

A survey was administered to second through sixth graders at two schools: Weberwood, a Charleston, West Virginia, elementary school which funds arts education for its elementary students and a control school, Homestead in Dailey, West Virginia, which like most other West Virginia elementary schools, does not fund arts education for its students. The Parent/Teacher Organization at Weberwood subsidizes a full-time art teacher and supplements the half-time county-provided music teacher so that position is full-time as well. The schools are similar in size and both have a similar socioeconomic background though Weberwood is in suburban setting and Homestead is in a rural setting. The students were surveyed on their predicted behaviors in response to situations that represent four of the five key elements in Salovey and Mayer's definition of emotional intelligence: knowing oneself, managing one's emotions, motivating oneself,

and recognizing emotion in others. The fifth element, handling relationships, is a more abstract concept and not elementary age appropriate. Therefore, it was not included in the survey.

### **Instrument**

Item One and Item Two of the survey dealt with self-awareness. Item Three sought appraisal of managing feeling and Items Four, Five and Seven assessed mood management. Item Six measured a people skill: empathy. Impulse control and the ability to motivate self which Mishel proved were critical to an individual's success were measured by Item Eight (5-82). Each question offered answer possibilities of Always, Sometimes, or Never. The survey was designed with short questions and a range of responses to each question. The questions were patterned after those in a widely published adult survey created by Daniel Goleman, an original thinker in the field of emotional intelligence (16:4-5). The research was conducted in the 1996-97 school year and did not include first graders and kindergartners because they had not had as much exposure to arts education. Also, using older students permitted utilization of more specific language in the survey.

Both principals in the participating schools preferred that their teachers administer the survey. The administration of the survey was completed during the 1996-97 school year. The principals, familiar with local custom, were involved in the composition of the permission slips. In deference to the principal's request, a permission slip that indicated the parent wished the child to participate was used at Weberwood. The control school

principal required a permission slip that stated the child would participate unless the parent requested he be excluded. The scores were tabulated with higher scores attesting to greater emotional literacy and the comparison of scores used to test the difference between two means applying a one percent margin of error. It was expected that the Weberwood students would demonstrate higher overall scores than the control school that did not provide arts education. A higher mean score for the Weberwood students would demonstrate what anecdotal information suggests: that education in the arts creates individuals who are more emotionally literate than those who have not had the opportunity of arts education. It was hoped that this study would provide affirmation to the hypothesis that education in the arts positively affects a child's emotional intelligence.



## Chapter 4

### Presentation of the Data

The study researched the concept of whether arts education increased emotional literacy in elementary school age children. The populations of two schools, one which provided education in the arts and one which did not, were surveyed with an instrument originally developed by Daniel Goleman in 1995 and adapted for use with children (15:4-5). It offered a range of responses to issues that affect young people. A higher score indicated greater emotional intelligence skills.

### Explanation and Analysis of Data

The data were compared in two ways. First was comparison of the two schools' mean scores on each item. The mean score in response to each question was higher at the school that provided arts education with the exception of the question: "Bad moods get me down".

