

Products of the Performing Arts: Effects of the Performing Arts on Children's Personal Development and How to Use Research to Initiate Policy Change

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Introduction

The performing arts provide a creative escape for children, introducing them to the imaginative worlds of theatre, music and dance. Exposure to the performing arts at an early age provides fond memories that children will cherish for a lifetime. More importantly, an introduction to the performing arts initiates the development of invaluable life skills in children. Numerous studies demonstrate these positive results.

However, what is it about the performing arts in particular that produces these outcomes? What specific parts of theatre, music and dance catalyze the intellectual and social development of elementary school-aged children? Furthermore, what are the most effective ways to bring the performing arts to these young people? Finally, if many studies demonstrate that the performing arts benefit young people, why do arts advocates still struggle when trying to persuade policy makers to implement arts education in American school systems? These questions can only be analyzed by examining current research as well as by conducting a case study of a successful arts organization that reaches out to youth.

My goal in writing this thesis is to discover ways that arts advocates can convince policy makers to establish more arts education in schools. I begin by consulting and summarizing findings that are already published. This fundamental analysis provides background for the larger part of my thesis: the case study.

My case study takes a thorough look at First Stage in Milwaukee, Wisconsin. This children's theatre offers not only professional performances of plays and musicals, but it is also home to First Stage Theatre Academy and the organization's Theatre in Education program.

By referring to current research to establish a foundation for my work, conducting a case study and synthesizing all of the findings, I hope to discover what specific aspects of the

performing arts catalyze intellectual and social development in children, and I also aim to unveil ways of convincing policy makers to implement more artistic opportunities for children and create a positive impact on young people.

Current Research and Studies

To begin, it is important to understand why schools should implement arts education in the first place. What are the connections between children's exposure to the performing arts and their intellectual and social development? According to numerous studies, the performing arts create a powerful positive impact on children in various ways. In this section of my thesis, I will summarize overall research findings, elaborating on the nuts and bolts of exactly why the performing arts produce such beneficial results for young people.

The performing arts' impact on youth has been a topic of examination for years. An important study took place in 1997: The National Educational Longitudinal Survey. This survey—the first study that I consulted during my research—provides reliable insight into child development, as it examined more than 25,000 students over the course of ten years (Catterall and Chapleau). Longitudinal studies evaluate the same subjects over an extended period of time, so these same students were evaluated at an early age and then re-evaluated at the end of their high school careers. Essentially, researchers James S. Catterall and Richard Chapleau placed the key findings into three separate categories explained below.

First, the research showed a correlation between involvement in the arts and academic success. Throughout the ten-year study, positive student development grew even more evident over time. Academic achievement was also found in students from families of low socio-economic status: a key group that I will examine in my case study.

The next category of findings proved a positive relationship between music and mathematics achievement. According to the study, students who played a musical instrument through high school were significantly more proficient at math than their non-instrument-playing student counterparts.

Finally, researchers placed findings into a third category: theatre arts and human development. Students' involvement in plays, musicals, drama club and acting classes yielded various results, including the following: improved reading proficiency, growth in self-concept and motivation, increased empathy and tolerance for others. These results held true for youth from families of low socio-economic status as well (Catterall and Chapleau).

This research undoubtedly exemplifies that the arts benefit youth. It is a longitudinal study that compares a control group of students who did not participate in the arts to an experimental group of students who partook in artistic activities. The fact that both groups were evaluated at an early age and reexamined at the end of high school—and the fact that these same subjects were evaluated as part of the longitudinal study—makes the evidence extremely credible. Research like this should be presented to policy makers in order to incorporate the arts into school curricula. These findings absolutely prove that students who participate in the arts attain invaluable personal growth that their non-artistic counterparts do not develop.

Lisa Phillips, CEO of Canada's Academy of Stage and Studio Arts, is an author as well as an arts and leadership educator whose work strongly supports arts education. Her book *The Artistic Edge: 7 Skills Children Need to Succeed in an Increasingly Right Brain World* explores how the arts develop leadership skills needed for children to grow into successful adults. In January 2013, her findings were featured in a *Washington Post* article listing the top ten skills that children learn from the arts. She lists the following skills as products of arts education:

creativity, confidence, problem solving, perseverance, focus, nonverbal communication, receiving constructive feedback, collaboration, dedication and accountability (Strauss).

