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**Educating with the Arts:
How Art Education Policy Impacts Educational Outcomes**

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By

Mary Louisa Deter

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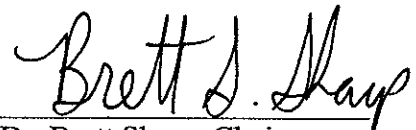
**Educating with the Arts:
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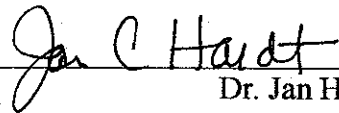
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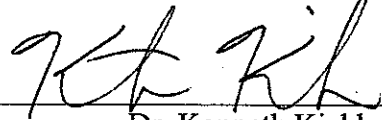
By _____



Dr. Brett Sharp, Chairperson



Dr. Jan Hardt



Dr. Kenneth Kickham

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Abstract

The purpose of this paper is to explore the impact of art education policy on educational outcomes. While past literature focuses on how art in the classroom can raise individual test scores, this research takes a broader look at how policies impact outcomes on a state by state basis. The first part of the study uses OLS regression to estimate the effects of art policies on reading, math, and science standardized test scores. The results show that individual policies, as well as the total number of policies, have significant effects on the test scores. The second part compares the graduation and attendance rates, Academic Performance Index scores, and A-F Grades of Oklahoma schools that are OKA+ against those that are not. The results illustrate that while there was no significant difference between the two in A-F Grades, schools that prioritize art education do have higher graduation and attendance rates, as well as higher Academic Performance Index scores. Overall, this research provides evidence that enactment of art education policies state-wide can produce positive educational outcomes.

Chapter I - Introduction

In the hustle and bustle of our ever changing and evolving education policy today, art education is beginning to slip through the cracks of being a priority in today's public schools. Drastic budget cuts, higher demands and expectations on educators, an increase in curriculum requirements, and an emphasis on standardized testing have caused art education to begin to be a thing of the past as more and more schools cut these programs. The arts should not be allowed to disappear in our schools. Arts provide much needed skills, social and emotional competency, health benefits, and assist with learning other traditional subjects. Participation in the arts can help students be more confident, give them the ability to communicate with others, and function more smoothly and successfully in today's job market. This study looks at what art education is, what the causes are for the decline of art education course in schools, and what specific benefits they provide to students. It will see how art education policy enacted by states affects their educational outcomes. It will also look at the effects of being an A+ plus member in Oklahoma, and how it affects their A- F school grade, API scores, and graduation rates compared to schools who are not members. After identifying the benefits and arguments for why the arts should be preserved, it explores possible solutions there are to bringing the arts back into curriculum.

Chapter II - What is Art Education?

Art education is curriculum that enriches children in the arts, such as dance, music, and painting, and that sponsors creativity and hands-on experiences. Art education can be presented in the classroom through three different methods. One approach is the direct action of teaching an art form, such as music or drawing. This approach generally gives students increased creativity and self-expression, and offers them an outreach, as well as skills in the art form. Another similar approach is in learning about the arts which can include specific elements involved, such as the color wheel for painting, the music notes on the staff, or the history and major contributors of certain art forms. The last approach, and one less explored, is the act of learning other subjects through the arts. This approach integrates subjects such as history and mathematics with artistic forms. This can be through museum visits (history through paintings) and watching performances (literature through drama) (Hodsoll 1985, 248). All of these methods give students important skills that cannot be gained from traditional subjects, as well as reinforce those skills that are learned in a traditional classroom.

The goals of art education are not necessarily to put students on the track for artistic careers, but to create skills that will help students in their life and future careers. Art education “can provide instruction in how to practice one or more art forms; it can impart knowledge (including critical evaluation skills) in one or more art forms; it can develop self-confidence, capacity for creativity and self-expression, and enhanced capacities in other subjects” (Hodsoll 1985, 247-248).

Chapter III - Historical Concepts of Art Education

The importance of art has been theorized as far back as the days of Plato and Aristotle. Plato, who valued reality over “imitation,” was relatively skeptical of the arts. Because of this, he did not believe they had cognitive status, for “the further a work is from reality the less true it is likely to be” (Efland 1978, 6). However, when it came to the arts in education, Plato “claimed that it could prepare the soul for reason” (Efland 1978, 6), supporting the theory that the arts can assist with educational development and critical thinking skills.

Aristotle had quite an opposite take on the arts and believed in the concept of universals, rather than then ideals. Aristotle thought there was a clear connection between life and art or that “art is that which imitates life while life is the subject of art” (Efland 1978, 7). This connection is shown between the actual subject the artist is trying to portray, as well as the meaning and purpose behind it. Art’s purpose is to bring “delight in the works of imitation” and a “pleasure of learning” (Hofsteder and Kuhn 1964, 99-100). Aristotle firmly believes that the arts provide cognitive development and discusses art education in his writing of *Politics*:

And now we have to determine the question which has already been raised, whether children should be themselves taught to sing and play or not... It is difficult if not impossible, for those who do not perform to be good judges of the performance of others... We conclude that they should be taught music in such a way as to become not only critics but performers. (Efland 1978, 7)

Aristotle believed that in order for us to be able to truly understand art, it was important for us to emerge ourselves in it and be a part of it.

John Dewey connected with the arts through his theory of intelligence. In Dewey’s theory, intelligence is uniquely formed by the person’s environment and is molded because of it. Intelligence, in Dewey’s world, “is not an attribute of an individual, but rather a process, and the resulting products of intelligence are what Dewey calls ‘experience’” (Efland 1978, 10). Dewey

establishes the importance of art for intellectual learning by expressing its completeness to our experiences. Dewey writes:

Because experience is the fulfillment of an organism in its struggles in the world of things, it is art in germ. Even in its rudimentary forms, it contains the promise of that delightful perception which is aesthetic experience... Art is the living and concrete proof that man is capable of restoring consciously, and thus on the plane of meaning, the union of senses, need, impulse, and action characteristic of the living creature. (Efland 1978, 11)

Dewey provides points that are necessary to art education. He believes that schools should provide resources for students to develop interests and encourage creative problem solving. Art education curriculum should focus on the actuality of doing art, rather than memorization of facts and figures, something often focused on in today's curriculum requirements. Above all, schools should encourage self-expression and artistic freedom. Dewey encourages various arts be supplemented and work hand-in-hand with other subjects to provide a whole educational experience. This curriculum combination of art and traditional subjects is focused on strengthening knowledge in both combined subjects (Efland 1978). These philosophers had very different views on art and how that fits into our education system, but all provide an argument that can still be used today, that the arts are important and need to be taught in today's schools.

Art education policy is not a new concept; in fact, the first lobbying effort by a special interest group in support for visual arts education took place in 1869 in support of mandating drawing instruction in Massachusetts public school. A group of individuals and businesses created a petition urging the importance of drawing concepts for industry and manufacture growth, stating its presence in European countries causes a disadvantage for competing American industries. The petition requested action from lawmakers and that the State Board of Education develop a plan that provides art education in some form, free to the public in towns of

five thousand and more citizens. Within days, the petition resulted in favorable action, resulting in the Massachusetts Drawing Act (Bolin 2006).

RESOLVE RELATING TO PROVISION FOR FREE INSTRUCTION IN
MECHANICAL DRAWING IN THE CITIES AN LARGE TOWNS OF THE
COMMONWEALTH.

Resolved. That the board of education be directed to consider the expediency of making provision by law for giving free instruction to men, women and children in mechanical drawing, either in the existing schools, or in those to be established for that purpose in all towns in the Commonwealth having more than five thousand inhabitants, and report a definite plan therefor to the next general court.

Approved June 12, 1869. (Secretary of the Commonwealth, 1869, p. 817)

This petition and quick resolution suggest that even in the 19th century, art education was revered as an important part of educational curriculum, a life skill for men and women in the work force, and worthy of the legislature's attention and policy action.

Chapter IV - Obstacles for Art Education

Education Policy: No Child Left Behind

No Child Left Behind was created in 2001 as an amendment to the Elementary and Secondary Education Act of 1965, which provides the largest amount of federal funding towards elementary and secondary schools. The purpose of No Child Left Behind was to “ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments” (NCLB Sec. 1001). The act created national educational standards, which are to be used to hold states accountable to improve academic achievement. Chapman states that “in theory, the law articulates the idea that all students can learn more than teachers expect them. NCLB is intended to close achievement gaps among students” (2004, 3). Overall, the law was created as a way for the federal government to micromanage education policy.

Although No Child Left Behind identifies the arts as one of the five core learning areas, it does not give procedure or re-enforcement to support it, nor foreign language, humanities, or social studies. The Council of Chief State School Officers has identified these subjects as the “lost curriculum” (Chapman 2005, 18). A survey by the National Education Task Force in 2007 showed that 22 percent of those schools districts surveyed reduced the amount of instruction for the arts (Grey 2010). Pederson believes that “there is less attention given to the non-tested subject areas. Those non-tested subject areas remain invisible. There is less interest in developing those areas. People are so busy with the big [tested subjects] there is no pressure to focus on fine arts, PE, or health” (2007, 287). Another survey by the Center on Education Policy shed light on the 71 percent of schools that had reduced their instruction in the “lost curriculum” to focus on the testing subjects, math and reading (Grey 2010). The neglect for the arts is far

from just instructional time. Funding and resources have also decreased, regardless of their “core subject status.” In 2003 funding for the arts was cut “on the grounds that the Bush administration has a ‘policy of terminating small categorical programs with limited impact in order to fund higher priorities’” (Gray 2010, 10).

Due to the emphasis No Child Left Behind put on core curriculum, supporters of the arts have pushed to reveal the benefits that arts education has on these subjects, such as mathematics and reading, in order to countermand the lack of support for the arts. Hetland et al. (2013, 3) suggests that this has taken away from the fact that the arts are in fact important in their own merit: “The arts must stand on what they teach directly... justifying arts programs on an instrumental basis, we devalue the arts and fall prey to anti-arts or arts-as-frills strain that accompanies the back-to-basics movement in the United States”. Hetland et al. (2013) fears that if we put too much emphasis on the arts as a support to other academics, and a future study shows this to be untrue, that the arts will lose meaning and standing even more in schools.

Also as a result, there has been an increase in community collaboration and involvement in protecting art education. Art organizations have become “anxious to jump on the arts education bandwagon in an effort to rescue the students from the ever-diminishing arts education curriculum” (Grey 2010, 10). Groups have begun to band together to create programs and encourage arts as extracurricular activities. Colwell makes this point by stating that “almost every museum, symphony, orchestra, dance group and theatre company has a substantial educational program, although their goals may be seen as a by-products of valid art instruction” (2005, 19). Overall, the aftermath of No Child Left Behind legislation, causing the arts to be put on the back burner, resulted in community support for art education and an increase in community educational programs.

