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A different kind of learning for a different kind of learner : justification of and best practices for the use of performing arts education for autistic students

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Signature Page for Leadership Studies Honors Thesis

A Different Kind of Learning, for a Different Kind of Learner: Justification of, and Best Practices for, the Use of Performing Arts Education for Autistic Students

Thesis presented

by

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This is to certify that the thesis prepared by *Jacob Litt* has been approved by his/her committee as satisfactory completion of the thesis requirement to earn honors in leadership studies.

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Chapter 1: Arts Education and Special Education

In our culture, our history, and our society, the arts play a vital role. However, despite maintaining such a fundamental place in our shared experiences, the arts' role in education is in constant need of clarification and defense. In addition, the presence of individuals with cognitive and developmental disabilities has become increasingly common in society, and yet special educational programs for these individuals, especially in their early years, have proven unable to find total success. These two fields of education – arts education and special education – thus share a common struggle: a need to find an established place in educational environments. I believe these two forms of education can complement each other – if education in the arts can help special education programs find new curricular means to encourage student success, this in turn can reaffirm the significance of the arts in education overall. In this thesis, I will demonstrate how a comprehensive integration of the arts into special education can be instrumental in helping to develop successful educational programs for individuals with special needs, particularly autism and related learning and intellectual disabilities.

The relationship I will examine is not simply founded on instrumental summations of the arts' benefits. Instead, I intend to demonstrate that the connections between arts education and special education exist on a deeper level – one that demonstrates the arts' intrinsic value as it relates to the emotional, social, and mental development of those with special needs. The remainder of this introduction will examine how the existing literature has considered both the instrumental and intrinsic benefits of the arts in education. It will also demonstrate more concretely the challenges that arts education and special education face in modern society. Finally, I will outline the rest of my thesis, creating my personal framework for demonstrating the intrinsic benefits of the arts in special education, in theory and in practice.

The Current State of Affairs of Arts Education

In May of 2011, the President's Committee on the Arts and the Humanities (PCAH) released a report titled "Reinvesting in Arts Education: Winning America's Future Through Creative Schools." In this report, the committee examined efforts and decisions surrounding arts education at federal and local levels to provide reflections on both the current place of arts education in America and the future benefits that arts education may hold. In its executive summary, the report emphasizes a major problem surrounding arts education: just as we are beginning to better understand the intrinsic and instrumental values of arts education, arts instruction and artistic opportunities are being removed from schools because of budget constraints and a higher emphasis on standardized subjects (PCAH, 2011, V-VI). In 2012, the National Center for Education Statistics, part of the Department of Education, released the results of a comprehensive survey it completed surrounding changes in arts education in U.S. public schools from 2000 to 2010. The report found slight declines in the amount of music and visual arts instruction offered in schools between the two years, but, even more disappointingly, noted that the number of elementary schools offering theatre and dance opportunities to students decreased from 20 percent to 4 and 3 percent, respectively (NCES, 2012).

In addition to these national statistics, one need only look at budget cuts in some of America's major cities to see that arts education programs are in peril. For example, an article in the *Washington Times* described a budget cut executed by Chicago Public Schools that laid off over 1,000 teachers, of which almost 10 percent were teachers in arts education (Hambek, 2016). Likewise, a budget shortfall of $18 million in South Carolina's Charleston County School District forced the district to remove its fine arts coordinator, limit its arts curriculum, and cut multiple arts educators (Parker, 2016). And again, in Philadelphia in 2013, a major budget was

passed to deal with a significant deficit, and that budget removed all funding for music and arts education programs (Strauss, 2013).

For years, the government has attempted to respond to these local budget cuts through federal funding and initiatives. These opportunities center around two vital agencies that advocate for the arts: the National Endowment for the Arts (NEA) and the National Endowment for the Humanities (NEH). According to *The 74 Million*, which describes itself as a "non-profit, non-partisan news site covering education in America," the NEA and NEH have spent hundreds of millions of dollars on education programs since their creation in 1965 (Mahnken, 2017). The Washington Post reports that in 2016 alone, the NEA sent $47 million in grants to U.S. states and jurisdictions, which went towards supporting multiple significant artistic initiatives (Kennicott and McGlone, 2017). Furthermore, the NEA awarded $5.8 million in grants specifically for arts education – which supported a substantial number of arts programs nationwide. The NEH awards comparable grants every year, and the NEH especially is highly committed to starting arts initiatives and establishing "state humanities councils," which can support more targeted arts programs at the state and local levels (Mahnken, 2017). Arts education programs, especially recently as they have faced the chopping block, rely on the NEA, NEH, and similar national programs and agencies for support and direction. Yet these federal agencies are also facing budget cut threats. *The Washington Post* reported in March of 2017 that President Donald Trump's newest budget plan would call for the elimination of both the NEA and the NEH, among other significant arts agencies, such as the Institute of Museum and Library Services and the Corporation for Public Broadcasting. Overall, these cuts would reflect almost $1 billion cut from federal arts initiatives (Kennicott & McGlone, 2017).