Phillips also mentions that some people want to change the nation's current educational emphasis from STEM (science, technology, engineering and math) to STEAM, incorporating the arts (Strauss). In particular, the STEM to STEAM initiative is currently being spearheaded by the Rhode Island School of Design (RISD). According to the STEM to STEAM website, teachers, researchers, policymakers, students and businesspeople involved with arts organizations across the nation support this movement. The objectives of the STEAM initiative are as follows (Rhode Island School of Design):

- “Transform research policy to place art and design at the center of STEM
- Encourage integration of art and design in K through 20 [kindergarten through 20 years old] education
- Influence employers to hire artists and designers to drive innovation”

What happens when students are exposed to the performing arts outside of school?

Researchers in the University of Arkansas Department of Education Reform found that school field trips to live theatre performances enhance literary knowledge, tolerance and empathy among students (University of Arkansas Fayetteville). This study found that reading and watching film versions of *Hamlet* and *A Christmas Carol* did not produce the increase in knowledge that students gained when they attended the live theatre plays. Additionally, when researchers administered a tolerance measure, students who attended the plays scored higher on that evaluation than students who did not attend the performances. Young people who attend live theatre performances are also better at recognizing and understanding what other people think and feel, according to this study (Hitt and Kraybill).

This research distinguishes itself as concrete support for the fact that exposure to the arts creates a major positive impact on young people. In this study, students were randomly placed into two groups by a lottery system: a control group of students who did not attend the live performances and an experimental group of students who saw the plays. Because these groups were randomly selected and compared to each other, the results are definitely credible. When conducting research to prove that a variable such as the performing arts affects subjects such as young people, it is crucial to eliminate unnecessary factors that may sway the findings. In this study, no other factors could have distorted the results. Therefore, this study and the longitudinal study explained earlier are both excellent examples of research that absolutely proves how the performing arts have an undeniably positive influence on young people.

Another ten-year study comes from researchers Heath and Roach, who examined 124 youth-based out-of-school organizations in economically disadvantaged communities in both rural and urban locations. These researchers found that students who participated in these arts organizations' programs not only developed skills in the arts, but they also developed important life skills and gained valuable experience such as the following (Heath and Roach):

- Students had opportunities to practice using their imaginations in a realistic context with limited resources, learning from their failures and successes.
- Students had opportunities to converse with adult mentors and learn from them. They learned skills in decision-making and strategy-building.
- Students showed a dramatic increase in their use of complex language—specifically, in syntactic complexity, hypothetical reasoning and questioning approaches.
- Students developed their linguistic habits, language skills and artistic technique both at school and outside of it.

- Students became aware that by combining their talents and abilities, they could contribute to their communities. Follow-up data with these students, collected years later, reveals that a significant number of students stay in their communities and work to enhance their areas' civic growth.
- Students participating in arts organizations' programs have higher self-esteem than high school students who are not involved in the arts.

Heath and Roach concluded that, while all youth organizations—not only artistic, but also religious, athletic, service-oriented, etc.—provide mentoring relationships, collaborative group dynamics and a balance of play and work, only arts organizations allow students opportunities for imaginative creativity. Evidently, arts-centered youth organizations produce outcomes in skill building for youth that transfers into involvement in school, work, home and civic life.

However, one aspect about this study—and numerous other studies on the performing arts' effects on young people—could use improvement: its lack of a control group. This thesis explores how arts advocates can conduct research by using the proper experimental procedure, which includes a randomly selected control group (the group that does not receive the variable—in this case, performing arts exposure), experimental group (the group that receives the variable) and an isolated variable. Arts advocates must approach studies in this manner because this data will isolate the performing arts variable and thus demonstrate that the arts directly influence child development. This topic will be explored more later. Nonetheless, the Heath and Roach study remains relevant because it illustrates benefits for children immersed in the performing arts.