The backlash from No Child Left Behind shows promise that the legislation has and will likely see more alterations as more people see the ramifications it has had on school systems.

Chapman identifies four key areas that will likely see reform. These changes will possibly be focused on:

- (1) new national standards and comparisons of state test scores with national assessments;
- (2) more flexibility for states to design multiple and longitudinal (growth or progress) assessments;
- (3) more options for assisting the neediest schools and districts; and
- (4) incentives that may attract teachers into high-need subjects and districts. (Chapman 2007, 1)

These areas of reform are helpful for fixing general education issues caused by No Child Left Behind, but there is a specific reform that could help strengthen the arts as well.

The National Association of State Boards of Education in 2003 found through its Study Group on the Lost Curriculum that there is a sufficient need for art education reform, as well as for foreign language. The Study Group came to two significant conclusions: (1) “that there is a substantial body of research that highlights the benefits of including arts and foreign language in the curriculum” and that (2) “these subject areas have often been marginalized, and are increasingly at risk of becoming lost as part of the core curriculum” (Meyer 2004, 11). As a result of its findings, the group presented a series of recommendations for Congress to consider when making decisions on future revisions to the No Child Left Behind legislation. Its suggestions were:

1. Develop licensure requirements for educators in the arts that are in sync with standards in their subject.
2. Provide time for art staff to participate in high quality professional development.
3. Ensure that at state-level departments of Education, expertise in the arts has some representation among the staff.
4. Increase the number of hours required for graduating high school by adding the arts as a core requirement.
5. Encourage colleges and universities to include high school art courses in cumulative grade point averages when considering college admission.

6. Require infusion of the arts and curriculum for lower elementary grades and encourage school districts to make art education the standard.
7. Encourage publishing companies to continue development of art education curriculum.
8. Include all core subjects into the improvement strategies presented by NCLB, including the arts.
9. Advocate for the National Assessment Governing Board to offer more frequent NAEP assessments for the arts.
10. Demand legislatures to commit to the arts. (Meyer 2004, 12-15).

Although No Child Left Behind had provided some positive assessment for arts education, such as identifying art as a core subject, it is all-in-all lost when it comes to financial support and is still thought of as a low priority subject. Increased regulations of traditional subjects have made it difficult for teachers to integrate the arts in these subjects. Although NCLB was created with good intentions, it did not have the proper funding and integrated based curriculum necessary to support arts education in public schools.

Other Education Policies and How This Affects the Arts

Today, education policy does not typically support the arts in academic settings. Federal and state policies such as No Child Left Behind and A-F school report cards emphasize and require student success on standardized tests. This change in the way schools demonstrate accountability alters the way educators prioritize and allocate their time and money. With this comes the pressure put on teachers and administrators to focus their attention on teaching only the subjects that their students will be tested over, leaving arts out of the classroom. Eisner believes that “the arts and artistically treated practice do not fare well in such a climate” (2003, 340). This narrow span and new way of measuring accountability force art education to be thrown to the wayside, as educators struggle to make the quotas these policies require of their students’ test results.

Focus on the academic “core” subjects causes imaginative subjects, such as the arts, to disappear or at the least brought to the bare minimum. “In many ways, the marginalization of the arts is consistent with what we used to call ‘the basics,’ as in ‘back to the basics.’ There is something quite appropriate about the phrase “back to the basics.” It is a matter of going back rather than forward” (Eisner 2003, 341). This was not always the case, as the federal legislation, The Goals 2000; Educate America Act of 1994, was the first to include arts education as a core subject in schools. Although there was concern that mandates would prohibit local control in education, many felt as though the “National Standards and Goals 2000’s de facto inclusion of the arts among the basics would halt the marginalization of music in the curriculum and secure a firm position for music in the schools” (Elpus 2013, 14). Goals 2000 resulted in an increase in high schools making arts a required course for graduation and a significant increase in number of arts credits required by schools. Although the number of unique music education courses did not show significant growth, courses from other disciplines, such as dance, drama, or media arts, were created to make up for the higher demand for arts courses (Elpus 2013).

Policies have also created issues as to who has access to art education. Louisiana has policy set in place that allows students who test poorly on standard exams to be exempted from participating in art education, so they can focus on subjects that are tested over. Louisiana’s education policy states, “For students in grades 5–8 who have scored below the Basic level on LEAP21 [the Louisiana Educational Assessment Program] in English language arts or mathematics, the minimum time requirements in health, music, arts and crafts, or electives are suggested in lieu of required” (Baker 2012, 17). This suggestion of alternative curriculum puts these students at a disadvantage and keeps them from receiving the benefits that art education has to offer.

Helen Storey, an artist and educator, finds issue with assessment, and believes that “of all subjects it is probably art that suffers the most...” (Storey 200, 18). Art is subject to opinion, and Storey suggests that putting this value of ‘good’ or ‘bad’ is compromising the whole purpose and growth of the artist. Art calls for “leniency of interpretation and experimentation” (Storey 2000, 18). Story believes that “it would be brave to attach more value to the process over outcome and likewise to build in a facility that could respond to developments in post-school life for those still in their early learning years” (200, 18).

Oklahoma’s Priority Academic Student Skills assessment recognizes the significant benefit art education has for students: “A quality fine arts program can contribute greatly to the development of each student’s creative thinking and problem-solving skills... Research confirms that every individual has innate creative potential. In order for this potential to be actualized, all students should be actively engaged in the creative process. Inspiring creative and imaginative confidence in our students will enable them to address the challenges of the future” (PASS 2013, 263). Even so, Oklahoma neglects to prioritize the arts as an academe field. “Schools give more lip service to the arts and to imagination than time and attention” (Eisner 2003, 341).

Oklahoma’s PASS assessment of the arts seems to be an example of just that.

Opponents to Art Education

The arguments for why we cannot sustain or increase art education in public schools have ranged from economic concerns to alternative education methods. Economically, school budget cuts and lack of funding have caused the arts to suffer. Public pressure to reduce government spending has made policy makers look to educational and art funding to enact these budget cuts (Carlisle 2011). When policy makers and education administrators are faced with having to make

drastic budget cuts to education, they have the daunting task of deciding where the money is going to come from. It is much easier to take money away from art and music, programs that take a lot of expensive supplies, than it is to take away from traditional subjects, such as reading and mathematics, despite costs associated with these programs. Specific artistic programs are not the only place where cuts are made. Drastic budget cuts in the classroom can cause teachers to not get enough money to afford supplies for crafts and creative projects that can be used to collaborate creativity with traditional subjects. When there are such difficult financial cuts, it is almost always the arts and creative endeavors that are the first to go.

Another concern administrators and parents have with art education courses is how schools schedule for them. Some administrators use the lack of time and space as an excuse to remove the arts from the curriculum. Many schools practice scheduling that takes students out of the classroom to participate in music classes and various activities such as concerts and contests. Administrators are concerned that this time missed in the classroom will cause some students to fall behind and have trouble catching up. Several studies have been conducted to try to measure the effects of pulling students out of the traditional classroom to participate in music. Most studies show there is no significant difference in academic achievement between these students. In fact, in some studies, it showed that the students participating in the art programs scored higher than those who did not (Kvet 1985). However, there is still a worry when a student is struggling in a traditional course, that he/she needs additional time and concentration in that course, rather than spending time in an artistic endeavor.

There is a possibility of concern over the lack of clear evidence for the benefits that art education gives. Scientifically it is very difficult to give empirical evidence to the benefits that art education gives. Most studies rely on personal observations or quasi-experimental research

designs that lack a proper controlled group (Lobo and Winsler 2006). Quantifying the benefits that the arts give is also difficult, as not every participant has the same starting point or potential emotionally or intellectually. Defining a rating for social and emotional well-being does not equal out the same for everyone and trying to develop those benefits into a study can feel impossible to give an accurate account of the actual benefit the arts have on someone. This gives way for skeptics to disregard art education, as it is not something that can be laid out and one hundred percent be scientifically proven all of the time.

Chapter V - Why It Should Be Kept

Enhancing an Alternative Way of Thinking

Art education is vital to creating well-rounded, creative thinkers in today's students. Studies have concluded that participation in the arts is helpful for creating a higher level of thought, captivating organizational skills as well as other cognitive skills (Boyes and Reid 2005). "The arts then are substantive; they involve thinking and problem-solving as well as expression; they require the learning of visual, aural, and spatial languages. A knowledge of them is needed to see and hear, as well as to read and write; it is also needed to express nonverbal concepts" (Hodsoll 1985, 247). These traits are necessary and important in future fields, even those that are not related to the arts. Finding creative ideas and solutions to problems is vital, whether one is a politician, software developer, or in the health care industry. Being able to look at problems and find alternative and unique solutions gives those with this ability an advantage in that particular industry.

Education in the arts also allows students to learn to be more descriptive in language, giving more qualitative perceptions of the things around them (Eisner 2003). In today's global society, people are expected to be comfortable and able to communicate with diverse populations. Exposure to the arts can provide a worldly thinking, and understanding of different cultures: "When we challenge our students to grow intellectually, emotionally, socially, and spiritually we prepare them to be effective leaders of the future" (Grytting 2000, 66). These skills are required and vital for future employers, as well as an overall positive well being. Many well-known and successful business executives have agreed and made comment on the importance of learning the arts in their careers and the people they choose to hire at their companies. Steve Jobs, founder of Apple, when releasing the latest products in 2011 said, "It is in Apple's DNA

that technology alone is not enough – it’s technology married with liberal arts, married with humanities, that yields us the results that make our hearts sing” (Stanford 2012). Joseph M. Calahan, the Director of Cooperate Communications at Xerox Corporation stated that, “Arts education aids students in skills needed in the workplace: flexibility, the ability to solve problems and communicate, the ability to learn new skills, to be creative and innovative, and to strive for excellence” (Stanford 2012). When it comes down to it, “arts education is essential for becoming an educated citizen” (Baker 2012, 23).

A Tool for Communication

Arts give students a new form of language to express themselves. Eisner believes that “literacy itself can be thought of not as limited to what the tongue can articulate but what the mind can grasp” (2003, 342). With this idea, art forms such as dance, music, and the visual arts are just as important as reading and literature. Cave art and rhythms in music were important to expressing emotion and as a means of communication for people who lived 17,000 years ago. Art is still used as a means to tell a story, such as through the memorial that was built to honor 9-11 victims and heroes. Art can be a means to express things that we cannot formulate into words: that “humans know more than they can tell” (Eisner 2003, 343). With that, art is used to connect people in ways that otherwise would not have. Art brings people together through an unspoken story that gives a deeper connection and relationship. This emotional connection can help people with diverse backgrounds come together and communicate in ways that they possibly wouldn’t have, if it had not been for the story that art portrays.