Another discouraging trend to be found in this data is that the elimination of arts education programs is disproportionately affecting minorities, urban schools, and other disadvantaged populations, creating an equity gap in the arts. When it comes to low-and-high-poverty schools, the 2012 NCES report found that the equity gap in the arts grew between 2000 and 2010, which meant that students in high-poverty schools were getting fewer, and lower-quality, arts education opportunities (NCES, 2012). And, according to a 2011 report from the NEA Office of Research and Analysis, African-American and Hispanic students were two times less likely to have arts education programs than white students (Rabkin & Hedberg, 2011). Likewise, that gap reflects a trend since the beginning of the 1990s of arts education opportunities decreasing annually for African-American and Hispanic students, with no comparable decreases for white students (Rabkin & Hedberg, 2011). *Law Street*, a web-based media platform that covers law and public policy, explains these discrepancies by noting the direct parallel between high-poverty schools and largely minority student populations. These schools constantly face the need for budget cuts, and, as standardized testing becomes more important for granting a school resources and funding, high-poverty, minority-populated schools, which rely heavily on such benefits, deprioritize the arts in favor of test subjects such as math and English (Metla, 2015). This is especially disappointing because there is evidence to suggest that these underprivileged populations might benefit even more from arts education than their peers. The PCAH report describes how implementing the arts in education can increase passion for learning and can boost attendance (PCAH, 2011). Benefits such as these serve at-risk populations tremendously as a response to the otherwise overwhelming pressures due to testing and struggles due to a lack of resources.

Literature Review – Arts Education Benefits, Instrumental and Intrinsic

Given the fact that increasing cuts to arts education across the country is leading to a lack of access to the arts, especially for those in at-risk populations, the time seems right for a defense of arts education and its benefits for students. The benefits of the arts in education have been framed in two ways. Some authors frame arts education as having instrumental value, meaning the arts are an effective means for achieving other in-school goals, such as higher understanding of subjects, better test scores, and higher attendance. Other authors frame arts education as having intrinsic value separate from merely instrumental value. They argue that the arts are meaningful in and of themselves, in the ways that they provide unique avenues for emotional and social expression, build opportunities for personal development of important skills, and have observable impacts on brain development.

The PCAH report on arts education defines four areas of emphasis on which most existing research focuses in defense of arts education: transfer of skills to student achievement, increased student motivation and engagement, development of greater habits of mind through creative thinking, and development of social and emotional competencies (PCAH, 2011). These four areas are also appropriate for grouping my own review of the existing literature on arts education benefits. However, while the PCAH defines these all as "instrumental outcomes" of arts education, I want to push back on that use of the term. I agree that the transfer of skills to other subjects and increased student motivation and engagement are instrumental outcomes of arts education – they are indeed ways in which the arts can be shown as a means to an end. However, the development of habits of mind and development of social and emotional competencies, as mentioned above, have intrinsic value because they are developmental goals that the arts can effectively create, at times better than other educational mediums. Defining all

benefits of arts education as "instrumental" is concerning to me because it implies that the arts in and of themselves are not important in educational settings, which might further convince schools looking to cut budgets or focus curricula that the arts' presence as largely unnecessary. Showing that arts education has both intrinsic *and* instrumental value is important for the most meaningful framing of arts education. A similar position is held by Arnold Aprill in "Toward a Finer Description of the Connection between Arts Education and Student Achievement." Aprill, responding to recent studies and debates about whether the arts should be integrated into other curricula or taught for their own sake, takes the position that this is a false dichotomy, and the arts has both roles in a modern educational setting. Thus, the best way to integrate the arts into education, according to Aprill, is to encourage arts teachers and other teachers to collaborate on using the arts to support other subjects, while also providing times when the arts are enjoyed and emphasized separately (Aprill, 2001). I agree with Aprill's analysis of the proper place of the arts in education. Though I believe the intrinsic benefits of the arts reflect a more substantial defense of the arts' role in education, it is important to not see this as contrary to the arts' instrumental benefits, but rather as complementary to them.

Beginning first with those benefits of arts education I'm defining as "instrumental," much work has been done to both pinpoint specific data-driven examples of arts education correlating with general student achievement (Hetland, 2000; Aprill, 2001; Boldt & Brooks, 2006; Ruppert, 2006; Catterall, 2009; PCAH, 2011; Anderson, 2015a), and to consider meaningful connections that can be made between the arts and other subjects through integration (Aaron, 1994; Flohr, 2006; Nompula, 2012; Bae, 2013; Ernest & Nemirovsky, 2016). Perhaps the largest study in this area of defining the arts' instrumental value is James S. Catterall's Doing *Well and Doing Good by Doing Art*. Catterall analyzed data from approximately 25,000 secondary school students over

four years, which was gathered from student responses to surveys collected by the Department of Education. He found a strong and direct correlation between involvement in the arts and general academic achievement, pro-social outcomes, and future pursuit of higher educational and employment opportunities. Catterall's findings specifically proved true for "at-risk" students in high-poverty, high-minority schools, who benefitted greatly in "arts-rich" schools compared to "arts-poor" schools. Furthermore, involvement in the arts also indicated increased community involvement among students, suggesting that the benefits of the arts in education in increasing student motivation held true outside of just the classroom (Catterall, 2009). Similar findings were made by Boldt and Brooks, who identified the positive effects of arts education on "at-risk" students, such as reestablishing value within their communities and helping them discover self-confidence through opportunities for creativity (Boldt & Brooks, 2006). Such findings might prove especially significant when we consider that the schools most frequently facing arts cuts are those whose students might most benefit from arts education.

