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An Action Research Project in Art Education

by

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ABSTRACT

Engagement in the arts from a young age is vital to helping students perform to their full potential across all academic disciplines over the course of their academic career. It is imperative for the arts to have a place in the core curriculum as opposed to the elective periphery from the start of primary education, as the arts provide an imaginative outlet that uniquely allows students to problem solve.

Many art programs are cut due to the lack of school district administrators' understanding of the value that art education provides and the cumulative positive effect that art education has on student performance in other courses of study within their institution (Metla, 2015). Often, art programs are abolished for the sake of saving another program deemed more necessary (Metla, 2015). According to Metla's (2015) study, "it's estimated that since 2008, more than 80 percent of schools nationwide experienced cuts to their budgets. As a remedy in some instances, art programs were partially or completely eliminated from affected school districts" (p. 1). To diminish the budgetary and visual art program cuts, school administrators need to become aware through evidence-based research that the visual arts are not only necessary as a core component of a student's education but that visual art education provides complementary value between and among many other subjects. There are several on-going challenges that I face as an art educator, feeling the need to constantly defend my position, that is, show my value and the value that visual art provides in overall academic performance. This has been a relentless battle both within the walls of my school, and, pervasively, with people that are uninformed and thus are indifferent at best, or at worst dismissive about art in general.

In this study, I reviewed research on the impact of art education in regards to students' performance in other subjects. I also interviewed K-12 school administrators, district school board members, educators, and former students to collect data on their view of the value of K-12 art education and on the impact of art education on their life and career. During the interviews, I asked administration, along with board members, questions such as why are the arts the first to have funds cut during budget decreases. Throughout the interviews, I was able to glean various viewpoints on the arts and their overall impact on the educational career of students.

The findings included in this study are insightful by giving a wide array of material to exemplify how important it is for the arts to be included in overall academics by school districts. The multitude of disciplines and roles I was able to interfaced with also added to the strength of this study.

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To my interview participants, thank you so much for being a part of my study and allowing me to learn various points of view on a topic so close to my heart; for taking time out of

your busy schedules to meet with me and give me your honest opinions on subjects that are not discussed most of the time. We must all work together to make the educational experience for our youth one that is most enjoyable and that only happens through educators.

Art education has always been a constant in my life; it was the subject that I ran to and felt the most comfortable with in high school and at college. Art education is something that defines me, because of my deep love for art it was most enjoyable to learn of the love that others have for art and the impact that art has had on their lives as well, mostly because it is not discussed openly very often. As art educators we must push onward and demonstrate the love of the arts and the affects that the arts have on the overall academic performance and the importance of art overall.

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CHAPTER ONE: INTRODUCTION TO THE STUDY

My intention for my action research project is to educate and impact K-12 school administrators' perspective on the significance of art education and how vital it is to fund and prioritize more of the arts rather than cut art programs; and, also, to inform how important it is to integrate the arts into other disciplines. In this study, I reviewed research on the impact of art education in regards to students' performance in other subjects. Particularly, the focus of my literature review was on K-12 math and science lessons that incorporate art into their lessons through collaborations with the school art programs.

My summarized literature review provided the content for an evidence-based S.T.E.A.M. (Science, Technology, Engineering, Arts, and Math) advocacy document that I used to ask school district administrators and school board members to read first and then respond to interview questions that I posed in seeking their perspectives on the value of art education. In the interview protocol, I presented rationales for the value of art education inclusive of common mediums such as painting, drawing, and graphic design in addition to art history, and then ask school board members and administrators within a school district whether they support or disagree with the statements on the advocacy document to interpret the role and value they place on art education. My overarching question for this study is: *Does art education impact the overall academic performance of students?*

Background to the Problem of Devalued Art Education in K-12 Schools

According to art education scholar Eliot Eisner's (2002) study of perceptions of the purpose and value of art, one common conception is that art encompasses beautiful paintings in a museum rendered by highly trained artists who had a focused and dedicated art education. Others value art for its therapeutic functions in providing relaxation and contemplation in viewing specific types of art. Rarely, do people think that they themselves could create similar works of art. Eisner (2002) explains that such perceptions are developed from narrow and inadequate art education. He states:

Another outcome of effective art education is the refinement of perception. Students who have been in an effective arts education program should have had their sensibilities refined. When it comes to visual qualities and their relationships, they should be able to see more, aesthetically speaking, than their peers who have not had the benefits of such program. ... [A]rts education is about the development of sight in the service of feeling. One might say that arts education should foster the ability to carry on those fine-grained discriminations that constitute qualitative forms of inquiry. (Eisner, 2002, p. 91)

These points discussed by Eisner, of an effective K-12 art education program, suggests enhancement of students' overall academic achievement throughout their K-12 education. However, the grim reality is when administrators and school board members enact budget cuts within a school district, the arts program is usually among the first to be reduced, Dickson mentions in an article written about budget cuts in schools; "When cutting programs, superintendents strive to cut those that have the least impact to learning and that create the least

amount of controversy. Wrongly, superintendents often recommend cutting some of the fine arts program” (Dickson, para. 2).

Often the rationale for the budget cuts affecting art, is a limited perspective that arts are merely crafts, or simply a luxury, and not considered important education in comparison to science, math, or other disciplines. As such, art is viewed as an elective and not a core component of curriculum; thus, it is among the first program to be cut from budgetary support.

From my experience as an art educator for the past eight years, my students and I have been involved in art shows throughout the state and country, donated art to cancer hospitals and local hospitals, created local shows with selling art to raise money for the school’s art department, worked with other educational institutions in the state of New Jersey to collaborate with different school districts, created an interdisciplinary curriculum within the school. I believe that if administrators were to truly understand the outcome the arts have on a larger scale, it would result in more budget, time, and facility allocations. I have always pondered, for example, why the athletics in my district are so heavily discussed among administrators and board members regarding what is needed for the various teams and the facilities in which teams play their games. It seems that a great deal of time and money go into preserving and improving these programs, whereas the arts are constantly being reduced or cancelled entirely. The sports teams have new uniforms and equipment with staff hired to care for athletic facilities. However, the photography darkroom, which is a darkened room where photographs are developed, is vacant and condemned due to mold as a consequence of disregard.

As another example of the devaluing of art education, there is an advanced art history program that I teach, which due to the rigor presents an enrollment challenge based upon student interest and ability given that the school district has a strict and pervasive rule that there must be

15 registered students for an Advanced Placement course to be offered. Many of the students interested in Advanced Placement art history intend to study art in some capacity as a component of higher education be it through art school attendance or merely minoring in art elsewhere. These students would greatly benefit from an art history offering. However, unless there are 15 interested and capable students each and every year the art history course is not offered. Adey (1987) argues that:

involvement in art history for the overall subject of art is a “participation” and appreciation on the art that should be taught through art history on a [n] entry level of all art classes. Meaning there should be lower level art history classes in the art curriculum to allow students to fully understand the art they will create in their studio art classes.

One important factor in the argument will be that everyone has a need for and right of access to his or her cultural heritage, this is taught through art history. The importance of art history in curriculum planning is crucial and often looked past. (p. 211)

Research finds that students who experience arts integrated curricula meet or significantly exceed state and district standardized test averages, even in schools with high populations of at-risk students. In addition, a notable study finds that arts integration programs do not lower test scores, suggesting there is no negative impact on academic achievement in core subjects from an arts-integrated curriculum (Seaman, para. 5).

Significance of the Study:

In the Action Research course, which is one of five required courses in the Master of Professional Studies (M.P.S.) in Art Education degree program, I researched my facilitation of experiential approaches to learning about art history, and found that students were able to retain

deeper knowledge than lecture and testing alone could measure, which correlated to an increased motivation within the students to learn more, and a similar motivation for me to find ways to add the experiential element to other lessons. Overall, the experience required that both the students and I engage Art History concepts in a more significant manner than a lecture-oriented classroom lesson, thus increasing knowledge retention and fostering an educational passion that conveyed that art is extremely important in ways that are otherwise taken for granted.

The idea for S.T.E.A.M. versus S.T.E.M. originated from the Rhode Island School of Art and Design (Marland, 2015). The idea is not to append with art but rather engage the arts in more integral ways to the S.T.E.M. paradigm leading to more comprehensive instruction and learning. The arts add a dynamic and imaginative component to the student experience not devoid of the critical thinking skills inherent to S.T.E.M. disciplines, but spatially and creatively enhanced as compared to S.T.E.M. Such integrated experience for students and educators alike is more interesting, and, as a result, augments knowledge retention among other learning goals.

“S.T.E.A.M.’s transdisciplinary approach introduces students to multiple ways of thinking about and demonstrating knowledge, attracts students from underserved groups, and increases the number of those individuals participating in S.T.E.M. fields” (Quigley, 2017, p. 32). Further research conducted in this study into S.T.E.A.M. compared to S.T.E.M. has provided empirical data from prior research to substantiate how much more advantageous S.T.E.A.M. is as opposed to its more limited albeit more traditional S.T.E.M. counterpart. The research was culled to create a visual art education advocacy document (see Appendix A) that I used as a prompt in interviews with administrators. This is discussed further in Chapter 2 on the methodology of my study.

CHAPTER TWO: ACTION RESEARCH AND INTERVIEW METHODOLOGIES

In this chapter, I discuss the methodology that I employed in the study. Literature review and interviews are the primary methodologies for this studies' data collection. I discuss in Chapter 2 the process to prepare for interviews using a focused literature review, the process of interviewing, and how I analyzed the data from interviews. I also clarify my role as part of the research, provide rationale and criteria for selecting interviewees, and discuss delimitations of the methodology.

As part of the methodology for this study, I created an advocacy flyer (Appendix A) which was to educate my interviewees. Art educator Eliot Eisner's (2002) concise document, *10 Lessons the Arts Teach* (see Appendix B), was the inspiration for my advocacy flyer. Eisner educates with ten strong points as to why the arts are important in k-12 curricula. I referred to Eisner during my interviews to inform interviewees on the value of art education. However, I felt as though after everything discussed with each interviewee that they needed no further explanation as to why the arts enhance overall academic performance.