Thomas Moore expresses the importance of the arts in forming relationships and social growth. He states that, “Continuous exposure to the arts in one of the best ways to prepare

ourselves for relationship, much better than relying entirely on the psychological in our approach to life. More important than the particular themes we find in the arts which may give us insight into relationship is the general education in poetic thinking and living that the arts provide” (Moore 1994, 246). Moore (1994, 246) also expresses that the arts give people a broader view of the world, and that this expansion can help when confrontation arises in relationships. “Through immersion in the arts, our reflection on life becomes larger, so that when we are confronted with the challenges of relationship we will have a rich imagination to bring to them”.

A particularly important time for exposure to the arts is in preschool, when children are beginning to develop social skills and are learning how to identify and express their emotions and feelings. Introducing creative forms into their learning environment encourages growth in these areas and helps children learn how to express their emotions towards each other in positive ways. In particular, dance/creative movement allows for originality, spontaneity, and freedom to invent movement at one’s own will. Lobo and Winsler find that “it is a method of learning about one’s own personal strengths and weaknesses, and a means to explore new physical, social and emotional territories. Dance encourages innovation and honors individual experience and resources at whatever stage they arrive” (2006, 503). Dance increases self-awareness and body control – both important and necessary when learning to control one’s behavior. Focus, ability to adapt and make adjustments, and the attention to detail can also translate as benefits for other aspects of communication and learning. When dancing in a group setting, children can learn the importance of personal space, having respect for others, and overall how to work together as a single unit (Lobo and Winsler 2006). Students can learn how to communicate through their body language, by learning how to use their body to tell stories and interact with one another. When students learn these skills in an art class, they will continue to use these skills when

communicating in other settings, helping them identify how to appropriately react with others and control their emotions when a situation becomes overwhelming, positively or negatively. Learning these skills and having the ability to adapt to different environments are essential when building relationships and communicating with diverse individuals. Creative endeavors help students develop in these ways and give them the tools to focus on these relationships.

Lobo and Winsler (2006, 512) supported their claims through an empirical study demonstrating that children in preschool who participated in a twice-a-week dance program for eight weeks “made both significant gains in their social skills and significant reductions in their behavior problems over the course of the program, whereas children not exposed to the dance program did not show much improvement.” The children also seemed to express more self-confidence over the course of the eight week program. One example from the study was given when a student, referred to as ‘Jack,’ was participatory and withdrawn at the beginning of the study. Lobo and Winsler (2006) state that Jack seemed to be in his own little world and unable to pay attention. As the weeks went on, Jack continued to improve, and by the end of the third week was fully participating and more engaged with the movements and the group. Teachers reported that outside of the dance class, he had also improved his focus in the classroom. Jack was one of many students who had improved communicating and engaging with others as a result of the dance class.

The study also revealed an improvement in communication and relationships through the body language the students showed among each other. At the beginning of the study, the children were hesitant to hold hands, touch, or engage in each other at all. The dance class helped the students get to know each other, and “by the end were spontaneously holding hands all the time and enjoying touching each other in socially appropriate and positive ways” (Lobo and Winsler

2006, 513). Art classes help students learn how to engage each other, communicate emotionally, socially, and through body language, and overall connect as one human being to another. These behaviors and skills teach children how to build long-lasting, meaningful relationships.

A Support to Academics

Art education is part of a full learning experience. Eisner (2003) suggests that we are born with brains, not minds, and that it is up to our exposure to education and experiences that we develop it. He states that “the task of education, socialization, and acculturation is to transform brains into minds. Minds come into existence as individuals secure varied forms of experience in the course of their lives and, through those forms of experience, learn to think” (Eisner 2003, 341). The arts play a crucial role in this development. Exposure to various art forms and learning to create our own are ways that give experiences and imagination in ways that other subjects cannot. Eisner (2003) relays that the relationship between the senses and the world, as well as thought process, what he calls “mind’s ear,” are important to recalling past experiences and overall memory. Combining art education with traditional learning helps to acquire and remember knowledge more quickly. This learning style uses the whole body as a means of putting the material to memory (Brown 2010, 113).

Subjects integrated with the arts are typically instructed as project-oriented learning. Completing projects has its own set of additional advantages. Art projects are used to reinforce core subjects and maintain a cultural theme which leads to in-depth analysis of the subject. Project-oriented learning makes “teachers function as facilitators,” which is important for students to explore self-teaching, and exploration of the subject. Art projects emphasize collaboration, both with fellow students and adults, and lets “students take ownership over their

learning” (Carlisle 2011, 146). Overall, the arts make learning more fun. Students are more interested and intrigued when they can foster their imagination and use creativity to learn new concepts: “Creative activities are among the experiences that induce a sense of flow. Art classes provide opportunities to for creativity. They foster a joy of learning as they allow students to create” (Grytting 2000, 66).

Lobo and Winsler’s study (2006) suggests that dance classes assist students in focusing on their classes. Also the dance class teaches other important concepts, such as letters and numbers. The students learned to use their bodies to make shapes, numbers, letters, and how to count rhythms. In this way, the arts can be used to collaborate with other subjects to help reinforce concepts that were taught.

Participation in the arts raises test scores. Baker (2012) found that the average test scores in English were five to nine points higher and four to eight points better in mathematics for music students than they were for non-music students. Another study by Gardiner, Fox, Knowles, and Jeffrey found that first graders scored higher on reading and mathematics achievement tests after seven months of being exposed to music and visual-arts classes (Grytting 2000).

Incorporating the arts into scientific subjects, such as chemistry, also has been shown to be an effective learning tool. Greenberg (1998, 17) suggests that combining the arts with chemistry promotes interest and creativity in learning, and “stimulates students to think outside the box”. In the case of combining art and science, both subjects work hand-in-hand. For example, learning why colors look the way they do enriches the student in both subjects. In one study, two classes were taught the same chemistry topics over five weeks, with one class including art-based activities, while the other did not. The inclusion of art-based activities in

chemistry resulted in a significantly higher scores on a chemistry understanding test than with a chemistry course taught without (Danipog and Ferido 2011). Overall, applying the arts to chemistry helps students to understand the material, gets them to think at a higher level, and makes the course more interesting to learn.

Tradition of Political Value

Taking away art programs is inconsistent with the goals of several education departments and state constitutions. For instance, Article VIII of the Louisiana Constitution “defines the goal of the public educational system as ‘to provide learning environments and experiences at all stages of human development that are humane, just, and designed to promote excellence in order that every individual may be afforded an equal opportunity to develop to his full potential’” (Baker 2012, 17). Louisiana’s policy exempting bad test takers from art programs does not fall in line with this goal. This exclusion is not only inconsistent, but against the state’s highest law. This policy disadvantages those who do not test as well as other, and gives them an education that is not equal to those that do participate in the arts.

The arts have been important subjects for several United States presidents. President George Washington made statement that the arts are necessary for living, saying that “The Arts and Sciences, essential to the prosperity of the State and to the ornament of human life, have a primary claim to the encouragement of ever lover of his country and mankind” (Stanford 2010). President John Quincy Adams believed that the arts were something one strived for, that you worked hard so that offspring could instead learn and enjoy artistic endeavors. He said, “I must study politics and war, that my sons may study mathematics and philosophy... in order to give their children the right to study painting, poetry, music, and architecture” (Stanford 2010). In

these sayings, our forefathers urged the importance and necessity for the arts and culture in society. President Lyndon B. Johnson suggested that without art we would be a visionless nation, and without vision, we could not survive. He said, “Art is a nation’s most precious heritage. For it is in our works of art that we reveal to ourselves and to others the inner vision which guides us as a nation. And where there is no vision, the people perish” (Stanford 2010). Art keeps the nation going, gives hope, and initiates culture and vision, and unity as a society, and this idea was even prominent in the political minds in the 1700–1800s.

Art and Health

Maintaining a healthy mental state is important for students to be successful in school and overall later as an adult. Participating in the arts also has shown significant benefits in people’s health and well being. The benefits of the arts in medicine and therapy have evolved and come to light in various research and studies. They are found to help people struggling with chronic illness and trauma, as well as people who deal with mental illness. Art education can increase confidence and self-esteem in students, as well as being helpful for developments in self-identity (Boyes and Reid 2005).

Arts have been used as ways to help people that are struggling with chronic diseases who are dealing with complex side effects, such as depression.

Chronic diseases are a nationwide burden, with cardiovascular disease being the leading cause of death during the past century and the incidence of diabetes continuing to increase, now affecting more than 20 million Americans. These diseases are associated with psychosocial difficulties such as depression and chronic stress, contributing to negative cardiovascular outcomes. Engagement with creative activities has the potential to contribute toward reducing stress and depression and can serve as a vehicle for alleviating the burden of chronic disease. (Stuckey and Nobel 2010, 254)

The arts have also been used to heal emotional wounds, alter behaviors and thinking patterns, develop self-reflection, and help increase the understanding of oneself.

There are four prominent ways that art is used to promote health: music engagement, visual arts therapy, movement-based creative expression, and expressive writing. These theories have been introduced into various medicine programs successfully across the country. The University of Florida created a program that put similar activities in place in a long-term dialysis unit. There is a significant link to long-term hemodialysis and decreased quality of life and depression. After six months of exposure to artwork, crocheting, poetry, seasonal displays, crafts and musical instruments, patients in the program showed a significant improvement in their SF-36 scores (a survey that looks at weight gain, phosphate levels, serum carbon dioxide content, depression, and anxiety) (Stuckey and Nobel 2010). Similar studies reveal the arts to be comforting, by reducing stress, improving well being, decreasing fatigue, and enhancing healing for patients suffering from cancer, trauma, or other chronic illnesses.

Creative therapies are also used to reduce traumatic stress, grief, and loss reactions as a result from violent abuse or attacks. Music or art therapy, dance/movement, drama, and creative writing can help victims in several ways. First, these therapies help the participant deal with self-regulation. Often after an exposure of violence, the victim is unable to self-regulate. Creative therapies give sensory experience that helps support self-regulation, as well as reduce stress-induced reactions, and allow the body to develop self-soothing behaviors. Art also helps a person find a sense of identity and reconnection with oneself that was lost after a violent encounter.

Art as a healing force does not come easy for those whose lives have been controlled, are accustomed to betrayal and punishment, and have learned self-hatred. But inevitably when it does, creativity and imagination restore a sense of possibility, identity, and reconnection with parts of the self that were silenced in order to survive the violence... This is a fundamental principle in the neurobiology of art expression. It is why humans

paint, sing, dance, and dramatize in the first place; it is the drive to make meaning of events when words are not enough. (Malchiodi 2013)

In Lobo and Winsler's (2006) study on preschoolers, they found significant improvement in the students' self-esteem and self-image. Dance classes allowed children to loosen up and discover themselves. Their creativity was valued and they were allowed to produce unique ideas and movement. The dance classes seemed to encourage the students to feel more comfortable, giving them more self-worth and positive outlooks. These strong self-images are important for leading healthy and wholesome lives. Dance provided an outlet for these students to identify and embrace their uniqueness.

