Bethel University

Spark

2021

Using Arts to Improve Academic Outcomes for Students With Disabilities

Melissa Jean Briggs Wood
Bethel University

Follow this and additional works at: https://spark.bethel.edu/etd

Part of the Special Education and Teaching Commons

Recommended Citation

USING ARTS TO IMPROVE ACADEMIC OUTCOMES FOR STUDENTS WITH DISABILITIES

A MASTER'S THESIS

SUBMITTED TO THE FACULTY

OF BETHEL UNIVERSITY

BY

MELISSA WOOD

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF ARTS IN SPECIAL EDUCATION

APRIL 2021

BETHEL UNIVERSITY

USING ARTS TO IMPROVE ACADEMIC OUTCOMES FOR STUDENTS WITH DISABILITIES

Melissa Wood

April 2021

APPROVED

Thesis Advisor: Lisa M. Silmser, Ed. D.

Program Director: Katie Bonawitz, Ed. D.

Acknowledgements

Throughout this process I have experienced the joys of getting married, having two children, buying a house and starting a new career. Taking on the titles of wife, mother, and teacher have been incredible achievements and I could not have done those things without my loving and supportive family, particularly my partner and husband, Nick. I also owe a large amount of my accomplishments through this time to my students who have given me a reason to research this topic and to my two children who help me to see meaning in the littlest of things. In addition, in my role as a student, I encountered many challenges that were met with grace and kindness by the Bethel University staff and my advisor, Lisa Silmser. Thank you.

Lastly, I would be amiss if I didn't mention one of the largest influences in my life and a large reason for my chosen field of study, Sarah Brown. Sarah is my aunt. She was diagnosed with meningitis as an infant and has lived most of her life battling cognitive and developmental delays, in and out of the hospital. Sarah has hydrocephalus and was not projected to live past her teenage years. She is now in her 50s. Having her in my life has shown me the importance of being kind and being able to see from different perspectives. She has also shown me that someone with disabilities should not be pushed aside or underestimated and is always up for singing and dancing. I hope that in my work as a Special Educator I am able to honor her and make her proud. I also need to say, for her, she is my FAVORITE Aunt.

Abstract

Theatre is often used as a tool in the classroom to target specific skills in language arts classes. More and more, it is being woven into curriculums outside of the language arts classroom to explore multi-disciplinary teaching. Theatre arts have the potential to reach a wide array of students in order to increase academic achievement, engagement/attainment, and social-emotional skills. Not only can theatre arts improve skills for students as a whole, but it can positively impact students with learning disabilities and special needs, too. Research indicates through empirical data that students generally show improvements in academic achievement, engagement and confidence levels after being exposed to theatre arts methods. For students with disabilities, results were similar. However, the qualitative data collected in a large majority of studies suggests that there are significant changes for students with disabilities in behaviors, confidence levels, and social-emotional skills after theatre exposure. Continued research is needed to truly determine how theatre can impact the education and learning of students with disabilities, but as teachers continue to experiment with methods that are tailored to student needs and abilities, they may find that theatre is an adequate tool for differentiating learning in the classroom.

Table of Contents

List of Figures

CHAPTER I: INTRODUCTION

Educators and classroom teachers are constantly seeking to enrich and improve

the academic and social development of young people. Professional knowledge shared

among educators tells us that theatre arts teaching and training can enhance

interpersonal, verbal, and reading comprehension skills. Special Education students can

also benefit from theatre arts but also need experiences that cater to their specific

learning styles. As a Special Education Teacher, I have come to find through assessment

that many of my students benefit from multiple modes of instruction that allow them to

process information in different ways (visually, sensory-driven, auditorily, verbally,

physically, etc.). Theatre techniques are being used more and more through

professional development in order to execute multi-modal teaching in the classroom.

Theatre techniques in the Special Education classroom (improvisation, reader's theatre,

role play, modeling, dramatic play) can be incredibly effective, but is there any merit to

this method? If Theatre Arts integration can improve the academic and social

achievement of students with disabilities, we must first ask the following

questions: What methods and models are already using theatre arts techniques and are

they successful? What Theatre Arts Techniques improve academic and social abilities in

an educational setting? Are students with disabilities more likely to benefit from

theatre arts techniques in the classroom in comparison with their same-age

peers? Theatre arts techniques are often seen as supplemental to instruction, and

teachers don't connect them to core content. If this type of instruction was proven to

significantly improve performance academically in addition to its effects on engagement and social-emotional skills, would teachers be more apt to use theatre techniques?

Using Arts to Improve Academic Outcomes for Students with Disabilities

Theatre as an art form has been around for centuries. It has been used as a method for story telling, expression, celebration, and education. It encompasses a plethora of art forms and as a result, theatre has become an incredible tool for multi-modal instruction and differentiation in the classroom. Theatre is meant to bring people together to celebrate culture, art, and to explore new ideas and social issues. At its core, theatre is a microcosm of the larger society. The actors and players performing bring their own life experiences and beliefs to tell a story which others will connect with. Whether it is through a Shakespearean tragedy, the *Wizard of Oz,* or a student-created work in an English class, there is relevance in how theatre affects those who experience it. Audience members and creators alike gain something from participating in the process of a theatre performance. In the classroom, the gains made from using theatre as an instructional tool can have long-lasting effects. Especially for students with special needs, it can be argued that the life-long skills theatre can provide are essential to their education.

Theatre is able to provide a creative way for educators to differentiate instruction in their classrooms. In order to differentiate, educators must look at each student as an individual. Howard Gardener's multiple intelligences (MI) is one way of determining how groups of students think, how they prefer to receive instruction and how to assist them in their successes in the classroom (Beam, 2009). Whether it is

musical, kinesthetic, interpersonal, intrapersonal, linguistic, mathematical, naturalistic,

or visual (Gardener, 1983), theatre is able to naturally include all of these learning styles

in some way. Acting, scenic and prop design, makeup and costumes, lighting and sound,

directing, stage management, special effects, dance and playwriting are all aspects of

theatre that encourage the use of multiple skill-sets. It is designed to incorporate

different forms of art in order to create one large piece of work. It can be a musical

production, a formal play, a puppet show, or even a theatrical dance performance. In

my experience, theatre has the ability to naturally join together personalities and art

forms in the most unexpected of ways. This is why theatre is fit for the classroom and is

especially suitable for differentiating and meeting the needs of students with

disabilities. "New teachers in the field, particularly those working with students with

disabilities, should understand that students learn best in environments that allow

freedom of choice, open-ended exploration, and validation of their experience(s)"

(Beam, 2009 p 5). Theatre is a safe space for learning and growth and is able to enhance

the skill development and self-worth of students with special needs.

Definition of Terms

Theatre arts and the arts are oftentimes synonymous because of the immersion

of arts disciplines within theatre arts. Theatre arts is a visual art form that tells a story

through some type of performance. It can include acting, mime, music, dance, poetry,

technology, puppetry, lighting, sound, costumes, makeup, and scenic elements. In the

classroom, 'theatre arts inclusion' is the practice of using these elements as a vehicle to

present instruction in the classroom.

Students with disabilities, students with unique needs or students with learning disabilities, all refer to students who have been identified as needing Special Education services in an educational setting. Their learning disabilities could be under a variety of labels such as Learning Disabilities (LD), Autism Spectrum (ASD), Emotional Behavioral Disorders (EBD), or any other categories listed that are considered educational labels. The term learning disabilities simply refers to the different disability areas that can qualify a student to receive special education services in school.

Other ways that students with deficits are referred to in multiple studies, but are not necessarily documented as having a disability are 'at-risk students', 'remedial students', 'high behavioral', 'disadvantaged' and 'low income' or 'low socio-economic' students. These terms are often used to group students together that are below their peers academically, socially, or behaviorally. These terms are also used to identify students with lower economic status than their peers to point out the different access points students have to the arts when they are from more economically advantaged households.

Academic achievement is used to describe gains in academic areas measured by state standards. It primarily refers to students meeting standards in the areas of math, reading, and writing but in this context, those standards are being measured against student participation or exposure to the arts. Similarly, attainment refers to a student's success with attending school and a school's ability to keep students in the classroom, and engagement refers to a student's motivation and participation in the classroom.

Social-emotional impact refers to the abilities that students need in order to interact with their peers. It also refers to the emotional competence that is needed to interact with others in the world. Social-emotional skills used in the classroom can include peer-to-peer interactions, a student's reaction to different instructions or directives from a teacher, behaviors in the classroom, and social maturity.

Pre-service teaching and professional developments are mentioned at length in several studies. These terms refer to the training teachers or instructors receive prior to teaching in the classroom. In some instances, pre-service teaching is referring to student teachers and the education they are receiving to become licensed. Pre-service teaching can also include training for teachers who are already licensed. However, professional development is more commonly used to describe training used for teachers who are already licensed.

Research Questions

It is important to understand how theatre is being used in schools so that we can then measure their success. There are researchers that have discussed the issue of theatre arts being measured against other subjects that are deemed more important, such as math and science (Catterall, 1998; Eisner, 1998). The large argument in this topic is that theatre is just as important as these other subjects in a child's education. Theatre can teach students life-long skills that they need into adulthood, which is why schools have become more creative in implementing theatre arts instruction with the reduced funding of arts programs. The most popular models for theatre arts instruction in schools are separate theatre arts classes and activities, theatre exposure through

Language Arts classes, theatre arts inclusion across content areas, and theatre training

for teachers through professional development opportunities.

In order to assess which of these types of exposure is most successful in

impacting student successes, the right questions need to be asked in research studies.

Most of the time, the questions being asked are specific to academic improvements

being made after a small amount of theatre exposure. Some studies have addressed

specifics about engagement and student motivation, which can imply improved

performance in the classroom, but it isn't always clear exactly what is attributing to the

improved performance or engagement. Is it the teacher? Is it the theatre activities? Is

it the students' other classes that they are taking? Figuring out which theatre techniques

are most successful is one of the more complicated pieces in finding out if theatre arts

can directly improve a student's performance and social-emotional skills. What we do

know is that after exposure to some sort of theatre activities, whether it be inclusion,

separate classes, or techniques taught through professional development, the

qualitative data collected is incredibly positive in regards to academic and social-

emotional growth in both teachers and students.

Because of the positive effects found on a general population of students, it

stands to reason that theatre also has a positive effect on students with special needs.

However, is theatre even more impactful for these students than it is for their peers

without disabilities? Because of the emphasis on differentiation to serve students with

disabilities, theatre is a great option for individualizing curriculum in the classroom and

helping improve confidence levels for students with special needs. In addition, the risk

that students take in the classroom when creating theatre or participating in theatre activities does not require advanced skill levels necessarily. Each student is starting at the same level and is able to advance or take risks at their own pace in the theatre classroom. This makes theatre activities a great fit for students with disabilities who typically feel that they are starting at a disadvantage in activities when compared to their general education peers.

As studies continue to be done to provide the rationale for why theatre is an important part of educating the child as a whole, teachers will continue to use theatre arts activities as supplemental materials in their classrooms or sadly, not at all. For teachers who include small aspects of theatre in their classes to encourage students to get out of their comfort zones or to collaborate more with their peers, they will find more and more ways to make theatre an active part of their lessons because the qualitative data is there. But what will it take to prove that theatre arts are integral to educating all students for their futures? Even more, what will it take to get theatre arts to be an integral part of educating students with disabilities? Perhaps it just takes a bit more research and a lot more faith that arts can be as important to a child's education as writing, math, and even reading.

CHAPTER II: LITERATURE REVIEW

Literature Search Procedures

To locate the literature for this thesis, searches of Education Journals, ERIC, Academic Search Premier, CrossRef, and EBSCO were conducted for publications from 1993-2019. This list was narrowed by only reviewing published empirical studies from peer-reviewed journals that focused on theatre arts education, teacher trainings using theatre arts, academic improvement through arts and arts focused curriculum to improve academic and social skills abilities in students with disabilities.

Impact of Theatre Arts on All Students

In 1999, the Arts Education Partnership and The President's Committee on the Arts and the Humanities released a report called *Champions of Change: The Impact of Arts on Learning* (Fiske, 1999). In this report, several studies were done specifically targeting the effect or impact of arts programs on learning and education practice. There were seven research teams put together for this study and each team examined different types of arts programs using a variety of research methodologies and released their results in this report. Through the research done in this compiled study, it was concluded that learners could attain higher levels of achievement through engagement with the arts.

One of the more critical findings in all of the research was that learning in and through the arts "level the playing field" for disadvantaged students. Fiske (1999), created a list of important findings that could be concluded through the compilation and through comparing the studies included in this report. Fiske concludes that the arts can

change the learning experience by reaching students who are otherwise not being

reached, in a way that they are not being reached; the arts connect students to

themselves and each other; the arts transform the environment for learning; the arts

provide learning opportunities for adults in the lives of young people; the arts provide

new challenges for students who are already considered successful, and they connect

learning experiences to the world of real work. Fiske made these conclusions based on

the research that the seven teams conducted over several years of research, some with

programs that were previously funded or in process, and some that were conducted

within the time frame that the *Champions of Change* (Fiske, 1999) project was funded

(2-3 years).

Catterall, a leader of research in the area of arts and education, was on two of

the teams that conducted studies specifically funded and published for the *Champions*

of Change project. For the first study, Catterall et al. (Fiske, 1999) spent two years

analyzing data provided through a longitudinal study done over 10 years. The study

followed the involvement in the arts of over 25,000 students between the 8th and 12th

grades. The researchers further analyzed this data from what was provided in the study

to determine what conclusions could be made about the students and their involvement

in the arts. The team specifically examined three areas: academic success, music and

mathematics achievement, and theatre arts and human development.

As they were analyzing the data, the team found significance in identifying socio-

economic status as a factor in student outcomes, specifically in the area of academic

success. The researchers separated out students with low socio-economic backgrounds

(low SES) when compiling their statistics (Fiske, 1999). They studied how students were achieving in specific categories of performance (grades, standardized test scores, general attitudes toward out of school activities, and drop out rates) when exposed to a high amount of arts programs and a low amount of arts programs/ none at all. There were striking differences in the achievement of students who were exposed to high arts vs. low arts in multiple areas. For instance, those exposed to high arts achieved higher scores on standardized tests by 20% or more when compared to those with low exposure to the arts (Fiske, 1999). The differences were also apparent in students with low socio-economic backgrounds who were exposed to high arts versus low arts.

The researchers found that there were substantial differences in the family income and education levels between the high arts and low arts groups. The probability of being "high arts" was almost twice as high for students from economically advantaged families, the probability of low arts involvement was about twice as high if a student was from an economically disadvantaged family (Fiske, 1999), meaning that economically advantaged families had a much higher probability of being exposed to arts and low SES families had a higher probability of NOT being involved in arts. The statistics around low socio-economic status and arts involvement spurred the team to take a closer look at this particular group because, in addition to the achievement issues typically found in low SES students, their access to arts programming is also lower than that of their economically advantaged peers. The findings yielded showed that arts-involved students do better on many measures and their performance advantages grow over time as they continue to be involved in the arts and the general performance

comparisons (high arts vs. low arts on standardized tests, grades, drop out rates, etc.) also hold true for low SES children (Fiske, 1999).

The study (Fiske, 1999) by Catterall et al. then went on to make comparisons between mathematical achievement with music involvement and self-concept with involvement in drama/ theatre. They continued to separate low SES students to make conclusions about access and attainment for that demographic. In mathematics and music, they found that students participating in instrumental music for grades eight through 12 were outperforming low SES students with no music by a margin of about 10%. That margin of success grew as those students continued to be involved in music throughout high school, and those same students were outperforming their low SES, non-music peers by a difference of 18%. Results in theatre were gathered similarly with high vs. low involvement in theatre arts over time and then gathering data comparing the arts involvement to different content areas or subjects. In this case they compared arts involvement to reading proficiency and self-concept as well as specific students' views on race and race relations. High theatre arts involved students outscored non-involved students in reading proficiency. The researchers aligned with much of theatre involvement to include literature-rich work with reading lines, exploring different texts, and actively engaging students in language.

The researchers analyzed the connection to self-concept, including confidence levels, empathy and tolerance skills (Fiske, 1999). This is where student views on race and race relations came up. There were gains over time in self-concept in all groups from high arts involved high SES groups and high arts involved low SES groups. Student

surveys and observations measured tolerance and empathy. It appeared that students

with high arts involvement were, in general, friendlier with other racial groups and also

less likely to use racist remarks (Fiske, 1999). In all of this research, whether or not the

arts involvement caused the results that were yielded was not considered. The

researchers wanted to be very clear that this study was simply making observations and

documenting results based on how much students were involved in the arts. There are

no claims that the arts have caused higher scores or grades or lowered drop out rates.

The observations are that those who were highly exposed to arts happened to have

higher scores and lower dropout rates.