Interview Methodology

I conducted this study over the 2017-2018 school year at my place of employment, North Hunterdon High school, located in Hunterdon County, a small rural county in New Jersey. I teach mostly 12th grade advanced level courses of photography and art history. The district has recently undergone a change in administration with a new principal, new assistant superintendent and a new superintendent. Hopefully with this change in positions there will be more of a regard for the arts, at least equal to those of other core disciplines. The communities' interest in the

visual arts is evident and there is a high interest in the arts, because there is an art museum located within the town. The school is also in near, by train or automobile, to both New York City and Philadelphia. Most of the students are well-educated in art since they have had the opportunity to visit museums in these two large cities and gain exposure to major museum collections of art.

Parents of the district are very supportive of the arts and it is not uncommon to have them reach out to past administration in support of our program when needed. However, my hope is that my research project will educate and impact administrators' perspectives on the significance of art education and how important it is to integrate the arts into other disciplines and create more of an interdisciplinary approach to the curriculum to gain concurrence to both fund and prioritize more of the arts rather than routinely cut the programs in fiscally challenging times.

The Assistant Superintendent of the school district selected the interviewees; by asking numerous employees and board members who would be interested in conversation. The subjects selected; encompassed twelve adults: two administrators (Superintendent and Assistant Superintendent), two board of education members, two art educators, one science educator, one mathematics educator and four former students of the district. Even though in the first initial thoughts of this study I had imagined more than 20 subjects, I was limited with the amount of research participants, however even with a smaller amount of interviewees I was still able to proceed and conduct my study with no difficulties.

I gave each person interviewed an advocacy flyer (Appendix A) at the time of our scheduled 30-minute interview. In the advocacy flyer, I presented rationales for the value of art education inclusive of common mediums such as painting, drawing and graphic design in addition to art history, and then asked school board members, administrators, educators and

former students within the district to which I am employed their thoughts on the rationales and document their responses whether in support or disagreement.

There are several S.T.E.A.M. (i.e., Science, Technology, Engineering, Art, and Mathematics) programs that provided models and evaluation of curricular impact on student learning. My summarized literature review provided the content for an evidence-based S.T.E.A.M. advocacy document that I asked school district administrators and school board members to read first and then respond to interview questions that I posed in seeking their perspectives on the value of art education. I included statistics from research that I found in my literature review. Statistical data, I believed would resonate with many school administrators, especially those with business backgrounds, as it is empirical and derivative of disciplines under the S.T.E.M. umbrella. For example, “According to the US Department of Education, the total number of S.T.E.A.M. related jobs, in the USA, will increase by 14% over the course of this decade (2010-2020), a figure that is 5-8% higher on average than all the other job sectors” (Berg, 2017, p. 1).

After reading the 10 facts from my literature review on the flyer, I asked interviewees to define how they felt and whether they learn anything new. Once the interviewees became familiar with the 10 advocacy statements through our discussion of each, I then asked 10 questions (see Appendix B for the questionnaire used at each interview). My study revolves around the importance of art education and how art education enhances the overall academic experience, however in order for me as the researcher to gain an insight into the backgrounds, feelings and ideas they have regarding art it was imperative that I ask other questions relating to art besides the crucial and very last question I had asked each one of them, *“Do you believe the arts enhance the overall academic experience?”*

Researcher's Role:

My role as the researcher was to design and implement the interviews, collect data, analyze the data, and reflectively interpret the patterns that emerged in analysis of the data. I became a participant researcher. “A *participant* researcher is fully involved in the activity under study and critically reflects for a self-study. A *participant-observer* involves recording and reflecting on observations and interactions in which the participant-observer’s role is frequently a part of the situation” (Keifer-Boyd, 2013, p. 247). Being able to participate as a teacher in the school in the interview process allowed me to gain a better understanding of this study. Being face-to-face with the interviewees permitted me to observe nonverbal cues as the various questions were presented to them, which added a fascinating aspect to my study.

Upon graduating with a degree in art education in 2010, North Hunterdon High School has been my only teaching position held. I am very active within this district and during the interviews I introduced myself by mentioning previously art events and initiatives that I have been a part of since being employed at the school district. My intent on interviewing administrators, board members, educators and former students at the district I teach was to get a better understanding how others view the arts and the importance of art in a school, but, also, how people I am familiar with perceive art and how better to educate the research participants. The interviews offered a better understanding of how art education does impact the overall academic experience. My goal for this research is to create an impression that remained with the interviewees within the school district and with their new knowledge and understanding through our conversational interviews might branch out to others and influence policy and budgetary support of visual art education.

Coding and Analysis Methods

Within the interviews, I provided an advocacy flyer (Appendix A) and questionnaire (Appendix C), which permitted me to gather qualitative data for my research. This allowed for comparable data to be made between the different groups interviewed and also to determine whether the views of art education's impact on the overall academic performance is viewed differently between each group and role that these subjects possess.

I systematized my interview group's data by their current position of employment. Within my interviews with administrators and teachers, I referred to the interviewees that agreed to take part in this study by their role and then numerically, for example: Administrator #1 or Administrator #2. The interviewing portion of this study was exceptionally delightful; it was engaging and fascinating to hear their answers and reactions to my questions. My objective was to execute a comparative data analysis of the gathered material collected.

Delimitations:

During this research, I delimited my study by interviewing and collecting data from published sources that in total would be sufficient enough information gathered to make an impactful study. Having too much information could make research too vast and challenging to complete. Therefore, the two focused processes that I used in this study (literature review and interviews) were the best way for me to be motivated, intrigued, and captivated by the research.

CHAPTER THREE: LITERATURE REVIEW ON VISUAL ART EDUCATION INCLUDING ART HISTORY ON S.T.E.A.M CURRICULA

I searched numerous databases and collected research studies on visual art education and art history education as significant to S.T.E.A.M. curricula. The research informed the Advocacy flyer (Appendix A) by displaying evidence to interviewees regarding the value of visual art education. Through the literature review I was able to strengthen my overall study with statistical analysis of the value of art education.

There are two main sections to my literature review on the value of art education. The first focuses on visual art education. The second main section is on the value of art history education. Within the visual art education section, I focus on four areas of the value of art education—creativity, enhanced performance in other disciplines with integration of art education, the value of studio art environments for learning, and inspirational stories. The value of these areas is critical in examining and conveying the importance of art education. The creativity area employs students to uncover and develop their minds in a way they never knew before. Second, the focus is on research that has been executed; to show how other area of disciplines with art integration enhances student performance. The studio setting of an art classroom is described in this literature review and in further detail about the importance of students experiencing the independence to explore and create more by being a part of a comfortable studio art environment. And lastly, inspiring stories about the importance of art and how art has affected numerous lives. The second main section is on the value of art history education, which focuses on developmental benefits and personal relevance. Within this section much is discussed about the foundation of art history and how art history is the underlining

subject to gain appreciativeness for art education. There must be an understanding of art history to wholly respect and significance the arts.

The Value of Visual Art Education

In this section of my literature review information is gathered pertaining to the significance of art education. The discussion on how art educators need to teach like artists and to stop teaching to a test. An art educator and a journalist within this section discuss an example of how art educators do not need to be driven to teach to a test particularly on the Torrance Creativity Test which was developed in 1966.

Studies on Creativity, Design Thinking, and Teaching to Think Like an Artist.

Creativity allows students to express themselves through materials that traditional classrooms and disciplines would not allow. The creativity that is exuded through artists is important and plays a role that no other person can experience except that one individual. Design Thinking encourages students to seek an understanding the user, an attempt to create unique solutions and problem solving. Design thinking is more of a hands on approach to understanding a problem, Rikke Dam and Teo Siang (2018) mention in their article, *What is Design Thinking and Why Is It So Popular*, “Design Thinking is an iterative process in which we seek to understand the user, challenge assumptions, and redefine problems in an attempt to identify alternative strategies and solutions that might not be instantly apparent with our initial level of understanding.” (Dam, para. 3-4)

Art educator, Cindy Foley, in a 2014 *TED Talk* describes: “Art education has been influenced by the standards and testing culture like all other disciplines. As art educators we

focus on teaching things that are concrete. As art educators we are teaching things that we can test” (n. p.). Foley, however, argues that art educators need to teach students to think like artists, which encompasses creative, curious, question seekers; and to develop ideas through exploration that can not be accessed with tests and standardized evaluations. She mentions that the Torrance Creativity Test developed in 1966 has been administrated for decades in public schools in the United States. There has been a decline in Torrance Creativity test scores since the 1990s in the United States, especially among 6 to 12 years of age. The age group of 6 to 12 years is vital for my study since this testing would have been done prior to the age grouping of high school aged students. Baer (2011) notes as he has listed the problems below of the Torrance Creativity to measure creativity as the test is designed to measure innovative ideas expressed through verbal language by number one and number two. (Baer, 2011) states:

1. The evidence that the Torrance Tests measure anything significantly related to creativity is open to question. The main validity studies supporting use of the tests has been called into question repeatedly, and there is counterevidence that challenges the tests’ validity.
2. The Torrance Tests have had the unfortunate (albeit unintended) effect of distorting how people in and out of the field of creativity research think about creativity. (p. 309)

The Wallace Foundation, which worked with Harvard’s Project Zero, found the number one quality of art education is the potential to develop, “the capacity to think creatively and the capacity to make connections” (Foley, 2014, n.p.). Foley (2014) states:

If we allow society to keep pushing out these cliché notions of what is creativity the harder it is for those in the field of art education to begin moving towards teaching for creativity. Teaching for creativity and embodying habits artists employ are:

1. Comfort with ambiguity (discomfort not knowing)
2. Idea generation
3. Transdisciplinary research (transdisciplinary is research that serves as curiosity)

Patricia Leavy (2011) defines transdisciplinarity as:

an approach to conducting social research that involves synergistic collaboration between two or more disciplines with high levels of integration between the disciplinary sets of knowledge. Transdisciplinary research practices are issue- or problem-centered and prioritize the problem at the center of research over discipline-specific concerns, theories or methods. (para. 9).