Arts and At-Risk Youth

Art education can be an outlet to students who would not typically succeed in traditional classes and can motivate these students to stay in school (Baker 2012). Children who come from poverty, particularly from racial/ethnic minority backgrounds, are often at risk for having difficulty learning in a traditional learning setting or lack readiness for school altogether. Art education offers social-emotional benefits that can strengthen these groups by combining the students' cultural experiences and traditions with the classroom environment. The arts offer a new type of communication, one that is a combination of verbal and nonverbal, that can assist those with language delays to begin to communicate and further language development. Another major struggle for students in poverty deals with their mental and emotional well being. Art education provides a healthy way to express emotions the students who would not have been able to otherwise, promotes mental stability and encourages self-awareness.

Brown, Benedett, and Armistead (2010) took it further, investigating how art education assisted at-risk children to be prepared for school. This study looked at two preschools, one

enriched in arts education, and another one nearby that was not. Both preschools were similar in demographics, having populations with low economic status and a higher percentage of minority ethnicities. The study included interviews with each family and results from a Peabody Picture Vocabulary Test-III. Brown compared beginning-of-the-year test scores with end-of-year scores and found a significant increase in vocabulary in those children who attended the preschool using art-enriched curriculum. In this school “arts instruction represents a central priority, and teachers organize it to promote skill development in early learning domains. Thus, the arts represent an object of learning and a central mechanism for teaching core cognitive skills” (Brown, Benedett, Armistead 2010, 123). The study gives reason to believe that at-risk students can benefit greatly from arts integrated curriculum.

Chapter VI - How to Get a Resolution

Taking Arts into Their Own Hands: The A+ Program

Lack of political support and lack of art-friendly policies have forced educators to find alternative ways to support art education in the classroom. North Carolina created the A+ School Program in 1995 as a school reform movement dedicated to emphasizing on art-based curriculum and environment. The program goals included “connecting people, providing a wide range of ideas, developing organizational capacity, trusting teachers to design appropriate curricula and instructional processes, attending to students, and ultimately valuing the arts” (Noblit, Corbett, Wilson, and McKinney 2009, 164). The program was built on the idea that the arts can invigorate school reform, add powerful value, and makes schools a more desirable place to be overall. The schools that joined the A+ program are diverse in demographics and have unique practices and curriculum, but are joined together by their commitment to the arts and using the art integration to help students grow and be engaged and motivated to learn. While many attempts for school reform have a short shelf life, attempted for a year or two, then disregarded and moved on to the next idea, the A+ program has proven to be a sustainable and long-term strategy for change.

Due to the success of the A+ program in North Carolina, it has also become a national movement, implemented by several other states, including Oklahoma, Arkansas, and Louisiana. Because of its diverse members and variety of needs by the students, the program focuses on a broad group of goals to build around known as the eight A+ Essentials. Whiteman describes A+ as “an extensive program evaluation found that the A+ Schools Program to be a successful arts-based school reform effort, in part because it is focused on the process of reforming schools through the arts, rather than on creating a defined product or outcome” (2014, 4). These eight

essentials are: the arts, curriculum, experiential learning, multiple intelligences, enriched assessment, collaboration, infrastructure, and climate.

The program focuses on six core commitments that participating schools agree to. First of all, A+ schools are expected to increase their students' exposure to art education, through direct instruction with artists and through creative activity within the classroom. It is important for schools to hire full-time art teachers, allowing students to have special instruction in specific art forms. Similarly, the second commitment is for schools to create curriculum that offers two-way arts integration. This is where the arts are taught not only as a stand-alone subject, but also are combined with core subjects to emphasize ideas and offer alternative methods to learning other than lectures and reading textbooks. This allows students to understand concepts on a deeper level, and demonstrate new ideas in diverse and creative ways. Third, ideas should be taught to adapt to multiple intelligences. Teachers need to provide alternative and multiple ways to learn subjects, enabling all students the opportunity to learn at their own level and pace. Not all students are going to be good test takers. With several ways to teach curriculum and show progress, these students can demonstrate success through their strengths, when they otherwise would not have.

The fourth commitment is to adopting the idea that curriculum and major concepts should be integrated into multiple disciplines and subjects. Thematic units allow for a deeper understanding of concepts, and give a chance for art instruction to be connected to other subjects. For example, history lessons focused on the 1800s should be paired with literature written by Charles Dickens and Edward Allen Poe, and art classes that study on romanticism and realism. This type of thematic curriculum gives students the bigger picture and helps connect how historical events and the advances in other subjects played off each other and worked hand in

hand. Fifth, schools should encourage more professional collaboration. Integrating arts into schools requires more planning, professional development, and coordination between educators. To have a successfully art integrated school, teachers must work together and build off each other's ideas and training. The last commitment A+ schools make is to strive for a strong connection and relationship with the parents and community. Important community connections to make are with local universities, the media, cultural institutions, and foundations. These relationships will help A+ schools with the additional resources needed to be successful at art integration (Noblit, Corbett, Wilson, and McKinney 2009).

In A+ schools, the “arts are central to the school identity, and the three components of comprehensive arts education – arts education, arts integration, and arts exposure” (Whiteman 2014, 32). All of the A+ Essentials connect to the arts in some way. These schools make a commitment to teach art on a daily basis through a variety of ways – including drama, dance, music, visual arts and writing, and value the arts as an essential part to education, just as one would mathematics or reading. Curriculum is integrated with various means of teaching, employing interdisciplinary methods and real world experiences to emphasize lessons. Experiential learning is grounded in art-based instruction and uses multi-facet instruction and different ways to measure assessment. A+ schools accept the theory of multiple intelligences, that learning is complex and the way people learn is different from person to person, and create curriculum to accommodate different learning styles. Enriched assessment is practiced, ongoing, and used to self-assess teachers and students to document and allow for reflection. Collaboration occurs between art teachers and classroom educators and is important between the school and stakeholders, the community and family. Infrastructure needs to have sufficient space for the arts, giving teachers time in the schedule to support planning, and provide time and means for

professional development. The goal of the climate in A+ schools is to reduce stress by keeping arts in the classroom. Teachers are trusted to have input in curriculum and are treated as professionals, allowing for morale to improve.

The OKA+ Program began in 2003 after the North Carolina A+ program was identified as the most successful and that it had the potential for replication as an education reform model. Today the OKA+ network has over 70 members and is continuing to grow every year. These schools share the vision to have “Education that expands the imagination and stimulates creative living, so that: Individuals are increasingly self-aware, self-motivated, and able to be successful along the continuum of lifelong learning” (OKA+ 2014). The OKLA+ program partners with many local foundations, as well as art and education organizations to assist with providing resources to Oklahoma schools committed to the arts, such as the Center Arts Center, the Kennedy Center, the Oklahoma City and Tulsa Ballets, the University of Central Oklahoma, and the Kirkpatrick Foundation. Oklahoma schools that have joined OKA+ are committed to keeping arts education inside the classroom, regardless of the lack of support from state education policies.

Art Focused Public Schools

Another way of providing art education is through specified high schools that are designed for students who are interested in pursuing the arts. The idea that there is a need to move beyond the traditional school setting has led to smaller schools that offer in and out of school opportunities to connect with the arts and provide “*multiple pathways*” to college or careers. These pathways include Advanced Placement courses, ways to earn college credit, opportunities to major in specific art subjects, and connections with community groups. These

schools often give focus to arts and arts integration. Maguire, Mishook, Garcia, and Gaillande (2013) conducted a case study on 4 of these type of high schools in New York City. They conducted their study through student surveys, focus groups and interviews, as well as outcome data and program. The study looked to see how art-based driven schools benefit students academically, preparing them for higher education, and what pathways to education these schools provide. All four schools had higher graduation rates than average, and students who felt that their high school had prepared them for college was considerably higher (2013, 24).

Oklahoma City offers one middle/high school that fits this bill called the Classen School of Advanced Studies, where students can pursue specific visual and performing art major areas of study. Although these schools provide excellent opportunities for student growth in the arts, and allow them to pursue their interest and abilities, there are also some disadvantages. Difficulties with these schools, and such with is Classen SAS, is that students are admitted by application. When students are let in based on their artistic skill or their academic achievements, they already have a base line of art/educational success. Thus those students who are not admitted could thrive in an art environment, but have never had the opportunity the chance. Minorities and those in poverty do not always have the means to apply to these schools, let alone meet the required academic and art ability requirements to be accepted into these schools. Often times, through this method of exclusion, the very population that would benefit the most from art education integration sometimes get left out.

Supporting the Arts: Community Involvement and Policies

The integration of art education requires collaboration between the community and the schools. Using art as a means to teach core subjects means more time, dedication, and expense

from teachers, something they often lack: “When schools, universities, and communities work together, school art infrastructures have the potential to be strengthened, which in turn impacts and strengthens communities” (Carlisle 2011, 147). Legislatures and most of all, community members must realize the strong role that art programs play in creating culture and bringing communities together. Without community support, these partnerships between art institutions and schools would not survive.

Developing a relationship with community members, such as universities, art institutions, businesses, and local artists, is vital to keeping art education alive in the classroom. When the community becomes a stakeholder within the arts program, the program is more likely to see state and federal support. Community arts programs also present cultural growth and sustainability within a community: “There is a potential to develop cultural oases in community areas that are in need of cultural development and support... policy administrators need to develop arts education partnership grants that focus on the development of cultural diversity during school instructional time that will demonstrate positive impacts of the community” (Carlisle 2011, 148). This is especially important as the United States continues to become increasingly diverse culturally and globally dependent. Community focus on preserving art education in schools will allow students to get a different perspective and learn the arts from people who are emerged in it every day. Educators can only know so much about integrating the arts with their subject of interest, so getting community involvement and assistance with how this should be done gives more variety and creativity when planning the curriculum.

A Shift in Political Thinking

Overall, for the arts to be as present in public schools as art education supporters would like for it to be, massive policy reform must take place. Policy makers must begin to see the value the arts provide for education, in order to for the arts to stay present and supported in public schools. However, in today's political environment, this is much easier said than done. Paul Bolin (2006), suggests that it may be useful to change the art education advocator's approach, in aiding state legislators in seeing that reform needs to take place. Bolin looks back and considers the approach that was taken in 1869 in Massachusetts, when a petition was presented to the state legislature regarding drawing instruction in public schools. The petition, as follows, was considered favorably within days of submission, and resulted in an immediate political action which was the drafting of the Massachusetts Drawing Act:

To the honorable General Court of the State of Massachusetts.