Catterall (2009) completed a 12-year study of how arts had affected students

into adulthood. Catterall used the same basis of research, quantifying students'

exposure to arts using the measures of 'high arts' vs. 'low arts' as a signifier of the level

of arts immersion students had experienced. He also used the quantifier of 'arts rich'

schools vs. 'arts poor' schools, identifying differences in how many arts programming

opportunities there were in specific schools that students had attended. Catterall not

only studied the effects of arts involvement on student success over time, but he also

included involvement in sports to make comparisons between different types of

involvement that students experienced (Catterall, 2009). Catterall continued to evaluate

the effects these activities played in the lives of lower SES students but expanded the

measures to include a larger variety of accomplishments and achievements that

students could experience over a more extended amount of time.

The study specifically used a panel study (National Educational Longitudinal Survey-NELS) that followed more than 25,000 American secondary students from four to 12 years (Catterall, 2009). The work addressed the development of children and adolescents over the period spent between the 8th and 12th grades and followed some of those students through age 26. Catterall used two main trials to collect data: the first was examining involvement in the arts generally, across all disciplines and the second was examining the potential importance of sustained involvement in a single discipline. Catterall used both music and theatre as case examples. These two art forms were used because of related research suggesting links between music and cognitive development and theatre/drama and cognitive development. After Catterall examined who was involved in what art forms and to what degree he measured 1) are these students 'Doing Well'? Furthermore-2) are these students 'Doing Good'? (Catterall, 2009). He measured 'Doing Well' by quantifying the students' successes in life after high school. Examples include: attending/ graduating from college, holding a full-time job, what job was received based on education, and involvement in the community (attending concerts, library, theatre). Catterall measures 'Doing Good' by quantifying the 'what' of student activities after high school. Examples include volunteer work, strong friendships, and voting activity. In each chapter of his study, Catterall continues to tie high arts involvement to high achievement and increased performance and enhanced social values that students carry through their lives into adulthood (Catterall, 2009).

The data collected through the school experience of these students was the first part of data gathered and indicated the affect arts involvement had on the students

during their time in secondary school, similar to the data collected in Champions of

Change (Fiske, 1999). However, Catterall took this research a step further.

In Figure 1.1, Catterall (2009), took very specific data points (grades in English

class, drop out rates, boredom in school) and made a comparison with those data points

to high vs. low involvement in arts. The results when he did this most often reflected

that high involvement in arts means better grades in classes, higher engagement in

school and higher scores on standardized tests. This type of data is also what caused

Catterall and his team to look more closely at the socio-economic status of students

participating in the arts and what their involvements were.

Figure 1.1: Involvement in the arts and academic performance, all students, by grade

Percentage in Each Group:	High	Low
8th Grade		
Earning Mostly A's in English	82.6%	67.2%
In top two quartiles on Standardized Tests	67.3%	49.6%
Dropping Out by Grade 10	1.4%	3.7%
Claiming to be bored in school half or more of	37.9%	45.9%
10th Grade		
In top two quartiles on Standardized Tests	65.7%	47.5%
In top two quartiles on Reading Tests	64.7%	45.4%
Scoring Level two (high) in Reading	61.0%	43.5%
In top two quartiles on History, Geog.,	62.9%	47.4%

In Figure 1.2, Catterall (2009) gathered data on the students into their adulthood

to age 26. The Figure shows indications of selected pastimes and activities of a young

adult life integrated with the community (*doing what?*). It also shows specific behaviors

that would be called *doing good* for the community of society (Catterall, 2009). In

general, the high arts students perform more positively on these measures than the

low-arts students. Some of the differences can most likely be linked to the level of

education that the students received which is also referenced in the study. High arts

students are 10 to 20 percent more likely to read books, frequent a public library,

participate in organized religions, and attend plays or concerts (Catterall, 2009).

Figure 1.2: Indicators of activities and community service involvement at age 26, by SES

and arts involvement groups. Percentages by group.

	All	Hi SES		Low SES	
Doing What?		Hi	Low	Hi Art	Low Art
Read papers or magazines 3+ days/wk	67.8	74.0	74.2	76.5	75.0
Read any books	81	91.7	87.1	81.8	73.8
Ever attend plays, concerts	48.4	51.3	51.7	55.1	43.0
Participation in organized religion	56.2	62.8	55.8	64.8	47.8
Participated in sports	46.3	43.1	49.0	44.1	41.1
Doing Good					
Youth organization volunteer	20	27.5	19.7	24.3	10.8
Civic/ Community volunteer	21.5	35.1	20.4	24.6	10.4
Participate in political campaign	3.6	7.1	1.4	4.1	2.8
Registered to vote	76.4	86.1	83.7	77.7	67.1
Voted in any election past 24 months	41.2	53.5	53.7	37	30.4
Voted in 1996 Presidential election	55	71.7	61.9	52.5	35.1

Catterall mentions throughout the study that much of the research done to

make these same claims is not nearly long enough. Many research studies claim that

arts affect student learning over months, weeks or, in some cases, minutes. Catterall has

attempted to do a comprehensive study with this work by following students who were

engaged or involved in arts programming over a more extended time period. However,

what does all the data he collected mean? Catterall claims that students exposed to the

arts experienced significant changes in their growth development (Catterall, 2009). He

suggests that this can occur in two ways: the first being how the researched students

communicate about themselves and others over time. The second is that arts exposure

can change the neural pathways of the brain and can affect how people do 'non-arts'

related tasks. He believes this information is connected with the data collected that a

large sample of students used in the study is 'Doing Well' and 'Doing Good.' Catterall

does admit that he cannot firmly affix these claims with the research that was done on

the students who were used in the study. He points out these claims to shed light on the

inevitability that there is more research to be done, and that there are many positive

associations gathered in the study that could be caused by arts involvement. However,

there are also many other factors that could have affected positive outcomes as well.

Lorimer (2011) proves through her research that arts learning can make a

positive impact on student achievement, increased performance and enhanced social

choices. In her study, *Arts-Infused Learning in Middle Level Classrooms*, Lorimer puts

curricular emphasis on arts-infused learning in language arts, math, science, and

history/social science middle level classrooms. She focused primarily on middle-level

classrooms, due to a severe disparity of arts in middle school classrooms, especially in

disadvantaged schools.

The study highlights findings from five classrooms in two schools, Urban Middle School and City School (Lorimer, 2011). Interviews and observation data were used to help inform results. These specific schools were chosen because both schools emphasize the visual and performing arts and serve a high population of English learners, students from economically disadvantaged families, and students from varied racial/ethnic backgrounds. All students attending these schools receive Title I services for Reading and Math. Lorimer immediately defines two different educational pedagogies: Culturally Responsive Teaching and Developmentally Responsive Teaching. She makes this point because arts-infused learning can naturally lend it to being developmentally and culturally engaging for students in many forms. When the two schools' data were compared, similarities were revealed about the types of art learning being used as well as how often they were being used. The school comparisons also revealed similarities in the quality of programming being provided in relationship to arts standards (Lorimer, 2011).

Based on the analysis of the collected observation and interview data, the impact of arts on middle-level learning became evident. A common theme in the classrooms observed was that visual arts were the most commonly used form of arts in the classrooms and served as an entry point to draw upon prior knowledge and experience to encourage analytical thinking about culture and promote inquiry (Lorimer, 2011). Music and visual arts were used more than drama and dance. However, there were notes about when interdisciplinary teaching was being used, students were given more public speaking and discussion opportunities. The arts were used as a vehicle to

study complex phenomena. During science labs, students worked as they developed

illustrations to support their understanding of critical concepts. Lorimer (2011) claims

that the pedagogy of including arts in the classroom enhances middle-level curriculum,

professional development, the pedagogy of the teachers, and also even enhances school

policy. All participants stated that they perceived arts-related learning as a positive

catalyst leading to more engagement, which also improves attendance, behavior, and

attitudes for young adolescents from diverse backgrounds (Lorimer, 2011). The principal

at Urban Middle School even documented fewer tardies, suspensions, and referrals

since the implementation of a school-wide arts focus. Providing students with different

ways to experience learning is essential. Students and teachers both reported that

students were engaged and presented a positive attitude when compared to other

peers (Lorimer, 2011). Lorimer takes these results to propose that we should be

designing curriculum and funding schools differently to provide more learning

experiences like those in this study.

Huffaker and West (2005) also researched the effects of art-infused learning

being used in the classroom to increase how students express and defend their ideas.

However, she used the theatre techniques on adults in a business classroom. Huffaker

and West wanted to find out how using improvisational forms in a particular business

course would enhance the learning of the business students (Huffaker & West, 2005).

The three primary learning objectives were to build community and encourage risk

taking to create an environment conducive to learning, facilitate experiential learning

about key course themes, and provide a dynamic alternative to traditional classroom discussion, capitalizing on creative, nonlinear expression and idea exchange.

The authors provide a detailed account of how this exploration benefited the classroom. Midterm and final evaluations were collected from students to assess the effectiveness of improv techniques on student learning. Students were asked anonymously for feedback on the class and the overall satisfaction level with the course was high, with an average score of 4.66 out of a possible 5. Improv was not explicitly addressed, but five students volunteered comments about its use and most were positive.

Although most of the results were positive, some students reported improv technique was not for them (Huffaker & West, 2005). These students gave feedback that improv did not feel comfortable and inhibited their learning, even though they understood the benefit of the technique for others. The authors concluded that using improv greatly enhanced her students' classroom experience. It was beneficial in creating an environment conducive to learning. Having activities that provided an open, risk-tolerant, creative, participative, and energized atmosphere enhanced the amount of exchange and exploration that took place. As reflected through observations, general satisfaction ratings, and the students' direct feedback, engaging with improv as a classroom tool had a very positive impact on most students in her classroom (Huffaker & West, 2005). The school's standard end-of-course evaluation form was given to students with two metrics that may have spoken to the use of the improv experiment. For the first, "Is sensitive to the response of the class, encourages student participation,

and welcomes questions and discussion," the class gave a 9.83 out of 10. The second,

"Enjoys teaching, is enthusiastic about the subject, makes the course exciting, and has

self-confidence," rated 9.92 out of 10 (Huffaker and West, 2005). According to the

teachers of the course, participation and student excitement were a direct result of the

use of improv. The authors also noted that using such playful, creative techniques with

students also provided the instructors with a sense of exhilaration, rejuvenation, and

joy.

Academic Achievement

McMahon et al. (2003) attempted to answer whether or not participation in arts

programs can improve academic ability through an art form not often used in the

classroom: dance. This study evaluates the effectiveness of an arts-based educational

program, Basic Reading Through Dance (BRD). Basic Reading Through Dance is a 20-

session, curriculum-based reading intervention for first-grade students developed by

Whirlwind, a not-for-profit organization. There were a total of 721 first-grade students

from Chicago public schools who participated in the study, with 328 students from six

schools receiving the program and 393 students from nine schools serving as controls

(McMahon et al., 2003). The program was designed to improve reading skills, such as

code knowledge (alphabet sounds) and phoneme segmentation--separating letter

sounds within spoken words (McMahon et al., 2003).

The program was implemented in two phases at three different schools. Three

artists implemented the program, and each artist worked with five to six first-grade

classrooms twice a week (McMahon et al., 2003). By the end of the study, students

were exposed to 13.3 hours of dance-based reading instruction. The sessions mainly involved students using their bodies to make the shapes of letters and letter blends representing sounds. The BRD sessions were developed to progress along a continuum of learning according to difficulty.

Most comparisons in this study were done between 337 control-group students and 293 BRD students (McMahon et al., 2003). Several analyses were undertaken to ensure the equivalence of both groups in terms of reading abilities. Pretest scores on the PhonoGraphix Test indicated that the control group started with slightly higher scores than the BRD group. Both groups were from low-income, predominantly minority populations in the same general areas of the same school district. To assess improvement in reading abilities, difference scores were calculated for each student based on subtracting pretest scores from posttest scores. The data was then segmented into categories specific to certain areas of reading abilities.

In the area of consonants and vowels, results suggest that BRD students demonstrated a more significant improvement in consonant and sound recognition of vowels when compared to the control group. BRD students improved their consonant scores by 27 points overall and their vowel scores by 30 points, where the control group only improved consonant scores by 10 points and 19 points in vowel scores (McMahon et al., 2003). In Phoneme Segmentation, again, scores improved more for students in the BRD group (28 points), than the control group (15 points). These scores indicate that participation in the BRD program resulted in greater improvements in the specific areas of Consonants, Vowels and Phoneme Segmentation.

Although there is published work demonstrating a rationale for the use of arts education, and there is some preliminary empirical support for the effectiveness of arts-education programs, little research examines dance as a specific form of arts education. The dance studies that have been conducted tend to be either case-study approaches with small samples or entirely theoretical. The variety of instructional approaches used across control classrooms provides a representative sample of teaching techniques used in the Chicago public school system (Mcmahon et al., 2003). Thus, the findings suggest that the BRD program yields more positive results than the typical approaches used to teach reading. Although it cannot conclusively be determined that dance, per se, improved reading, the BRD curriculum, which incorporates dance as a teaching tool designed to improve reading comprehension, yielded more positive results than other approaches currently used (Mcmahon et al., 2003).

Page (1983) did a study involving academic ability in reading as well. Her dissertation was done to study the effect storytelling has on children's reading comprehension. It specifically explores two modes of storytelling in the classroom: storytelling done by the teacher (presentation) and storytelling done by the students (participation). The purpose of the study was to use results to whether it is better to use more presentational instruction or participation and which stories lend themselves best to each of these approaches to increase competency and success. An empirical study was implemented on 38 students in two elementary classrooms (Page, 1983). Two randomly selected groups in grades one through three received two sessions of alternating treatments of storytelling and story dramatization.

The study demonstrated that children are more involved and engaged through drama than through storytelling. First graders, and particularly students who read below grade level, achieved more overall comprehension through drama than through storytelling (Page, 1983). There were three treatments of the study that were used in the experimental group. In the first, children participated as a group with a leader to dramatize an open-ended story. In the second, children enacted a complete story that had been told to them beforehand. The third was children observing two actors enacting stories for the group. Data was then collected through questionnaires measuring main idea, inference, recall, and vocabulary and also through taped interviews using a picture sequence exercise (Page, 1983).

Out of two stories presented to the different groups of children in grade one and grades two and three, students in grade one showed similar results when exposed to drama or storytelling. For the first story, both groups had an average of 55% accuracy on the questionnaire when answering questions about main idea, inference, recall, and vocabulary (Page, 1983). For the second story, drama student results were 60% on average for accuracy and 59% accuracy for those who received the storytelling treatment (Page, 1983). The grades two and three group had more significant differences in accuracy on the questionnaire between the drama group and the storytelling group. On story one, the students exposed to drama had an average score of 88.8% and those exposed to storytelling had an average of 69%. For the second story, the drama treatment group scored 70% and the story telling group scored an average of 78%. Through the questionnaire alone, the results were difficult to interpret.

The results that Page (1983) was able to get from the taped interviews and

receiving more anecdotal information from students were more successful in gathering

data that could be interpreted more clearly. Questions addressed on the taped

interview portion included each child's retelling of the story and grammar categories

and also their expressiveness during the retelling. It included setting, initiating event,

internal response, attempt, consequence, and reaction (Page, 1983). Students were not

rated on the sequence their stories were told in, but expressiveness was used to

measure engagement. On the first story for the Taped Interviews, those who

participated in the drama treatment outscored their storytelling treatment peers in

grades one, two and three with an average of 91.65% to the storytelling treatment

scores of 77.5%. On the second story, similar differences were calculated with the

drama treatment group scoring an average of 92.85% accuracy on questions and the

storytelling group scoring an average of 79.9% accuracy on questions (Page, 1983).

Both activities proved to be beneficial for recall of sequence, details and

vocabulary comprehension. Some certain words and details that were easier for

students through storytelling, and conversely, there were certain words and details that

students were able to comprehend and understand better through drama. Main idea,

character motivation and identification were concepts better grasped through drama.

Inference was better achieved through storytelling (Page, 1983). The study did not detail

the specific use of dramatic arts in the classroom and noted that this kind of research

would be beneficial, especially for struggling readers. The author also noted that future

research should include formal observation of participant behavior in both settings, and

treatment sessions conducted by the classroom teachers. The author did conclude that

the format in which material is presented or experienced does affect a student's ability

to comprehend the material, or in this case, a story. More students, overall, did better

on comprehension assessments after participation, rather than just presentation (Page,

1983).

Walker, Tabone, and Weltsek (2011) also decided to integrate an arts program

into schools and track achievement and collect data. Through the Arts Education Model

Development and Dissemination program, the team worked through a non-profit

performing arts organization in New Jersey called the Education Arts Team (EAT). The

EAT received two grants to track achievement through the arts. The first tracked

standardized test scores from classes that integrated drama into language arts and

social studies classes. The second funded a theatre arts infusion program for 6th and 7th

grade language arts curriculum. The team used the information from these grant

programs to make conclusions about theatre arts-infused teaching and achievement

data.

There were two main questions addressed when compiling the data: the first

asked to what extent students' language arts and mathematics performance and

engagement with the school was positively impacted by being in a classroom that

infused theatre arts strategies into the language arts curriculum (Walker et al., 2011).