All of these individual studies draw the same conclusion: The arts produce invaluable benefits for youth. Also, these studies examine the impact of arts both inside and outside of

schools. Here, another question arises: When it comes to incorporating the performing arts into a child's life, is one way better than another? For example, does in-school education, a field trip to a performance or involvement in outside arts organization programs yield stronger results? Matt Wisley is the Student Services Coordinator for the Master of Arts in Arts Administration at the Indiana University School of Public and Environmental Affairs and former school director at Windfall Dancers, Inc. in Bloomington. He explored this question:

“Any exposure to arts at younger ages helps to instill a love for the arts. It's important for youth to see professional performances so that they get to see what a polished, finished project looks like compared to a second grade talent show. Both in-school visits and field trips are important. The great thing about a field trip is the students also get the feel of an actual performance space rather than a school cafeteria stage.

“Also, having low-stress learning opportunities at a young age is important. I find that students that get to take a workshop or a small session in the performing arts learn whether or not they have an interest in it rather than signing up to be in a production that might have more stress value on it. These small workshops and sessions help students gain an interest without the pressure of performing. Those children that find an interest in it will start joining higher impact classes to start working on their skills and technique. Those who don't have an interest will find something else but will not begrudge the experience since it is short.”

Another opinion on this question comes from Gail Bray, Drama Instructor at Stages Bloomington. She says the following:

“I doubt that there's one best way for instilling a love of the performing

arts in youth. All of the things mentioned [in this section of the thesis] have a positive impact since they expose children to theatre and the performing arts.

“Perhaps there are two parts to this: developing a passion for performing is one and creating a passion for supporting live theatre and the performing arts is the other.

“The other method I can think of...is participating in productions, choirs, dance performances, etc. Or maybe even when [children] come across the performing arts unexpectedly as in the flash mob performances that were popular a while back or guerilla theatre events.”

Thus, there is no single best means of instilling a love of the performing arts in youth provided that these initial introductions to the arts do not put stress on children. Any positive introduction to the performing arts can ignite an interest that can develop dramatic intellectual and social growth in young people.

Case Study: First Stage

Located in the heart of downtown Milwaukee, Wisconsin, First Stage is a professional theatre organization that offers much more than its performances of plays and musicals. Founded in 1987, this arts organization has expanded to offer three branches of programming directed toward young people and their families: professional theatre performances, theatre academy and theatre in education. The mission of First Stage is as follows (About First Stage):

“First Stage touches hearts, engages minds and transforms lives by creating extraordinary theatre experiences for young people and families through:

- Professional theatre experiences that inspire, enlighten and entertain

- Unparalleled Theatre Academy training that fosters life skills through stage skills
- Dynamic Theatre in Education programs that promote active learning in our schools and community”

First Stage performances feature professional adults actors as well as youth actors to play age-appropriate roles. The theatre has been praised for featuring young actors in its productions rather than casting adults as children. Area schools can organize field trips to First Stage, and they have the option of participating in pre- or post-show workshops and talk-backs with a show’s artistic team. Additionally, First Stage offers theatre classes through its Theatre Academy. This variety of classes and opportunities to join the academy’s youth performing groups are offered for young people ages four to eighteen years old. Taught by professional artists from around the Milwaukee area, these classes range from scene study to improvisation to musical theatre. The performing groups include the Young Company high school theatre troupe, the Advanced Musical Theatre group and the Organized Chaos improvisation team. While enrollment requires the payment of tuition, scholarships are available. Finally, the First Stage Education Department oversees its Theatre in Education program in which First Stage teachers travel to Milwaukee area classrooms teaching theatre and leadership lessons.

My main interest is examining First Stage’s Literacy Residencies, which are part of its Theatre in Education program. Many of the schools that First Stage visits are located in the inner city of Milwaukee or in other underprivileged areas. According to the First Stage education staff, many of these students lack opportunities to experience the arts outside of school. Often, their parents do not have extra money to purchase tickets to a performance, or their families simply are not interested in investing the time to do so.

First, it is helpful to examine current research that First Stage has conducted during its analyzation of its Theatre in Education programs. During the 2011-2012 school year and season, the organization evaluated its Literacy Residency programs using focus groups, pre- and post-testing, interviews, surveys, participant observation, previous evaluation findings and published data (Reinders). This research was comprised of 212 participating students, twenty-two classroom teachers from partnering schools, thirteen parents of participating students and five First Stage teachers who visited the classrooms. Overall, First Stage found that its Literacy Residency program produces the following results for students: increases literacy and reading scores; builds emotional intelligence; enhances social skills; intensifies self-awareness; improves behavior and helps students overcome critical barriers to learning; enhances classroom decorum; meets teacher's learning targets and aligns with existing school curricula; aids teachers through professional development; strengthens schools; and builds life skills that help prepare students for the 21st century workforce.