Your petitioners respectfully represent that every branch of manufactures in which the citizens of Massachusetts are engaged, requires, in the details of the processes connected with it, some knowledge of drawing and other arts of design on the part of the skilled workmen engaged.

At the present time no wide provision is made for instruction in drawing in the public schools.

Our manufacturers therefore compete under disadvantages with the manufacturers of Europe; for in all the manufacturing countries of Europe free provision is made for instructing workmen of all classes in drawing. At this time, almost all the best draughtsmen in our shops are men thus trained abroad.

In England, within the last ten years, very large additions have been made to the provisions, which were before very generous, for free public instruction of workmen in drawing. Your petitioners are assured that boys and girls, by the time they are sixteen years of age, acquire great proficiency in mechanical drawing and in other arts of design. We are also assured that men and women who have been long engaged in the processes of manufacture, learn readily and with pleasure, enough of the arts of design to assist them materially in their work.

For such reasons we ask that the Board of Education may be directed to report, in detail, to the next general court, some definite plan for introducing schools for drawing, or instruction in drawing, free to all men, women and children, in all towns of the Commonwealth of more than five thousand inhabitants.

And your petitioners will ever pray.

JACOB BIGELOW.	JOHN AMORY LOWELL.
J. THOS. STEVENSON.	E.B. BIGELOW.
WILLIAM A. BURKE.	FRANCIS G. LOWELL.
JAMES LAWRENCE.	JOHN H. GLIFEORD.
EDW. E. HALE.	WM. GRAY.
THEODORE LYMAN.	F.H. PEABODY
JORDAN, MARSH & CO.	A.A. LAWRENCE & CO.

BOSTON, June, 1869. (*Thirty-fourth Annual Report*, 1871, pp. 163-164)

Bolin concludes from the legislature’s quick action and positive response, that the lobbyists were onto something when it comes to drafting a well-received petition. He believes that we could learn from their strategies, and use them to craft present day petitions that could lead to change in art education policy. In his study, he looks at ten specific considerations that he believes current education lobbyists could learn from. Several particularly stood out. First, and possibly the most important attribute that leads to successful policy change was the specific elements that it presented: “The petitioners perceived a pressing societal and economic need, devised a plan in response, and took action with lawmakers to help shape art education policy to address the recognized need” (Bolin 2006, 329). The petition also provided a widespread benefit for the state of Massachusetts. It expressed a problem and gave specific reasons why other countries were not having these same issues. The petition stated specific measures that would help Massachusetts economically and socially throughout the state.

Many times our petitions contain one ingredient to this petition, either by stating a problem or a need and hoping for lawmakers to come up with a solution, or by lobbying for a policy change but not giving specific details as to why the change should be made. The policy presented in 1869, gave all of these elements (problem, call for change, and solution) making the decision for lawmakers to act clear and in the lobbyist’s favor. Bolin discusses how the document was almost written like a prescription that matched their recommendations. The writers start off by stating the illness and its symptoms, and follow through with a remedy, with a

clear picture of exactly what the petitioners were looking to happen. The petitioners did not leave the solution up for interpretation by lawmakers:

For such reasons we ask that the Board of Education may be directed to report, in detail, to the next general court, some definite plan for introducing schools for drawing, or instruction in drawing, free to all men, women and children, in all towns of the Commonwealth of more than five thousand inhabitants. (Bolin 2006, 334)

The closing of their petition was less suggestive and more direct, giving exact directions of how to fix the problem.

This leads to another point by Bolin, as he expresses that “the petitioners showed a willingness to follow through long-term in monitoring the legislative process surrounding their proposal” (2006, 338). Following the initial positive response from lawmakers to the petition, outspoken leaders from the group, Edward Hall and Francis Lowell continued to be active in the political process – leading to the Massachusetts Drawing Act a year later. Continued cultivation and drive towards the goal for free drawing instruction, even after a winning initial response, pushed legislatures to create a standing permanent policy.

Bolin (2006) also expresses interest in the individuals that were used to lobby this policy change. The petitioners were a group of well known, well regarded individuals and companies from broad, wide spanning industries, which all showed first-hand knowledge of the problem. This gave lawmakers the impression that this need wasn’t one that affected just certain industries, but was a widespread issue. Adding drawing as an education policy would benefit a wider net of people, rather than a targeted industry. These individuals also were knowledgeable and respected individuals, which helped legislatures feel as though they could trust them and their positions. One is much more likely to listen to someone who is an expert in a field, and these petitioners were just that. It also helped that they were familiar with the legislative process,

which is probably why their petition was drafted in a way that the legislature had a specifically identified issue and a clear cut solution to the problem (Bolin 2006).

If these elements were used in today's petitions for art education policy reform, maybe we could persuade legislators to see the real issues and help them form solutions. Petitions need to have clear cut problems, economic and social reasons to back up the need for change, and an identified solution that would yield results. Strategically choosing authors for these petitions would present the issues as a widespread problem, one that affects people from various industries and walks of life. Finding petitioners that are familiar with the political process, are considered experts in their fields, and are highly regarded in the community are attributes that are important in presenting a policy solution that will be considered by legislatures. Individuals who are more likely to follow through with the process and not let a small win be the end-all-be-all, are more likely to produce big picture results, rather than temporary solutions or policy proposals that overall go nowhere. Perhaps, if we incorporate these elements into our petitioning today, we could be more successful in creating policy that supports art education.

Chapter VII - National Policy Study

The purpose of this study is to show how art education affects educational outcomes. This study has two parts. The first will look at how certain art education policies on a national level that are enacted by the states (including the District of Columbia) impact 8th grade assessments in mathematics, reading, and science. The second part will examine specifically Oklahoma schools and compare OKA+ participating and non-participating schools on their A-F State Report Card grades, Academic Performance Index scores, and graduation/attendance rates. In both parts of the study, I expect to find that art education positively impacts educational outcomes.

Data and Methods

For the first part, I will use OLS regression to find the relationship between different art education policies and the 2013-2014 8th grade mathematics, reading, and science assessment scores. This data comes from the Arts Education Partnership and the National Center for Education Statistics. Arts Education Partnership is a national coalition made up of businesses, government, education, and art organizations that are “dedicated to securing a high-quality arts education for every young person in America” (AEP-arts.org 2015). The National Center for Education Statistics is part of the United States Department of Education and Institute of Education Sciences. It is the “primary federal entity for collecting and analyzing data related to education in the U.S. and other nations” (nces.ed.gov).

There are thirteen policies that are art education specific, that are used as variables in this study, as well as a collective variable including all the policies. Art Policy One is ‘Arts as a Core Academic Subject.’ The 27 states that have this policy identify arts as an academic core subject.

Art Policy Two is called ‘Early Childhood Arts Education Standards’ and Art Policy Three is ‘Elementary and Secondary Arts Education Standard.’ 45 states have policy two and 50 have policy three, where they have adapted curriculum or standards for art education in early childhood/pre-kindergarten and elementary and secondary schools. ‘Arts Education Instructional Requirement-Elementary School’ (Art Policy 4), Arts Education Instruction Requirement-Middle School’ (Art Policy 5), Art Education Instructional Requirement-High School’ (Art Policy 6) represent policies where the states require schools to provide art instruction at the elementary, middle, or high school level. 45 states require art courses in the elementary school and middle school levels and 42 states require arts in high school. Art Policy 7, ‘Arts Requirements for High School Graduation’ represents the 26 states that require arts course credits for graduation for high school. ‘Arts Alternatives for High School Graduation’ (Art Policy 8) are policies that allow course credits in the arts, along with other options, as alternatives for select requirements. Eighteen states have a policy of this nature. Art Policy 9, ‘Arts Education Assessment Requirements’ is enacted by 17 states. These states require assessment for students of the arts at the state, district, or school level. Sixteen states require Art Policy 10, ‘Art Education Requirements for State Accreditation,’ where art education is a standard requirement for schools to be accredited. Art Policy 11, ‘Licensure Requirements for Non-Arts Teachers’ is where states require art requirements for initial licensure or certification for non-arts teachers, whereas Art Policy 12 ‘Licensure Requirements for Arts Teachers’ looks at the art requirements for certification or initial licensure for art teachers. Art Policy 11 is enacted by 34 states, where Art Policy 12 is enacted by 42 states. The last policy is ‘State Arts Education Grant Program or School for the Arts’ (Art Policy 13). This policy is enacted by 19 states, which

provide state funding for art specific education grant programs or have public schools for the arts (Arts Education Partnership 2014, 11-12).