Foley demonstrates how artists utilize ambiguity is part of their process. For example, an artist that uses ambiguity in his artwork is, Mark Tansey, in a *New York Times* article written about his work, Mr. Tansey's wheel painting is, in a sense, a compass, a guide through the territory of his work; he is the master of mordant polemical paintings about modernist art theory and deconstructionism, a painter who makes paintings about the idea of making paintings., Tansey explains about his work; I think at this point I've gotten beyond the wheel," says Mr. Tansey, whose new work will go on view Thursday at the Curt Marcus Gallery in SoHo. "It was something I used against artist's block to provide narrative. Now I've gotten to another understanding of what motivates pictures." (Hoban, para. 2-4)

If we used Tansey's approach in art education, we would be able to bypass fear of the unknown and engage students in exploration. Art education taught as formulaic approaches to make images is more familiar to administrators and test developers. However, if ambiguity, idea generation, and transdisciplinary approaches were emphasized in art education then art would be valuable in teaching creativity, that is, to think like an artist.

Studio classroom settings have encouraging benefits pertaining to the atmosphere for students to learn and engage. Vanada (2011) research provides evidence on how learner-centered art classrooms that incorporate design thinking as a balanced process can enhance the overall learning capacity of students. Vanada (2011) found that the

impact of learner-centered pedagogies on visual art students' balanced intelligence and reviews of literature surrounding the promotion of depth and complexity of knowledge, new conceptual frameworks and assessments offered, towards a vision of fostering deep, connected and independent thinkers, the design thinking approach implements an aesthetic, inquiry based process. (p. 21)

Vanada (2011) discusses teaching for 21st century skills, how to integrate technology more often into every subject allowing for cross discipline to be taught through elementary and secondary schools. She also explores developing capacity through balance, having a traditional based setting for learning along with a classroom where the students can move around freely similar to the studio setting approach, which brings stability to a student's life because of that balance. When diving into art and learning about this incredible discipline whether it is through creating it or art history the brain work in a special capacity as unlike other subjects, allowing stability to be shifted into the brain from one subject to another. She discusses three involvements of balance: "Inquiry, Connection-Making and Self-Directed Learning" (Vanada,

2011, p. 21). This permanence is a must and frequently used in 21st century skill teaching of the arts. Vanada (2011) discusses the design thinking frameworks, which involves both analytical and creative thinking involve both a hands-on approach as well as a mental method, which creates multiple possibilities for investigation and solutions when students are learning and trying to problem solve. The key components in design thinking were identified by the Hasso Plattner Institute of Design (see Figure 1).

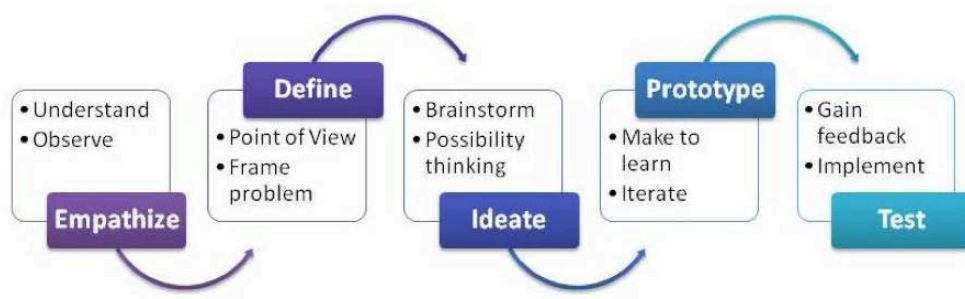


Figure 1. Key Components in Design Thinking.

The dual aims of this article are: (a) to summarize findings from a mixed model study that the researcher conducted in middle school art classrooms (designed to be more or less learner-centered) and (b) to offer a framework for design thinking for elementary and secondary visual arts.

Enhanced Learning with the Integration of Art Education in Other Disciplines.

There is an intrinsic value of the arts. Intrinsic by definition refers to belonging to a thing by its very nature. According to the article, *Intrinsic Value and the Arts*, by Jennifer Faulkner (2004), intrinsic value is an ethical and philosophic property, which referring to art, that means that the arts are a part of life, and should not be viewed as a separate thing to be enjoyed (or not) as an “add on” (para. 2).

The instrumental value of the arts is what some researchers argue there is solid research suggesting that links art education and academic achievement (Tyler & Likova, 2009). Neuroscientists, Christopher Tyler and Lora Likova (2009) claim, “emphasizing instrumental value may help pursue a frugal and skeptical American public that the arts have worth. Reading comprehension is also excelled within the student when they can draw pictures to support understanding sequencing, character study, mood, setting, and summarizing” (Tyler & Likova, 2009, p. 1).

A balanced approach of integrating the arts into other disciplines offers to the cognitive constraining method that produces future learning, making learning more of a life-long memory. It is vital for the arts to be involved in other disciplines, especially science courses, because:

Despite the divergence between arts and sciences, a growing body of quantitative research suggests that the learning of science may be enhanced by relationships with the arts. Contemporary research is beginning to explore explicit neuroscientific hypotheses concerning the effects of activities such as, drawing, visual esthetics, and dance observation. (Tyler & Likova, 2009, p. 1)

Tyler and Likova’s (2009) research supports the notion that visual art learning is reliant on a intricate system of perceptual, higher cognitive, and motor functions, therefore, proposing a shared neural substrate and strong plausible cross-cognitive transfer in learning and creativity.

Art integration theory and method is a central concept in art education overall. When art is integrated into other disciplines it allows students to combine various methods of learning together. Some students might even understand the subject better, simply because of the coloration between art and the subject that is being taught to the student at that moment. An article written, by, Susan Riley (2012) for the George Lucas Educational Foundation explains,

An Arts Integration approach is naturally engaging to students and to teachers. Almost everyone has one art form (visual art, music, dance or drama) with which they connect and use to make sense of the world. By weaving the arts into and through our content in naturally aligned ways, we are providing relevance to student learning, and giving them an opportunity to connect their world to our classrooms. By using Arts Integration, teachers and leaders can ensure that students are learning in a way that meets their own unique cultural, social, emotional and intellectual needs. (Riley, 2012, para. 5-6)

Art brings the world inside to our classrooms; we must integrate art into other disciplines to allow an overlap of contrasting materials so that the students gain an understanding to what is being conveyed to them from educators. Co-teaching is another brilliant way that students can attain an appreciation for the two unlike disciplines being taught to them as well. In my research on integration of art into classrooms I found two very useful sources.

The first resource is a paper I found online through the *Oxford Bibliographies*, investigates facets of art and math, which is assessed, to prove that no one subject is more important than the other. The author presents a review of pedagogical and curricular models for each subject. Smilian “expresses a coordination of math and art concepts through integrated curriculum to promote complimentary learning.” (Smilian, p.1) Co-teaching is a fantastic way to explore interdisciplinary teaching and learning, explores other subjects in a different way. Having two of a student’s teachers together in the same environment can allow students to understand art and math or whatever subjects are being taught together in an overall exciting and new way. The article has numerous art teachers and higher academia art teachers who have written their perspectives about integrating the arts across the curriculum. It is interesting to read each one of their views, which makes the overall argument about academic performance

enhanced through having art in a student's academic career so important. Bickley-Green speaks about how "historical information on the fields of art education and math education, providing a theoretical base for ideal, the instructional, and the operational curriculum domains" (Bickley-Green, 1995, p. 6). Guyotte discusses proposes "teaching S.T.E.A.M. subjects to integrate learning through the visual arts as a holistic and social practice" (Guyotte, 2004, p. 12). Marshall suggests that if the "arts are a substantive component of art integration and not just a curriculum embellishment, then a quality arts education can be accomplished through the integrative process with other disciplines" (Marshall, p. 17). Rocher and Lovano-Kerr (1995) cautions against "compromising the integrity of quality art programming" (p. 20) and provides examples of how to avoid various pitfalls when integrating art across the curriculum. The importance of integrating the arts into interdisciplinary curriculum would allow students to see many different variations of subjects together. When a student revisits a point or comprehension that was presented to them in repetitive way the knowledge sticks, they then understand and it stays with them forever.

The Arts Integration Research Through The ESSA (Every Student Succeeds Act) report delivers research on activities that use the arts to improve student achievement, which is known as arts integration. "The Every Student Succeeds Act of 2015 (ESSA) is a law that transforms the federal government's position in public education. It funds several states and districts that improve schools, including 12 that could be used to support arts integration." (Ludwig, 2016, p. 1). However in order to gain funding from the government that district needs to explore and prove that the effort they propose can in fact improve student achievement, there needs to be proof. The literature review created during this research shows that "44 districts could qualify for the ESSA funding, however of that 44 only 10 met Tier-III evidence standards for strong,

moderate or promising evidence, while the other 34 met the Tier IV standard for having a research-based rationale” (Ludwig, 2016, p. 1). Different activities were used to display the arts into other subjects, this is once again interdisciplinary teaching and learning, for example music was taught to teach fractions in a math class and drama was used to help vocabulary and dance was used to teach reading to those of the younger age, kindergarten. A big help in understanding the arts more for other disciplines is to allow professional development for those disciplines not involved in art and so that those teachers can integrate art into their lesson plans. Within this study, researchers found significant improvements in student achievement, “proving that arts integration could in fact move the average student from the 50th percentile to the 54th percentile” (Ludwig, 2016, p. 1), which is truly amazing.

Both “what and how something is taught influence what the arts teach. That is, the arts, like other fields, can be taught in different ways for different ends” (Eisner, 2002, p. 70). We must recognize how to identify the ways in which the arts influence the experience students have in working with them and thereby the cognitive capabilities that they are likely to acquire as well. There are four ways that are addressed in this book of the ways students learn from the arts. They are: “there are constraints and affordances provided by activities and materials in which the student understand that through work, there are prompts, cues, and scaffolding that the teacher provides to enable the student to succeed and there are classroom norms, the kind of thinking and behavior that is encouraged and discouraged in the setting and finally there is ambiance we can refer to as the classroom milieu. The curriculum in the classroom is a series of activities in which the students engage. The activity may take form of a project to be framed or a well-defined problem to solve. Each of these activities take shape within the constraints and affordances of some material, if the class is English it would take shape through language likely discussed

within the classroom. (Eisner, p.71) Another outcome of effective art education is the refinement of perception. Students who have been in an effective arts education program should have had their sensibilities refined. When it comes to visual qualities and their relationships, they should be able to see more, aesthetically speaking, than their peers who have not had the benefits of such a program. Mention of how arts education is about the development of sight in the service of feeling. Overall, what the arts teach shows when students are able to comment upon work that they experience and give reasons for the appraisals and interpretations they make. A program in arts education that nurtured such competencies would make it possible for students to provide experientially grounded justifications of their observations.