The second asked to what extent students can sustain their learning gains in language

arts performance from a theater-integrated curriculum once they return to traditional

language arts instruction (Walker et al., 2011). In short, they are asking what are the

positive gains and can they be retained.

The study design for the project involved randomization of schools and

classrooms. The study sample consisted of 14 teachers, 14 classrooms, and 540 students

in the treatment condition and 14 teachers, 14 classrooms, and 480 students in the

control group. The student population of the school district in which the study was

conducted is multiracial and multiethnic. The free and reduced lunch rates for the

student population in participating schools ranged from 77% to 88%. These rates

indicate that almost eight out of every 10 students came from an impoverished

background and the schools chosen had the lowest percentage of proficient students on

the state's language arts assessments (Walker et al., 2011).

The integrated strategies involved artists and teachers collaborating on the

instruction of 40 drama-based lesson plans linked to the district -mandated literary texts

for the sixth and seventh grades and taught for the course of the academic year (Walker

et al., 2011). All teachers in the treatment group were given training on drama and

related arts techniques and along with language arts standards, the artists and teachers

worked toward integration of the national theater arts standards and found natural

points of intersection between both literary and dramatic arts disciplines (Walker et al.,

2011). EAT project leaders identified four points of intersection: scenery design and

setting; acting and understanding the characters; directing and understanding theme,

plot, and character relationships; and script writing and dialogue. The teachers and

artists used these points of intersection to teach the grade level goals and standards

(Walker et al., 2011).

The first set of findings included in this study was related to the success of the

drama-integrated classrooms on state standardized exams. Approximately 56% of

students in the theater strategies classrooms passed the state assessment in language

arts, compared to 43% of students in the control classrooms. With respect to

mathematics, 47% in the integrated classrooms were successful on the state

assessments, compared to 39% of students in the control classrooms (Walker et al.,

2011). It was found that students in an arts-integrated classroom were more likely than

students in a traditional classroom setting to pass the state assessments. Being in an

arts-integrated classroom increased the odds of students passing the state assessment

by 77 percent in language arts. The odds of passing on the math assessment increased

by 42% when students were in an arts-integrated class. Following 338 students from 7th

to 8th grade also measured the sustaining impact. Of those students, 215 had received

the drama and arts inclusion in their language arts class in 7th grade. Seventy-eight

percent of eighth graders whose language arts instruction as seventh graders included

theater strategies were proficient in language arts on the eighth-grade assessment,

compared to 69% of students who were instructed using traditional pedagogy. Former

arts integration students also significantly outperformed their peers in persuasive and

speculative writing on the grade eight state assessments (Walker et al., 2011). Other

measures were not as significant. The students in the theatre arts integrated classes also

proved to have fewer absences than their peers. These findings underscore the

importance of integrating drama and theater strategies into students' learning

processes.

Another approach to tracking achievement through instructional approaches is

that of differentiated instruction (DI). At the heart of differentiating instruction in

language arts is the need to provide learners with choices about what they read and to

design their projects and curriculum to match their learners' needs (Tobin & McInnes,

2008). Learners are provided with multiple access routes to make sense of and

demonstrate their understandings. Ten teachers from Aberdeen School District were

assigned mixed-grade classrooms and researchers provided two 3-hour workshops to

assist teachers in developing a framework for thinking about instructional

differentiation, invoke thinking about the nature and needs of diverse students, and

provide teachers with materials and helpful strategies to meet the literacy needs of

academically diverse learners (Tobin & McInnes, 2008).

Emphasis was placed on meaningful reading tasks, flexible grouping, and ongoing

assessment and adjustments for all students. Teachers also practiced using a variety of

texts with struggling readers in order to provide more systematic and intensive

instruction. Some texts used benefitted readers in word-study strategies, increased

opportunities for repeated readings to build fluency and more explicit and systematic

instruction in comprehension strategies (Tobin & McInnes, 2008). After the workshops

were delivered, two teachers were chosen to provide specific examples of DI in their

classrooms and to also provide evidence of how DI was benefiting their students. The

first teacher provided numerous examples of how she would allow students to respond

to readings in her classrooms. Sometimes the students would respond in groups, sometimes through drawing pictures, sometimes through discussion. The teacher created a 'menu' for her students on activities that they could choose for literacy times.

From observation, the DI activities that were chosen from the first teacher were inherently arts-based and social. She provided students with a menu of options to easily choose different ways of using strategies and connecting to the text (Tobin & McInnes, 2008). The inherently arts-based activities used empathy skills (Character Swap) or ways of creating new materials based on what they had read (Slice n Spice, Talk Back). The second teacher used a similar strategy for her classroom, but instead of a menu of choices to practice comprehension and understanding, she used a tic-tac-toe board and centers. These choices on the tic-tac-toe board included more literacy-based options (picking out unfamiliar words, writing a letter to the author), but also sprinkled in some more arts based strategies (draw a picture, play roles of characters, sharing with a partner, playing a game).

There were not explicit results shared from this study about academic success, rather it was shared how teachers felt they were able to provide a level instruction that they had not experienced in the past. There were more opportunities for feedback and one on one instruction time with students when these types of activities were offered (Tobin & McInnes, 2008). Differentiated instruction helped students understand and apply content and processes in their literacy learning and have choices about their different learning experiences. Teachers used variations of differentiated instruction

that matched their professional profile, curriculum focus, and school resources and reported overall positive results in their classrooms (Tobin & McInnes, 2008).

In 2014, Inoa, Weltsek and Tabone researched how arts positively impact the process of learning through a program called Integrating Theatre Arts Project (ITAP) (Inoa et al., 2014). This study followed 6th and 7th graders in an urban school district that were exposed to the ITAP program in which theatre arts lessons were infused with Language Arts classes to enhance learning. The objectives brought together curricula, standards, and areas of learning from both language and theater arts. "The long-term goals of the project were to develop lifelong learners who enjoy reading and expressing themselves through writing; the short-term goals included improvements in student comprehension skills and student motivation in reading and writing, as well as the exploration of themes and characters from academic novels and the establishment of opportunities that lead students to work meta-cognitively through discussion, personal reflection, and writing" (Inoa et al., p 6, 2014).

The study took place over two academic school years 2008-2009 and 2009-2010. In those years the sixth and seventh grade students in the district took the statewide assessment in the spring in the areas of mathematics and language arts. The researchers took their data from these test scores and analyzed a total of 1,193 students in both sixth and seventh grade. The students exposed to ITAP were separated from those scores, and the students who were not exposed to that program were used as the control group. In the sixth grade group, the findings indicated that students in the arts-integrated classrooms (Mean: 196.66, SD: 20.821) scored higher than students in the

control classrooms (Mean: 193.16, SD: 22.744) in the area of language arts. Results were similar for this grade group in mathematics, where the treatment group tested higher overall than their peers. The seventh grade results showed similar trends with the treatment group outperforming the control group but the results did not prove statistically significant (Inoa et al., 2014).

Although much of the study did not yield statistically significant results, it did show that students who participated in ITAP often outperformed students in the comparison subgroups. The most significant results occurred in sixth grade, where students receiving a theater arts intervention outperformed their control group counterparts by almost eight percentage points, a difference that missed statistical significance by one- hundredth of a point, while in math, treatment once again surpassed control group participants, this time by 11.5 percentage points, a statistically significant difference (Inoa et al., 2014). These results are encouraging because they predict educational benefit to students who participate in theatre arts-related interventions and it does not just apply to literacy-related skills but also math achievement.

Engagement/ Attainment

Through previous studies mentioned like Lorimer (2011), Huffaker and West (2005) and Catterall (1999) the researchers found that a natural result of studying the impact theatre has on a student, academically or otherwise, is the unmasking of data showing how engaged students are in the classroom when theatre arts is present. Arts-related learning has been perceived as a positive catalyst leading to more engagement,

improved attendance, behavior and attitudes (Lorimer, 2011). In Lorimer's study, it was

even documented that tardies and suspensions were lessened once the implementation

of school-wide arts focus began. Both students and teachers reported increased

engagement and positive attitudes were results of the arts-focused programs (Lorimer,

2011). Huffaker and West began their study with improv technique in large part because

they wanted students to engage and interact more actively with their materials

(Huffaker and West, 2005). Most of the results collected from that study were anecdotal

and students reported mainly positive results as well as having more positive

impressions of the teacher and their approach of using arts in the classroom as

innovative and engaging (Huffaker & West, 2005).

Catterall (Fiske, 1999) points out the impact that high arts involvement can have

on all students but makes a point of separating low SES students. In Figure 1.3, more

statistics from his study *Doing Well and Doing Good by Doing Art* (Catterall, 2009) give

insight into the impact the amount of arts exposure can have on attainment and

dropout rates. The information in Figure 1.3 is also listed in Figure 1.1, but is separated

here by All Students versus low SES students. This information is significant to the topic

of engagement and attainment because of the implications that dropping out of school

can have on a student. Catterall gathers information here out of roughly 25,000

students. The data shows that the dropout rate of all students from the sample study is

only 1.4%, but for students with low arts involvement and low socio-economic status,

that percentage rises 9.5% (Catterall, 2009). This doesn't prove that arts are the reason

students are choosing to stay in school, but Catterall argues that a correlation does,

indeed, exist.

      Figure 1.3 also highlights a question from the student survey about student

boredom (Catterall, 2009). Forty-two point two percent of all students who were

exposed to high arts involvement reported being bored in school half or most of the

time. That percentage rose for all students by 6.7% when there was low arts

involvement (Catterall, 2009). The same is true of low SES student statistics. Again, this

correlation cannot be directly tied to arts involvement, but it makes a strong argument

that the presence of high arts involvement in a student's life can increase their

likelihood of staying in school and being bored in school less often.

Figure 1.3 Academic and behavioral measures for all versus low SES students and by high

and low arts involvement

	All Students		**Low SES Students**	
Grade eight Academic Performance	**Hi Art**	**Low Art**	**Hi Art**	**Low Art**
Scoring in top two quartiles on std. tests	66.8%	42.7%	29.5%	24.5%
Dropping out by grade 10	1.4%	4.8%	6.5%	9.5%
Bored in school half or most of the time	42.2%	48.9%	41.0%	46.0%

      In all of the research examined, how strategies are being implemented is

sometimes overlooked. Kariuki and Black (2016) decided to research the specifics of

theatre arts strategies being used in the classroom and how those specific strategies are

impacting learning. They looked at the difference between Theatre-Arts Strategies and

Traditional Strategies. The sample consisted of just one English class of 21 students, and

data was collected from cumulative student grades over 18 weeks (two nine-week semesters). Theatre arts teaching was used for four weeks out of nine in the first semester, and then traditional teaching methods were used for four weeks in the second semester. The three research questions of interest in this study were specific to 1) Academic Achievement using both theatre arts and traditional strategies, 2) Impact on achievement for different genders of students using theatre-arts strategies, and 3) Impact on achievement for different genders of students using traditional strategies (Kariuki & Black, 2016).

Engagement was most focused on in the area of academic achievement and cumulative grades. During the study, there was little to no difference in scores during the traditional teaching versus the theatre arts model. It was found (although not statistically significant) that there was an average increase of 3.05 points to each student's score when exposed to theatre arts (Kariuki & Black, 2016). It was also noted that there was an increase in engagement and participation as well as fewer classroom disruption during theatre-arts related techniques. When exposed to theatre strategies, students were also more likely to turn in assignments. Students taught using the traditional methods were often uninvolved, inconsistent in their work and less interested in lessons and more frequently absent (Kariuki & Black, 2016).

Because theatre is innately collaborative, it can be used as a way to increase engagement and participation by merely having students work with one another. Palmer Wolf (1999) conducted a study over multiple years and it was then published in *Champions for Change* (Fiske, 1999). Palmer Wolf's work is titled: *Why the Arts Matter*

in Education or Just what do Children Learn When They Create an Opera? (Fiske, 1999).

Much of the data collected in this study was focused on students' engagement and how students interacted with the materials they were presented in classes. Wolfe wanted to explore the claims and implications associated with students who were exposed to arts making more gains in certain academic areas. For instance if these students happen to excel in geometry, is their experience in the arts giving them an advantage somehow at reading diagrams and graphs? What if all that distinguishes these students, beyond their higher grades, is regular attendance rates? Did visual arts training lend them persistence? (Fiske, 1999) Depending on how these questions are answered, understanding the effects of arts learning would be dramatically different.

The focus of the work was a multi-year study of "Creating an Original Opera" (COO), a program in which elementary students from a company wrote and produced an original opera. The study selected four classrooms in which the COO program was fully implemented (e.g., classroom and specialist teachers were involved, teachers were trained in the program, there was adequate classroom time, and so forth). Qualitative approaches were used to collect data. These included classroom observations, transcripts of teacher and student interviews, student ethnographies, logs of important activities and collections of student work (Fiske, 1999). Figure 2.1 demonstrates how students interacted and engaged during opera sessions as compared to Non-Opera contexts. Each "dimension" of data sets to prove that students operate more cohesively, connecting what they say to what others in the group have said, and engaging more deeply than students in alternative settings (Fiske, 1999).

Figure 2.1 Collaborative interactions across opera and non-opera contexts

Dimension:	Non-Opera Context	Opera Context
% students participating	33	50
% students taking substantive turns	20	26
% student turns with questions	11	12
% student turns with links back to previous comments	18	38
% student turns with constructive critique of others	9	32
% student turns with revisions of student's own earlier	9	26
% student turns with links back to a long term theme	7	20

Overall, this data shows relevancy in the number of students participating and making relevant contributions to the group based on what they had previously learned about class content or about how to interact with others in their group. Creating the actual opera caused them to be naturally more engaged and collaborative with their peers and teachers (Fiske, 1999). Students exposed to the Opera context were much more likely to participate, make links to other student comments made in class, make constructive critiques, make revisions on previous ideas or proposals, and make links to a long term theme or issue for the group. There were lower percentage gaps where students were taking substantive turns and asking questions during class, but the opera treatment group still had higher percentages in those areas.

Social-Emotional Impact

Much of the research done to measure the impact of theatre arts is

accomplished by exploring arts inclusion and curriculum. Exposure to the arts can be

used as a measure to gauge knowledge, tolerance and how students can read emotion

(Greene et al., 2015). The exposure measured in a study done by Greene and his team

was through culturally enriching field trips and the attendance of a live theatre

performance (Greene et al., 2015). The study was possible through collaboration with

TheatreSquared, a professional theater in Fayetteville, Arkansas. TheatreSquared added

performances of *A Christmas Carol* and *Hamlet,* specifically for school groups in grades

seven through 12 to attend and opt-in for the study. A total of 49 school groups, with

670 students, participated in the study. 24 of those groups applied to see *A Christmas*

Carol, and 25 applied to see *Hamlet*. Half of the groups went to the performances and

half served as the control group for the study (Greene et al., 2015). Instead of attending

the live performances, the control group watched a movie performance or read the

plays in class.

The goal in researching the effects of culturally enriching field trips is to broaden

the types of measures that education researchers, and in turn policymakers and

practitioners, consider when judging the educational success or failure of schools, rather

than solely relying on standardized tests and measures (Greene et al., 2015). The control

group and the treatment group were measured in the areas of Knowledge, Tolerance

and the Reading of other people's emotions. They were given surveys after their

exposure to their specified medium of the literature and play performance. 78% of the

treatment group and 79% of the control group returned their surveys. Results showed that those who saw the live performance of the play (treatment group) had more knowledge of the plot and vocabulary of the play, more tolerance, and also higher scores in the ability to read other's emotions.

In the area of knowledge of vocabulary and plot, the control group saw an estimated gain (percentage of standard deviation) of 58% and the treatment group saw a gain of 63%. In the area of tolerance, which was measured by asking students whether they agree or disagree with certain statements relating to the live performances of theatre, both the control group and the treatment group saw gains. However, it was evident in the answers to specific questions that the treatment group showed more tolerance through their live theatre experience. For instance, when asked the question, "Plays critical of America should not be allowed to be performed in our community," only 9% of the treatment group agreed with the question compared to 21% of the control group. Similarly to the question "People who disagree with my point of view bother me," only 22 percent of the treatment group agreed with that statement compared to 30% of the control group (Greene et al., 2015). In the area of Reading others emotions, all of the students were given a test called Read the Mind in the Eyes Test (RMET), to identify what emotion a person was feeling through looking at pictures of their eyes. Control group students could correctly identify emotions 71% of the time while the treatment group was able to identify them 73.4% of the time. While this does not suggest that their academic abilities were enhanced, there were definite gains made by the treatment group after being exposed to a live theatre performance.