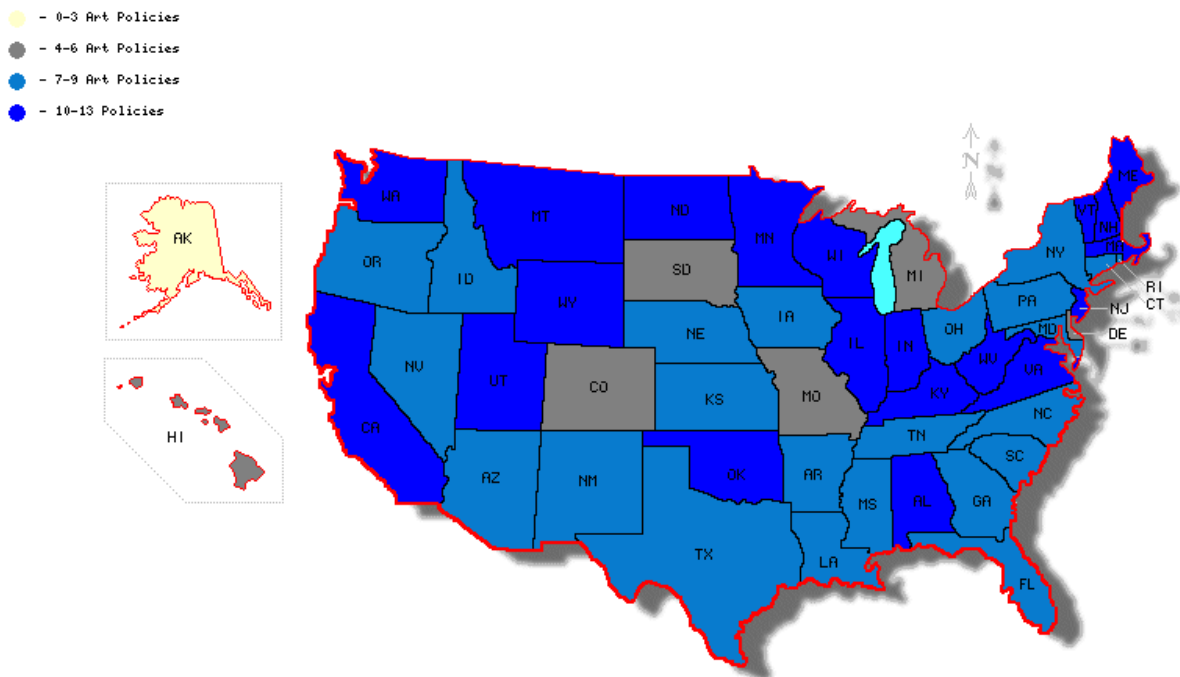
Figure 1: Art Education Policies

Policy #	Name	What It Does	# of States
1	Arts as a Core Academic Subject	States identify the arts as an academic core subject	27
2	Early Childhood Arts Education Standards	States adapt curriculum or standards for art education in early childhood schools	45
3	Elementary and Secondary Arts Education Standard	States adapt curriculum or standards for art education in elementary and secondary schools	50
4	Arts Education Instructional Requirement-Elementary School	States require schools to provide art courses at the elementary school level	45
5	Arts Education Instructional Requirement-Middle School	States require schools to provide art courses at the middle school level	45
6	Arts Education Instructional Requirement-High School	States require schools to provide art courses at the high school level	42
7	Art Requirements for High School Graduation	States require art course credits for high school graduation	26
8	Arts Alternatives for High School Graduation	States allow course credits in the arts as alternatives for select requirements	18
9	Arts Education Assessment Requirements	States require assessment for students of the arts at the state, district, or school level	17
10	Art Education Requirements for State Accreditation	States where art education is a standard requirement for schools to be accredited	16
11	Licensure Requirement for Non-Art Teachers	States require art requirements for initial licensure or certification for non-art teachers	34
12	Licensure Requirements for Arts Teachers	States have art requirements for initial licensure or certification for art teachers	42

13	State Arts Education Grant Program or School for the Arts	States provide funding for art specific education grant programs or have public schools for the arts	19
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The average state has eight art education policies enacted. The range is two to twelve policies, with Alaska having the lowest number of policies with a total of two, followed by Hawaii and Michigan with four. Oklahoma has twelve art policies enacted, the highest amount, followed by Alabama, Maine, Minnesota, New Hampshire, and New Jersey with eleven. The mode is nine, with seventeen states having nine art education policies.

Figure 2: Number of Art Education Policies by State

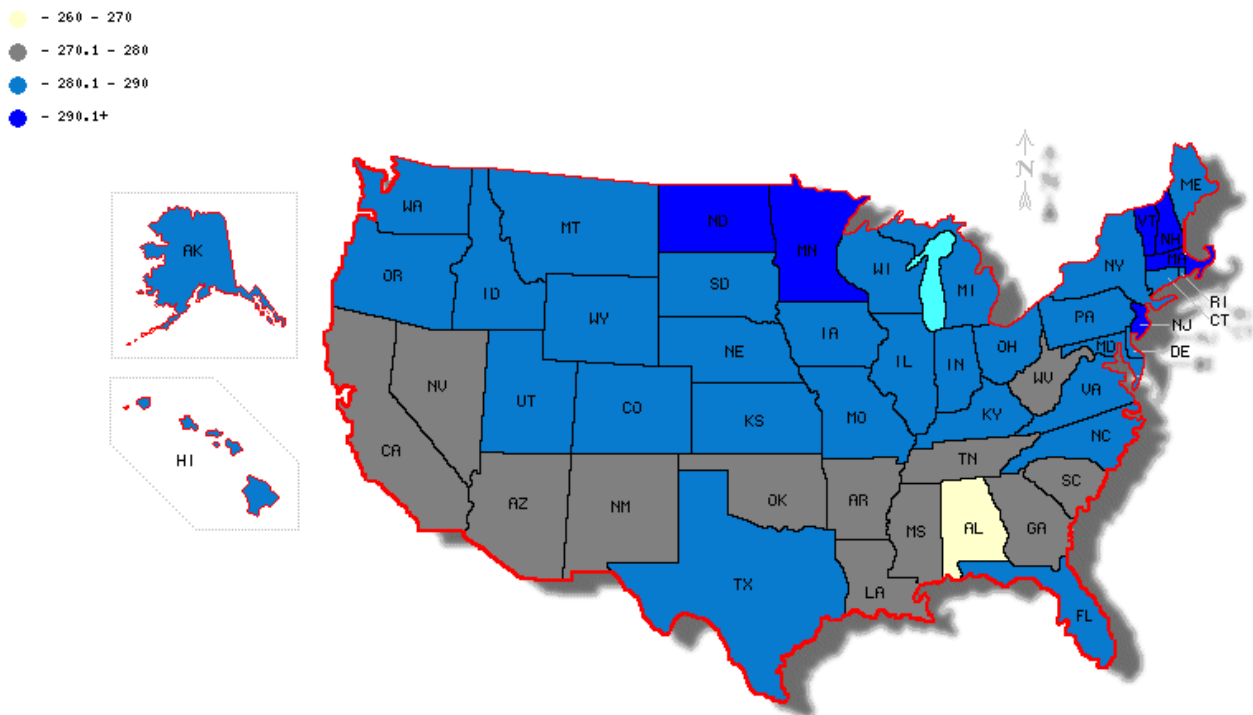


To measure states educational outcomes, the study looks at the results from the National Assessment of Educational Progress (NAEP) from 2013-2014 in mathematics, reading and science. These standards are set by the National Assessment Governing Board, a bipartisan group appointed by the Secretary of Education that is composed of governors, local and state

education officials, educators, business and public representatives, and state legislatures. The NAEP reports by subject-matter achievement for these subjects, along with others, by state. I chose to use mathematics, reading, and science, because these are the subjects the NCES had NAEP reports on for the year 2013-2014, the same year as the art policy data. As control variables, I will also include the median household income and per pupil spending, which were collected from the United States Census Bureau and National Education Association, respectively.

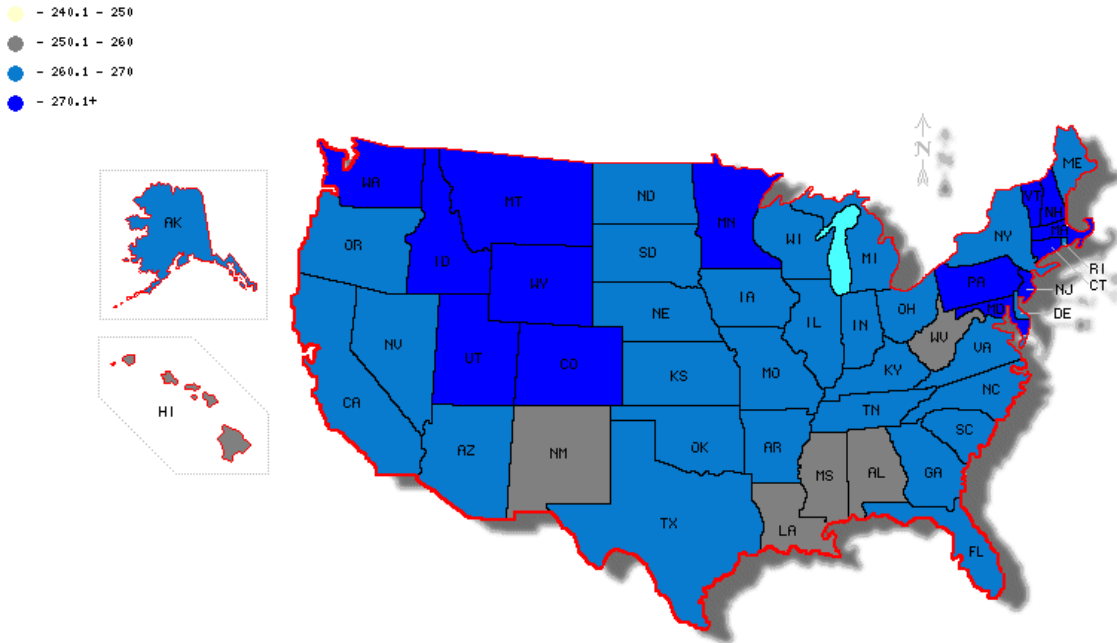
The average math score was 283.91. The scores ranged from 265.26 (District of Columbia) to 300.57 (Massachusetts). Most states scored within the 280.1–290 range, as shown in Figure 2 below.

Figure 3: Math Scores by State



The average reading score was 266.3. The scores ranged from 247.74 (District of Columbia) to 277.01 (Massachusetts). Figure 3 shows that most states' scores fell within the 260s.

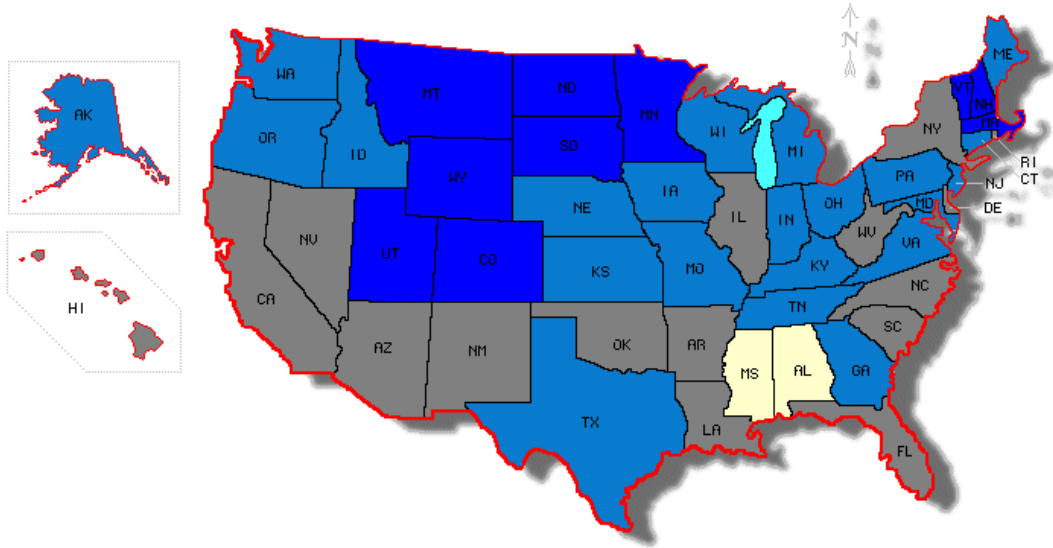
Figure 4: Reading Scores by State



The average score for science assessment was 152.38. The District of Columbia had the lowest score of 111.7 and North Dakota had the highest score of 164.01. Most scores fell in the 150s range, as is shown in Figure 4.