Likewise, pieces of the literature that examine specific instances of arts integration show that the arts improve understanding of subjects and increase creative thinking. Different authors show how this is true for incorporating the arts into different subjects. For example, when it comes to enriching English and language, the incorporation of the arts into reading and storytelling increases the understanding of phonics, the ability to predict and sequence content, and the intake and subsequent use of a greater variety and depth of language (Flohr, 2006; Anderson, 2015a). Additionally, the incorporation of arts into math and geometry has proven to provide students with a greater clarity of the mathematical material through opportunities to demystify mathematics through implementation into artistic creations (Ernest & Nemirovsky,

2016). Defending the arts' potential in supporting these fields especially is significant, as these are frequently-tested areas on which schools feel a higher need to focus.

Other authors provide a more comprehensive framework, demonstrating how the arts support other subjects through proper and effective integration. Most of these authors elaborate on strategies for effective integration, typically revolving around (1) arts-based self-teaching and presenting opportunities for students in the classroom, and (2) time and curricula that specifically focus on the arts (Aaron, 1994; Nompula, 2012; Bae, 2013; Anderson, 2015a). Bae's findings are especially interesting. His work not only includes a study of the effects of arts-integrating curricula on classroom success at the elementary-level, but also interviews and surveys of the teachers implementing the curricula. Bae found that teachers were more likely to think of the arts as being purely instrumentally valuable in teaching other subjects, but were much less likely to decide to learn about art itself in the classroom (Bae, 2013). In other words, Bae shows that teachers encouraged to incorporate arts into education will begin to see the arts as more instrumentally good than intrinsically good. This finding from Bae is worrisome: instrumental defenses of the arts in education can only do so much to establish the arts' role, insofar as they rely on the arts providing demonstrable benefits in other academic areas.

Even though the above section covers extensive research on the instrumental benefits of the arts, some authors worry that the findings pertaining to arts education's benefits on general student achievement and specific subject improvement might be overstated or misrepresented. Perhaps the biggest advocate of this position is Lois Hetland – who produced a 2000 study on the relationship between listening to music and improved spatial reasoning. Hetland, in multiple works since, has come out as more doubtful of the validity, or far-reaching effects, of studies that find instrumental value in the arts in general education. In fact, in the introduction to her book

Studio Thinking 2: The Real Benefits of Visual Arts Education, in which she argues against instrumental conceptions of the value of the arts, she even regrets that people have taken her 2000 study and extrapolated from it that listening to music as a baby might improve test scores all the way into high school (Hetland, 2013). The original study only found the effect to last around 10 to 15 minutes (Hetland, 2000). If it is true that instrumental defenses of arts education are tenuous, and if we then rely too greatly on instrumental explanations of the arts' benefits, then defending arts' place in educational environments might become challenging.

In a 2001 article in *Arts Education Policy Review*, Hetland and coauthor Ellen Winner reviewed the summary of the Reviewing Education and the Arts Project report – which is, in fact, the same report to which Aprill was responding in his article about removing the false dichotomy between the instrumental and the intrinsic. While Aprill finds within the report encouraging proof that arts integration is a useful, instrumental tool in education, Hetland and Winner instead find the report to be inconclusive, mainly because most of the studies fail to establish the crucial difference between correlation and causation. They argue that many studies, by not considering relevant confounding variables or by extrapolating heavily from their findings, do not meet sufficient scientific standards for proving causation (Hetland & Winner, 2001). They also fear that the findings give too little credit to the intrinsic benefits of the arts, thus providing the arts with a less sound claim to significance and value by relying on instrumental arguments instead. Given that Hetland has been writing for over a decade expressing doubt about the instrumental benefits of arts education, some take her stance to be that arts education is unnecessary. However, a 2017 interview with Hetland in *Phi Delta Kappan* demonstrates that Hetland's cynicism about instrumental benefits of the arts occurs because she more strongly advocates for the *intrinsic* benefits of the arts as a justification for maintaining its

place in education. Hetland argues that it is through demonstrating the unique benefits of the arts themselves, separate from other subjects or tests, that we can best advocate for the role of arts in education (Heller, 2017).

While Hetland's discrediting of research affirming the arts' instrumental value is perhaps too harsh on the studies (as controlling for confounding variables in a study on education is highly difficult, and difficult still when examining existing data, as many studies do), I think Hetland does highlight an important point. Rather than the arts having instrumental value *instead* of intrinsic value, they might have instrumental value *because* they have intrinsic value. There is a greater focus in the existing literature on identifying such intrinsic values in arts education. For example, many studies and analyses, both data-driven and theory-driven, identify benefits for emotional and social development that the arts can provide (PCAH, 2011; Landy & Montgomery, 2012; Hetland, 2013; Greene, 2013; Kotin et al., 2013; Sowden, 2015; Sarath et al., 2017; Thompson, 2017). There are two levels of emotional and social development that the arts can help develop: emotional and social understanding, and emotional and social expression. Understanding comes in many forms - recognizing emotional truths and beauty through the arts (Greene, 2013), developing critical thinking skills, problem solving skills, collaboration and communication through arts instruction and participation (PCAH, 2011), and tapping into creative thinking through the arts (PCAH, 2011; Sarath et al., 2017). When it comes to emotional and social expression, many authors talk about the avenues that the arts provide to express ideas, share experiences, and perform emotionally, and how such experiences support the growth of emotional and social passions. This, in turn, is a way in which the arts are especially effective at motivating social activism, and are likewise effective in developing skills of leadership – critical

thinking about justice, ethics, and social dynamics – that better shape the individual for success (Landy & Montgomery, 2012; Kotin et al., 2013; Sowden, 2015).