As part of the *Champions of Change* (Fiske, 1999) report, a specific study was done to research the implications that arts-based and arts-infused curriculums can have on student learning and accomplishments. Burton, Horowitz and Abeles (Fiske, 1999) wrote *Learning In and Through Arts: Curriculum Implications* to determine what cognitive, social, and personal skills are developed through arts learning, if these competencies have a more general effect on learning, and what conditions in schools support this learning. The four arts disciplines used in this study were visual arts, music, dance and drama. Different teachers implemented arts learning in different ways. Over 2000 pupils in grades 4-8 from public elementary and middle schools were examined during the study and separated pupils into groups exposed to high arts and low arts (Fiske, 1999). Several standardized measures were used including paper and pencil responses, measures for creative thinking abilities, self-concept, and school climate. Both students and teachers were given standardized measures and administration and staff were also interviewed about the process and observations were also used as a form of data. The study took place over two years.

The bulk of data collected through the study and answering the questions, "What is arts learning?" "Does it extend to learning in other school subjects?" What conditions in schools support this learning?," were primarily related to self-concept of the learners. Those who had high arts exposure had much higher self-concept and higher creative thinking abilities. Figure 3.1 shows the data collected in relation to the Self-Concept of the students in the study specific to different subject areas, academics

and relationships (Fiske, 1999). The results were based on the scores taken from the Self

Description Questionnaire (SDQ-I).

Figure 3.1 SDQ-I (Self Concept) scores compared to number of years of in-school arts

SDQ-I Scores	High Arts Group	Low Arts Group
Physical Ability S-C	29.65%	20.08%
Physical Appearance S-C	27.40%	24.31%
Peer Relations S-C	29.45%	23.26%
Parent Relations S-C	35.17%	24.31%
General Self Concept	36.81%	27.48%
Reading S-C	40.49%	20.08%
Mathematics S-C	29.86%	15.43%
General School S-C	35.79%	18.60%
Total Non-Academic S-C	33.33%	24.31%
Total Academic S-C	41.10%	17.76%
Total S-C	34.15%	17.97%

The findings in this study show that children in arts-rich schools are more likely

than children in low arts schools to have a higher self-concept of good rapport with their

teachers, parents, peers, higher self-concept of their physical ability, appearance and

academic skills (Fiske, 1999). High arts schools also showed better self-concept overall

by 16.18%. In addition to student gains, the study also found that teachers in arts-rich

schools demonstrated more interest in their work. The arts-rich schools proved to favor

change and experimentations and teachers at those schools were more likely to be

innovative in their teaching (Fiske, 1999). This information was gathered mostly through interview and observation. It should also be noted that the researcher found that the results of studying the sample for socio-economic status was more firmly tied to rich arts provision than high economic status (Fiske, 1999).

When well grounded in the kind of learning observed in this study, the arts develop children's minds in powerful ways. With arts learning, young people become adept at dealing with high ambivalence and uncertainty (Fiske, 1999). Conversely, a poorly conceived curriculum where arts are limited or not offered can have a negative effect on the development of critical cognitive competencies and personal dispositions. Arts should be considered as a valuable tool and curriculum to work to add their richness and complexity to the learning process (Fiske, 1999).

Catterall has done multiple studies throughout the years is in his research with how students exposed to the arts have chosen to spend their time as adults later in life (Fiske, 1999; Catterall, 2009; Catterall et al., 2012). He relates high exposure to arts programming to applicable social skills used later in life. This includes a better understanding of a student's role in society, relating their arts involvement to the likelihood they will participate as active citizens into adulthood. In their work for the National Endowment for the Arts, Catterall et al. (2012) attempt to specifically target a demographic of at-risk youth in four longitudinal surveys overtime. They use these surveys to examine the academic achievement and civic duty that these students exhibit at different periods of time, ranging from 1988-2010, after being exposed to arts in their secondary schooling. The main areas they focused their findings were in Academic

Achievement and Civic Engagement (Catterall et al., 2012). In the area of achievement, data was collected on how many arts credits and how much arts exposure students had received throughout their secondary experience. Researchers found that High School students (13-17-year-olds) who earned few or no arts credits were five times more likely to not graduate from high school than students who earned many. This data also transferred to data related to attending college. Low SES students were more likely to attend college if they had received arts exposure. Similarly, students who had intensive arts experiences in high school were three times more likely than students who lacked those experiences to earn a bachelor's degree, and this was also true of students with high socio-economic status (Catterall et al., 2012).

In this study, though, it was not just about researching the achievement of these individuals. The researchers wanted to know about how the arts affected their attitudes toward community and civic responsibility. How did their arts exposure and higher achievement affect their social-emotional being and how they perceived their role in society? Information was collected on how often students would read, how often they would volunteer or participate in extracurricular activities and whether they were likely to vote or participate in political campaigns. High school students who were exposed to arts experiences were more likely to read the newspaper, volunteer, and vote later in life. High school students from low SES backgrounds with arts-rich experiences participated in student government and school service clubs at four times the rate of low-SES students who lacked those experiences (Catterall et al., 2012). Conclusions drawn from this information were that disadvantaged teenagers and children who have

high levels of arts engagement or arts learning are more likely to experience positive

outcomes in other areas of their lives than their low-arts-engaged peers. Those

outcomes include a host of academic and civic behavioral measures including grades,

test scores, membership in clubs, graduating from high school, college enrollment and

achievement, volunteering and engagement in politics (Catterall et al., 2012). These

outcomes and activities require a certain level of social-emotional competency gained

through exposure to the arts.

In 2004, Hughes and Wilson from the University of Manchester in the UK

explored the impact of youth theatre on young people's personal and social

development (Hughes & Wilson, 2004). The research combined qualitative and

quantitative data with participatory and creative research workshops working with

young people and youth theatre leaders. Twelve students were chosen as peer

evaluators and reviewed over 700 youth theatres across England. Research collected

from youth participants and the National Association of Youth Theatres (NAYT) database

highlighted broad patterns of why these young people attended youth theatre and

perceptions of its impact on their development (Hughes & Wilson, 2004). There were

multiple models of youth theatres included in the study and the research done

highlighted some characteristics of productive youth theatres that help facilitate

personal and social development in young people. From the data collected, it was

determined that good youth theatres: include all young people, regardless of ability or

background, are characterized by occurring in an informal setting yet also having a very

disciplined process with high expectations, they provide opportunities for youth to feel

safe to take risks, take part in performances and take responsibilities to maintain the organization with a commitment to work hard and work to real deadlines (Hughes & Wilson, 2004).

Much of the qualitative data collected during the study indicated that students built confidence, allowed students to express a wide range of emotions, and provided a positive social environment for them. It also helped students learn how to present themselves in different settings (Hughes & Wilson, 2004). The quantitative data collected indicated that 80% of young people said they attended youth theatre to improve their acting abilities or pursue an interest in theatre; 54% reported attending to meet up with friends and 51% said they attended to be in productions. Although there are limitations in the results of this data being mostly qualitative, not targeting a specific group of students over time, and not having a right amount of base data, the results do indicate that students who participated in youth theatre had opportunities to experience impact in their personal and social development. Through surveys collected at a variety of workshops, the researchers found that the most frequently mentioned impacts reported were: improved confidence, improved performance skills, more friends/ improved ability to make friends, improved ability to themselves, more open-mindedness, ability to understand and work with other people, improved ability to express themselves, increased happiness, diversion from getting into trouble, and increased ability to deal with difficult/negative experiences (Hughes & Wilson, 2004).

James Catterall has concluded that the study of these specific social skills and how they are developed through theatre needs to be more closely examined and more

specific (Catterall, 2007). He examined a program implemented and created to examine

and enhance pro-social behaviors that students exhibit when participating in theatre

and how that may affect conflict resolution skills in students (Catterall, 2007). The

school program he studied was called the School Project, aimed at developing a positive

sense of self, strength in standing up for their views and ideas, respect for collaborative

creation and staging of thematic dramatic works. The program used theatre activities

with students to write and perform original plays over a 24 weeks working with a

theatre artist. Many activities were aimed at exploring empathy, expressing emotions

and solving conflicts. The program took place at three middle school sites in Los Angeles,

CA, and more than 80% of the participants were from low-income families. Participants

also came from school populations experiencing pronounced behavior, academic and

language difficulties (Catterall, 2007). Seventy-one students were used as the

'treatment' group participating in the program, and 84 non-participating students were

used as the comparison group. Both groups completed questionnaires before and after

students engaged in the program.

Figure 3.2 highlights the data differences between the participants in the theatre

workshop and non-participants. Net gains were found by calculating the difference

between each group's gains or scores in each area (Catterall, 2007). Program students

made meaningful and significant gains on five of the seven scales shown in Figure 3.1.

The largest gains were in student attitudes about acting, metacognition, problem

resolution skills and self-efficacy. This program provided a natural environment for

social and collaborative engagement and learning (Catterall, 2007). The development of

individual student knowledge unquestionably built on the understandings of others.

Students had multiple opportunities to learn by example and simulation (Catterall,

2007). The opportunities that this program provided through the creation of original

theatre and intentional practice of social skills and relational activities impacted its

students positively in the areas of conflict resolution and to work with other students

effectively.

Figure 3.2 Pre to post changes in perceptions and attitudes, drama vs. comparison group

Scale	Net Gain	p-value	Signif.	Absolute gain	Effect size
Pro social Changes in behavior					
Ability to work with others when disagreeing	.13	.24		.20	.28
Ability to work effectively in groups	.28	.02	**	.17	.35
Problem resolution skills	.35	.02	*	.29	.47
Conditions and Processes of Learning					
Metacognitive Skills	.43	.02	*	.26	.38
Self-efficacy	.33	.01	**	.31	.62
General outlook	.22	.10		.13	.22
Reflection on drama medium					
Liking to Act and Perform	.41	.02	**	.10	.16

Impact of Theatre Arts on Students with Special Needs

Similar to *Champions of Change* (Fiske, 1999) and the compilation of studies

done in the area of theatre arts and education, efforts have been put forth to compile

studies and research on how the arts impact students with disabilities. The first, *Critical Links: Learning the Arts and Student Academic and Social Development* (Deasy, 2002), was a compendium of research and studies that had previously been done in the area of Arts and Education. However, this compendium brought to light a wide variety of arts studies by specific arts disciplines and specific areas of child development. This compendium is important to this research because it brings to light a variety of ways in which art can affect education while also drawing attention to the different types of children that this type of learning can affect. *Critical Links* (Deasy, 2002) contains several studies that are mentioned in the below sections that connect the arts to teaching students with learning disabilities and any number of disorders that impact learning. The compilation includes over 62 summaries of research studies with commentary provided by leading experts in the field of arts and education research (Deasy, 2002). The compendium was designed as a way to open lines of communication between researchers and funders about prominent research that has already been done on the academic and social effects of learning in the arts (Deasy, 2002). It also provides designers of arts education curriculum and instruction with insights that suggest strategies for deepening the arts learning experiences that are required to achieve those academic and social effects.

Similar to these other compilations of research (Fiske, 1999; Deasy, 2002), the John F. Kennedy Center for the Performing Arts, and its affiliate VSA (The International Organization on Arts and Disability), assembled a group of 50 national leaders in arts education and special education in July of 2012 (Malley et al., 2012). They were

gathered to examine how the two general fields of arts education and special education intersect to provide services and supports for students with disabilities. These educators, administrators, researchers, practitioners, parents, and students with disabilities, then conceived a national agenda to ensure that students with disabilities participate in rich arts and arts education experiences. This research adds to the body of knowledge on arts education and special education through research, special projects designed to serve students, and meaningful discussions (Malley et al., 2012). It was identified through the process of creating this work that much of the work done around art and education does not include students with special needs. Textbooks that included information about arts and inclusion with students with disabilities used to only include one chapter or one section addressing how teachers should use art in inclusion (Malley et al., 2012). This collection of exemplary programs and approaches, as written by different researchers and professionals, deeply examines the study of special education and arts programming. It is an essential work to consider and reference when discussing arts education and special education intersections.

Students with disabilities need to be seen as capable individuals in the classroom. Theatre can eliminate normative behaviors and actually highlight differences in individuals in order to create a positive environment that supports inclusivity and interaction (Trowsdale & Hayhow, 2013). Even instructors can sometimes have a hard time seeing beyond the lens of a diagnosis of a student. In fact, diagnosis is important information to use in order to develop appropriate goals or plans and to be able to respond to the needs of specific students. Because of the need for individualization that

is needed with students who have learning disabilities, many studies use different

practices and theatre-related interventions to reach their target demographic. In one

such study, a theatre-based practice called "mimetics" is used to engage its participants

both physiologically and sociologically (Trowsdale & Hayhow, 2013). Mimetics is an

interactive communication process based on copying and imitation. It can take on the

form of a non-verbal dialogue between a teacher and student, and it incorporates the

whole body of the speaker while also incorporating an audience in order to create a

performance (Trowsdale & Hayhow, 2013). The participants are able to sense what it is

like to be in another person's shoes and explore another version of themselves. This

type of theatre can be very significant for a person with a learning disability as it can

give a sense of awareness of what more they are capable of. This particular study by

Trowsdale and Hayhow (2013) draws on a five-year project funded by Creative

Partnerships from 2006 to 2011 in the United Kingdom. The evaluation of the program

was done by examining creative learning development through changed behaviors,

development of skills and understanding of participants. The age range in students used

for the study varied from three to 11, and the selection of children varied in the severity

of disabilities and environments over the five-year period. Over the five years, over 290

students participated in mimetics and were rated on their degree of change over the

course of the program. Figure 4.1 shows the average degree of change for each group in

the program over the course of its five years. A rating of four marked the highest degree

of change seen in students, and rating of one marked the lowest. Although most aspects

were recorded in the first years of the study, only the aspects sustained over time are

included in the table. This table includes teachers' views of the degree of change seen in

the student participants. Taking risks, solving problems, being engaged, and thinking in

new/imaginative ways, and reflections were selected as being the most significant

factors in developing children's learning. They were also rated as significantly altered

through the mimetics program (Trowsdale & Hayhow, 2013).

Figure 4.1-Degree of change in children through mimetics (average ratings)

Learning behavior/ Skill	Year 1	Year 2	Year 3	Year 4	Year 5
Problem Solving	*3.5*	*3*	*4*	*4*	-
Thinking in new ways, new ideas	*4*	*3*	-	-	*4*
Engagement	*4*	*4*	-	*4*	*4*
Risk taking	*3*	*4*	*4*	*4*	*4*
Reflecting on learning	-	-	*4*	*4*	*3*

In addition to these ratings, anecdotal information was also collected about the

mimetics program and the changes that teachers saw in students throughout. They

witnessed students playing together more often, students who did not normally make

eye contact were looking at each other more often, and students who were quiet and

compliant were more likely to debate and converse throughout their participation in the

program (Trowsdale & Hayhow, 2013). Not only did theatre participation change the

students, but the teachers as well. Instead of limiting the students and taking things out

of the curriculums, they were now able to acknowledge that the students just needed to

learn in different ways. Theatre can have significant value for children with learning

disabilities. It can increase engagement, ability to learn in new ways, and even increase

a child's readiness to reflect on their own behavior and progress (Trowsdale & Hayhow, 2013).

Academic Achievement

Data collection in special education is integral in serving students. Teachers must make appropriate data-based decisions to modify instruction based on student performance (Nevin & Hood, 2002). Collaborative action research is a process that enables teachers to improve student learning, to improve their own practice, to contribute to the development of their own profession, and to overcome the isolation commonly experienced by classroom teachers. It also promotes professionalism and fosters positive relationships with teachers. The process of Collaborative action research was founded on the idea that teachers need to constantly need to be evaluating what they are doing to measure effectiveness and also share back with their team members in order to improve the effectiveness of their school as a whole. Nevin and Hood used this theory of collaborative action research (Sagor, 1992) and tasked over 15 teachers to implement this method in their classrooms over time. Some of the data collected were specific to academic achievement in reading or math, and some were tracking behaviors. The teachers chose specific students in their classes and created goals for those students in order to then implement strategies to achieve those goals (Nevin & Hood, 2002).

Much of the data in this study was anecdotal, written by the teachers themselves. There was some graphing and charting done by the teachers, but the bulk of the information collected was written. Many of the goals that teachers created were

based on children's IEP goals. For example, one of the teachers focused on getting a student to know the names of adults that he was working with in order to receive help from them. Through this experience, the teacher was able to identify ways to help the student reach the goal of using inherently arts-based techniques. She used some role-play and modeling and set up opportunities for the student to practice (Nevin & Hood, 2002). This eventually led to the student reaching the goal much faster than the teacher anticipated and ultimately helped him to also use the names of his peers in social situations.

Another example of a goal used in this study was with a student who had written language needs. The 6th grade student's goal was to write a 4-sentence paragraph on the same subject utilizing correct capitalization on three out of five occasions. To help the student with this goal, the teacher decided to pair the student with a peer in order to increase confidence. The teacher was very specific with whom she chose to pair with this student and made sure to let them share ideas and write together and help them write at least three sentences on a given topic. This is also an inherently arts-based approach--students sharing ideas and creativity in a controlled environment. Through this approach, the student was able to meet his goal and had a significant decrease in negative behaviors during writing activities (Nevin & Hood, 2002). Nevin and Hood's research provided many more examples of teachers using arts-based strategies to help students achieve goals in the classroom. The data-based instruction used to help them explore strategies further were a large reason for the use of these strategies and the desire to differentiate their teaching methods (Nevin & Hood, 2002).