Data collected through all of the evaluation methods listed above support the following findings about the First Stage Literacy Residencies (Reinders):

- Students develop socially, emotionally and behaviorally. Social challenges observed at the beginning of the First Stage visits included low cooperation/teamwork, being shy and/or withdrawn, disrespect for authority and inability to follow directions. These obstacles were overcome by the program's emphases on self-confidence, cooperation and teamwork, respect for authority and each other, and listening skills/improved attentiveness. Emotional challenges initially observed included anger management issues, low coping skills, acting out at inappropriate times and difficulty applying learning. The Literacy Residencies helped repair these emotional issues by teaching

coping skills, reducing anger, developing creative reasoning and problem solving abilities and nurturing imagination. Finally, behavioral problems originally encountered included propensity to use violence to solve problems, difficulty focusing and maintaining attention, low attendance, bad language, bullying and gang mentality. By emphasizing focus, empathy, community mindset, tolerance, respect/mutual identification and flexibility, the program combatted behavioral issues.

- By offering creative, alternative teaching strategies through theatre education, the First Stage Literacy Residency Program helps to meet classroom teachers' goals while fulfilling gaps in the schools' curricula that academic work alone does not satisfy. Specifically, this Theatre in Education program teaches listening and oral skills, story comprehension, problem solving skills, the ability to define story elements and critical thinking skills. Thus, the Literacy Residencies fill gaps that standard coursework alone does not fulfill.
- As evidenced by pre- and post-programming reading exams, the Literacy Residencies boost students' interest in reading and raise their literacy levels. On average, students in every grade level from second through sixth grade increase their test scores by two letter grades (ie. "C level" to "A level"). In addition, thanks to the introduction of the Literacy Residencies as part of their school week, third graders averaged a 26% increase on the Wisconsin Knowledge Concept Examination (WKCE) test and a 30% increase on the Measure of Academic Progress (MAP) test reading scores.
- First Stage Literacy Residencies teach students valuable skills to prepare them for the 21st century workforce. Before First Stage visits, classroom teachers set priorities and inform the First Stage teachers about which skills they want their students to learn. Teachers

have observed growth in their students in the following areas: self-confidence, teamwork/cooperation, problem solving, flexibility, creative thinking and acting/thinking with a community mindset rather than a “me orientation”.

- Milwaukee Public Schools (MPS) and First Stage have established a strong partnership, which continually enhances the Literacy Residencies’ impact through mission integration and cultural alignment. For example, if schools emphasize a different theme every year (such as Milwaukee College Prep’s vision of TRECK—Trust, Respect, Excellence, Courage and Knowledge), teachers can easily work with First Stage to develop creative means of teaching these values through theatre education.
- All of the First Stage teachers involved in the organization’s theatre in education programs are committed to the First Stage mission of teaching “life skills through stage skills”.

Since I was in eighth grade, I have spent much time at First Stage by taking theatre classes and participating in its Young Company. Two summers ago, I was an intern in its marketing and public relations department. This past summer, I served as a development intern.

In June of last year, Education Director Julia Magnasco explained how First Stage approaches its education programs. The organization hosts over 2,600 workshops and visits over 400 classrooms annually. All of the program’s curricula are linked to the Wisconsin Common Core Standards and Model Academic State Standards. Using a constructivist methodology based on collaborative problem solving, First Stage’s Theatre in Education programs are a form of arts integration. That is, First Stage utilizes theatre education to teach social or curricular subjects on which the schools wish to focus as part of their academia. These objectives may evolve as the school year progresses; First Stage and the schools work together to develop lesson plans for the

visits. Magnasco says that students' emotional intelligence (EQ) increases thanks to the program's focus on developing empathy. Emotional intelligence describes the ability, capacity or skill to identify and assess the emotions of one's self and others (Hubbartt). EQ is a type of intelligence receiving more and more attention in the fields of psychology and business today; many employers now argue that EQ carries much more importance than IQ.