S.T.E.M. is seen everywhere, currently at the district I teach at, there is a S.T.E.M. program, however there is not a S.T.E.A.M. program for students. Hopefully with the emerging popularity of S.T.E.A.M. a lot more districts will be incorporating the “A” into their curriculum.

It is important for administration to see the need for the Arts to be included in S.T.E.M., technology and art get along. Photoshop is a program geared towards allowing students to think on a more scientific side of their brain while encompasses the art into their project.

An emphasis on the investigative significance of existing and emerging digital technologies of bringing S.T.E.M. education up to speed and applying variations to curricula at the classroom level is very important. Of a precise interest are the assorted ways of integrating the arts into S.T.E.M. course content in equally restructuring humanities education and scientific education. This book provides pedagogical strategies for making S.T.E.A.M. education the core of reachable, pertinent learning in keeping with today’s digital developments. Technology is constantly changing and moving forward, it is very important to be up to date with technology

and integrating art into technology it allows for a more creative and diverse way of teaching students.

Ludwig (2016) shows the growing interest in S.T.E.A.M., the enhancement of creativity implied into traditional S.T.E.M. program. The authors have a design background, which allows them to have experience with art but also integrating that aspect of their career into other subjects to see if the understanding of those subjects make more sense to them and come easier to them through the S.T.E.A.M. They believe that S.T.E.A.M. might enrich engineering education in ways that are more closely aligned with pedagogical commitments of the arts. There are three authors of which two, as I previously mentioned, have design backgrounds and also environmental engineering that is how we get the link to engineering. The study is grounded in the educational philosophy of arts advocate Maxine Greene, who views learning as an active collaborative search for meaning, wide-awakens” and social change. The study shows that

S.T.E.A.M. allows and provides students and educators to explore connections between materials, design, society, and the natural environment and to critically engage with implicit and explicit facets of disciplinary identity. ... S.T.E.A.M. simultaneously complements and challenges current conceptions of this emerging educational movement that, almost without exception, are underpinned by calls for competitive economic growth and technological development. (Sochacka, 2016, p. 22)

Sochacka (2016) writes, in regards to the exhibition at the American Association for the Advancement of Science in Washington, which explores the science storytelling found in the funny pages and in between the covers of a comic books. The storytelling is called, “S.T.E.A.M. Within the Panels: Science Storytelling Through Comic Books, Comic Strips, and Graphic Novels, and it’s devoted to the ways the art form describes and reacts to science and technology”

(Blakemore, 2017, p. 1). In a thorough explanation the importance of the “A” in S.T.E.A.M. is discussed on how sequential art and science fiction have always been closely linked. The showcase incorporates art from the 1930’s and new works from hired groups of artists to reimagine timeless superheroes who acquired their powers from scientific discoveries. It is a chance to look back on how comics have portrayed science and consider how artists might converse complex issues such as climate change. The combination of these two subjects coming together allow for more of interest from different groups of people. It seems as though many pro-S.T.E.A.M. groups of people are getting together and getting the word out about how important is it for that “A” to be included pressing forward.

The Value of Art Studio Environments to Learning.

Howard Gardner and Ellen Winner’s (2017) research contributed to Project Zero, a research project begun in 1967 on understanding learning in and through the arts. Gardner and Winner described Project Zero as follows:

It seems as though in the 20th century that artistry has not been taken seriously in American social science. Project Zero has drawn on several disciplines that are: pre-eminently developmental psychology and cognitive psychology to elucidate the range of skills and understandings that were appreciated by the artists and art lovers but not by the public and teachers. Creating the base for art is very important, the research shows claims about art education. One claim is that arts education boosts children’s academic performance. Numerous correlational studies report that students who study arts do better in school than those who do not study the arts. These experiments some published and some not, tested the claim that studying the arts leads to higher academic performance. In

the research executed the R.E.A.P project (for Reviewing Education and the Arts) researchers examined studies observing reading and math achievements in children before and after getting high vs. low exposure to the arts. The outcome required to have more of a hands on approach, because of this the experiment seemed to in the end become more generalized. (2017, p. 1)

Hands on approaches to learning is crucial because:

As the Roman adage has it, ‘ars longa, vita brevis’—it will take many lifetimes to elucidate the nature of artistic knowledge and thinking; to determine how best to nurture arts teachers as well as general teachers; and then to introduce young (and perhaps older) people to the arts—whether they are to become professional artists, amateur artists, or simply those who enjoy dabbling in the arts as audience members. The effort is worthwhile. Indeed, civilizations in the past are judged as much—if not more—for their artistry than for their other achievements. (Gardner & Winner, 2017, p.1)

The arts teach us about ourselves through self-discovery involving pushing disciplinary boundaries.

One way that the arts can explore more of a physical approach to healing and self-discovery is Art therapy which is used to diagnosis and repair. According to Mitchell (2013): art therapy is a specialized area of mental health that uses art materials and the creative process to explore emotions, reduce anxiety, increase self-esteem, and resolve other psychological conflicts. The American Art Therapy Association states that art therapy can be an effective mental health treatment for individuals who have experienced depression, trauma, medical illness, and social difficulties. Making art in therapy can be a way to achieve personal insight as well as healing. (p. 1)

While some schools seek art therapy programs for the treatment of trauma such as following school shootings and other tragic events that impact a school or community, those who teach regular studio art courses are not certified as art therapists.

However, there is much to be gained from studio art courses such as confidence building, Art education scholars, Lois Hetland, Ellen Winner, Shirley Veenema and Kimberly (2013) conducted a study in which they interviewed, observed and researched curriculum on various art educators. This study also helps advocate and explain the arts to policymakers. They state:

Learning in a studio setting is very different than a typical classroom setting, therefore a lot of students from the very beginning are pulled in and start a love affair with art because they can think differently, move around the classroom different and get graded based more on effort instead of having the correct answer. The stress is not felt a lot in an art classroom, allowing creativity to be engaged fully and developing different educational habits they most students would not gain in a formal setting. (Hetland et al, 2013, p. 4)

The opening portion of this book places the reader in the position of the art educator. The history behind how art education has always been in a tenuous position and all too often the arts is more of a luxury than anything in a school district is examined in great detail.

Art educators are always trying to prove that their subject is just as important as the math teachers, science teachers and history teachers. In reaction to the increasingly weakened position of the arts in our schools, arts advocates have tried to make the case that the arts are important because they improve students' performance in traditional academic subjects that really count. (Hetland et al., 2013, p. 1)

Hetland et al (2013) found that studio settings build academic skills such eight studio habits of mind:

1. Develop Craft
2. Engage and Persist
3. Understand Art Worlds
4. Stretch and Explore
5. Envision
6. Reflect
7. Express
8. Observe

Hetland et al. (2013) research is significant in educating administrative decision makers on the importance of the studio setting rather than a typical classroom with rows of seats. Often, students feel confined in almost all other classes with assigned seats. The studio atmosphere inspires and allows for more freedom, and, therefore, if there is more freedom, students motivation to learn increases. Hetland et al. (2013) research is essential for a school district to understand that studio art environments are beneficial to have diversity in academic learning environments.

Inspiring Stories about the Importance of Arts in Education.

Differing from everything thus far in my literature research, I decided to review artist autobiographical work. Herbert Kohl and Tom Oppenheim (2012) created a powerful illustration for positioning the arts at the center of primary and secondary school curriculums. [elaborate on the illustration]

Kohl and Oppenheim (2012) correlate the arts to the development of intellect, imagination, spirit, emotional intelligence, self-esteem, and self-discipline of youth. However, there is a growing national trend on the elimination of the arts in public education (Kohl & Oppenheim, 2012). Creative arts, as a means of academic and person development, are a critical element of any education not just the arts (Kohl & Oppenheim, 2012). Kohl and Oppenheim (2012) found that:

What is important in this context is that studying art is empowering whether one becomes an artist or not. It develops imaginative problem-solving skills, boldness, an understanding of the planning and execution of creative works, a spirit of independence and entrepreneurship, experience with disciplined and hard work, and, finally, the deep satisfaction of being able to use your mind and skills to produce results you honor and are willing to risk putting out in public. (p. 14)

The arts make students overall more unique and able to understand other academic fields better because they use their brain in a special manner than in a traditional classroom setting. Being involved in the arts engages the student differently, absorbing much more than a non-arts student (Kohl & Oppenheim, 2012). Kohl and Oppenheim (2012) make a compelling argument for keeping arts education in schools and how to do this with narratives written by many artists who differ in age, gender, and relationship to the arts.

The Value of Art History Education

The development of a student is amazing to watch as an educator. In art, this is seen very frequently because students gleam when they are able to investigate through hands-on materials and also through a fascinating lecture on the history of art. However there seems to be a push for

Common Core and methods that would teach towards only testable content whereas in public education many if not most educators began their careers doing so because they loved to teach and connected with the content and wished to share that connection with their students, increasingly this enthusiasm and initiative is being sacrificed for the sake of metrics and increased regulations.

Many educators that I have spoken to in regards to the shift in education towards testing and strict regulations is driving many educators to find new careers. Yet what is happening to the arts is that administrations feel as though art education is a luxury. This is just not the case, art allows for a creative process to occur in a manner that other subjects cannot replicate thus the arts are both a crucial and complimentary component of education not an add-on or elective luxury as some would argue. Learning to create and appreciate visual aesthetics may be more critical than ever for the development in children growing and retaining information that is being delivered to them through other parts of their academic career. Grace Lynch (2013-2018) explores the developmental benefits of art, which includes enhanced motor skills, language development, decision-making, visual learning and cultural awareness. Lynch's (2013-2018) list of developmental follows:

Developmental Benefits of Art

Motor Skills: the motions involved in making art which allows for a student to explore holding a paint brush or scribbling with a crayon or marker are extremely essential in fine motor skills. The discussions on the use of age appropriate challenges are addressed, for example cutting using non-safety scissors and drawing squares and circles. This is taught and understood through art as a child. Another benefit to art being introduced as a child is the introduction of shapes; this is something that stays with us, as we get older. If you

ever noticed art is all around us, for example when you take an eye test there are numbers (math portion of your brain) but there is also shapes and colors too. The majority of the public does not realize that art is focused all around us; we just take it for granted most of the time.