Much of the other data related to academic achievement and the use of theatre arts with students in special education is used in relation to reading and writing skills. Reader's Theater is a very commonly used technique to help students with fluency and comprehension in the classroom. Reader's Theater uses guidance, modeling, and independent student practice while students rehearse a play, poem, or other appropriate text (Corcoran & Davis, 2005). In a study done by Corcoran and Davis (2005), they assessed the effectiveness of a readers' theater fluency program by pre-and post-testing 12 students with learning disabilities in a combined second/ third grade exceptional education classroom. Students were placed into three groups of four based on their reading abilities and past oral fluency scores and reading levels (Corcoran & Davis, 2005). Two of the groups were given the same plays each week written at their instructional reading level. The third group was given plays that were a higher reading level to suit their needs. Each play was practiced for an average of two weeks or six sessions. Each student was allowed some time to practice with an adult individually and then given time to work with peers. They followed a schedule of silent reading on day one, imitating a modeled reading of the script on day two, reading aloud with the group and an adult on day three and then continuing to practice and be more independent in the following days (Corcoran & Davis, 2005). The readers were then videotaped so they could later watch their performances. The performance of the play also helped to improve their critical thinking skills.

Students were given a post survey to elicit their comfort levels with reading in different contexts and also to gauge their attitudes toward Readers' Theater. Student

comfort levels with reading aloud showed an increase of two to 16 percent. The most

poignant question asked was "How do you feel when it is time for Reader's Theater?"

(Corcoran & Davis, 2005). About 95 percent of the students felt comfortable with

Reader's Theater in class. For reading out loud in school, 52 percent felt comfortable in

the pre-survey and that number jumped to 68 percent in the post survey. Most of the

results of the student survey indicated that students were more comfortable reading

aloud after they went through the Reader's Theater program than when they started. In

terms of achievement, the number of words read correctly per minute increased overall

as a class by an increase of 17 additional worlds read correctly in spring versus the

winter. Increases initially ranged from the lowest of three words more per minute to the

highest increase of 41 additional words read correctly. All but three students were

considered one quartile below grade level for the spring scores. However, all students

achieved the spring scores that are considered on grade level for the winter test

(Corcoran & Davis). This data indicates that the special education students benefited

from participating in the Reader's Theater program. The growth achieved in fluency and

confidence in these students proved that this creative method was something that

worked well as a reading strategy for these teachers and students.

Another method that has been used, similar to the study that was conducted by

Page (1983), is to incorporate creative dramatic activities during the teaching of a story.

DuPont (1992) actually conducted this type of learning with remedial readers in the 5th

grade. She had three groups and there were roughly 17 students in each group. One

group was taught by the researcher and immersed in creative dramatics activities

throughout their reading and learning of a story (DuPont, 1992). The second group was

given the same learning objectives as the treatment group, but they were taught by

their regular reading teacher and not subjected to any creative dramatics activities

throughout their units. They can also be considered the modified treatment group. The

regular remedial reading instructor taught the third group, but none of the learning

objectives were changed. They are considered the control group. They just continued in

the same program that they were previously learning (DuPont, 1992). Figure 4.2 and 4.3

show how the treatment group grew in their scores from the Metropolitan Reading

Comprehension Test of the Reading Diagnostic Test (MAT6). Figure 4.2 shows the

standard scores of each group on the post-test as well as the difference between their

scores on the pretest and the percentage of change.

Figure 4.2-Multiple comparisons of the MAT6 posttest mean scores

	Post Mean Scores	Differences	p (Percentage)
Group One (treatment)	47.82	11.29	<.01
Group Two (modified treatment)	36.53	5.11	NS (not significant)
Group Three (control	42.71	6.18	NS

Although all three groups were equivalent at the onset of the study, the only group that

showed a significant increase in mean scores from pre-to posttest was Group 1 (DuPont,

1992).

Figure 4.3-A plot comparison of criterion-referenced test mean scores
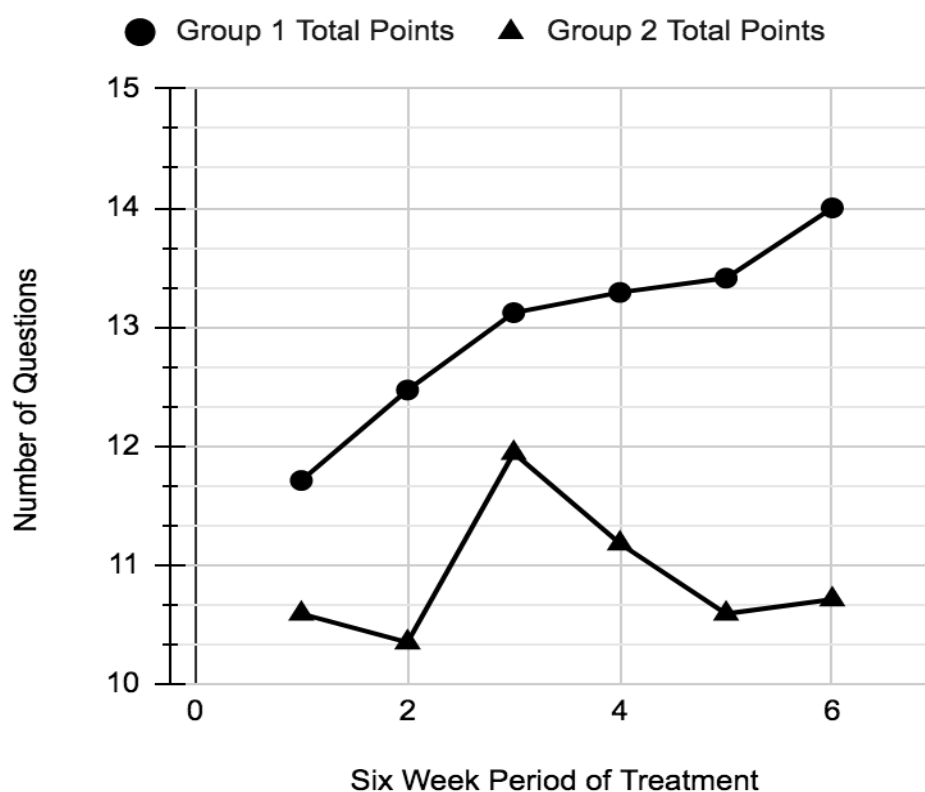
In Figure 4.1, the line graph shows the different scores from the criterion-referenced test scores taken weekly by the students in the treatment group and modified treatment group. Test scores increased for the treatment group every week and showed a trend of continuing to show growth. The modified treatment group did not show these same patterns (DuPont, 1992). According to the findings of this study, the fifth grade remedial reading students who participated in the creative drama activities on a weekly basis showed enhancement in their abilities as compared to their non-creative drama participants in the other two groups. These results could be attributed to the researcher conducting lessons for the treatment group, causing the

students to perform differently for a teacher that was new to them, possibly trying harder. One thing that the researcher found puzzling was that Group 2, the group that only read and discussed children's literature during the study, scored significantly lower on the MAT6 posttest than the creative drama group and the control group. This may point to some ineffectiveness in teaching this way. The readers need to be engaged in creative thinking and writing activities in order to experience effective instruction and improvement in their reading (DuPont, 1992). This study is a commentary on the effect that creative drama can possibly have on student confidence and comprehension. When students can see and experience what they are reading, especially when they have difficulties reading, they are able to be more successful in their learning. Creative drama and theatre provide imagery and verbal processing opportunities for children who are struggling to read.

Engagement/ Attainment

Where some children with disabilities feel socially isolated and emotionally distant from their peers, theatre can foster the individual development of these students in the classroom (Bernstein, 1985). In 1985, Bernstein observed a variety of classrooms that were designed for students with different types of learning disabilities or "educational handicaps" and then implemented a series of theatre activities called the Spolin games, a compilation of more than 200 games and exercises originated by Viola Spolin to encourage spontaneity, creativity and interpersonal communication in group settings (Bernstein, 1985). The games take place in a group context and develop physical awareness and interaction with the environment. Bernstein initially observed

that many of the classrooms for students with disabilities focused directly on each student's problems, often through excessive verbalizing and remediation administered through reward or punishment. Each of four classes involved went through a workshop given twice a week for 10 weeks. Sessions averaged 45 minutes in length. Video observations and extensive interviews were conducted to collect data (Bernstein, 1985).

As the workshop went on, participation and attitudes from the children went from unfocused, unintegrated and even destructive at times to being involved, joyful, and creative. Most students participating in the classes were at least two years behind their expected age/ grade levels and had learning disorders or problems related to social adjustment. Ages ranged from 6-9 years old and there were 42 male children and six females total (Bernstein, 1985). Prior to conducting the study, Bernstein observed the classrooms he would be entering into. The children's activities tended to be individual and stationary. The teacher determined nearly all of the activities. Many of the children were disruptive, often resisting directions and attempting to gain attention from peers. Name-calling and physical fighting occurred frequently, and focus was difficult for most students. All four teachers were female, their experience ranging from five to 20 years teaching. Their styles ranged in interaction with their students, and three of the four ran fairly structured programs (Bernstein, 1985). Getting the students to move from classes that were very much in isolation to then becoming part of a whole required a re-teaching of how to interact with their environment, how to interact with other people, and how to interact with their own intuitive-creative functioning (Bernstein, 1985).

Many of the children had strained relationships with their classmates at the beginning, varying from insults, bickering, and even physical aggression (Bernstein, 1985). The theatre activities provided a context for social interaction for many of the students. The study focused on one child in particular that was consistently interrupting games, upsetting other children who were participating, and doing negative things to gain attention from peers and teachers. He transformed throughout the study to slowly coming into games and participating after students expressed that they did not appreciate him disturbing games and telling him they did not want to play with him. Once he started participating appropriately, the other children began inserting him and accepting him. At each session, students were given a choice to participate, which was a stark difference from most activities in the Special Education classroom (Bernstein, 1985). In the beginning, many of the students chose to sit out of the games and observed. Others attempted to take the games off task from the sidelines. As the sessions progressed, children more readily participated and their involvement became increasingly appropriate.

Because engagement in activities was such a problem in the classrooms prior to the implementation of the workshops, needing extrinsic rewards and incentives for students to participate, the children were hesitant to willingly participate and even agree to the rules. Children often broke the rules of the games at the beginning of the workshop period, and then the rule breaking decreased or sometimes disappeared within the course of a single game. The participation with initiating and reflecting was also difficult at first. Some of the games naturally allowed for children to break out of

their already established action patterns. One observation noted that students who had

appeared sleepy and quiet in the first weeks, wanted to initiate an exercise called "Relay

Where" (Bernstein, 1985). Another observation noted that a student who often initiated

relinquished his desire to initiate when another student who rarely gave input raised his

hand. The children were making the choices, practicing new skills, and experiencing the

activities for themselves (Bernstein, 1985).

One unique aspect of these classes that were implemented is that teachers were

invited to also participate as equals to their students. This also included teacher's aides.

At first, this change in roles was difficult for the teachers and students to understand,

with students continuing to test the boundaries of who was going to enforce

consequences for bad behaviors. In the beginning, the teachers tried to continue their

pattern of verbally correcting behaviors. An example, a student starts running around

the room, and a few others follow him, then disrupting the game. A teacher then calls

the student out by name, sharply (Bernstein, 1985). On the other hand, by having the

teachers participate as fellow players, the students were given the opportunity to

partner with their instructors and experience a closeness and enjoyment of their

teachers. Observations indicate on several occasions that students were delighted to

see the teachers participating with them, using comments such as "Look at what Mrs.

Johnson is doing!" The Spolin games also gave the teachers a different perspective of

how they could engage and interact with their students who have unique needs

(Bernstein, 1985). One particular example of this was at the beginning of the study, a

teacher described one of her students as acting repulsively and having no idea how

offensive he is. In Session seven of the study, she reported that the student was really enjoying the sessions. It was as though he had finally found something he enjoyed. On to Session 13 when she anecdotally explained, "He's on time for class now, he finishes his assignments, he is dressed properly and he doesn't act in the awful way he used to. He has a new sense of himself. I'm convinced it is because of these games--it has been a chance for him to succeed in something to participate, to enjoy himself, to feel good about himself. You can see it by just looking at him." (Bernstein, 1985, p. 223.). The ways in which the involvement and engagement were increased in the Special Education classrooms by the Spolin theatre games, also affected students' self-concept and self-presentation of themselves.

Other studies have explored the methods of kinesthetic learning combined with arts and academic learning (Boswell & Mentzer, 1995; McMahon et al., 2003) in order to engage students in the learning process. Boswell & Mentzer (1995) designed a program specifically for students with learning and/or behavioral disabilities in which students would put poetry and movement together in order to enhance students' appreciation of Poetry. The initial project was a case study involving five elementary-age students with behavioral disorders and attention-deficit disorder (ADD) who resided in a residential treatment home. Appreciation of Poetry was evaluated by examining the level of interest in reading and writing poetry during the program. Questionnaires were also given to teachers and staff, including open-ended questions observing the behaviors and social interactions of the students while they participated in the program. The qualitative data collected indicated that students had increased positive social

interactions in other classes and that the program was having an overall positive effect

on students (Boswell & Mentzer, 1995).

After the initial case study, a larger field test of the study was done with larger

groups of children over a period of one year in the public schools with elementary-age

students with learning and/or behavioral disabilities and attention deficit/ hyperactivity

disorder (AD/HD). Teachers reported, similar to the trial study, that children generated

both oral and written poetry and that positive interaction with peers increased (Boswell

& Mentzer, 1995). The program included many aspects that encouraged positive

interactions, interactions with literature and writing, and opportunity for movement.

The researchers believed that these opportunities improved the students' appreciation

of poetry by experiencing positive feedback from their peers in reflection and also

getting the opportunity to express excess energy (Boswell & Mentzer, 1995). This study

laid out a very specific and detailed plan for how to carry out the *Movement and Poetry*

curriculum. It included a warm up activity, ways to elicit feedback positively, and even

intentionality with how to choose poems students would be able to move to. It is this

kind of planning that keeps students engaged and interested to provide various avenues

and a more comprehensive base for learning that can reach many students with

learning and behavioral issues (Boswell & Mentzer, 1995).

Arts can provide depth to the curriculum and increase student engagement to

allow for greater freedom in a teacher's instructional practice (Mason et al., 2008).

Although much of the research done with arts and education has been done with a

general population of students, there are indicators that arts can have positive impacts

on students with disabilities. For students with disabilities specifically, a major

advantage of an arts-based approach to instruction is that students have opportunities

to make their own decisions as they create. Learning is more hands-on and academics

seem to be more distant concepts (Mason et al., 2008). As a way to further research

how arts impacts students with disabilities in the classroom, Mason et al. (2008)

conducted two studies collecting information on teachers' perceptions and knowledge

of how using arts in the classroom has affected students who have learning disabilities

and/or behavioral disorders (Mason et al., 2008).

The first study focused on teachers' perceptions of academic, social, cognitive

and artistic skill development. Thirty-four focus group interviews were conducted in 16

states over a two-year period (Mason et al., 2008). The study interviewed a variety of

elementary through high school teachers in rural, urban, and suburban areas across the

US. It included teachers in inclusive environments and also special education centers.

The majority of the participants were certified teachers, some were teaching artists, and

almost 50% of the teachers had Master's degrees. Much of the qualitative data and

anecdotal evidence fell into three main themes with respect to the way students' skills

were developed through arts engagement and involvement (Mason et al., 2008). Those

themes were voice, choice, and access. In terms of voice, teachers reported that the arts

are a way for students who often fall outside of the rigidly defined notions of success in

our schools to contribute to the community. The arts become a conduit for positive

attention and increases in self-esteem. Similarly, these students are given choices and

opportunities to contribute to the classroom, where they are often never asked how

they view the world and where life is typically scripted for them. The arts engage

students with disabilities in the acts of observation, rehearsing, weighing, and judging,

all essential tools for general learning (Mason et al., 2008). An example of teacher

feedback given on this topic was a teacher using a specific activity called "Rewind"

where the students could act out a scene and then try different alternatives. The activity

then changed the language that they used in the classroom and instead of giving

punitive feedback when negative behaviors were displayed, the teacher could say

"Rewind!" and the students would respond as they did when they were in the activity

trying new things and correcting their own behaviors (Mason et al., 2008). Teachers in

focus groups also discussed the accessibility of the theatre arts. Arts have the ability to

meet students where they are, and level the playing field. They give students the ability

to explore curriculums and goals in different ways (drawing a picture, writing a poem,

physical movement). Arts can also provide a sense of ownership and satisfaction for

students, and there are so many different ways in which this satisfaction can be

achieved through the arts (Mason et al., 2008).