Another specific field that identifies the intrinsic value of arts education is the field examining the connections between the arts, arts education, and brain development (Flohr et al., 2000; MENC, 2000; Silverman, 2008; Flohr, 2010; Schellenberg, 2011; Geist & Geist, 2012; Groff, 2013; Scott, 2016). The most comprehensive of these sources is *Music Makes the Difference: Music, Brain Development and Learning,* a book from the National Association for Music Education, which gathers numerous major works on the relationship between music and brain development, including research linking music exposure and IQ, music training and spatial-temporal performance, and music instruction and cognitive development. The book then elaborates on how those areas of brain development factor into higher understanding of difficult subjects, greater SAT scores, and higher academic achievement (MENC, 2000). This research, which ties mental benefits to academic outcomes, is a clear example of how looking at intrinsic benefits of the arts on the brain can translate directly to instrumental evaluations – further demonstrating how the two evaluations complement, rather than compete against, each other. Furthermore, much of the research on the role of arts education in brain development subsequently encourages that such practices be implemented early – starting in pre-school education and playing a larger role in elementary education (Flohr et al., 2000; Flohr, 2010; Geist & Geist, 2012).

There are other additional considerations about specific types of general intelligence growth that might be solely associated with the arts. For example, Howard Gardner, in *Frames of Mind: The Theory of Multiple Intelligences,* defined seven different areas of intelligence that an individual can develop, with one such area being directly related to the arts (musical) and others

being developed heavily by the arts (visual-spatial, bodily-kinesthetic) (Gardner, 1983). Other authors have taken Gardner's framework and either elaborated upon it as it relates to current brain research (Flohr, 2010) or provided an even more developed framework for the necessity of the arts in contributing to a well-rounded general intelligence (Groff, 2013). Thus, under such a theory of multiple intelligences, some of the arts' benefits for the brain, such as increasing visual-spatial awareness and bodily-kinesthetic involvement, may be exclusive to the arts alone.

Finally, there is one last understanding of the intrinsic value of the arts – the arts are essential, and irreplaceable, because they are the arts. Though the definition of "art" is constantly evolving, it is tautologous to say that if something is not art, then it cannot replace art. This is important to consider, because it is easy to overlook the absolute value of the arts, and instead jump right to applications of that value. Many philosophers have discussed this concept of judging "arts for arts' sake." Oscar Wilde once described that an appreciation of art is like an appreciation of a flower – a flower may be bought and sold, and thus be used, but that is not the given use of the flower. In the same way, art may be bought, sold, and given socio-cultural significance, but that does not mean that art is not valuable in and of itself, for the moods it creates and the value in holds (Wilde, 1891). However, going beyond Wilde's idea of the arts' value, it still remains true that the arts have other important purposes in society. As stated at the beginning of this introduction, the arts play a vital role in culture, history, and society – uniting different populations, expressing different ideas, and documenting norms and beliefs of a given time. We cannot thrive without the arts, in the same way we cannot thrive without language, reading, mathematics, and science. And the arts will forever continue to play a significant role in culture and society. This alone grants the arts a special intrinsic value, which contributes to the effective defense of arts education.

Overall, the conclusions I have drawn from my review of the existing literature on the integration of the arts into education is that it is important to examine both the instrumental and intrinsic values of arts education; however, there is a fundamental divide between how instrumental and intrinsic evaluations of arts education are used. Instrumental evaluations might be more effective in attempting to convince schools not to cut arts from education, because creating a clear connection between implementation of the arts and other areas of academic development and success will justify maintaining the arts' presence. On the other hand, intrinsic evaluations might ultimately be the more substantive and meaningful evaluations of arts education available. If we can show the unique positive effects that an exposure to the arts has on emotional, social, and mental development – which in turn will compliment other areas of development – then the arts will not be portrayed as superficial, but vital and irreplaceable.

The Arts and Special Education: New and Crucial Ground

While a review of the existing literature has found many connections between the arts and general education practices, it is important to note that there is relatively little literature on arts education's specific applications for and relations to special education. In many ways, the existing literature lays a solid foundation on which a comprehensive theory about the arts and special education can be built, but we must be careful about extrapolating too far from the existing literature. What is practical and effective in general education does not exactly equate to what is practical and effective in special education. Such a false equivalency proves to be extremely problematic, especially given that special education programs constantly face a need to create conditions designed to accommodate those with learning disabilities. These students require diverse accommodations, from addressing skills deficits constructively, to adapting the curriculum for academic success, to solving other challenges faced throughout the educational

experience. These additional needs cannot be met simply through general education practices alone, and therefore the literature about the arts in general education alone cannot prescribe strategies for special education. New frameworks and strategies for, and understanding of, the arts in special education is necessary to best serve those student populations, and provide the best opportunities for students with learning disabilities and special needs.

The need to establish effective special education programs continues to grow in necessity as the rates of autism and other related intellectual and learning disabilities increase. A Centers for Disease Control and Prevention study published in 2016 found that, as of 2012, 1 in 68 children in multiple communities across the United States have been identified with autism spectrum disorder. This is a 30% increase from even the most previous estimate, which put the statistic at 1 in 88 (CDC, 2016a). There are many explanations that might account for this increase in rates of autism, and while there is controversy surrounding which is correct, I think all these explanations illustrate important trends in society's understanding of disabilities. One explanation is that the increase may be biological, and there are indeed more individuals being born with autism than before. This explanation has been met with doubt from others, such as Warren Cornwall, who wrote in *Science Magazine* that it seems odd for a rise in the number of individuals with autism to correlate with a decline in the rate at which children were labeled as having an intellectual disability in the same time frame (Cornwall, 2015). So, instead, Cornwall and others believe that the increasing rates of autism might point to a growing understanding of what autism is, and the many ways in which it can be manifested as a learning disability *and* an intellectual disability (Mitka, 2010; Cornwall, 2015). This possible explanation for the growing rate of autism is significant because it demonstrates that society has more awareness of, and concern about, the effective diagnosis and treatment of those with learning and intellectual