Last July, I was fortunate enough to sit in on First Stage's Literacy Residency program in action at an inner city summer school. For six weeks during the summer, 75 kindergarteners through eighth graders attend the Freedom School, a camp associated with the literacy-based national program Urban Roots. Students explore books the program selects, which focus on profound subjects such as civil rights. First Stage Lead Teacher Sheri Williams Pannell and Julia Magnasco led the visits and created the curriculum.

All of the Freedom School's students live in inner city Milwaukee and surrounding neighborhoods. The lessons they learn truly impact these children, who otherwise may not have access to theater education. Not only may they not have exposure to the arts; they may lack support at home and at school. "Some of the children are in homes and schools where people make promises and do not follow through," says Williams Pannell. She explains the importance of committing to the students: "Each week, you build on their trust."

The lessons become more challenging once that trust is established. Then, the class delves deeper by "exploring their emotions and learning to build empathy," says Williams Pannell. Such personal growth is difficult, especially because examining one's own feelings can be a sensitive subject.

At the Freedom School summer program, students are categorized into three age groups: Level One is kindergarten through second grade, Level Two is third through fifth grade and

Level Three is middle school. They read a book every day, and their lessons reflect themes from these stories. On July 29, the children read *Tomás and the Library Lady* by Pat Mora, a tale about an immigrant boy from Mexico who befriends a librarian as she teaches him English and he teaches her Spanish.

That day, Level Ones participated in a listening exercise that involved carefully observing their classmates. Level Twos played a game where students had to ask for something while speaking jibberish. These activities demonstrated that people can communicate with each other by actively listening and committing to understanding someone regardless of his or her language. Level Threes acted out skits that illustrated discrimination and discussed its prevalence.

The most poignant moments that day took place during an exercise where students learned about overcoming obstacles to reach a dream. Sheri listed statements beginning with “If you have ever...”. Students stepped forward for positive claims (“If you have ever been told by a parent that you can achieve your dreams, step forward”) and backward for negative ones (“If you have ever lived in a neighborhood where you do not feel safe, step back”). The sound of little feet hesitantly stepping backward on the hardwood floor could bring tears to one’s eyes, but the confidence the children displayed while striding forward was incredible.

During the course of the First Stage Literacy Residency programs, Williams Pannell observes dramatic development in many of the students. “When I first met the middle school students, many of them hesitated to participate in the drama activities,” Williams Pannell recalls as she reflects on the Freedom School summer session. “I did not want their reluctance to get in the way of their participation. I stated that no one is allowed to sit in the room and watch.” By

the second week, the students' reluctance had diminished, and it had virtually disappeared by the third week. "Positive peer pressure prevailed."

One of the most impressive parts of First Stage's Literacy Residency at the Freedom School was its honest outlook on society. While one may assume that visits from a children's theater would only highlight upbeat lessons, First Stage's program examined both happy and challenging aspects of life. "Some of life is joyful, but some is not," explains Williams Pannell. "We use theater to explore life's challenges and how to overcome them."

Using Research to Change Policy

Evidently, an abundance of current research exists that clearly demonstrates how the arts benefit children. With such a large quantity of positive support for implementing more performing arts education in schools, why is it still so difficult for arts advocates to initiate policy change? How can policy makers argue against this evidence?

First, it is important to understand why the performing arts—as well as non-performing arts—are often overlooked by policy makers and currently receive little attention in schools. Several factors discourage policy makers from investing money, time and energy into the arts.

One key obstacle in obtaining more performing arts opportunities for students in schools stems from the American government's implementation of the No Child Left Behind program. Established in 2001, the No Child Left Behind program essentially aims to ensure that all schools in the United States meet certain academic standards in their teaching practices. To further persuade schools to reach these requirements, schools that do not meet such standards will not receive monetary support from the government. Basically, the No Child Left Behind program measures students' abilities in the subject areas of mathematics as well as reading and writing. Because the arts are not measured, schools often overlook arts education, as students' artistic

abilities will not improve schools' academic performances as evaluated by the No Child Left Behind requirements (Wilkerson). This same deprioritizing of the arts takes place because standardized college admission tests, particularly the American College Testing (ACT) exam and Scholastic Assessment Test (SAT), do not evaluate students' knowledge of the arts. Rather, they stick to core academic subjects such as math, science and English. Of course, if the No Child Left Behind program and standardized college admissions examinations did test students on their arts knowledge, schools would very likely incorporate more arts opportunities into their academic curricula. However, because of the current standards that America sets for schools, the arts are often put on the back burner.