Language Development: For very young children, making art—or just talking about it—provides opportunities to learn words for colors, shapes and actions. When toddlers are as young as a year old, parents can do simple activities such as crumpling up paper and calling it a “ball.” By elementary school, students can use descriptive words to discuss their own creations or to talk about what feelings are elicited when they see different styles of artwork.

Decision Making: According to a report by Americans for the Arts, art education strengthens problem-solving and critical-thinking skills. The experience of making decisions and choices in the course of creating art carries over into other parts of life. “If they are exploring and thinking and experimenting and trying new ideas, then creativity has a chance to blossom,” says MaryAnn Kohl, an arts educator and author of numerous books about children’s art education.

Visual Learning: Drawing, sculpting with clay and threading beads on a string all develop visual-spatial skills, which are more important than ever. Even toddlers know how to operate a smart phone or tablet, which means that even before they can read, kids are taking in visual information. This information consists of cues that we get from pictures or three-dimensional objects from digital media, books and television.”

Inventiveness: When kids are encouraged to express themselves and take risks in creating art, they develop a sense of innovation that will be important in their adult lives. “The

kind of people society needs to make it move forward are thinking, inventive people who seek new ways and improvements, not people who can only follow directions,” says Kohl. “Art is a way to encourage the process and the experience of thinking and making things better!

Cultural Awareness: As we live in an increasingly diverse society, the images of different groups in the media may also present mixed messages. “If a child is playing with a toy that suggests a racist or sexist meaning, part of that meaning develops because of the aesthetics of the toy—the color, shape, texture of the hair,” says Freedman. Teaching children to recognize the choices an artist or designer makes in portraying a subject helps kids understand the concept that what they see may be someone’s interpretation of reality.

Improved Academic Performance: Studies show that there is a correlation between art and other achievement. A report by Americans for the Arts states that young people who participate regularly in the arts (three hours a day on three days each week through one full year) are four times more likely to be recognized for academic achievement, to participate in a math and science fair or to win an award for writing an essay or poem than children who do not participate. (Lynch, para. 1-7)

The developmental benefits that art possess is critical to every student. It allows for finer motor skills, an increased development in language, a more cultural awareness in today’s society and lastly an overall improved academic performance.

The Personal Importance of Art History.

In watching the development of students engaging hands-on, the thrill of seeing a student engage in an exciting lecture on the history of art is just as electrifying. The history of art is very beneficial as it defines in depth about the concepts, theories, and meanings of art. In order to fully understand and appreciate art you must learn about the work's meaning and significance. There needs to be an introductory art history course for every student involved in art as a prerequisite to move onto any level II art class, no matter the medium. From my experience, the mandate for all high schools to implement a core basic fundamentals art history class is a necessity, yet is lacking in many schools.

Art history encompasses so much more than simply just art, for example when I teach art history and lecture about the Egyptians, I not only talk about the art but the reasoning why they did what they did with the preservation of the body. The expressions on the students' faces when I teach them about how much the Egyptians invented for example: toothpaste, medicine, birth control, and makeup is eye opening information for these students. According to Janson (1991):

Art history is entirely relative to individual perspective on the importance, some people argue whether or not the field has much significance. Art history is a small field compared to many others, however when engaging in art it is imperative that the history of the art is known before moving deeper into the subject of art. Learning about art is personal and a lot of times when a student is being introduced to several pieces of art; there is some sort of correlation to that art that becomes personal. Art is very intimate, artists usually create their art in a private studio and then only later is it viewed in a museum with hundreds of people there. If art is so personal and private when being created, why is art not like that as a personal connection when viewing it? Is it the setting,

a museum? Museums have too many people usually to get that connection so many viewers are looking to achieve. Therefore, does a classroom setting of seeing it in front of them through museum websites and technology allow this to become more of a personal approach? (p. 121)

To answer Janson's (1991) question, I feel as though technology in a classroom can have the same impact on students as viewing in a museum. Today's technology and websites (e.g., *Khan Academy* and *Google Art*) allow viewers to virtually circulate around the art and zoom in close to art that is not always possible in a museum. Many of times I would tell my class we were going on a class trip and I would put the projector on and we would visit the Lascaux caves in France or see the Venus of Willendorf in Vienna.

CHAPTER FOUR: ANALYSIS OF INTERVIEW QUALITATIVE DATA METHOD

Chapter 4 provides an analysis of the data collected in this research study. I compiled the material into different questions that I had asked them and made bar graphs to permit the overall data to be concise.

I organized this chapter in the order that I began the interview process of questioning with my subjects. Starting with question #1 and following to the very last question #10. However, I only selected the questions that I felt was the strongest impact to this study. Some of the questions that I asked were simply to get a feel for the way the interviewee had an association with art. For example, question #6, *Did you take any art courses in high school or college, if so is there any that left an impact on you and why?* This question was merely to have the interviewee reflect on their relationship to art and potentially arise from emotion from the past.

Reactions to the Advocacy Flyer Data

The study began with interviewees reading the advocacy flyer. Much to my surprise out of the twelve interviewees, six of them answered that they were surprised with similar facts listed on the advocacy flyer (see Appendix B). Of those six interviewees, four were shocked by #8 on the flyer, which states, according to *The Center for Arts Education*, “The average student could go from the 50th to the 54th percentile as the result of arts integration in his or her school.” (Ludwig, 2017, p. 1). The second most similar response was question #6, which states, “Studies show that there is a correlation between art and other achievement. A report by Americans for Arts states that young people who participate regularly in the arts (three hours a day on three days each week through one full year) are four times more likely to be recognized for academic

achievement, to participate in a math and science fair or to win an award for writing an essay or poem than children who do not participate.” (Lynch, 2017, p. 1). And finally #4 was most responded too, “According to several studies, teaching the arts has significant effect on overall success in school, both verbal and quantitative SAT scores are higher for high school students who take art courses than those who take none” (Hetland et al, 2013, p. 1).

Below is a bar graph that shows that the most astounded reactions of interviewees to specific items on the advocacy flyer (see Figure 2).

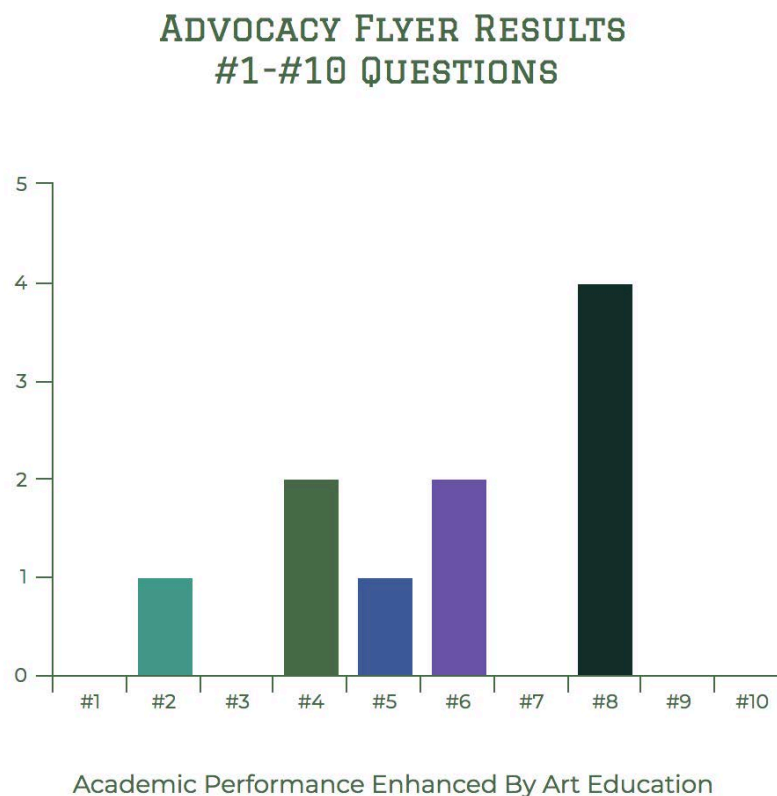


Figure 2. Advocacy Flyer Results #1-#10 Questions

It appears that #8 was most reacted too, merely because of statistical numbered data that was visual and obvious as first glance. However the interviews went deeper and more personal, for example Art Educator #2 mentioned that “it proves that being well rounded in all areas can

improve achievements, however seeing the numbers really as an art educator makes my job feel like I am doing something right.” Art Educator #1, stated that he already knew all this information, “however it would be good for Administration and policy-makers who fail to see the Arts as an integral part of our students success,” he goes on to mention that this “flyer is great and its good to have confirmation of what I do as an art educator, now let’s sell it!”

Former Student #3 stated that in regards to #8:

something from this visual that came back and shocked me was the students who study art can move from the 50th to the 54th percentile just by studying art. I completely agree with this statement because my success in art history truly inspired me to succeed in my other basic history classes that I previously would have found no interest in. I definitely see a drive and desire to achieve in history classes because of my love for art history.

As far as the other reactions, no other interviewee commented on any particular numbers that stood out to them, instead they mentioned as a whole what art education meant to them.

Administrator #1 says, “I agree with everything the article mentions and really do not find any of it surprising. I have always understood that a variety of learning styles is beneficial to the process, and art education allows students to use their brains in ways otherwise not realized.”

Incorporating the Arts into Community, Interdisciplinary Methods and S.T.E.A.M.

The overall reaction to question #7, *How could the district improve on incorporating the arts more into the community and other disciplines, requirements to go along with S.T.E.A.M.*, which mentions, about the school incorporating art interdisciplinary into their lessons, is S.T.E.A.M. is prevalent within the district and how to make the students work within the community more visual, varied tremendously depending on their current position.