**Table 1**

**Table of Mean Scores**

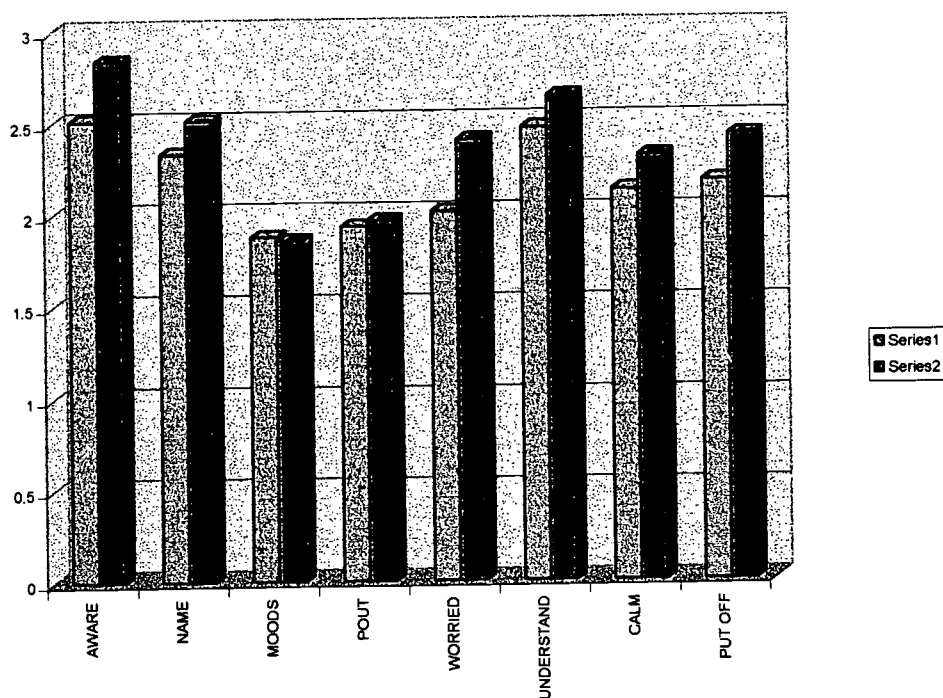
|                  | AWARE   | NAME  | MOODS   | POUT    | WORRIED | UNDERSTAND | CALM  | PUT OFF |
|------------------|---------|-------|---------|---------|---------|------------|-------|---------|
| <b>Homestead</b> | 2.51136 | 2.33  | 1.875   | 1.93181 | 2.01136 | 2.4659     | 2.125 | 2.17045 |
| <b>Weberwood</b> | 2.83636 | 2.509 | 1.85454 | 1.96363 | 2.4     | 2.63636    | 2.309 | 2.41818 |

The children who received arts education exhibited a mean score higher than their peers who did not receive arts education on the other survey items. These questions queried other elements of emotional intelligence: knowing self, managing emotions, recognizing emotion in others, and motivating self. The latter concept included the

ability to delay gratification, which has been proven to be a predictor of academic success. Additionally, longitudinal studies have confirmed that children with this attribute generally are more responsible citizens than those who exhibit impulsive behaviors in early childhood. On this item "I can put off getting something now in order to get something later", the students receiving arts education demonstrated the higher greater mean score.

**Table 2**

**Comparison of Mean Scores**



**Sample One: Homestead**

**Sample Two - Weberwood**

The second use of the data was to apply a two-tailed z test to examine the premise of arts education producing more emotionally literate youth. In testing the overall mean score of each school, the estimated variance is 3.20 for Sample One, the school that does not provide arts education. The variance for Sample Two, the school that does provide arts education, is 5.23. A level of significance of one percent is applied. The test was a simple random sample with high sample size, hence the use of a z test. Normal population and normal distribution were assumed. Because the value of variance for Sample Two, the school that provides education in the arts, falls outside the critical region (critical z score of 4.80), the null hypothesis is rejected. There is a measurable difference in the response of the children who received arts education over those who did not. This led to the conclusion that education in the arts produces more emotionally intelligent elementary school age children.

## Chapter 5

### Restatement of the Problem

This study researched the question of education in the arts increasing an elementary age child's emotional intelligence. There has been little exploration in this area though there is much anecdotal evidence indicating a positive correlation. These observations have been chronicled by participants, educators and administrators in arts programs. Goleman's studies in the past decade led him to observe that emotional intelligence predicts about 80 percent of an individual's success in life. Intelligences traditionally taught in school, linguistic and math/logic, account for only 4 to 20 percent (29:12).

### Summary

To develop a child's full potential, integration of intelligences into the curriculum, beyond currently taught linguistic and math/logic, is necessary. Researchers working with Harvard's Project Zero for the past twenty years concluded that the arts represent those other intelligences: music, visual/spatial reasoning, kinesthetic, interpersonal and intrapersonal. They proposed the arts are cognitive domains and represent organized forms of perception (26:447).

Abstract thought is, therefore, significantly dependent on artistic thinking. Arts education programs develop higher level thinking skills and increasing academic achievement. The arts enhance the learning environment, merge process and content, and

integrate basic neurological functions aiding student learning in other areas. The arts are symbol systems, as important to expression as letter and number systems (36:4).