  The second part of the study was over the course of eight weeks. Seven teaching

artists were instructed on how to implement and use rubrics in their classes and then

implemented this method over a six week time period. They adapted a pre-determined

Community of Practice (COP) that established their goals and provided the team with a

common way of communicating, evaluating and implementing their teaching. All

participants agreed that their involvement in the COP was a valuable practice and when

asked if they learned new information, rating on scale of 1-5 (with five being highest),

the mean score was 3.8 (Mason et al., 2008). They also expressed interest in sharing

what they learned with colleagues and expressed the value of developing and using the

rubrics. The rubrics they created were intentional and made sure to include the ongoing

evaluation of processes and goals for students. This study was very intentional about

starting with teachers to help with student engagement and reaching students on an

individual level. Participants in both studies expressed how helpful it was to have a

common language with each other and with their school administrators to implement

practices in their classes. It created a unified approach (Mason et al., 2008). It was also

reported that using the arts made learning fun and exciting for the teacher and the

students. Both of these studies helped the teachers connect with their students on an

individual level and give them a voice. When students are given a choice through

differentiated instruction and arts programming, they outperformed others on almost

every measure. Arts integration offers collaboration among general educators, arts

specialists, and special educators (Mason et al., 2008).

Social-Emotional Impact

Students with learning disabilities (LD) comprise the greatest number of students

receiving special services and typically have difficulties with the acquisition and use of

listening and speaking skills as well as problems with self-regulation, social perception

and social interaction (de la Cruz et al., 1998). Students with LD need adaptive social

skills to become accepted by their peers and de la Cruz et al. (1998) studied how

creative dramatics could increase the social and oral expressive receptive language skills

of children with LD. Thirty-five children with LD from two large urban schools with

speech centers participated in the study. There were two separate groups, one exposed

to creative dramatics through a speech pathologist that was also trained in theatre

technique, and then the control group just continued to receive their regular services.

Ages in the experimental group ranged from ages six to 11, and the control group

ranged from ages seven to 12. Most of the children, 66% attended primary or

intermediate level LD instruction, and 34% also received cognitive disabilities instruction

in self-contained programs in addition to their speech therapy sessions (de la Cruz et al.,

1998).

Non-academic and academic social skills were defined and categorized to

document and measure how certain behaviors were affected by the study. Social skills

included: student apologizes when the action has injured or infringed on another peer,

the student finds acceptable ways of using free time when work is completed, student

ignores distraction from peers when doing seatwork assignments, and the student

follows written directions from the teacher (de la Cruz et al., 1998). Baseline data was

collected over two weeks prior to the implementation of the drama lessons that were to

be administered over 12, 40-minute sessions to the two groups of students (de la Cruz

et al., 1998). Lesson plans included active play, imagination activities, and scenarios for

students to re-enact and practice what they would do. Different standardized measures

were used for social skills and language skills. There was an additional supplemental

measure used as well as qualitative interviews to assess children's perspectives of their

own experiences. A total of four different data measures were used in this study. The

Test of Language Development (TOLD-2) was used for language, the Walker-McConnell

Scale of Social Competence and School Adjustment (WMS) was used for social skills, and

the Scale of Specific Social and Oral Language Skills (SLS) was used to supplement. Data

was collected from the drama group eight weeks after the study to measure retention

of skills. Results indicated that there were significant gains in the mean WMS social skills

scores of the drama group and even greater social skills gains in mean SLS scores when

compared to the control group (de la Cruz et al., 1998). Figure 5.1 shows the average

gains of the mean scores (*M*) between the control group and the drama experiment

group on all standardized tests given.

Figure 5.1 Mean score gain comparisons between control and drama groups

	WMS (M)	SLS (M)	TOLD-2 (M)
Drama Group	11.95	11.38	10.05
Control Group	-2.43	-3.36	3.85

The drama group made greater gains in their standard test scores than their

control group peers. They also maintained their scores according to a follow-up test

period. They were given nearly eight weeks after the posttest was administered (de la

Cruz et al., 1998). Student interviews also yielded positive results for the drama test

group. There were many statements directly addressing the four targeted social skills.

Children reported learning skills of apologizing, avoiding distractions from peers,

listening, speaking, and that the drama made them feel happier (de la Cruz et al., 1998).

The drama leader also reported that drama lessons increased children's length of

utterances and were able to expand on given situations orally, including wit and humor

at times. This study demonstrated that children with LD could improve and maintain

social and oral expressive language skills through drama (de la Cruz et al., 1998).

Another tactic used to help students with disabilities improve their social skills is

through integration and intentional pairing and socialization with their regular

education peers. Problems arise for students with disabilities because the activities need

to safe and motivationally stimulating in order to increase success (Miller et al., 1993).

In order to examine how theatre can work as a socialization tool for students with

disabilities, 24, fifth grade students from special and regular education classes were

chosen to participate in one of two conditions classes. The first condition involved

students participating in dramatic games and culminating in a theatrical performance

planned by the group. The second condition involved students playing noncompetitive

games culminating in a demonstration of those games by the group. Eight regular

education students were placed in each group and four special education students were

placed in each group. The special education students got to choose their preferred

group; regular education students did not (Miller et al., 1993). To minimize group

selection bias and to establish a baseline of social interactions, each group was observed

in a free-play session prior to the study. The frequency of social behavior was measured

by the initiation of social interaction and being a target for social interaction. The study,

which was named "Acting Together", took place over a three-month period in 1988, and

the groups met weekly for a total of 12 sessions per group. Both conditions were

coached or taught by the same staff members in the same location on the same days of

the week. The coaches were special education staff members and were given training

on how to implement treatments for both groups. The drama group used theatre games and techniques and the second condition used cooperative games (Miller et al., 1993).

Data were collected on the study using three dependent variables. The first was the initiation of positive interaction toward peers, the second was whether or not a student is a target of positive social interaction by peers, and the third was students' perceived quality of friendships between regular and special education demographics (Miller et al., 1993). The first two measures of information were collected through time interval sampling, and the third measure was achieved through a forced choice sampling on a pre and post "Friend-Sort". In both groups, coaches were instructed to encourage students to solve problems on their own and not given explicit help. The students were not given instruction on interacting with their special education peers either, although they were encouraged to include everyone. The incidents of coaches cueing social interaction between regular and special education students throughout the study was much higher in the cooperative games condition as compared to the drama group at the rate of 11 to one (Miller et al., 1993). Positive reinforcement by the instructors was also higher in the cooperative games condition than the drama condition at a rate of 59 to 40. The redirections to keep students on task, however, was also higher in the cooperative games condition as compared to the drama condition at the rate of eight versus four. In terms of the initiation of positive behaviors towards students with disabilities, data was not significantly different between the two groups. The data was significant, though when measuring for positive social interactions. Special Education students in the drama condition were targeted significantly more frequently for positive

social interaction than the Special Education students in the cooperative games group.

Anecdotal information from students also yielded positive results in both groups. This

program demonstrated the value of drama as a medium for students who have a limited

repertoire of social skills (Miller et al., 1993). Dramatic play also provides a unique place

for participants to experience risk without consequence or penalty. This is especially

important for students with special needs. There seemed to be more visible examples of

students being socially comfortable and interactive in the drama group than there was

in the cooperative games group. Students who were more socially withdrawn at the

beginning became more willing to help others or show their care and creativity through

dramatic play (Miller et al., 1993).

Among students with disabilities that are socially withdrawn, students with

Autism Spectrum Disorder (ASD) tend to have the most difficulties with social

interaction, communication, and emotional recognition (Beadle-Brown et al., 2018). In

addition, students with Autism struggle with anxiety, self-esteem, and attitudes toward

relationships with peers (Hillier et al., 2011). Because of the social disparities that

people with Autism face, theatre arts and music have been used as intervention tools to

increase self-esteem and communication skills for students with Autism or Autism-

related disabilities (Hillier et al., 2011; Beadle-Brown et al., 2018). Improvisation with

students with Autism is a useful tool in both music (Hillier et al., 2011) and drama

(Beadle-Brown et al., 2018) to allow for differentiation of instruction for students and

directing the students' learning so that they are doing more than telling (Hillier et al.,

2011). The music program study (Hillier et al., 2011) was an eight-week program called

SoundScape consisting of 90-minute weekly music sessions for participants from ages 13
and 29 years of age. A total of 22 students participated in the study, 18 were male, and
four were female. Sessions were conducted by music students and psychology students
and overseen by professors in those departments. The *SoundScape* program gave music
educators hands-on experience working with these students to listen to different types
of music, explore sound, and compose and improvise music. Through the program,
instructors realized that one large interest of the participants was in multimedia and
technology. With that information, they decided to engage in a project with the
participants to produce short films or movie soundtracks in smaller groups to promote
social interactions between participants (Hillier et al., 2011). Self-report questionnaires
were completed at the beginning and end of the program by both the participants and
their parents/guardians (Hillier et al., 2011). Peer relations were the main item
measured by parents and participants, and then just the participants completed a
measure on self-esteem and anxiety. Figure 5.2 details the results from each of the
inventories given and how the scores changed from the beginning of the program to the
end.

Figure 5.2 Results of pre-and post-program intervention measures

Measure	Mean pre score	Mean post score
Index of Peer Relations (participant version)	96.4	126.27
Index of Peer Relations (parent version)	87.88	95.82
Rosenberg Self-Esteem Scale	28.36	30.22
State-Trait Anxiety Inventory	46.83	40.78

According to the data collected, an increase in peer relations and self-esteem were apparent after the completion of the program. The questionnaire designed by the authors about the program's success also revealed that the majority of parents and participants reported having made friendships or connected to other parents during the program (Hillier et al., 2011). The Anxiety scale showed a decrease in score because the score is measured higher if a participant is feeling more anxious. The reduction in score from pre-to post-scores reflects that participants felt a lower level of anxiety after the program's completion. This study shows that engaging with music can positively impact a range of psychological and social outcomes for those with ASD (Hillier et al., 2011). More specifically, the way in which the participants interacted with music and each other made a large case for stepping away from other models such as music therapy and attempting to add in technology and more cooperative learning with predictability and structure in place for those with ASD.

Similar to music interventions and programs, drama intervention can also prove to be a positive way to help students with Autism to improve their social interaction and communication skills (Beadle-Brown et al., 2018). Some of the basis for providing drama as an intervention comes from the basic concepts that drama provides through communication, interaction, and imagination. Students with Autism generally need support in these areas in order function in a group setting adequately. *Imagining Autism* was a program created in order to engage students with dramatic participatory play and improvisation in a themed multi-sensory pod resembling a portable, tent-like structure. The study took place in the United Kingdom with a total of 22 children aged 7-12 years

from three schools. It was a 10-week program and measures were collected before the

program, after the program, and up to 12 months after the program ended. Drama

practitioners engaged with the students in 45 minutes sessions, three to four students

at a time (Beadle-Brown et al., 2011). During the 10 weeks, each child experienced each

of five environments (space, under the sea, under the city, in the forest and arctic)

twice. There were four or five practitioners in the pod for each session and the adult to

child ratio was at least 1:1 for all sessions. Each practitioner was experienced in theatre

and trained in which theatre exercises to use and how to provide Autism-friendly

approaches during the study. Social communication, adaptive behavior, and emotional

expression recognition were all measured throughout the program as well as parent and

teacher views by questionnaires (Beadle-Brown et al., 2011). Figure 5.3 details the

results collected in each period of the study on the different standard measures used for

social behavior, communication, and facial expression recognition. Follow-up scores (up

to 12 months after the study) were not included for the socialization and

communication scores on the Vineland Adaptive Behaviour Scales (VABS). They were

included for the Ekman Facial Recognition assessment. For each measure, student

scores increased from the time the baseline data was collected to when the post-

intervention measure was collected. Parent surveys also reflected a positive outcome,

indicating that exposure to dramatic play and using their imaginations in a small group

of their peers was effective in increasing imagination, communication and positive social

behaviors (Beadle-Brown et al., 2011). The researchers recommend that future studies

use a control group of similar students and conditions in order to fully understand the

actual impact of the specific techniques used throughout the study. Regardless, this

study showed that theatre arts and the use of drama as an intervention could impact

students with Autism in positive ways.

Figure 5.3 Scores on Vineland Adaptive Behaviour Scales and Ekman Facial Recognition

for all students

Test Measure	Baseline	Post-intervention	Follow-Up
Socialization Score (VABS)	51	63	NA
Communication Score (VABS)	44	65	NA
Facial Expression Score	13.12	15.18	18.13

In addition to the significant social and emotional impact theatre can have on

the participants of drama programs and interventions, it can also have an impact on the

outward community. When people with disabilities are involved in more visible theatre

performances or programs, it impacts perceptions that community members may have

about people with disabilities, consequently impacting the perceptions that people with

disabilities have of themselves (Dickinson & Hutchinson, 2019). These opportunities can

have a positive impact by providing an opportunity for people with intellectual

disabilities to show their otherwise hidden abilities and to be an active participant in the

wider community where often people may focus on what they cannot do rather than on

what they can do. In a study in the UK, an established theatre company for adults with

intellectual disabilities conducted a series of structured interviews with members of the

theatre company as well as with focus groups and other community supporters to

collect data on perceptions of people with intellectual disabilities. The ages of theatre

participants ranged in age from 18-53 years and lived in various settings with a variety

of different disabilities. Their participation in the theatre had been between six month

and over nine years and they attended an average of four groups at the theatre per

week. These groups were led by professional artists and involved various singing, music,

dance, film, stage and drama activities that promote community participation and

involvement. Fourteen total members participated, 11 family members/ friends of

participants participated, and 11 supporters from the community all gave input for the

study. Themes were identified across data sets. Themes were related to impacts on the

members with intellectual disabilities and how they connected with others or

experienced parts of life that they are often excluded from due to having intellectual

disabilities. The other themes were related to how the theatre company has impacted

all the participant groups through growth and involvement in the theatre company

(Dickinson & Hutchinson, 2019). Several pieces of anecdotal data mentioned friendships

that members had gained from participating in the theatre company as well as how it

has provided a place to talk about intellectual disabilities in a safe space. Some even

compared the community of the theatre as a family. Community members also reported

changes in perception through the theatre company, going as far as to say that it makes

people more understanding of what intellectual disabilities are and what kinds of things

people with intellectual disabilities are capable of. Some members did not think that

many of those types of people could put on a performance. When people with

disabilities come together, they realize shared experiences and are able to develop

social and community connections through theatre (Dickinson & Hutchinson, 2019).

Impact of Theatre Arts on Teachers and Teaching Practice

The role of teachers in the process of learning is integral in determining

interventions and techniques that should be used in the classroom. As previously

described in other studies, using theatre techniques and arts in the classroom can

heavily impact teachers' attitudes and confidence (Fiske, 1999; Huffaker & West, 2005;

Malley et al., 2012; Nevin & Hood, 2002). Using theatre technique and arts in the

classroom has become a common practice in order to supplement the lack of arts

integration and curriculum available in schools, but more and more schools are

attempting to provide professional development opportunities for teachers in order to

increase confidence and understanding of arts teaching practices in the classroom

(Ewing & Gibson, 2016; Lin et al., 2015; Saraniero et al., 2014). Ewing and Gibson (2016)

began with the idea that pre-service teachers or student teachers should experience

innovative and imaginative learning in their post-secondary learning in order to feel

empowered to then initiate creativity and imaginative strategies for the students they

would teach in their classrooms (Ewing & Gibson, 2016). If the potential of arts is so

valuable to students socially and academically, teachers should be given training on how

to implement some arts-based strategies in their classrooms. By offering innovative

units of study for student teachers to be actively involved in designing their own

learning against the traditional norms of education, we are encouraging all students to

engage in creative arts experiences and access their own learning in different ways

(Ewing & Gibson, 2016).

To test this theory of creative teaching, a two-year unit of study was offered to Bachelor of Education students in Sydney, Australia, and each unit of study in this program was monitored to collect data about *Integrating Creative Arts* (title of program) and it's effectiveness in developing more innovative teachers. Students were involved in creating the course content, grading structure, and even some of the projects and assessments. The implementation of these kinds of choice-based options for students was intentionally designed to push students beyond their existing areas of expertise and explore new ways of engaging with materials. An example of this was a project given to student teachers asking them to interpret and explore their learning spaces through art Ewing & Gibson, 2016). One group created a class mural with found objects from their classes. Another group of students wrote and performed a song. Others created a map of the spaces in which they learn. Similar results were gathered when teachers were asked to define their own teacher identities through art. Artistic views were all very different and challenged each teacher to find deep and meaningful ways in which to define their own teaching through art. Some used images they had found, others created their own artwork with drawing or painting, and others still made collages made from magazines. This technique of providing choice and showing teachers creative ways of implementing the framework of projects, lessons, curriculum, and even grading structures was an attempt at helping pre-service teachers connect with their own creative potential and then transfer that to their own students (Ewing & Gibson, 2016).