disabilities. Another explanation for the growing rates of autism might be that autism is being over-reported, possibly through improper methodologies for gathering data on autism (Ramsey et al., 2016). However, though this seems like the least useful explanation for the increase in autism rates, it does point out that there is a growing drive to provide additional attention and resources to students with special needs. While in some instances this might incorrectly inflate actual rates of autism, it is certainly good to know that there is a growing trend to accommodate those with special needs. Therefore, the rise of autism rates shows that we as a society are facing more instances of learning and intellectual disabilities, coupled with a greater understanding of the necessity to find appropriate and effective treatments and accommodations for these individuals – especially in education.

Contrary to growing rates in autism, and a better understanding of the need to treat learning and intellectual disabilities, recent initiatives in American education policy have favored outcomes-based approaches to education, which are highly problematic for students with special needs. Two such initiatives, which have been perhaps the biggest education initiatives of the past decade, have been the No Child Left Behind Act (NCLB), passed by President George W. Bush in 2002, and the introduction of Common Core standards and subsequent funding programs related to those curriculum expectations. Both initiatives were created with similar goals in mind: creating uniformity in what academic material was taught in schools, how it was taught, and how proficiency in those materials and subjects would be best measured. Both share an increase in the amount, and significance, of standardized assessments and measurements of proficiency in education, with the intent of ensuring students find the academic success that NCLB and Common Core hoped to achieve. These levels of proficiency, for specific grade and age levels,

create thresholds that students must meet or surpass to be deemed successful in their academic development (Breslin, 2009; Haagar & Vaughn, 2013).

The NCLB and Common Core initiatives, therefore, represent an approach that relies on students reaching certain outcomes in order to be deemed successful and to gain necessary resources. While it would in fact be ideal for all students to reach these academic thresholds, the reality is that many students, especially students with special needs, are unable to meet them. Students who were low-achieving before the introduction of NCLB and Common Core were expected to make major academic adjustments to reach the achievement thresholds. Lowell C. Rose, writing about the failures of NCLB, explains that "the students who have had the greatest difficulty achieving must demonstrate the greatest progress" (Rose, 2004, p. 122). This is a problem for low-achieving students because the struggle they will face to reach potentially unattainable levels will decrease their academic motivation and their perceptions of their own success. Similar challenges could be seen with Common Core (Haagar & Vaughn, 2013). Evaluations of the NCLB and Common Core show a dilemma present in high thresholds of achievement: they demand more from students who are struggling more with the materials and subjects, in many ways setting those students up for failure instead of achievement.

As would be expected from such a system, those students set up for failure often do fail, producing negative consequences for them in terms of continued academic development. For one, NCLB expectations requires that schools meet their challenging academic standards, and show yearly progress in all subgroups, to be considered a successful school, which, in turn, will give it greater access to funding and state support (Breslin, 2009). This creates a cyclical problem for those schools and programs who enroll students who struggle the most – those students will be unable to reach the higher achievement thresholds demanded by NCLB, which

will deny their school the funding and resources that might be essential if the school ever wants to reach those higher thresholds. And data consistently shows, again as expected, that low-achieving students struggle to meet these outcome thresholds. This is especially true for students with special needs, who already face funding and resource deficits for their programs. Laudan Aron and Pamela Loprest, in their essay, "Disability and the Education System," reviewed the data and found that 64 percent of students with disabilities, compared to 24 percent without, tested below basic proficiency in reading, while 76 percent of students with disabilities, compared to 34 percent without, tested below basic proficiency in mathematics (Aron & Loprest, 2012, p. 113). And these are just basic levels of proficiency – gaps in achievement are likely even more dramatic for the higher expectations that some school districts and states might put in place. Overall, initiatives like NCLB and Common Core have proven detrimental to special education in the United States, by forcing schools to focus on students achieving outcomes that for many – especially those with disabilities – may be nearly impossible to reach.

While much literature exists on the creation of effective special education programs, especially in response to NCLB and Common Core, a specific focus on the benefits of the arts is significantly lacking. Given the instrumental and intrinsic benefits of the arts in general education discovered above, it is logical to see how similar instrumental and intrinsic benefits of the arts can translate to effective special education. There is only some literature that has begun to do this, and most of this literature has only come out in the past few years (Anderson, 2015a; Blair & McCord, 2016; McCord, 2017; Scott, 2017). In 2015, Alida Anderson edited a collected volume titled *Arts Integration and Special Education* that revisits the intrinsic and instrumental benefits of the arts, but applied to a special education environment. In the first part of the book, she draws connections between arts integration in the classroom and increases in the learning and

use of language, in cognitive and affective engagement, and in the overall potential for students with special needs to learn diverse subjects with greater clarity and ease (Anderson, 2015b; Berry and Anderson, 2015; Anderson, 2015c). In the second part, Anderson showcases how these intrinsic benefits translate to effective applications in English, social studies, math, and science classrooms – covering all of the core academic subjects (Nagy & Anderson, 2015; Bosch & Anderson, 2015; Davis & Anderson, 2015). Finally, she reflects on where future investigations of arts education and special education may lead (Crockett et al., 2015; Catterall, 2015). In many ways, this thesis will expand upon the model started here by Anderson – going from theory to practice.