Additionally, children who participate in arts education programs display improved attitudes of self-expression, trust, self-acceptance and acceptance of others. Low self-esteem is a significant factor in learning difficulties, the dropout rate, teenage suicide, violence, substance abuse, and crime. The value of arts education in advancing emotional intelligence becomes apparent as the drop-out rate falls and communication and self-concept improve (36:2-3). Arts programs offer a way of not only solving some of these problems but of avoiding them by motivating children through creative activities (34:612).

### **Conclusions**

Teachers today face enormous challenges. Their students bring their stress-filled personal lives into the classroom. More than ever before, society needs young people prepared to make emotionally intelligent responses as they face a sometimes violent and threatening world. Arts education has been proven to give children new ways of seeing their world and, in doing this, finding fresh ways of solving problems. Arts education promotes social behaviors of self-discipline, self-motivation, self-esteem, and social interaction. Sautter concluded the chain of research that explores the consequences of art for learning makes a strong case for arts-integrated school as a model of school reform (35:435).

### **Recommendations for Further Study**

Much data in the field of emotional intelligence and arts education are either anecdotal or by self-report. Longitudinal studies that research the impact of arts education in childhood would be useful. The nature of the discipline makes it difficult to test, often requiring subjective judgments. Correspondingly, a large sample size over many years is difficult to follow. Still, the most convincing mode of effecting change is through the confirmation by hard science. Until there is accurate and thorough documentation of the values of arts education, it will be difficult to mandate its inclusion in the curriculum.

### Appendix A

Testing instrument developed from a widely published prototype by Daniel Goleman.

|  | Always | Sometimes | Never |
|--|--------|-----------|-------|
| I am aware of my feelings.   |        |           |       |
| I can name my feelings as they occur.  |        |           |       |
| Bad moods get me down.   |        |           |       |
| When I am upset, I pout or "blow my top".  |        |           |       |
| When I am worried about my work in school, I have trouble preparing well.            |        |           |       |
| I understand how my friends feel when they are sad or happy.                         |        |           |       |
| I can calm my upsetting feelings so they don't keep me from doing what I need to do. |        |           |       |
| I can put off something now in order to save to get something later.                 |        |           |       |

**Please check the box that describes how you usually feel. Thank you very much!**

## Appendix B

Permission form used at Weberwood School:

Dear Parent,

I am conducting research on "emotional literacy for a masters thesis. The research survey consists of eight questions to which the responses are "Always", "Sometimes" or "Never":

- 1- I am aware of my feelings.
- 2- I can name my feelings.
- 3- Bad moods get me down.
- 4- When I am upset, I pout or "blow my top".
- 5- When I am worried about my work in school, I have trouble preparing well.
- 6- I understand how my friends feel when they are sad or happy.
- 7- I can calm my upsetting feelings so they don't keep me from doing what I need to do.
- 8- I can put off getting something now in order to get something later.

Thank you!

Sincerely,

Rebecca R. Wallace

---

I give permission for my child \_\_\_\_\_ to participate in an emotional literacy survey.

---

Parent Signature



### Appendix C

Permission form used at Homestead School:

Dear Parent,

I am conducting research on "emotional literacy for a masters thesis. The research survey consists of eight questions to which the responses are "Always", "Sometimes" or "Never":

- 1- I am aware of my feelings.
- 2- I can name my feelings.
- 3- Bad moods get me down.
- 4- When I am upset, I pout or "blow my top".
- 5- When I am worried about my work in school, I have trouble preparing well.
- 6- I understand how my friends feel when they are sad or happy.
- 7- I can calm my upsetting feelings so they don't keep me from doing what I need to do.
- 8- I can put off getting something now in order to get something later.

Thank you!

Sincerely,

Rebecca R. Wallace

If you **object** to your child's being surveyed (his/her name will **not** be on the questionnaire), please sign this form and return it to your child's teacher. If you have questions, feel free to call me at 636-1197. Thank you.

Sincerely,

Rebecca R. Wallace

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