Taking this theory of creative teaching one step further, Saraniero et al. (2014) implemented a summer institute program with arts integration at the center. The study

had three groups to sample from, a control comparison group with no treatment, a

group that received training on arts integration through a summer institute professional

development program, and a third group that received the summer institute program

but also went on to receive coaching sessions throughout the school year related the

summer institute sessions and arts integration (Saraniero et al., 2014). This project took

place over three years and 116 teachers participated in the treatment groups. Roughly

39 teachers per year that were not exposed to either treatment completed pre-and

post-tests for the control group data. The groups consisted of 3rd and 4th grade

teachers with an average of 12 years of teaching, and anywhere from 37-53% of

teachers in each group had completed their Master's degree. Anywhere from 13%-18%

of participants in the study had also received previous art classes in a certified program

of some sort. It was clear through data collection that the group without any treatment

at all did not have scores reflecting high confidence scores that improved throughout

the year when compared to the other two treatment groups. Treatment group teachers

also reported that their students exhibited a higher level of engagement and

enthusiasm for learning. Teacher attitudes and perceptions were most positive in the

group that was coached through the year in using arts strategies. The evidence collected

definitely pointed to the coaching intervention model having a deeper impact on

teacher practice and attitudes as well as on student success (Saraniero et al., 2014). The

institute only group was able to build confidence and knowledge in arts integration, and

teachers were able to apply their learning, but it was more limited than the coached

group. Especially in terms of the implementation of arts integration, the coaching group

reported having an easier time implementing strategies than the institute only group who reported time constraints and other pressures preventing the application of the integration of arts. Overall, this study shed light on how professional development can support arts integration and can carry some arts-based strategies and teaching practices into the classroom (Saraniero et al., 2014).

Similar to the previously mentioned studies, research suggests that professional development can improve teachers' confidence to facilitate positive attitudes about student learning (Lin et al., 2015). One particular study took the Readers' Theater Teaching Program (RTTP) for professional development as an example to further investigate how participants used their knowledge learned from the training and how it impacted their students' reading fluency. The researchers wanted to know if teachers' knowledge of RT actually improved after attending the professional development training, in addition, they wanted to know if teachers actually used RT in their classrooms after receiving training on it, and thirdly, they wanted to know if student scores in reading fluency improved in those classrooms regardless of if the teachers were using RT. They collected information on these points by giving teachers pre-and post-tests surrounding the RT professional development sessions. Two female English teachers and their students participated in this study. A total of 69 seventh graders were involved. The study was done in China, so all of the participants in the study were non-native English speakers. The researchers also observed the classrooms to collect data. In the first area of RT content knowledge, each teacher had an average gain in RT knowledge of 35.75%. Both teachers reported finding the RT content helpful in their

classrooms and that it increased their confidence in communication, organization, and

attention to student needs. In terms of student scores, all students showed growth in

fluency scores. The lowest progress percentage in reading fluency was 10.17 and the

highest was 127.48. The data collected showed that RT professional development

significantly impacted the teachers' approaches to teaching reading and also helped

with overall attitudes and confidence with the RT curriculum.

The collaboration involved in integrating arts into professional development and

curriculum can challenge teachers to get away from isolating themselves and working

primarily as individuals (Mason et al., 2008). Arts can create a platform for general

educators, arts specialists, and special educators to work together in order to

differentiate the curriculum and plan for each of their students' needs. Even arts

professional development opportunities can lend itself to collaboration and cooperation

between professionals. It has been identified in many studies that arts can be very

valuable to students and as a result, it should also be part of teacher preparations and

training (Mason et al., 2008).

CHAPTER III: DISCUSSION AND SUMMARY

Summary of Literature

The study of Arts in Education has primarily evaluated if the Arts have an impact on academic success, engagement/ attainment, and the social-emotional growth of students. There is research focused solely on the general impact of arts on all students (Catterall, 2009; Fiske, 1999; Huffaker & West, 2005; Lorimer, 2011), but there is also data that suggests arts in education may impact students with low socio-economic status (Catterall, 2007, 2009; Deasy, 2002; Fiske, 1999; Malley et al., 2012; Walker et al., 2011), high academic needs (Inoa et al., 2014; McMahon & Parks, 2003; Page, 1983; Tobin & McInnes, 2008; Walker et al., 2011) and students with special education needs (Beadle-Brown et al., 2017; Bernstein, 1985; Boswell & Mentzer, 1995; Corcoran & Davis, 2005; de la Cruz et al., 1998; DuPont, 1992; Hillier et al., 2012; Mason et al., 2008; Miller et al., 1993; Nevin & Hood, 2002; Trowsdale & Hayhow, 2013). In order to gain a broad spectrum of understanding on how the arts can affect student learning, several compendiums have been developed (Deasy, 2002; Fiske, 1999; Malley et al., 2012). These compendiums have explored a range of art forms used as tools to increase academic success and have drawn great attention to the need for arts education in schools. These compendiums, as well as all the referenced studies, have all used data from years of work and a wide array of authors from multiple fields in order to answer the question: What happens in young people when they are exposed to the arts? When children are able to interact and engage in the arts, they begin to develop the desire to contribute to the world around them (Fiske, 1999). It can deeply impact students in

multiple ways through the development of multiple skills and abilities (Catterall, 2009;

Fiske, 1999; Huffaker & West, 2005; Lorimer, 2011). A bulk of the research done to

justify arts in education has been done with a general population of students, often

documenting their abilities in different academic skill areas or on standardized tests and

then measuring the growth they achieved after being exposed to an arts program. Much

of this research takes place over a few weeks or months (Catterall, 2009; Huffaker &

West, 2005; Kariuki & Black, 2016; Lorimer, 2011; McMahon et al., 2003; Page, 1983)

and doesn't have much longevity. There are exceptions that have been implemented

over the course of a school year or two (Fiske, 1999; Hughes & Wilson, 2004; Walker et

al., 2011), and Catterall did his longitudinal studies over the course of a decade or so

(Fiske, 1999; Catterall, 2009). Overwhelmingly, each of these pieces of research has

found ways in which students who are exposed to the arts have improved their

achievement, engagement and social-emotional abilities.

In the area of academic achievement, researchers explore the application of arts

in the classroom by studying different techniques such as arts inclusion strategies for

teaching (Tobin & McInnes, 2008; Walker et al., 2011), and explicit exposure to arts

activities within the classroom (Inoa et al., 2104; McMahon & Rose, 2003; Page, 1983).

Explicit arts instruction, such as drama classes or afterschool activities, have also been

considered in some research (Catterall, 2009; Fiske, 1999), but in the area of academic

achievement, most studies have considered how arts can improve specific areas of

instruction as the content is being taught. Reading and literacy is the most widely

explored area when it comes to using drama to improve academic achievement (Inoa et

al., 2014; McMahon & Rose, 2003; Page, 1983; Tobin & McInnes, 2008) but studies also

use this information about strategies being used to compare to the performance in

other areas such as math achievement (Inoa et al., 2014; Tobin & McInnes, 2008;

Walker et al., 2011). One such study used a program called the Integration of Theatre

Arts Program (ITAP) and the Theory of Change to integrate theatre and give students

arts interventions to help improve literacy and math skills. The academic benefits to

students who participate in the arts are not just limited to literacy and math. It is found

in multiple studies that growth in academic achievement is apparent in study skills,

ability to ask questions in class, and improving confidence levels. Although many of the

control groups in these studies showed growth in academic areas, the arts achievement

or treatment groups consistently outperformed their control group peers in most areas.

In the area of engagement and attainment, researchers found that theatre

techniques and strategies naturally involve students in a way that promotes active

learning (Fiske, 1999; Huffaker & West, 2005; Kariuki & Black, 2016; Lorimer, 2011).

When students are asked to participate in theatre activities, physical, verbal, and

creative engagement is naturally embedded within the content. In multiple studies,

theatre arts activities have proven to engage learners that may have trouble interacting

with other types of content in a typical general education setting. Arts infused

experiences within other subject areas such as language arts, history, science courses,

and math can engage students through multimodal learning. It becomes more relevant,

challenging, integrative, and exploratory (Lorimer, 2011). Teachers with low

engagement levels in their classrooms look for ways to get students more involved in

their own learning. Through research and a variety of activities, theatre arts can offer

ways for students to engage. They are able to engage physically, verbally, creatively, and

as active listeners or audience members. Theatre-arts integration can increase academic

success, attendance and also decrease behavioral problems and referrals (Kariuki &

Black, 2016). The engagement that theatre arts provides in a curriculum positively

affects student attainment and attendance (Catterall, 2009; Fiske, 1999; Huffaker &

West, 2005; Kariuki & Black, 2016; Lorimer, 2011).

In the area of social and emotional learning or growth, arts curriculums help

students explore their own ideas and abilities in new ways alongside their peers. It can

also positively impact their behaviors in the classroom (Catterall, 2007, 2012; Fiske,

1999; Greene, 2015; Hughes & Wilson, 2004; Lorimer, 2011) and impact the way they

interact with others in their communities (Catterall, 2009, 2012; Fiske, 1999). In multiple

studies explored, arts learning was able to increase students' perceptions of themselves,

their peers, school staff and their overall perception of learning. Acting and performing

can change a student's perception of themselves (Catterall, 2007). For the general

population of students, theatre and arts inclusion in the classroom is able to increase

social-emotional competency and improve social skills within the classroom

environment and beyond (Catterall, 2007, 2012; Fiske, 1999; Greene, 2015; Hughes &

Wilson, 2004; Lorimer, 2011). Researchers found that involvement in theatre can also

prepare students for experiences outside of the classroom in multiple social-emotional

contexts. Risk taking, commitment, preparation, collaboration, discussion and decision

making are all skills that young people feel more comfortable doing within the structure

of theatre (Hughes & Wilson, 2004). When students are exposed to theatre arts or arts-infused curriculums, they have a higher chance of improving social-emotional competency.

For students with disabilities, theatre arts and arts-infused curriculums also have an impact in the areas of achievement, engagement/ attainment, and social-emotional needs (Deasy et al., 2002; Malley et al., 2012; Trowsdale & Hayhow, 2013). However, targeted research provides more specific insight into how students can benefit from theatre arts when the specific needs of the students are documented in advance. Just as there are larger compendiums compiling studies to discover how the arts affect all students in the classroom, there have also been compendiums funded to research the effects arts have on students with disabilities (Deasy et al., 2002; Malley et al., 2012). These compendiums contain multiple research studies, articles and academic papers exploring how students with disabilities are affected by different art forms (Deasy et al., 2002). *Critical Links* (Deasy et al., 2002) contains summaries of multiple essays and studies that speak to the social and academic performance of students after exposure to the arts. Many of these studies in this compendium target specific groups of students, including those with special needs, and speak to how exposure to the arts is useful in developing students' abilities to transfer skills from the arts across disciplines. The arts can impact the way children learn and cultivate an awareness that is associated with more creative ways of thinking. It can also impact how they express themselves across disciplines (Deasy et al., 2002). This research, along with the compendium done by the Kennedy Center (Malley et al., 2012), identifies how differentiated instruction and

multiple intelligences can address the different needs and learning styles of students

with learning disabilities (Deasy et al., 2002; Malley et al., 2012). Theatre arts practices

have significant value for children with learning disabilities (Trowsdale & Hayhow, 2013).

Changes in engagement with other students, and increased problem solving, risk-taking

and imaginative thinking are positive ways in which students with disabilities are

affected by theatre arts. Children with disabilities are also more prepared to reflect on

their own behaviors and progress in an arts setting (Trowsdale & Hayhow, 2013). These

particular skills are important in enriching the lives of students with disabilities so that

they can be prepared and have the skills to function independently in society.

Theatre arts strategies are an effective tool in increasing academic levels for

students with disabilities. Reader's theatre, acting out the story, using creative drama

and also using different modes of instruction through collaborative research can assist in

aiding the learning of students with disabilities (Corcoran & Davis, 2005; DuPont, 1992;

Nevin & Hood, 2002). These strategies specifically target the abilities of students with

disabilities to increase confidence, retention and inherently increase their academic

abilities. When a teacher uses creative drama or arts centered strategies, different

learning styles can be more actively accommodated and attended to (Deasy et al., 2002;

DuPont, 1992; Malley et al., 2012; Nevin & Hood, 2002). Many remedial readers do well

with a kinesthetic learning style (DuPont, 1992; Nevin & Hood, 2002). Students with

special needs have shown an increase in fluency, comprehension, writing skills and even

oral communication skills that aren't always explicitly graded or measured in the

classroom, as a result of some form of arts inclusion in the classroom (Corcoran & Davis,

2005; DuPont, 1992; Nevin & Hood, 2002). Academic skills that are typically measured

through standardized tests or summative measures are explicitly recorded in different

settings with students with unique needs. The disabilities of students are not always

stated in the studies, and they vary from Autism, emotional behavioral disorders, and

learning disabilities. They also vary in severity. One thing is clear, in most studies there is

a clear improvement in the academic abilities of the students being tested in

comparison to their same-age peers. In some instances, the same-age peers are those

given the same treatment but do not have any learning concerns, or it is a comparison

group with similar disabilities and learning concerns given no arts treatment (Corcoran

& Davis, 2005; Deasy et al., 2002; DuPont, 1992; Malley et al., 2012; Nevin & Hood,

2002). These comparisons are important because it defines the differences that the arts

can have on the general population of students vs. students with disabilities. Arts has

been proven to increase the academic ability for classrooms as a whole, but it tends to

benefit students with higher needs in a different way and with a higher rate of success

(Catterall et al., 1999; Corcoran & Davis, 2005; Deasy et al., 2002; DuPont, 1992;

Huffaker & West, 2005; Kariuki & Black, 2016; Lorimer, 2011; Malley et al., 2012;

McMahon et al., 2003; Nevin & Hood, 2002; Page, 1983; Trowsdale & Hayhow, 2013).

Learners with a need for multimodal instruction respond well to theatre arts inclusion in

the classroom and have increased academic abilities as a result. These learners include

students with a lower socio-economic status, at-risk students, and students with

disabilities (Catterall et al., 1999; Corcoran & Davis, 2005; Deasy et al., 2002; DuPont,

1992; Kariuki & Black, 2016; Lorimer, 2011;Nevin & Hood, 2002; Page, 1983; Trowsdale

& Hayhow, 2013). Along with providing multiple ways for learning to be accessed, the positive effects theatre can have on the confidence levels and self-esteem of students with disabilities inherently improves their academic abilities (Corcoran & Davis, 2005; Malley et al., 2012).

Academic engagement and attainment for students with disabilities are greatly affected by the activities chosen in the classroom. Students with learning difficulties are not as likely to take risks in the classroom if they are not able to engage with the activities at their own pace (Corcoran & Davis, 2005). Theatre-like activities that include movement, doing things as a group, and the opportunity to create your own work helps to engage students who often feel socially isolated (Bernstein, 1985; Boswell & Mentzer, 1995; Corcoran & Davis, 2005; Deasy et al., 2002; Mason et al., 2008; Nevin & Hood, 2002). Teaching and learning through the arts helps to build on student strengths and uses multiple ways of accessing a wide array of learning styles and intelligences in the classroom. Theatre can help to motivate and engage students who have challenges or tend to show resistance to class activities (Catterall, 2009; Malley et al., 2012; Page, 1982). In Special Education classrooms, teachers tend to focus on the 'problems' that the students are facing and this can result in more negative interactions than positive ones (Bernstein, 1985; Boswell & Mentzer, 1995). Theatre allows students to interact positively with one another and give input into how they demonstrate they have learned (Bernstein, 1985; Boswell & Mentzer, 1995, Mason et al., 2008). Theatre naturally promotes student engagement in the classroom through the enhancement of peer relationships and the autonomy provided to students through individual choice

(Bernstein, 1985; Boswell & Mentzer, 1995; Mason et al., 2008). This is especially true

for students with disabilities. The consistency achieved in a theatre classroom or

through theatre activities can provide predictability and stability to increase

engagement while also allowing students to take risks and look to peers for guidance

(Miller et al., 1993).

When students with learning disabilities are exposed to the arts, there is an

apparent change in their social-emotional growth (Beadle-Brown et al., 2017; de la Cruz

et al., 1998; Dickinson & Hutchinson, 2019; Hillier et al., 2012; Miller et al., 1993). A

large amount of research in this area has been done with students with Autism

Spectrum Disorder (ASD) because this disability largely affects social-emotional

behaviors (Beadle-Brown et al., 2017; Hillier et al., 2012). Theatre is specifically used to

target social-emotional behaviors because it requires its participants to use empathy

and think creatively. Deficiencies in these areas do not just apply to students with

Autism. Students with oral language challenges, intellectual disabilities, and learning

disabilities also struggle with social emotional confidence and competency (de la Cruz et

al., 1998; Dickinson & Hutchinson, 2019; Miller et al., 1993). Despite social emotional

skills being tested or not, students showed more confidence, better relationships with

peers, improved behaviors and expressed emotions in different ways after being

exposed to the arts (Beadle-Brown et al., 2017; Bernstein, 1985; Boswell & Mentzer,

1995; Catterall, 2009; Corcoran & Davis, 2005; Deasy et al., 2002; de la Cruz et al., 1998;

Dickinson & Hutchinson, 2019; DuPont, 1992; Hillier et al., 2012; Malley et al., 2012;

Mason et al., 2008; Miller et al., 1993; Nevin & Hood, 2002; Page, 1982; Trowsdale &

Hayhow, 2013). Anxiety levels were significantly reduced for children in theatre settings

because of the flexibility of activities and choice. In some cases, children were even

given a choice of whether or not they would participate in the theatre activities. Then,

after observing or sitting out, students decided they were comfortable enough to join

group activities that would normally cause extreme anxiety or incite behaviors (Beadle-

Brown et al., 2017; Dickinson & Hutchinson, 2019; Hillier et al., 2012; Miller et al., 1993).