Figure 5: Science Scores by State

- Below 140
- 140.1 - 150
- 150.1 - 160
- 160.1+



Results

When comparing the thirteen different art policies enacted by the states, and their effect on reading, math, and science test scores, several policies stood out. The Arts Education Instruction Requirement in Elementary, Middle, and High School (Art Policy 4,5, and 6) and Arts Education Assessment Requirements (Art Policy 9) had positive impact on test scores. For reading, as shown in Figure 5, the requirement of arts in elementary (Art Policy 4) and middle school (Art Policy 5) rose scores by 6.962 points and is significant at the .01 level. Art requirements in high school (Art Policy 6) gave reading scores a boost by 6.492 points and became significant at the .001 level. Art assessment requirements (Art Policy 9) had a little less growth than the other policies, 4.224 points, but were still highly statistically significant at the .01 level.

Table 1: Effect on Reading

Art Policy Effects on Reading Test Scores				
	Policy 4	Policy 5	Policy 6	Policy 9
(Intercept)	237.107*** (5.450)	237.107*** (5.450)	240.939*** (4.686)	248.201*** (4.738)
Income	0.402*** (0.101)	0.402*** (0.101)	0.349*** (0.097)	0.314** (0.103)
Spending	0.163 (0.231)	0.163 (0.231)	0.140 (0.223)	0.012 (0.239)
AP4	6.962** (2.167)			
AP5		6.962** (2.167)		
AP6			6.492*** (1.727)	
AP9				4.224** (1.538)
adj. R-squared	0.347	0.347	0.387	0.313
sigma	4.853	4.853	4.700	4.975
F	9.841	9.841	11.535	8.606
p	0.000	0.000	0.000	0.000
N	51	51	51	51

Significant at: . p < .10; * p < .05; ** p < .01; *** p < .001

Similarly to the reading test scores, the same art policies were statistically significant with the math test scores. As shown in Figure 6, art requirements in elementary (Art Policy 4) and middle school (Art Policy 5) had an increase of 6.394 in scores and are significant at the .05 level. An art requirement in high school (Art Policy 6) increased scores by 6.334 and art assessment requirements (Art Policy 9) raised scores by 5.565 points, both significant at the .01 level.

Table 2: Effect on Math

Art Policy Effects on Math Test Scores				
	Policy 4	Policy 5	Policy 6	Policy 9
(Intercept)	250.199*** (6.731)	250.199*** (6.731)	253.394*** (5.811)	261.038*** (5.503)
Income	0.508*** (0.125)	0.508*** (0.125)	0.459*** (0.120)	0.413** (0.120)
Spending	0.116 (0.285)	0.116 (0.285)	0.096 (0.277)	-0.064 (0.278)
AP4	6.394* (2.677)			
AP5		6.394* (2.677)		
AP6			6.334** (2.142)	
AP9				5.565** (1.787)
adj. R-squared	0.313	0.313	0.350	0.361
sigma	5.994	5.994	5.829	5.779
F	8.583	8.583	9.981	10.423
p	0.000	0.000	0.000	0.000
N	51	51	51	51

Significant at: . p < .10; * p < .05; ** p < .01; *** p < .001

The effects of art policies on science was lower than the effects on reading and math. As seen in Figure 7, while art requirements in elementary (Art Policy 4) and middle schools (Art Policy 5) raised points by 6.770, the level of significance was lower than on reading and math, coming in at the .10 level. Art requirements in high school (Art Policy 6) increased scores by

7.622 and this variable was found to be significant at the .05 level. Requiring art assessment (Art Policy 9) increased scores by 5.000, and was significant at the .10 level.

Table 3: Effect on Science

Art Policy Effects on Science Test Scores				
	Policy 4	Policy 5	Policy 6	Policy 9
(Intercept)	129.710*** (9.791)	129.710*** (9.791)	132.301*** (8.446)	140.843*** (8.266)
Income	0.361 (0.182)	0.361 (0.182)	0.310 (0.174)	0.268 (0.180)
Spending	-0.201 (0.415)	-0.201 (0.415)	-0.218 (0.403)	-0.369 (0.418)
AP4	6.770 . (3.894)			
AP5		6.770 . (3.894)		
AP6			7.622* (3.113)	
AP9				5.000 . (2.684)
adj. R-squared	0.058	0.058	0.111	0.067
sigma	8.720	8.720	8.472	8.681
F	2.035	2.035	3.086	2.193
p	0.122	0.122	0.036	0.101
N	51	51	51	51
Significant at: . p < .10; * p < .05; ** p < .01; *** p < .001				

These art policies have their greatest strength in supporting reading, with mathematics close behind. Art policies exhibit the least amount of progress towards increasing science test scores, while still having statistically significant effects. Overall, the presence of requirements of art education in elementary school (Art Policy 4) and middle school (Art Policy 5) have the most significant effect on these subjects overall. Of these policies, art assessment requirements (Art Policy 9) had the least amount of statistical significance and the smallest coefficient of the four art policies that has significance.

The effects of the total number of art education policies enacted by a state were also measured against the test scores. Figure 8 shows the effect of the total number of art policies a

state had (out of thirteen) in comparison to its math, reading, and science scores. Both math and reading showed a positive relationship and are significant at the .05 level, with scores rising 0.866 and 0.892, respectfully, for every additional art policy enacted. However, there was no statistically significant effect found from the total number of art policies enacted on science test scores.

Table 4: Total Art Policy Effects on Test Scores

Total Art Policy Effects on Test Scores			
	Math	Reading	Science
(Intercept)	251.249*** (6.839)	238.697*** (5.646)	132.048*** (9.950)
Income	0.451*** (0.125)	0.340** (0.103)	0.302 (0.182)
Spending	0.145 (0.291)	0.191 (0.240)	-0.181 (0.423)
APT	0.866* (0.421)	0.892* (0.347)	0.778 (0.612)
adj. R-squared	0.293	0.301	0.031
sigma	6.080	5.019	8.845
F	7.905	8.184	1.536
p	0.000	0.000	0.217
N	51	51	51

These findings confirm the theory that art education has a positive effect on educational outcomes. Overall, reading scores are the most significantly affected by art education policies. These results are consistent with previous findings from studies conducted by Martin Gardiner, Alan Fox, Faith Knowles, and Donna Jeffrey, where first graders improved their reading and math test scores after seven months of art and music classes (Grytting 2000). Science scores were the least affected by art education classes according to these findings. That being said, the literature provides evidence that interest in science is peaked when the arts are incorporated, and there are studies that show art-based activities can increase the overall understanding of scientific subjects (Danipog and Ferido 2011).

Chapter VIII - State of Oklahoma Study

Data and Methods

For the second part, I will use difference of mean hypothesis testing to attempt to find the significance between being an A+ school in Oklahoma and its graduation/attendance rate, Academic Performance Index Score, and A-F school grade. The study looks at what schools in Oklahoma are members of the OKA+ program, identifying schools that give the arts a priority and are subject to higher art education standards than non-member public schools. As found in the research, these schools agree to pursue six core commitments through their eight essentials, including increasing creative activity and arts instruction, and integration of the arts in the core curriculum. The data on OKA+ schools comes from the organizing body of the program. There are 64 schools that are members of the A+ program. These schools are compared with a random selection of 100 non-member Oklahoma schools. These schools were selected by assigning each school with a number, then randomized and selected through a random number generator. I predict that schools that identify themselves as members of OKA+ will have higher academic outcomes than schools that do not.

These schools are compared by their Academic Performance Index scores, A-F Report Card grade, and their graduation/attendance rates. All of these variables are reported by the Oklahoma Department of Education (ok.gov/sde/ 2015). The study looks at the last reported Academic Performance Index (API) for Oklahoma. This was in 2011, as the API scoring was eventually replaced with the A-F report card grade in 2012. API was scored on a range from 0 - 1500, and measured factors including ACT scores, AP credits, attendance and graduation rates.

The A-F school grading system was adopted by Oklahoma Legislature in 2011 as a means to make school performance more transparent and give educators an incentive to increase

students' educational progress. The report is calculated by a combination of student performance, student growth, and test participation. Bonus points are available through attendance/graduation rates, advanced coursework, End-Of-Instruction (EOI) and college entrance exams performance. The report is given on a scale from 0-100, with 110 being possible through bonus points. These number grades then transfer over to the A-F grading scale as such:

Figure 6: A-F Grading Scale

Numeral Score	Grade	Numeral Score	Grade
97% and up	A+	70% - 72%	C-
93% - 96%	A	67% -69%	D+
90% - 92%	A-	63% - 66%	D
87% - 89%	B+	60% - 62%	D-
83% - 86%	B	57% - 59%	F+
80% - 82%	B-	53% - 56%	F
77% - 79%	C+	52% and below	F-
73% - 76%	C		

This study uses the latest available data for A-F report card grading, which is for the year 2014. My hypothesis is that schools that are OKA+ members will have higher graduation/attendance rates, Academic Performance Index scores, and A-F report card grades than schools that are not OKA+ members.

Results

Difference of means tests between OKA+ and non-OKA+ schools show mixed results with regards to my hypothesis. The first area tested was the difference in graduation/attendance rates between the two types of schools. For the OKA+ group, data was available for 58 of the 65 possible member schools. These schools had an average graduation/attendance rate of approximately 94.63%, with a standard deviation of 0.87. For the non-OKA+ group, data was

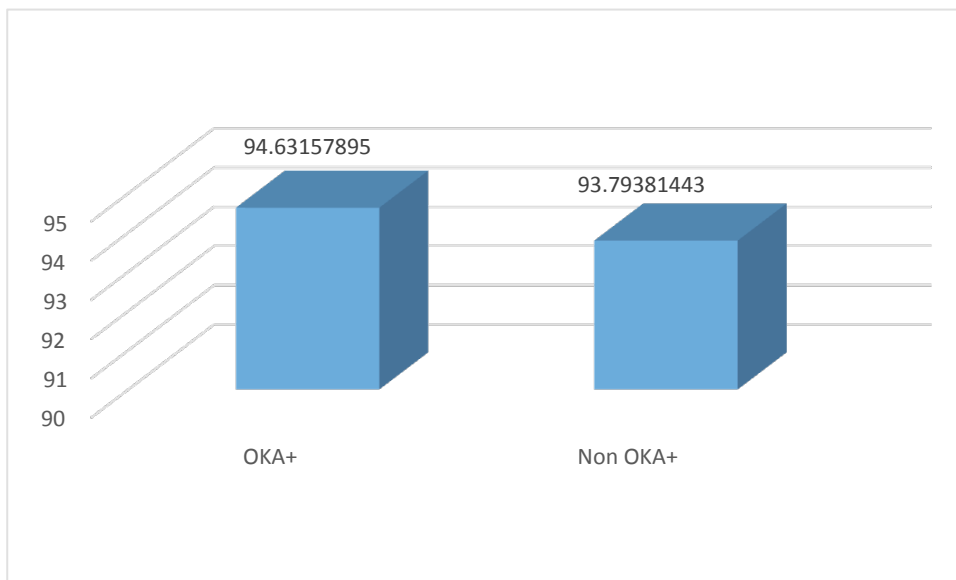
available for 97 schools. These schools had an average graduation/attendance rate of approximately 93.79%, with a standard deviation of 2.38. The average rates for both groups are shown in Figure 10. The hypothesis and null hypothesis for this test were as follows:

H₁: The average graduation/attendance rate for OKA+ schools is significantly higher than the graduation/attendance rate of non-OKA+ schools.