Other works have focused on specifically creating inclusive and effective arts experiences for students with disabilities and special needs. Deborah V. Blair and Kimberly A. McCord wrote in 2016 about how classrooms could become more inclusive through the introduction of the arts, especially music, into teaching practices, student collaboration, and individual presentation (Kaikkonen, 2015; Hammel, 2015; Bernstorf, 2015). They also wrote about how to make the arts themselves more inclusive, through specific strategies meant to expand the accessibility of the arts for students with special needs (McCord, 2015; Lee, 2015; Darrow & Adamek, 2015). Blair and McCord's work includes a number of case studies into programs both in the U.S. and around the world that have combined the arts and special education, demonstrating successful applications of their ideas (Salmon, 2015; Hourigan, 2015). Two other recent works focus on how arts education should be best adapted to accommodate students with special needs. In *Music Education for Children with Autism Spectrum Disorder: A Resource for Teachers*, Sheila Scott (2017) focuses on challenges typically faced by autistic students in educational environments, and then considers how such challenges should be avoided

in effective arts education. She lists all of the most common elements of music education – singing, listening, playing instruments, and moving to music – and describes changes to established best practices and curricula that can better accommodate autistic students (Scott, 2017). Kimberly McCord, writing again in 2017, considers ideas similar to Scott's surrounding an appropriate adaptation of arts programs for students with disabilities, but she instead writes in the context of postsecondary music education. As shown by these four works, the literature considering arts education and special education has begun to cover some major ground in recent years, but there is still a long way to go.

Conclusion

In this introduction, I have shown that both arts education and special education face challenges in educational frameworks. Arts education's benefits need to be redefined and defended in the face of threatened cuts and doubts about its necessity. Appropriate and effective special education programs need to be established in the face of growing rates of learning and intellectual disabilities and educational initiatives that pose great challenges to those student populations. I have also shown that research on the specific connections between arts education and special education, though recently gaining some momentum, is significantly lacking in the existing literature on both subjects. In this thesis, I will create a comprehensive pedagogical and theoretical framework that justifies an increased integration of performing arts education into special education.

Before such a framework can be made, and before the positive effects of performing arts education on students with autism can be fully understood, we must explain the areas of development targeted by the performing arts, as well as the areas of deficits and difficulties experienced by students with autism. Finding a connection between these two will allow for a

full framework to be developed. Thus, the next two chapters (Chapters 2 and 3) will focus on both of these topics in turn: first, the intrinsic benefits of performing arts education, and then, the skills deficits typically associated with autism. Chapter 4 will then synthesize that information into a framework, which will pair autism's deficits with concrete curricular and pedagogical recommendations based on the benefits of performing arts identified in Chapter 2. I will also consider how the framework can be more widely applied because of its relevance to deficits any student may have. Finally, in Chapter 5, I will make recommendations regarding changes that should be made to educational programs to support the successful implementation of my framework. These recommendations specifically pertain to changes in curricula, inclusivity in the classroom, and teacher and special educator collaboration and leadership. I will also attempt to apply my framework to an existing performing arts program – the LIVE ART program at the School of Performing Arts in the Richmond Community in Richmond, Virginia – to see how the program's educators use the arts to work with their student population, which has a mix of typically developing and non-typically developing students. To conclude, I will make recommendations for future research and policy initiatives, such as increased arts training for teachers and reformed teacher-administrator relationships, to motivate further improvement of educational opportunities. Ultimately, I hope to defend the significance of the performing arts in education by describing their intrinsic benefits, and through those benefits make a new path for special education programs to best help students with autism and other disabilities.

Chapter 2: Curriculum, Pedagogy, and Student Development in the Performing Arts

One of the primary goals of performing arts education is to teach the performing arts in a way that develops the student as an artist and increases their passion for their crafts. Music educators intend to teach students instruments, singing, or compositional and theoretical techniques. Theatre educators focus on acting strategies, the parts of a whole production, and the execution of scenes or a show. And dance educators want to expand the students' movement vocabulary and potential, and motivate their students to perform and choreograph their own dances. All these learning goals are certainly crucial parts of performing arts education. However, the development of the student as an artist is not the only focus of performing arts educators. Instead, performing arts educators are interested in educating the whole student through the arts, and this is closely reflected in their curricula – what they teach – and their pedagogies – how they teach it. This was true almost a century ago, as shown in a 1928 list of objectives in music instruction that, among purely musical learning outcomes, describes two desired outcomes as developing "the social spirit through music," and encouraging "a creative attitude that implies that music has become a vehicle for self-expression" (Davidson, 1928). More recently, the performing arts have been described as having countless learning outcomes external to learning the art itself. These range from developing a student's literacy, language, and cultural awareness, to building cognitive development and problem-solving skills, to increasing engagement, empathy, and expression (McFadden, 2012; Manouchehri, 2017). In this chapter, I will focus on four areas of student development – language, emotional, social, and creative – and describe how all four are central to performing arts education curricula and pedagogy in elementary school programs. Overall, at the end of this chapter I will have established numerous intrinsic learning benefits that performing arts education provides in the above areas.

Curriculum, Constructivism, and Self-Guided Learning

Before examining the curricula and pedagogy present in elementary performing arts education, I must acknowledge a central debate surrounding these topics – a debate that ultimately illustrates how the educational strategies of the performing arts are rather different from those of other subjects. This central debate relates to all education, but is especially relevant to the arts: the debate of proficiency versus growth. This debate was introduced in Chapter 1, as a product of new educational policies in the 21st century placing premiums on proficiency. While proficiency measurements might be more prominent in general, higher-level curricula and pedagogies, such measurements are extremely difficult in the arts.