Administrator #2 mentions, “I know that art teachers have worked on interdisciplinary projects before, and I hope they continue to do that. Non art-teachers will benefit by experiencing new ideas that hopefully can be used in their regular instruction.” This response made me realize that in fact there is not too many interdisciplinary lessons being executed by other departments within the school and after mentioning about non art-teachers, hopefully this Administrator can view this finding as something that needs to be incorporated as a necessity district wide. If the district were to come up with a requirement that states that all departments need to create a lesson along with another teacher in a different department once a marking period, this would allow students to see more interdisciplinary teaching and benefit from it. Board Member #2 who does not, on a daily basis, see what the teachers are teaching, explained, “I’m sorry but I do not have knowledge in this area.”

Hearing this Board Member mention not having any knowledge in this area, raised a red flag for me, I always felt as though the Board Members should be aware of community engagement, after all the Board Members live in the community. I found Art Educator #1’s answer to the question: *How could the district improve on incorporating the arts more into the community and other disciplines, requirements to go along with S.T.E.A.M.*, extremely interesting, similar to the way that I felt prior to leaving on my maternity absence. They state, “Well for one, our district should push for S.T.E.A.M. instead of S.T.E.M. If Art was integrated, then we could develop a cross-curricular plan that addresses various needs of all of the subjects in this acronym. Right now, the development for S.T.E.M. in our district. I believe they even have a curriculum that they are appropriating from another district. I think the key is that we need to come up with projects that overlap with other subjects. It will take work and planning, but could be so beneficial to student learning. If you look at most fields, they are collaborative

and require teams of people with various skill sets. Educating students this way is a very practical way to prepare students for real world situations.” This makes sense, as mentioned by the Administrator in the last question, we need to teach and make students well rounded.

If there is such a drive for S.T.E.M. in the district are the arts not thought about? Do they matter to the district? This makes us as art educators’ wonder, academically driven subjects are usually always the ones that get priority placement and the arts are shoved to the side, this is a perfect example. Shifting to non art-teachers, Educator #2 who is a Mathematics teacher and has a background in art, states, “I think the development of a S.T.E.A.M. class would be fascinating. Perhaps an art teacher and a math/science teacher could collaborate or co-teach the class to adequately incorporate all elements of S.T.E.A.M. into the class.” This is great idea, if the district were to shift one person from each department and create a class that was co-taught and the requirements to fill for S.T.E.A.M. were in place, the class would be very exciting and engaging. This course would be a pleasant break from traditional classroom settings, having numerous teachers in the room and having the students encircled by diverse disciplines would create a different learning environment for them as well. Lastly, a complete surprise to me was for all the former students interviewed, not one of them mentioned S.T.E.A.M. and only focused on more art shows within the school and more community engagement. A couple former students mentioned that some English teachers incorporated art into their lessons, however not too many. The reality of this is that unfortunately, students are not engaging enough in interdisciplinary learning environments, S.T.E.A.M. is not being pushed within the district, seemed as though no former student even knew what S.T.E.A.M. was about. This should be an eye-opener as well to Administration that S.T.E.M. is a thing of the past and incorporating the Arts is what is wanted and sought after by students.

Obstacles and Challenges of Art Educators

Interestingly enough one of the interview question asks: “what art educators find challenging today versus 10 years ago.” To my surprise every single interviewee repeated similar answers. They ranged from S.T.E.M. versus S.T.E.A.M., being recognized similarly to other disciplines, the enormous use of technology, large class sizes, not being taken seriously from administrators and other educators and lastly supplies due to budget decreases. As you can see in the graph below, S.T.E.M. versus S.T.E.A.M. was the greatest discussed obstacle. Followed by a tie of being recognized, having larger class sizes and budget cuts eliminating supplies. Technology and not being taken seriously were the least of the subject’s thoughts on obstacles for art educators in present day (see Figure 3).

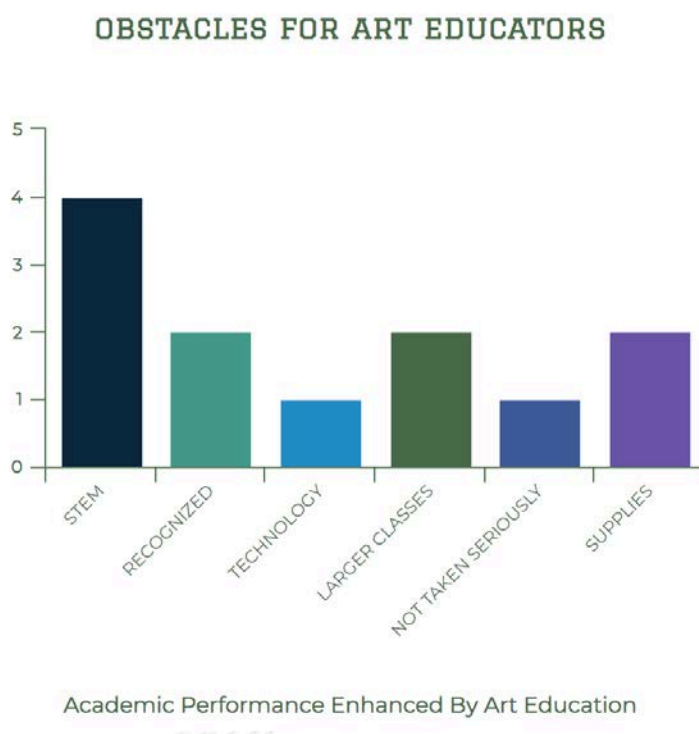


Figure 3. Obstacles For Art Educators

Administrator #1 mentions, “The recent importance place on S.T.E.M., Science, Math is something that I think all educators struggle with now, but I can see how that would affect art educators face in education today verses ten years ago as we struggle for resources.” Whereas Art Educator #1 states, “I feel like we are in a constant competition with the testable academic subjects or high-rigor Advanced Placement courses. It seems that our classes become devalued as “hobby” or “relaxing” courses. This is problematic, because if we are not valued equally as other subjects, we will receive fewer resources. It seems like there is a strong push for engineering, science, literacy and math (S.T.E.M.) I feel like art must be incorporated into this acronym making it S.T.E.A.M. instead.” Both interviewees holding different positions within the district both mention S.T.E.M., Administrator #1 encompasses art education within that acronym clearly indicating that art is a part of that when clearly that is not the case. However, Art Educator #1 states that there is a push for S.T.E.M. but not for S.T.E.A.M. and that is where the Arts is left out and how the Arts must be a part of that. The sad reality is that administrators do not see the big picture of the curriculum as much as the teachers that are teaching it, simply because they are not in the classroom and the school witnessing the Arts being pushed to the side.

Being recognized should not even be an obstacle that an educator feels or perceives as an issue, since every educator within a school is there for one reason, to educate. However, it is a reality that are all not equal similar to what Art Educator #1 mentioned in regards to S.T.E.M. versus S.T.E.A.M. However, Board Member #2 mentions, “ I’m sure some of the challenges are still the same as ten years ago. The challenge of being a recognized, required, meaningful discipline that is beneficial to the students overall development.” Similarly, Art Educator #2 explains, that space is an issue, the budget cuts to the art department, communication from

educators to administrators, however I feel as though exposure and recognition is not seen within this district. During faculty meetings almost all other departments/disciplines are being recognized for something they did or their student, however the Art department puts on so many shows and displays art everywhere within the community and we get NO acknowledgment.” This is not fair, the administration needs to see the good that the Art Educators do and how much the students produce and display within the community. There needs to be more involvement from the administration to the arts, especially as the community is a tremendous supporter of the high school art students.

Normally technology and art do go together, however within our district it seems that the primary technology issue is obsolescence. I knew that when I interviewed a certain science educator she would state something to the degree of involvement of technology as an obstacle, she mentions, “The same for all of us, however traditional educational devices, like chalk and pencils are being lost! Now everything around us is technology based and we have not been caught up to speed on current technology, allowing our incredibly smart students graduate and not have the knowledge of technology as they should.” This answer that was given really hits a sensitive area with me personally, simply because I teach Advanced Placement photography and unfortunately the darkroom has not been in use for the last two years due to mold and outdated enlargers that do not work any longer. It pains me that I have a good amount of students that do go on to art school and have no working knowledge of the darkroom, which is fundamental and germane to photography education.

Two Former Students mention the utter disgrace of the guidance counselors just filling the art classes with students that have time in their schedule and no area for them to go to, so the guidance counselors simply place them in an art class because it “doesn’t mean as much” we are

viewed as a elective non-traditional class so therefore we can have more than the allotted thirty students permitted in a class. Former Student #1 states, “it was so annoying that in my drawing class there was an overflow of students placed in the class because they had no other place to be, making it hard for us Advanced Placement students working independently. We literally had to stand and draw instead of sitting because all chairs in the classroom were taken.” Former Student #4 says, “I feel as though I cannot learn because of the amount of people that are always in my color and design class. You cannot move around and clean your materials at the end of class without having to wait in line for ten minutes, cutting into class time because the amount of students is ridiculous.” This is horrible, because you would never see this occur in a math class or science class because they hire proportionately more math educators, leaving the art department with not enough educators to teach and placing students in an art course as a matter of occupying time, which conveys as well as perpetuates the dismissive perspective that is a constant challenge for the arts. This is a clear indication that we as art educators need to be taken more seriously.

When will the art department be a respected as an equal core curriculum subject? Only one interviewee mentions that art educators are not being taken seriously. This is interesting, because that one answer comes directly from former student #3 recognizes, “I have never in all the four years I attended high school that I saw any of my art teachers being treated the same as my other teachers, this makes me think that the art department is not being taken seriously.” Well, if students see this, I am sure a lot of others do as well. Students communicate to their parents, so I am sure word is getting back to the parents of the students about the lack of respect for the art teachers.

Lastly, the budget being cut all the time and the lack of supplies that art educators are allowed to purchase within their orders are diminishing at a rapid amount every year. Former Student #2 and again Art Educator #1 speak about the use of art educators own personal money being used to purchase supplies for assignments and projects. Former Student#2 exclaims, “I feel some art teachers are not given the funding they deserve in order to give a well rounded art education, I feel that trips and better art supplies would help. I wish administration would hear the art teacher complain about the lack of supplies, than maybe they would do something.” No student should ever have to hear an educator who is a professional complain about something within their own occupation. However, the reality once again is the budget cuts consistently taking away supplies to the art department and in return the students are the ones that suffer from this action.