H₀: There is no difference in the graduation/attendance rates between OKA+ schools and non-OKA+ schools.

The difference of means test provides a t-score of 3.137. As this is different than 0, which would be expected if the null hypothesis was true, the null hypothesis that there is no difference between the two groups in graduation/attendance rates can be rejected. Further, the average graduation/attendance rate is higher for OKA+ schools than non-OKA+ schools at a significant level. The results of this test were significant at the 0.01 level, meaning that there is just a 1% chance that the null hypothesis was rejected in error.

Figure 7: Average Graduation/Attendance Rates



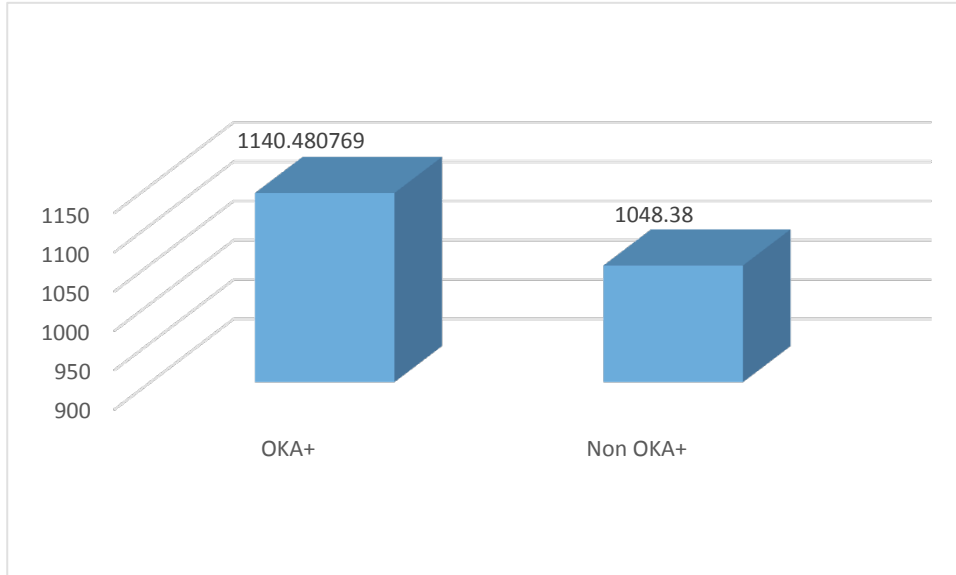
The second test was conducted to measure the difference between the two groups and their Academic Performance Index scores. For the OKA+ group, data was available for 53 of the 65 member schools. The average API score for these schools was approximately 1140.48, with a standard deviation of 168.72. For the non-OKA+ group, the average API score for the 100 schools for which data was available was approximately 1048.38, with a standard deviation of 200.71. The average API scores for both groups are shown in Figure 11. The hypothesis and null hypothesis for this test were as follows:

H_1 : The average Academic Performance Index score for OKA+ schools is significantly higher than the average Academic Performance Index score of non-OKA+ schools.

H_0 : There is no difference in the Academic Performance Index scores between OKA+ schools and non-OKA+ schools.

The difference of means test provides a t-difference of 3.004. As this is different than 0, which as stated before would be the expected value if the null hypothesis true, the null hypothesis that there is no difference between the two groups in Academic Performance Index scores can be rejected. Further, the average API score is higher for OKA+ schools than non-OKA+ schools at a significant level. This result is also significant at the 0.01 level, meaning that there is just a 1% chance that the null hypothesis was rejected in error.

Figure 8: Average Academic Performance Index Scores



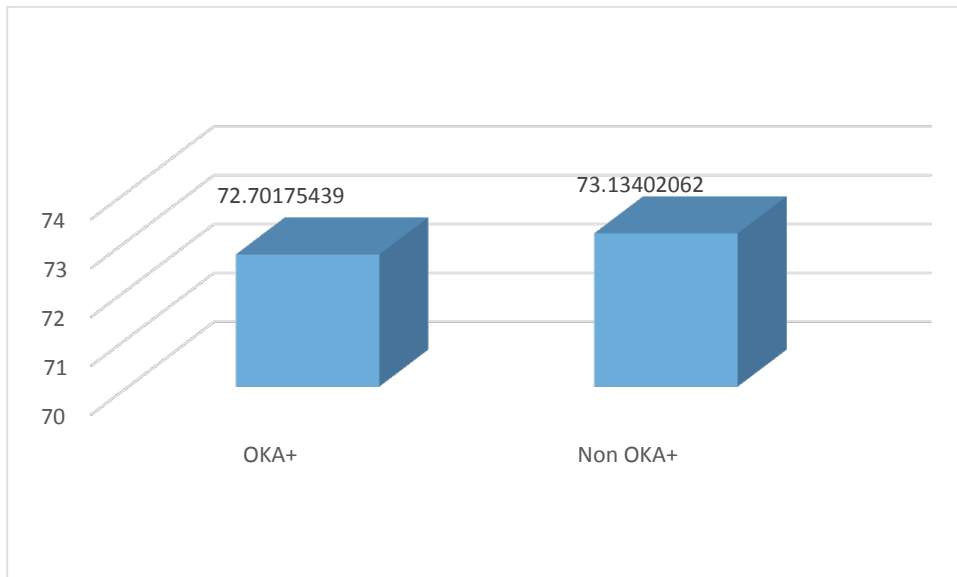
The final area of comparison between the OKA+ schools and non-OKA+ schools was average A-F Grade. As the A-F Grade system is what replaced the Academic Performance Index for evaluating Oklahoma schools, the differences between the two groups was expected to remain significant. However, the data show the first signs of a problem with this hypothesis. For OKA+ schools, the average A-F grade for the 57 schools for which data was made available was approximately 72.7, with a standard deviation of 15.69. For the non-OKA+ schools, of which there were data on 97, the average A-F grade was 73.13, with a standard deviation of 14.64538. Of the three areas examined, this was the only one in which the average for the non-OKA+ schools was higher than the average for the OKA+ schools. The average A-F grade for both groups is shown in Figure 12. The hypothesis and null hypothesis for this test were as follows:

H_1 : The average A-F grade for OKA+ schools is significantly higher than the A-F grade of non-OKA+ schools.

H_0 : There is no difference in A-F grades between OKA+ schools and non-OKA+ schools.

The difference of means test provides a t-value of -0.169, and with a one tailed p-value of 0.433, the null hypothesis that there is no significant difference between OKA+ schools and non-OKA+ schools with regards to their A-F grades cannot be rejected. While these results are in contradiction to the expected results, they are not completely surprising. The A-F grading system has come under intense scrutiny since its inception from both educators and scholars. A joint study from the Oklahoma Center for Education Policy at the University of Oklahoma and the Center for Educational Research and Evaluation at Oklahoma State University identified several deficiencies with the grading system (Adams et al. 2013). Among these were the composition of several elements of no relation into a single grade and a failure to adequately track growth within the measure. Further study needs to be done to understand the value of the A-F grade system on the evaluation of educational outcomes, and how art policies may impact those outcomes.

Figure 9: Average A-F Grade



Chapter IX - Conclusion

The purpose of this study was determine if art education policy improves the overall educational outcomes. The results from both the national and Oklahoma studies confirm the theory that arts education produces a positive effect. In the national study, OLS regression estimates showed that certain art education policies had significant and positive effects on standardized test scores. The effects were the most significant in reading and math. While the effects were not as strong, for science test scores art policies still had a significant effect. Furthermore, the total number of art policies enacted by a state had significant and positive effects on both math and reading test scores. These results show that states that embrace art education policies can expect to have higher educational outcomes than states that do not, and that by increasing the total number of policies enacted, states can expect to see even greater benefits. Oklahoma, the state with the most art policies, however, proved to be an outlier in this study as the test scores were in the middle to low range. I believe this to be caused by the low-per pupil spending, and further research should look at how much money Oklahoma actually appropriates towards the art education policies it has enacted.

The results from the Oklahoma study also show that exposure to art education in a classroom can increase not only the state's test scores, but also other measures of academic success as well. The difference of means test between schools considered OKA+ and those that are not confirmed that schools that prioritize the arts have higher Academic Performance Index scores and graduation/attendance rates, and opens the door for the study of many other significant relationships. The results are significant, especially at time when the state grapples with ways to reform the education system.

This study adds to the literature on the effects of art education in the classroom in many ways. Whereas the previous literature states that participating in some form of art activity as a part of a school curriculum has positive effects on certain educational outcomes, this research shows how state-wide enactment of art education policies can support academic success at a larger level. In addition, the national study shows that these positive results exist even when considering state medium income and per pupil spending. The Oklahoma study shows how the development of an art education professional development program such as OKA+ can aid in increasing educational outcomes at the school level.

There are several limits to this study. First, it does not take into account the amount of money spent on art programs. States could be implementing policies, but not actually giving the funding to support them. There is also a limited time frame, as the data is only collected from one year. Comparing data over time would produce more accurate results. This could be expanded on in the future. The study also does not take into account the policies that are implemented at the school district level. Although some states may not require art education policies, some school districts may continue to support art programs, thus reaping the educational benefits.

Future research into art education policy can focus on several areas. First, the amount of money spent by schools on art programs should be researched. The effect of the amount of money spent on art education may be a strong indicator of program success, especially with the possibility that some states may have enacted a program but committed no money to its success. Also, more research into the individual types and number of different art classes offered by a school may also provide helpful insight into where the most growth can be obtained. Other research may focus on the political attributes of the states that actually embrace art education

policy and the factors that play into its adoption. For example, are states under Democratic control more likely to adopt art education policy than states under Republican control? Also, how might state economic conditions play into the decision? With regards to the Oklahoma study, future research needs to be done into how well the A-F grading system actually measures educational achievement. With a flawed measure, studying the effect of art education is useless.

In conclusion, art education policies show strong promise for raising American educational outcomes. Art education may prove to be a successful avenue for the continued growth of the American education system and should be considered a policy solution to fixing curriculum in the United States. While the education system continues to be a source of great debate and contention, simple solutions exist to aid in this struggle. As this study has shown, art education policies in schools do matter. By enacting them on a larger scale, the benefits would extend far beyond the classroom.

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