Arts teachers who are forced to teach based on proficiency do not always know how to effectively judge the arts development of their students under such a model. Do they measure their students' knowledge of terms and specific techniques or strategies? Or do they focus on their ability to compose and analyze artistic pieces? (Englebright & Mahoney, 2012; Kranicke & Pruitt, 2012). Both of these strategies seem as though they would exclude some students in unfair ways. These strategies are unfair because they are too focused on specific "skill transfers," as described by Timothy Sullivan in his reflection on creativity and the music curriculum. Sullivan explains that "skill transfer" models of instruction too often take the form of specific teaching agendas, with very clear outcomes that every student is supposed to meet. For example, in a music classroom, a "skill transfer" model might create expectations that all students will be graded by how well they can sight-read a piece of music, and this will determine their defined success. This kind of curriculum restricts creativity by making desired outcomes too specific, and therefore students who show promise in the arts but fail to live up to certain expectations can easily get left behind in a proficiency-based model of arts education (Sullivan, 2006). If a student

does not know how to sight-read well, they would not be considered successful under standards-based measurements of student achievement. These proficiency measurements are especially problematic in elementary programs, as the younger students' development in the performing arts is at too early of a stage for a measurement of skills to really be meaningful. In upper-level performing arts classes, a certain level of proficiency might be demanded given the intensity of the program, but in elementary school, when all students are at very different artistic levels, proficiency is not as necessary.

So, given that it is hard to create effective proficiency measurements for performing arts education, and such measurements unfairly discredit some students' academic performance because those students did not exactly meet expectations, curricular and pedagogical norms within elementary school performing arts programs are trending more towards growth-based models. Growth-based models entail educators observing a student's development across a certain period of time, and then evaluating how that student has progressed from the beginning. Growth-based models also give as much weight to where students start as where students end up when the period of time has concluded. By judging every student's performance by their growth, the thriving artist and the struggling but passionate artist alike can have a chance for strong evaluations of success in the classroom. This can significantly boost student motivation. Successful performing arts education should evaluate each individual student's transformation and flourishing, so as to be inclusive of and encouraging to all students in the program, further increasing student motivation and commitment to the arts.

Successful programs also recognize that each student is unique and capable of reflection, creativity, and growth, and educators therefore base their pedagogies on interactive activities that engage students in many different ways, so as to give them the best opportunities for success

(Kane, 2013). Growth-based models of arts education provide far more flexibility in measuring student success, but they still lead to one key question: should growth be measured from the perspective of the teacher, or from the perspectives of the students?

Performing arts curricula and pedagogies are increasingly leaning towards the latter answer to this question – that teachers should examine students' perspectives of their own growth, and teachers should allow students opportunities to express their own thoughts and ideas about what they are learning and how they are creating meaning from it. This has led to the flourishing of what is known as constructivism – an approach to curricula and pedagogy that specifically emphasizes student-centered learning and places a premium on measuring students' growth based on their own perceptions of improvement. In a 2005 article about constructivism, Janet Montgomery and Betty Hanley defined constructivism as focusing on a set of beliefs that prove the value of respecting students' opinions on their learning. Some examples of these beliefs are that "knowledge and beliefs and formed within the learner," "learners play an essential role in assessing their own learning," and "the outcomes of the learning process are varied and often unpredictable" (Montgomery & Hanley, 2005, p. 19).

In other words, teachers cannot simply assume their teaching agendas are being equally or effectively received by all students. The needs and experiences of the students themselves need to be factored into the equation as well. These beliefs, among others listed, are then used to recommend that educational experiences should be more individually-tailored to students based on what the students demonstrate they need, and how the students express they learn best (Montgomery & Hanley, 2005). James Garnett, in his 2013 work on constructivism, further added that constructivism involves defining learning by what students understand, rather what they can do. Determining what students understand requires providing students with more

opportunities to reflect on their works and their progress. He adds that constructivist curricula, through peer-evaluation and peer-collaboration, encourage students to think about the different thought processes of other students, which in turn can help students self-reflect on what they have gained from their educational practices.

So, a constructivist model for curricula in elementary performing arts education emphasizes what a student is learning, and how they are developing as both an artist and a whole person. But a constructivist curriculum is not enough. As Garnett explains, a constructivist curriculum's learning outcomes mean nothing if the pedagogical strategies used to teach that curriculum are not also constructivist (Garnett, 2013). A constructivist pedagogy primarily involves students participating in self-evaluation, self-learning, and student-to-student reflection and feedback (Chen et al., 2017). Questions such as "What did we notice?" "What do we know?" "What do we think it means?" and, "What do we need to know?" can all be parts of an effective constructivist pedagogy (Sullivan, 2006). A teacher asking the above questions would not have specific answers for which they are looking, as might be in a proficiency model. Instead, the teacher is intending for students to come up with their own learning goals and outcomes, so that they themselves can be in charge of their own learning and therefore have more of a commitment to educational achievement. This constructivism would not be possible under a proficiency-based model. Even though there are some ways that rubrics and criteria can be made to measure student-learning and student-understanding in a constructivist setting (Chen et al., 2017), these rubrics are not meant to directly correlate to class performance, but exist, instead, to guide teachers in their reflection on the growth of their students. Finally, constructivist curriculums and pedagogies, as well as self-guided learning strategies, can help motivate students to succeed and

flourish, to learn more content with greater ease, and to build their understanding and creativity (Chan, 2009; Niland, 2009).