The social-emotional growth for students with disabilities achieved through the arts is

closely tied to engagement and attainment. If students feel safe and engaged in

activities, their abilities to cope with challenges, take risks, grow their confidence levels

and develop relationships with peers will naturally improve (Beadle-Brown et al., 2017;

de la Cruz et al., 1998; Dickinson & Hutchinson, 2019; Hillier et al., 2012; Miller et al.,

1993). The safe environment created by theatre is an important aspect of growth.

Negative perceptions of people with disabilities from peers and even from teachers can

impact the learning environment and decrease engagement and growth. Theatre and

arts instruction can help decrease these negative perceptions because the content is

ever evolving. There is no one 'right way' to produce art in the classroom (de la Cruz et

al., 1998; Dickinson & Hutchinson, 2019; Hillier et al., 2012; Miller et al., 1993). Theatre

provides more opportunities for group activities and learning as a whole, which has

shown to have a positive impact on students with disabilities by increasing their self-

esteem, self-confidence and enhancing social skills (Beadle-Brown et al., 2017; de la

Cruz et al., 1998; Dickinson & Hutchinson, 2019; Hillier et al., 2012; Miller et al., 1993).

The final section of the research studied encapsulates the effects that theatre arts inclusion can have on instruction practices. Professional development can improve teachers' knowledge and pedagogy as well as increase confidence (Ewing & Gibson, 2015; Lin et al., 2015; Saraniero et al., 2014). It can also mold perspectives that teachers have about their practices in the classrooms and well as perceptions they have of students. Theatre arts integration in pre-service or professional development instruction can have a high impact on students' academic achievement, engagement and social skills (Ewing & Gibson, 2015; Lin et al., 2015; Saraniero et al., 2014). Teachers that are taught how to use theatre arts in their classrooms have successes with engaging their students and feeling a sense of inspiration to be more creative with the content they are teaching. However, just being taught the content to use theatre arts in a professional development setting is not enough to increase student engagement and learning. Supports must be in place to assist these teachers in implementing these strategies in order for them to continuously be used (Ewing & Gibson, 2015; Lin et al., 2015). When teachers were provided with the right amount of support, resources, and knowledge they were able to see results in the classroom after using theatre arts strategies they had learned in pre-service or professional development sessions (Ewing & Gibson, 2015; Lin et al., 2015; Saraniero et al., 2014). Positive experiences from using the strategies they had learned in professional development opportunities resulted in certain teachers using theatre arts in the classroom more. Those who used the strategies more reported increased engagement, better relationships with their students and a sense of inspiration from the arts activities (Lin et al., 2015; Saraniero et al., 2014). In short, using

theatre arts as a method of increasing teachers' knowledge and toolkit in the classroom

can also have positive effects on students' achievement (Ewing & Gibson, 2015; Lin et

al., 2015; Saraniero et al., 2014).

Limitations of the Research

Literature for this thesis was primarily found through searches of Education

Journals, ERIC, Academic Search Premier, CrossRef and EBSCO. Although the research

criteria were requested from 1980-2019, the bulk of research found was from 2005-

2019 with a few sources being found from 1983-2003. These studies still speak to the

relevance of this topic, although some are quite dated. This list was narrowed by

reviewing published empirical studies from peer-reviewed journals that focused on

theatre arts education, teacher training using theatre arts, academic improvement

through arts and arts focused curriculum to improve academic and social skills abilities

in students with disabilities found in journals that addressed the guiding questions.

Searches included content around how theatre affected children with specific learning

disabilities, Autism, and at risk youth. Much of the content found about theatre arts in

the classroom was more specific to a general population of students and lacked specific

data around the effects that arts inclusion and theatre arts have on special education

students. Articles and research specific to Autism, 'at risk' youth, high behavior

students, or students with low socio-economic backgrounds were easier to find than

research targeted specifically to children with learning disabilities. Much of the research

obtained was limited to shorter studies over weeks or months of time and typically did

not provide enough quantitative data to justify a definitive conclusion. There may have

been improvements in academic scores or standardized tests over the few weeks or

months after the theatre or arts treatments, but many studies had inconsistencies with

what the actual cause of those improvements was. Where there was a lack of

quantitative data, there was an abundance of qualitative data from teachers and

students stating improvements in behaviors and feelings after arts exposure.

Longitudinal studies specific to students with disabilities containing quantitative data

would be beneficial to this topic but were not able to be found in this research.

Implications for Future Research

Researchers should continue to explore the value of arts in the classroom,

especially relating to its value for students with unique needs. More and more, teachers

are being asked to be creative in the classroom and focus more on individualized

education that can cater to an inclusive model for special education students. More

research that follows students through their educational experience needs to be done,

and the amount of arts they are exposed to should be tracked, similar to how Catterall

tracked student data over time (Catterall, 2007, 2009; Catterall et al., 2012; Fiske, 1999).

Data that targets specific disability areas would also be beneficial, seeking to find what

type of arts curriculums and arts inclusion is most beneficial to certain disabilities (i.e.,

learning disabilities, Autism, emotional/ behavior disorders, cognitive disabilities, etc.).

Researchers should also continue to study how arts trainings for teachers continue to

affect instruction in the classroom. With the absence of funding and formal arts

education classes in schools, continued training and arts inclusion in non-arts

curriculums is going to be essential in providing students with a well-rounded education.

But what is the actual gain for teachers? How do we decipher if arts are actually improving pedagogy, creativity, and relationships in the classroom?

Implications for Professional Application

Arts integration, arts inclusion, and theatre arts course work in schools is an important topic for educators to discuss because it can help with individualization, differentiation, and providing multimodal instruction to students who need it most in our ever-changing world. Theatre can enhance and enrich learning experiences for all students and provide them with opportunities to express what they have learned in different forms. Using arts to enrich projects, help students to memorize vocabulary, improve fluency, or even to get them out of their 'shells' is an important skill to have as arts funding continues to dwindle in this country, and other subject areas are considered priorities. Theatre encapsulates many different art forms and disciplines and can be used to teach almost any subject. In addition, the long-term effects of theatre on the individual can impact our larger communities. Students who participate in theatre in their primary and secondary school years are more likely to be well rounded members of the community who make substantial contributions and become life-long learners (Catterall, 2009; Fiske, 1999).

Specific to students with disabilities, theatre is important to use because it can reach a wide variety of learners. It contains opportunities for modeling, practicing oral fluency, reading fluency, inflection, social skills, role-play, written expression, cooperation, collaboration, and practice with making choices. There are many more skills that can be practiced through theatre that can benefit the individual goals of

students who have education plans. Students with disabilities stand to gain more from arts inclusion and theatre arts in the classroom because it is choice-based, inclusive, and provides opportunities for both group and individual growth. These things provide autonomy for students and also help to boost self-esteem, self-confidence and engagement, things that students with disabilities tend to struggle with more than their peers.

If theatre really does improve academic growth, engagement/ attainment, and social-emotional skills for general education students and students with disabilities, then it should be used more as a tool in the classroom. It should not only be used to brainstorm or as a welcoming activity or for fun social activity. Theatre should be intentionally used as a tool to individualize learning for all students in the classroom, especially those with disabilities. As educators, we should always be looking for ways to improve our pedagogy and curriculums and this is a very simple way to adjust the structure of learning in the classroom to reach a broader audience of students. Theatre should be taught in schools as a way to help students understand their own learning and it should be included into general subject areas to enhance the learning process for all students.

Conclusion

Researchers should continue to explore the value of using theatre arts in the classroom to benefit all students, but specifically to benefit students with disabilities. Current research shows that using theatre as a tool for instruction can improve academic achievement levels, increase engagement and attainment, and provide

valuable social-emotional skill development to all students. For students with disabilities, theatre provides a way for students to engage in class materials at their own pace with less risk and more access points. The use of differentiation through theatre is helpful in reaching students with different disability areas and allows for individualization of curriculum. Theatre also provides opportunity for students and teachers to take risks and increase confidence in the areas of engagement and academic achievement. The majority of research does not target students with disabilities or have enough longevity to support the installation of theatre as core curriculum in schools. If there are schools that can invest in theatre arts programs to target lower-achieving students or even students with disabilities, more quantitative data can be added to the research and increase the value of theatre programs in education.

References

Beadle-Brown, J., Wilkinson, D., Richardson, L., Shaughnessy, N., Trimingham, M., Leigh, J., . . . Himmerich, J. (2017). Imagining Autism: Feasibility of a drama-based intervention on the social, communicative and imaginative behaviour of children with Autism. *Autism : The International Journal of Research and Practice, 22*(8), 915-927. doi:10.1177/1362361317710797

Beam, A. P. (2009). Standards-based differentiation: Identifying the concept of multiple intelligence for use with students with disabilities. *TEACHING Exceptional Children Plus,* 5(4) Article 1. Retrieved from

http://escholarship.bc.edu/education/tecplus/vol5/iss4/art1

Bernstein, B. (1985). Becoming involved: Spolin theater games in classes for the educationally handicapped. *Theory into Practice: Educating through Drama, 24*(3), 219-223. doi:10.1080/00405848509543176

Boswell, B. B., & Mentzer, M. (1995). Integrating poetry and movement for children with learning and/or behavioral disabilities. *Intervention in School and Clinic, 31*(2), 108-113. doi:10.1177/105345129503100208

Catterall, J.S. (1998). Does experience in the arts boost academic achievement? A response to Eisner. *Art Education (Reston), 51*(4), 6-11. doi:10.2307/3193703

Catterall, J. S. (2007). Enhancing peer conflict resolution skills through drama: An experimental study. *Research in Drama Education, 12*(2), 163-178. doi:10.1080/13569780701321013

Catterall, J. S. (2009). *Doing well and doing good by doing art; a 12-year national study of deduction in the visual and performing arts; effects on the achievements and values of young adults*. Los Angeles, London: Imagination Group/ I-Group Books.

Catterall, J. S., Dumais, S. A., & Hampden-Thompson, G. (2012). *Arts and achievement in at-risk youth: Findings from four longitudinal studies .* ().National Endowment for the Arts. Retrieved from https://statistical.proquest.com/statisticalinsight/result/pqpresultpage.previewtitle?docType=PQSI&titleUri=/content/2012/9566-2.26.xml

Corcoran, C. A., & Davis, A. D. (2005). A study of the effects of readers' theater on second and third grade special education students' fluency growth. *Reading Improvement, 42*(2), 105.

de la Cruz, Rey E, Lian, M. J., & Morreau, L. E. (1998). The effects of creative drama on social and oral language skills of children with learning disabilities . *Youth Theatre Journal, 12*, 89-95.

Deasy, R. J., & Arts Education Partnership. (2002). *Critical links : Learning in the arts and student academic and social development*. Washington, DC: Arts Education Partnership. Retrieved from http://hdl.handle.net/2027/mdp.39015064205522

Dickinson, D., & Hutchinson, N. (2019). Changes in understandings and perceptions of individuals, significant others and community supporters involved in a theatre company for adults with intellectual disabilities.*32*(3), 691-705. doi:10.1111/jar.12564

DuPont, S. (1992). The effectiveness of creative drama as an instructional strategy to enhance the reading comprehension skills of fifth-grade remedial readers. *Reading Research and Instruction, 31*(3), 41-52. doi:10.1080/19388079209558087

Eisner, E. W. (1998). Does experience in the arts boost academic achievement? *Arts Education Policy Review, 100*(1), 32-40. doi:10.1080/10632919809599448

Ewing, R., & Gibson, R. (2015). Creative teaching or teaching creatively? using creative arts strategies in preservice teacher education. *Waikato Journal of Education, 20*(3) doi:10.15663/wje.v20i3.225

Fiske, E. B. (1999). *Champions of change : The impact of the arts on learning.* (). United States: President's Committee on the Arts and the Humanities, Washington DC. Retrieved from http://catalog.hathitrust.org/Record/005256504

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences* (5. print. ed.). New York: Basic Books.

Greene, J. P., Hitt, C., Kraybill, A., & Bogulski, C. A. (2015). Learning from live theatre. *Education Next, ,* 55-61. Retrieved from educationnext.org

Hillier, A., Greher, G., Poto, N., & Dougherty, M. (2012). Positive outcomes following participation in a music intervention for adolescents and young adults on the Autism spectrum. *Psychology of Music, 40*(2), 201-215. doi:10.1177/0305735610386837

Huffaker, J. S., & West, E. (2005). Enhancing learning in the business classroom: An adventure with improv theater techniques. *Journal of Management Education, 29*(6), 852-869. doi:10.1177/1052562905277311

Hughes, V. Z. H. (2014). *The play's the thing: Staging for success in reading comprehension and fluency with theatre infused curriculum* Available from Dissertations & Theses Europe Full Text: Literature & Language. Retrieved from http://www.riss.kr/pdu/ddodLink.do?id=T13702421

Inoa, R., Weltsek, G., & Tabone, C. (2014). A study on the relationship between theater arts and student literacy and mathematics achievement. *Journal for Learning through the Arts, 10*(1) doi:10.21977/D910123495

Kariuki, P. N., & Black, L. N. (2016). The effects of integrating theatre arts strategies and traditional strategies on student performance in an english classroom at a selected high school. Paper presented at the *Annual Conference of the Mid-South Educational Research Association,* 1-23.

Lin, S., Cheng, W., & Wu, M. (2015). Uncovering a connection between the teachers'

    professional development program and student's learning

    . *Journal of Education and Practice, 6*(23), 66-74.

Lorimer, M. R. (2011). *Arts-infused learning in middle level classrooms* eScholarship,

    University of California.

Malley, S. M., Andrus, L., Adamek, M., Darrow, A., Dorff, J. B., Levett Gerber, B., . . .

    Wexler, A. (2012). *The intersection of arts education and special education:*

    Exemplary programs and approaches. ().John F. Kennedy Center for the Performing

    Arts.

Mason, C. Y., Steedly, K. M., & Thormann, M. S. (2008). Impact of arts integration on

    voice, choice, and access.*Teacher Education and Special Education, 31*(1), 36-46.

    doi:10.1177/088840640803100104

McMahon, S. D., Rose, D. S., & Parks, M. (2003). Basic reading through dance

    program. *Evaluation Review, 27*(1), 104-125. doi:10.1177/0193841X02239021

Miller, H., Rynders, J. E., & Schleien, S. J. (1993). Drama: A medium to enhance social

    interaction between students with and without mental retardation. *Mental*

    Retardation (Washington), 31(4), 228. Retrieved

    from https://www.ncbi.nlm.nih.gov/pubmed/8412728

Nevin, A., & Hood, A. (2002). *Improving the learning outcomes of preschool-grade 12 students with disabilities through collaborative action research and data based instruction.* ().Arizona State University West.

Page, A. (1983). *Children's story comprehension as a result of storytelling and story dramatization: A study of the child as a spectator and as a participant* Available from ProQuest Dissertations and Theses A&I: The Humanities and Social Sciences Collection. Retrieved from https://search.proquest.com/docview/303173301

Sagor, R. (1992). How to conduct collaborative action research. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=74149

Saraniero, P., Goldberg, M. R., & Hall, B. (2014). "Unlocking my creativity": Teacher learning in arts integration professional development. *Journal for Learning through the Arts, 10*(1), 1-22. Retrieved from https://www.openaire.eu/search/publication?articleId=od_____325::d1695b8f84db266b5a5535ff848c8f7f

Tobin, R., & McInnes, A. (2008). Accommodating differences: Variations in differentiated literacy instruction in grade 2/3 classrooms. *Literacy, 42*(1), 3-9. doi:10.1111/j.1467-9345.2008.00470.x

Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, Va: Association for Supervision and Curriculum Development.

Retrieved from http://www.fachportal-

paedagogik.de/fis_bildung/suche/fis_set.html?FId=551176

Trowsdale, J., & Hayhow, R. (2013). Can mimetics, a theatre-based practice, open

possibilities for young people with learning disabilities? A capability

approach. *British Journal of Special Education, 40*(2), 72-79. doi:10.1111/1467-

8578.12019

Walker, E., Tabone, C., & Weltsek, G. (2011). When achievement data meet drama and

arts integration. *Language Arts, 88*(5), 365. Retrieved

from https://search.proquest.com/docview/864728386