Similarly, another obstacle preventing school administrators from investing money, time and energy in the arts is the nature of modern college applications. Here, not unlike the previous ACT and SAT examination discussion, students' artistic achievement is not central in their admissions to universities. If colleges required more arts experience in students' high school transcripts, then presumably the schools would have no choice but to provide more artistic opportunities for their students. Additionally, students would feel more motivated to enroll in classes focusing on different types of arts (Wilkerson). However, college applications focus heavily on students' grades in core academic subjects and also pay attention to their standardized test scores. While special programs at universities may also ask applicants to submit a personal essay or an artistic portfolio or résumé, the majority of college admissions processes do not consider students' artistic experiences.

One more prevalent obstacle to changing policy is not that policy makers do not appreciate the arts; rather, in order to fund arts education, financial resources such as the government must stop providing money to certain endeavors such as mathematics education and

invest those resources in the arts instead. It is very difficult—perhaps nearly impossible—for administrators to argue against the arts. Plenty of research as well as personal experiences prove that the arts enhance the nation’s culture and provide for invaluable entertainment and learning opportunities. However, it is very likely that few to no policy makers would immediately cut funding for math, science or English—subjects that schools strive to effectively teach students in order to receive government funding and demonstrate students’ college preparation levels—and instead fund the arts. With limited budgets, such an action would be extremely difficult for policy makers and financial providers to justify.

Essentially, while much of today’s research strongly favors the arts, it fails to prove that exposure to the performing arts is the sole variable that enhances the personal development of young people. That is, during the course of many performing arts studies, young people are also positively influenced by non-arts factors in addition to their participation in the arts. These non-arts variables could include, for example, a high household income that provides for additional educational opportunities. Since numerous studies do not isolate the performing arts exposure variable, only a few studies currently prove that young people’s literary and social skills have improved primarily because of the arts.

Arts advocates would see much more success in changing policy if they would provide research proving that the performing arts undeniably benefit young people. The key is to conduct studies that isolate the performing arts variable. One example of a study that successfully did this—and thus that produced highly credible results—is the field trip study conducted by the University of Arkansas Department of Education Reform, which was mentioned in the “Current Research and Studies” section of this thesis. Jay Greene, professor of education reform, spearheaded the study (Hitt and Kraybill).

Greene led a team that met the ideal standard of research by creating a randomized field trial. School groups in grades seven through twelve received free theatre tickets to one of the performances. In total, 49 school groups comprised of 670 students participated. Then, 24 inter-school groups were formed according to students' age, demographics and enrollment in English or drama classes. In order to organize these students into a control group (which did not see the live performances) and an experimental group (which attended the live performances), the research team used a lottery system. Later, about six weeks after the performances, the researchers asked students questions about each literary work—*Hamlet* and *A Christmas Carol*—focusing on both plot and vocabulary. Compared to the control group, students who attended the live plays gained a much greater understanding of the stories. For example, 83 percent of the students who attended the play identified Rosencrantz and Guildenstern as Hamlet's friends, while only 45 percent of the control group correctly identified the two characters. Over 94 percent of the treatment group knew that Ophelia drowns in *Hamlet* compared to 62 percent of the control group. The students who only watched films of *Hamlet* did not acquire this same knowledge. Additionally, students who attended live performances of the play also scored higher on the study's tolerance measure than the control group by a moderately large margin and were better able to recognize and appreciate what other people think and feel (Hitt and Kraybill).

This University of Arkansas study clearly demonstrates that exposure to the performing arts undoubtedly enhances children's knowledge of stories because it isolates the variable of the performance attendance. Such research exemplifies the ideal experimental procedure involving randomly selected subjects, a control group and an experimental group. Thus, Greene's team proved without a doubt that the children with exposure to the performing arts developed more dramatically than their peers who did not attend the plays. No other irrelevant variables

influenced the data. In an *Education Week* article, Greene and his team explain how their study exemplifies the ideal method of research (Greene):

“By comparing outcomes for students who had these arts experiences—by chance—with the outcomes of those who did not, we can identify with confidence what the arts do for young people. The approach we took, which is typical in medical research, creates treatment and control groups that are, on average, identical in their backgrounds and prior interests, with only chance determining the distinction between the two groups. Therefore, any subsequent differences we observed in the students were caused by...seeing live theater, not a result of pre-existing differences among them.”