Interviewees Involvement with the Arts

I found this question interesting; I knew the former students had to have had some sort of involvement within the arts, since it is required by the State of New Jersey to take two years of elective credits in order to graduate. However, it was fascinating to hear the educators and administrations involvement within the arts. The Administrators seem to think that they support the arts, however there is a divide between what they see and obviously what the educators and students witness, their vision is skewed, however Administrator #2 states, “My role has been to support the teachers and make sure our students have the resources they need to succeed in the arts.” Board Member#1 mentions, “I don’t have a direct involvement with art itself in the high school, but I do sit on the curriculum committee of the BOE, so I do have an insight into the Art courses that are well received.” After hearing this Board Member say this, made me realize that

this is the reason why so many art courses do not run every year. The B.O.E (Board of Education) allows only the courses that are received well from course sign up of a designated number of students and the voices of the administration. Even if there is one more student that needs to sign up for the class and doesn't, that course will not run leaving the other fourteen without that course being offered to them. Unfortunately this happens very often and the majority of the students that end up losing out are the students that are going to art school and wanted to take that class for curiosity, understanding for future endeavors and for the love of art. The love of art is heard in every lecture, in every assignment in the art shows displayed in our schools. Art Educator #2 explains, "I teach art, that is my involvement. When I hear the word art, I think: love, passion, comfort, self-expression and imagination. It's like hearing the word "home" when you think of yourself curled up in a blanket on the couch. It's that all around comfort feeling." The passion that my co-workers possess is something quite incredible to witness and I am so appreciative of being able to be surrounded by kind souls that have a love affair with the Arts as I do. I learned a lot as well about my non-art co-workers, Educator #1, "My involvement with the arts is that I have a jewelry business in which I am very creative, my husband is a master wood worker, I design my own landscapes and gardens and my mother had a PhD in fine arts." And Educator #2, "Involvement in the arts, where do I begin? Well first off I teach Mathematics, but I took two art history classes in college and almost minored in art history." I would have never had known this prior to this study on just how important the arts are to overall academic excellence. Another example of the importance of art in education and involvement in the arts was with my Former Student #3, "While I was at North Hunterdon, I took a variety of art classes such as color and design, ceramics, painting, art history and photography. All of these classes were electives that I hoped to sign up for first being anything

else required. Each year that I took art classes I could appreciate my portfolio of the year and truly see my progress first hand and visualize in person how much I was able to improve thanks to my art studies.” From my experience as an art educator within the district I frequently see more than less so many students sign up as the elective fulfillment of taking an art course and end up continuing through the advanced level art courses identical to the experience of Former Student #3.

Does Art Education Impact and Enhance the Overall Educational Career

I ended the gathering of data for this study with the one question that this study was focused around; does art education enhance the overall academic performance? I saved it last solely because after enlightening themselves of the ten facts assembled from my literature review on the advocacy flyer and the precisely created questions asked of them they would be able to recognize the significance of the arts in responding to this question. It is to no surprise after hearing all the optimistic and encouraging remarks from the interviewees on how they felt about the arts and what the arts has done for them academically and as a human being, they all agreed the arts does play an enormous role in the performance overall academically. There were no questions asked, every single interviewee very quickly said, with a yes, or absolutely, and a smile! (See Figure 4.)

DOES ART EDUCATION ENHANCE OVERALL ACADEMIC PERFORMANCE

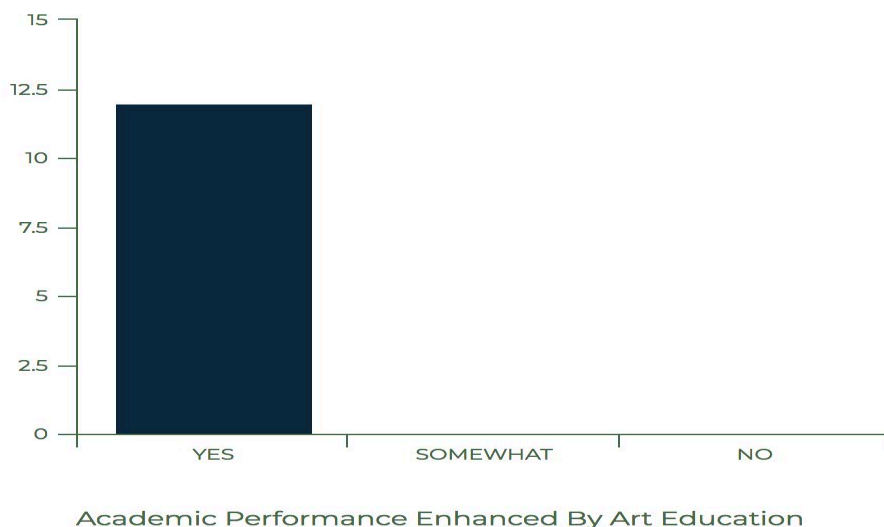


Figure 4. Does Art Education Enhance Overall Academic Performance

The arts play an enormous role in the overall academic journey of our students. A very influential art educator who taught at Stanford Graduate School of Education, Elliot Eisner created *10 Lessons the Arts Teach* (Eisner, 2002, p. 72). See Appendix A for Eisner's advocacy flyer, which inspired my advocacy flyer.

Eisner was the inspiration for my advocacy flyer, he educates quickly with ten extremely important and strong points as to why the arts are so influential on a student and what they teach. I mentioned Eisner during my interviews to allow my subjects even further knowledge on the power the Arts supply to our minds. However, I felt as though after everything discussed with each interviewee that they needed no further explanation as to why the arts enhance overall academic performance.

Administrator #1 when asked the question, "Yes, I truly believe the a well-educated person needs experiences in all disciplines, Art, Music, World Language to truly be well

rounded. Board Member #2 believes that the arts help with confidence, “Yes, I definitely do believe the arts enhance overall education. I think it gives students a sense of accomplishment and satisfaction to admire something that they created. It also, can be another gateway for a student that might be having trouble in other study area to boost confidence in themselves with their creative accomplishments.” It’s true, having something tangible for students to be able to hold and value once finished versus a test grade. The feeling of a great test score is something that can boost confidence however; something dimensional that can be observed is a different emotion. Art Educator #1, states the obvious a phrase that we use frequently, “Absolutely the arts enhance overall academic performance. The phrase “think outside the box” comes from creative problem solving. This is a skill developed in our class.” Art allows students to think in a more creative way, using their bodies in ways other disciplines do not.

Educator #2, who previously mentions that she almost minored in art history, when asked the question about art enhancing overall academic performance she was so excited to answer this question. This was her reply, “I absolutely do. Even though I have always been more solidly mathematically minded, I have always appreciated the arts. I do not have artistic talent with painting or drawing, but I have always loved photography, and took three photography classes in high school. And as previously mentioned, I have also always been fascinated with art history.

I think studying art makes a person more intellectually curious because you are always looking to see or learn something from a new angle or new perspective. For example, I remember during a photography project that I did in high school; I photographed the same waterfall from six or seven different angles and perspectives. Each different angle provided a different perspective of the falls, and with each position, I learned/noticed something new about the subject of my photo shoot. I think I apply the exact same intellectual curiosity and

perspective to math problems. If I can't seem to solve a problem from one direction, I need to try another method or perspective, similar to the waterfall project I did. I think studying art helps students develop this ability to adapt and willingness to look at a problem from another perspective. I often notice that my most inquisitive and patient math students are the students who also take numerous art classes. I do not think this is coincidence. I definitely believe that art develops intellectual curiosity and willingness to work through an academic problem." The way an artist works through a problem is completely different than that of a non-artist. Artists see the whole problem, similar to the way Foley (2014) mentions about if we could teach our students like artists.

The break down and overall philosophy of problem solving is worked out differently in the mind of something engaged or influenced by the arts. However, art history is a wonderful part of art that allows students that are artistically challenged like Educator# 2 to still appreciate the arts. I found in teaching art history that the majority of my past students were not always in fine arts classes, however in advanced placement mathematics, history or world language courses. I really enjoyed asking this question to the Former Student subjects, they have been the most recent of my interviewees to have been part of the art curriculum at North Hunterdon, Former Student #1 mentions, "Art education made me realize that I could get good grades and excel, while studying things I cared about. I became aware of new interests and topics that I would enjoy studying." The arts for this student opened her mind and eyes and allowed her study something she turned out to be passionate about. She gained the confidence as previously mentioned by Board Member #2. Former Student #2, who was not involved in the arts at all previously states, "I believe that art education for every student is a great thing.

Classes like drawing, ceramics and color and design all allow a student to use their full creativity and express themselves. Taking art history has had a major impact on my life and my educational performance in a positive way.” The freedom of expression is a focus that the arts imply and students really gain that confidence and understanding of themselves when they involve themselves in art. Former Student #3 explains, I feel that art education has had a tremendous imperfection in my performance of education because several classes have given me inspiration projects in other classes that have allowed me to share my creativity in different mediums. Through music, art, posters and even writing, I have used my past experience in different art classes in my projects in school, whether it be creating a design for an advertisement or a poem for a writing class. With art, I have found that my mind has widened in such a way that a stringent class like math could not. Art classes have allowed me to share my design creativity with my various classes and the world, even earning me a promising young artist award and the art history student of the year award. Without art electives, I truly would not be where I am today. I think that art electives should not be called electives, but classes because of how monumentally important they are to a student's creativity.” This student has been able to see the effects of art roll into his other classes and make an impression for him that obviously stood out, this overlap is key in the argument that art does affect the academic journey all of us go through in our lives. Lastly, Former Student #4 states, “I think art education was a great outlet for me, I was able to take the knowledge I gained from my art classes and apply them to my regular academic classes. I feel as though my test grades in other classes improved once I started my path of being an art student.” The responses from each interviewee make my study complete; art does in fact increase the overall academic performance.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

In the final overall review of study, the main goal of allowing others in educational roles to understand the importance of art education was a success. My thorough examination of my literature review, collected data through interviews and my reflections have given me a sense that this study was executed well and left an impact on those in which it included.

In this concluding chapter to my study, I examine why the study was a success. The chapter focuses on the impact of my advocacy flyer, the 10 questions conversed, the impact left to the interviewees and the future decisions made by the administration and board of education.