In addition, Greene’s research team explain that, while arts advocates spend so much time and energy trying to prove that the arts improve math and reading scores, such promises should not be made: The positive effects of the arts should be appreciated solely for their own value and not necessarily in relation to core academic subjects. In other words, Greene’s team takes a realistic approach to demonstrating the benefits of arts exposure for young people rather than making grand claims that the arts trigger earth-shattering revolutions in children’s academic careers. The research team says (Greene):

“We didn’t look at math and reading test scores because we have no reason to expect that arts experiences would have an impact on them....Instead, we looked at whether exposure to the arts affected students’ knowledge of the arts and altered their desire to consume the arts in the future. We also looked at whether arts experiences had an effect on student values, such as tolerance and

empathy. Finally, we looked at whether students' ability to engage in critical thinking about the arts was affected by these experiences."

Although it may be tempting for arts advocates to show policy makers some sort of link between exposure to the arts and academic achievement, Greene's team believes that the values of the arts are unique and significant enough to be appreciated on their own. The arts can initiate invaluable personal development for young people, and that outcome in itself proves the importance of giving students more opportunities to incorporate the arts into their lives.

Clearly, the studies that yield the most reliable and persuasive results are those that are extremely thorough and repeatable. Here lies yet another obstacle in changing policy: Much time, money and energy is required to continue conducting new studies and repeating them to ensure their reliability. The process of carrying out a study entails that researchers find financial resources willing to provide them money, which is not an easy task.

However, such clear-cut research, conducted through highly organized research methods that isolate the variable it examines, is the type of evidence that arts advocates should present to policy makers in order to initiate change in school curricula. The issue with much of the existing research is that, although it demonstrates how children grow personally through participation in the performing arts, it does not prove that they will *not* attain the same development *without* this arts exposure. In order to convince policy makers that arts education is worthy of implementation in schools' academic curricula, arts advocates must prove that students' exposure to the performing arts undoubtedly fills a void that would remain empty without immersion in the arts.

Conclusion

Today, countless schools dedicate the majority of their time, money and energy to strengthening core curricula and meeting state academic standards. Granted, school subjects such as the sciences and mathematics are worthy of such resources; society thrives on progress in these fields. However, the performing arts deserve far more attention than they currently receive from schools.

Support for this argument comes from years of thorough research based on an abundance of real world case studies. Students who participate in the performing arts gain invaluable life skills that cannot be learned through current core academia. If students receive opportunities to experience live performances, learn from teaching artists who visit their classrooms and participate in arts classes outside of school, these young people can attain outstanding personal growth that they may never gain otherwise. There is no single most effective means of immersing students in the performing arts; any positive experience can instill a passion that will last a lifetime.

Unlike areas of study such as the sciences, research in the arts cannot be analyzed very much in terms of quantifiable data. Performing arts research is based much more heavily on quality. Although plenty of current research suggests that exposure to the performing arts does benefit young people, much of those studies do not follow an ideal scientific method. That is, many studies do not have a randomly selected control group, experimental group and an isolated arts participation variable. Often, studies indicate that student arts participants do gain certain literary or social skills. However, it becomes difficult to attribute this personal growth directly to performing arts exposure when, for example, the only group of subjects in a study receives the arts participation variable, and there is no non-arts-participating group of subjects with which to compare this experimental group. These studies do not prove that it was undoubtedly the

students' immersion in the performing arts that filled a certain void in their personal development.

In addition, arts researchers must distinguish between correlation and causation. Correlation is a relationship between two variables that is more coincidental than anything; one variable does not necessarily trigger a specific result. For example, research has demonstrated that babies whose parents play Mozart in the house before their birth tend to perform better academically than babies whose parents do not play Mozart. This perceived relationship was initially called the Mozart Effect. However, other factors influence these academically gifted babies: Many of these Mozart-playing parents are in the upper-middle class income bracket or higher. Thus, it is unclear whether or not playing Mozart directly initiates brain development in the unborn child. It can only be said that there is a correlation in this situation: Babies who happen to live in Mozart-playing households tend to perform well academically, but it is not entirely certain if Mozart was the sole cause of their school success. On the other hand, if there was undeniable evidence that Mozart stimulated the babies' brains in ways that no other music could—if the Mozart variable was somehow isolated and free from the influence of other factors such as family income—then perhaps there would be causation: Playing Mozart for a baby in the womb may cause advanced intellectual development for the baby. Thus, researchers who want to prove that the performing arts benefits children's intellectual and social development must isolate the performing arts variable in order to demonstrate causation rather than correlation.