Arts Advocacy Visual

The strength of my advocacy flyer and the 10 questions that were asked from my interviewees opened their eyes about the depth of how art education has an impact on overall educational performance. By doing this study, I expect that it will change the way art is viewed in this district from now on, the Administrators and Board Members seemed to really engage with the questions and were shocked by the advocacy flyer. Educating those two positions was extremely meaningful for me. Those two positions hold high importance for the arts in the sense of selecting classes for the year, community engagement, requiring interdisciplinary teaching lessons and demanding more throughout the school.

Being an art educator myself it is frustrating to have to consistently defend my position and the significance of art. Art is everywhere, it surrounds us and having art education be viewed as academically required like other subjects is very vital. Through my literature review and interview analysis, I conclude that Art Education in fact enhances academic Performance.

Findings from the study suggest that art is viewed as important and is a necessity, however, the way in which people are educated about what art does for students' overall performance is limited. By interviewing various positions, in the future it will create more of a harmonious effort to promote an understanding of the arts and their importance in the district.

Recommendations for Further Research

For this study, I reduced the amount of interviewees to gain a better understanding of the place each one of them stood in their relationship, outlooks and overall knowledge on art. This reduced amount was to gain an understanding on if they felt as though through conversation and being informed from my advocacy flyer that they feel as though, art education makes an impact and enhances a students overall academic experience. The study only analyzed adults, even those past students since they are now all over the age of 18 and in college.

I feel as though further research is needed based on current students in observation for several months to a full academic calendar year to see if their scores increase and if the administration and board permit S.T.E.A.M. and interdisciplinary teaching to occur. Further research may also investigate the purpose of including more arts into activities within the district and open the eyes of the positions that make the final say in cutting the art budget. An additional study would also show to the administration and board of education the importance of art education and the need for students to engage in not only S.T.E.M. classes, but treat art as a academic discipline as well.

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APPENDIX A



10

POSITIVE impacts of the ARTS on overall LEARNING

1. The RIGORS of ARTISTIC discipline lead organically toward self-transformation, ARTS help break down received and self-inflicted stereotypes by opening both the mind and heart. The ARTS produce curiosity and engagement with life, with self and other.

2. The ARTS act as antidotes to hyperactivity and Attention Deficit Disorder, providing ALTERNATIVE ways of LEARNING.

3. The ARTS are just not for people who become artists. They are INTEGRAL to the DEVELOPMENT of self-confidence, character, creativity, a capacity to deal with the tragicomic nature of life, and, fundamentally, the capacity to reach deep into yourself and draw upon your own inner STRENGTHS to SOLVE problems in difficult times.

4. According to several studies, TEACHING the ARTS has a SIGNIFICANT effect on overall SUCCESS in school, both verbal and verbal and quantitative SAT scores are HIGHER for high school students who take ART courses than those who take none.

5. The ARTS teach VITAL modes of seeing, imaging, inventing, and thinking.

6. Studies show that there is a CORRELATION between ART and other ACHIEVEMENT. A report by Americans for the Arts states that young people who participate regularly in the ARTS (three hours a day on three days each week through one full year) are four times more likely to be recognized for ACADEMIC ACHIEVEMENT, to participate in a math and science fair or to win an award for writing an essay or poem than children who do not participate.

7. Studying ART is EMPOWERING whether one becomes an artist or not. It DEVELOPS imaginative problem-solving skills, boldness, an understanding of the planning and execution of creative work, a spirit of independence and entrepreneurship, experience with disciplined and hard work, and, finally the deep satisfaction of being able to use your mind and SKILLS to produce RESULTS you honor and are willing to risk putting out in public.

8. The average STUDENT could go from the 50th to the 54th percentile as the RESULT of ARTS INTEGRATION in his or her school.

9. According to a report by Americans for the Arts, ART education STRENGTHENS problem-solving and critical-thinking skills. The experience of making decisions and choices in the course of creating ART carries over into other parts of LIFE.

10. The ARTS invite children to pay attention to the environment's expressive features and to the products of their IMAGINATION and to craft a material so that it expresses or EVOKES an emotional or FEELINGFUL response to it.

APPENDIX B

10 Lessons the Arts Teach

By Elliot Eisner



- 1 The arts teach children to make **GOOD JUDGMENTS** about qualitative relationships. Unlike much of the curriculum in which correct answers and rules prevail, in the arts, it is judgment rather than rules that prevail.
- 2 The arts teach children that problems can have **MORE** than **ONE** solution and that questions can have more than one answer.
- 3 The arts celebrate multiple **PERSPECTIVES**. One of their large lessons is that there are many ways to **SEE** and **INTERPRET** the world.
- 4 The arts teach children that in complex forms of problem solving purposes are seldom fixed, but change with circumstance and opportunity. Learning in the arts requires the **ABILITY** and a **WILLINGNESS** to surrender to the unanticipated possibilities of the work as it unfolds.
- 5 The arts make **VIVID** the fact that neither words in their literal form nor numbers exhaust what we can **KNOW**. The limits of our language do not define the limits of our **COGNITION**.
- 6 The arts teach students that **SMALL DIFFERENCES** can have **LARGE EFFECTS**. The arts traffic in subtleties.
- 7 The arts teach students to think through and within a material. All art forms employ some means through which **IMAGES** become **REAL**.
- 8 The arts help **CHILDREN LEARN** to say what cannot be said. When children are invited to disclose what a work of art helps them **FEEL**, they must reach into their **POETIC CAPACITIES** to find the words that will do the job.
- 9 The **ARTS ENABLE** us to have **EXPERIENCE** we can have from no other source and through such experience to **DISCOVER** the range and variety of what we are capable of **FEELING**.
- 10 The arts' position in the school curriculum symbolizes to the young what adults **BELIEVE** is **IMPORTANT**.

SOURCE: Eisner, E. (2002). *The Arts and the Creation of Mind*, In Chapter 4, What the Arts Teach and How It Shows. (pp. 70-92). Yale University Press.

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NATIONAL
ART EDUCATION
ASSOCIATION

APPENDIX C

Administration & Board Members:

1. How does Administration decide on which art classes will be offered during the school year?
2. Why does the school allot only for certain classes to run with a certain number of students (allowing art history to hardly ever run)?
3. How does non-art disciplined educators incorporate art into their lessons, involving S.T.E.A.M, are you aware of this procedure and also is this required per the district?
4. Do you feel as though the arts are usually the first department to be cut within the budget?
5. What is your involvement with art within the district and outside of your occupation?
6. Did you take any art courses in high school or college, if so is there any that left an impact on you and why?
7. How could the district improve on incorporating the arts more into the community and other disciplines, requirements to go along with S.T.E.A.M?
8. What challenges do you feel as though art educators face in education today versus ten years ago?
9. Do you feel as though certain art courses need to have prerequisites and if so which art courses and why?
10. Do you believe the arts enhance overall academic performance?

Art Educators & Educators:

1. How do you incorporate required standards per the state into your lessons, please give me two examples?
2. Do you feel as though the arts are usually the first department to be cut in the budget?
3. On average how many students a year continue to high education majoring in art?
4. Do you feel as though there needs to be prerequisites for classes and if so which ones and why?
5. Do you feel as though there needs to be sign up amount requirement in order for a course to run?
6. What challenges do you feel as though art educators face today versus ten years ago?
7. Is there anything as an educator that you feel as though the district needs to implement in order for the arts to be recognized and stronger moving forward?
8. How do you incorporate other disciplines into your lessons, do you co-teach and collaborate teach within the school and if so what other disciplines have you worked with for this?
9. How could the district improve on incorporating the arts more into the community and other disciplines, requirements to go along with S.T.E.A.M?
10. Do you believe the arts enhance overall academic performance?

Former Students:

1. What is your relationship with art, which classes did you take when you were at North Hunterdon High School?
2. Do you feel as though certain art classes should have been taken prior to the next one for better understanding? For example implementing prerequisites.
3. Did art history leave an impact on your educational career?
4. What were your thoughts on art history prior to taking the course and they way feel now about that subject in relation to other subjects?
5. How could the district improve on incorporating the arts more into the community and other disciplines, requirements to go along with S.T.E.A.M?
6. When you were a student at North Hunterdon did you feel as though the school as a whole embraced the arts and respected the arts? Did other subject disciplined teachers ever mention art and if so in what way?
7. Was there a moment in time during your art courses that sparked a change in you or your character that still is present today?
8. Being in college now, do you still engage in art, if so what courses or in what manner do you?
9. Do you feel as though your art teachers from high school face obstacles in education? Why or why not?
10. Do you feel as though art education has had an overall impact on your performance in education?

APPENDIX D



PennState

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EXEMPTION DETERMINATION

Date: April 9, 2018

From: Philip Frum,

To: Zena Kirby

Type of Submission:	Initial Study
Title of Study:	Academic Performance Enhanced By Art Education
Principal Investigator:	Zena Kirby
Study ID:	STUDY00009378
Submission ID:	STUDY00009378
Funding:	Not Applicable
Documents Approved:	<ul style="list-style-type: none">• KirbyHumanProtocolResearchIRBRevised.pdf (0.04), Category: IRB Protocol• KirbyQuestionsforInterviewing.docx (0.02), Category: Data Collection Instrument

The Office for Research Protections determined that the proposed activity, as described in the above-referenced submission, does not require formal IRB review because the research met the criteria for exempt research according to the policies of this institution and the provisions of applicable federal regulations.

Continuing Progress Reports are **not** required for exempt research. Record of this research determined to be exempt will be maintained for five years from the date of this notification. If your research will continue beyond five years, please contact the Office for Research Protections closer to the determination end date.

Changes to exempt research only need to be submitted to the Office for Research Protections in limited circumstances described in the below-referenced Investigator Manual. If changes are being considered and there are questions about whether IRB review is needed, please contact the Office for Research Protections.

Penn State researchers are required to follow the requirements listed in the Investigator Manual ([HRP-103](#)), which can be found by navigating to the IRB Library within CATS IRB (<http://irb.psu.edu>).

This correspondence should be maintained with your records.

We would like to know how the IRB Program can better serve you.
Please fill out our survey; it should take about a minute: <https://www.research.psu.edu/irb/feedback>.
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