Often, arts advocates present policy makers with research from studies that do not follow the ideal experimental procedure. In response, policy makers may refuse to accommodate arts advocates' wishes because there is no concrete evidence that exposure to the performing arts is the sole variable that triggers otherwise unattained personal growth in young people. In order to

convince policy makers to implement more arts education and performing arts activities as part of schools' academic curricula, arts advocates must present research that follows the ideal experimental method complete with a randomly selected control group, experimental group and isolated performing arts exposure variable. Compared to the large number of current arts studies that do not follow this method, only a few studies exist today that fit this scientific standard.

This lack of current studies means that arts researchers must conduct more studies that follow the ideal experimental procedure and prove without a doubt that performing arts education initiates invaluable literary and personal growth in children that they would otherwise not develop. By providing such concrete evidence for the invaluable benefits of performing arts exposure, arts advocates will more likely change policy, and the performing arts will transform generations of young people for years to come.

Works Cited

- “About First Stage”. n.d. Web. 28 Nov. 2014. <http://www.firststage.org/About-First-Stage1/>
- Bray, Gail. “Re: Help with Thesis?”. Message to the author. 7 Dec. 2014. Email.
- Catterall, J. and Chapleau, R. et. al. “Involvement in the arts and human development: General involvement and intensive involvement in music and theatre arts”. Chapter in E. Fiske, *Champions of Change: The Impact of Arts on Learning*. Washington DC: Arts Education Partnership and President’s Committee on the Arts and Humanities, 1-18. *Arts Ed Search*. Web. 19 Nov. 2014. <http://www.artsedsearch.org/summaries/involvement-in-the-arts-and-human-development-general-involvement-and-intensive-involvement-in-music-and-theatre-arts>
- Greene, Jay P. et. al. “Arts Education Matters: We Know, We Measured It”. *Education Week*. 2 Dec. 2014. Web. 13 Dec. 2014.
- Heath, S. and Roach, A. “Imaginative actuality: Learning in the arts during nonschool hours”. Chapter in E. Fiske, *Champions of Change: The Impact of Arts on Learning*. Washington DC: Arts Education Partnership and President’s Committee on the Arts and Humanities, 19-34. *Arts Ed Search*. Web. 27 Aug. 2014. <http://www.artsedsearch.org/summaries/imaginative-actuality-learning-in-the-arts-during-nonschool-hours>
- Hitt, Collin and Kraybill, Anne. “U of A Researchers Find Major Benefits for Students who Attend Live Theater”. *University of Arkansas Colleague*. Oct. 2014. Web. 11 Dec. 2014.
- Hubbartt, Jennifer. “Research Proves First Stage Theater Academy Has Positive Impact on Emotional Intelligence”. Press release. 14 Aug. 2009.
- Magnasco, Julia. Personal interview. 26 June 2014.

Reinders, Mary. "First Stage 2011-2012 Evaluation Results". First Stage Comprehensive Evaluation Final Report 2012. Reinders Research.

STEM to STEAM. Rhode Island School of Design, 2014. Web. 11 Dec. 2014.

Strauss, Valerie. "Top 10 skills children learn from the arts". *The Washington Post*, 22 Jan. 2013. Web. 19 Nov. 2014. <http://www.washingtonpost.com/blogs/answer-sheet/wp/2013/01/22/top-10-skills-children-learn-from-the-arts/>

University of Arkansas Fayetteville. "Major benefits for students who attend live theater, study finds". *ScienceDaily*, 16 October 2014. Web. 19 Nov. 2014. <http://www.sciencedaily.com/releases/2014/10/141016165953.htm>

Wilkerson, Michael. Personal interview. 11 Dec. 2014.

Williams Pannell, Sheri. Personal interview. 31 July 2014.

Wisley, Matthew. Personal interview. 16 Sep. 2014.