Likewise, these same articles point to the potential of constructivism in developing the student emotionally, culturally, and socially. Niland's piece, about music- and- movement-based play, describes how kindergarten students' increased understanding of the arts contributed to the development of their emotional capacities. Through creative play associated with the arts, especially theatrical play, students learned how to express emotions and respond to the emotions of others (Niland, 2009). In Chan's piece, about how elementary school students in Hong Kong responded to a constructivist curriculum, Chan discusses how students developing their own thoughts and views also allows them to respond to each other's thoughts, feelings, and needs with more awareness and care. In addition, such a curriculum highlights "cultural, moral, and affective development" (Chan, 2009). Constructivist curricula and pedagogies are the best available to performing arts educators. By focusing on student growth, from the students' perspectives, educators encourage the students to take ownership of their education, and therefore students gain more from their lessons with regards to personal growth. Constructivism and self-guided learning allows the performing arts student to develop and flourish, both artistically and developmentally. And while constructivist curricula might be effectively implemented in many types of classrooms, they are especially useful for the performing arts, because by focusing on arts students' perspectives on their own growth, teachers can come up with individualized means to help those students grow further. The rest of this chapter will use a constructivist, growth-based model as a given for explaining how students can tap into the intrinsic skills associated with a well-rounded performing arts education.

Language, Literacy, and the Performing Arts

Performing arts education helps students develop language and literacy skills, which are vital for all levels of social interaction and communication. However, more importantly, the performing arts provide context for those new skills to be used, creating an environment for understanding the function and use of language. Such an environment is hard to recreate in other educational contexts. Even English, which obviously focuses on language and literacy, often relies on performing arts activities – especially theatrical ones – to build students' skills further. A constructivist curriculum in the performing arts allows for significant opportunities for students to learn how to express themselves through targeted, well-developed language practice. One study by Liane Brouillette in 2009 found that all types of performing arts activities were beneficial for the development of students' language and literacy. Through the performing arts, students not only learned new language, but learned how to use that language strategically and socially, including through jokes, story-telling, and general conversations. In addition, the attention given to words and expression in the performing arts requires students to participate in an increased exploration of the meanings of the words and their uses (Brouillette, 2009). This increased understanding of how to skillfully use language in many contexts, both academic and social, is a vital skill that is developed through the language and literacy work within performing arts education.

In music classes, students learn about the meanings of language through singing instruction, while also increasing their literacy by reading scores and learning instruments. First, singing can be used purely for the learning of a new language – consider how young students learn many new words through children's songs. Furthermore, singing is a type of storytelling, and therefore it not only teaches students words and phrases, but also frames how they should be

expressed. This is achieved through dynamics, rhythms, and pitches: three fundamental building blocks of singing that also directly correlate to spoken-language skills. Singing in a group also involves using language in a well-organized manner for the sake of coordination and communication. In 2011, a group of researchers led by Adam Winsler conducted research on elementary school students, looking for links between performing arts education and language in speech. They found that students enrolled in music classes not only were more capable in language development and private speech skills, but also used language more appropriately than other elementary school students. For example, students learning music were less likely to interrupt others (Winsler et al., 2011). This closely relates to the conjunction of language and time within music – the structure of a song requires the lyrics to be sung at specific times, and two individuals singing contradictory lyrical lines at the same time would not create a pleasant musical experience. Therefore, practicing music makes interruption and improper timing of language use less desirable for the student. Winsler and his team also found that students enrolled in music showed an increase in self-regulation of their language use – not interrupting, not monopolizing conversations, and not abruptly using non-sequiturs as often as other students (Winsler et al., 2011). Again, this closely relates to the expectations of proper music-making – working as a unit and maintaining control along with the rest of the group. Singing in music classes both develops students' language skills and informs their best use of those skills through appropriate communication and conversation.

While a vocal curriculum in elementary music classes targets language development, a curriculum for learning to play instruments and read scores directly translates to an improvement in student literacy. Of course, a musical score does not have the same content as a written passage, and therefore they are read very differently. However, what is relevant is that they are

both indeed *read*, which means that both academic experiences develop the sections of the brain responsible for literacy. One study found that students who learned instruments in elementary school generally had greater spelling abilities, language potentials, and reading proficiencies (Hille et al., 2011). Perhaps this is because reading music involves understanding a set of symbols: the pitches of notes, the lengths of notes, and the tempo and dynamic markings, to name a few. Keeping track of all of this information while reading a score and studying an instrument certainly compares to all that a student must remember and put together when reading words from written passages. By combining singing activities, instrumental instruction, and score studying, elementary music teachers directly integrate language and literacy skills into their curricula and pedagogies.

In elementary theatre classes, language is an essential element of the curriculum, and language and literacy can be both means and ends to theatrical activities. One of the biggest focuses of elementary theatre pedagogy is process drama, in which students embrace drama as a learning medium through immersive, student-focused activities. This constructivist type of practice means that students learn their theatre class skills hands-on. They might improvise scenes or conversations, but they are also very likely to encounter theatrical scripts. Scripts give the students literacy skills, as they practice reading the scripts, and speech skills, as they practice reading the lines from the page with dramatic emphasis and purpose. The students also gain dialogue and interpersonal communication skills, as they either improvise or recite spoken conversations with each other. All of these elements of drama build the students' language capabilities by diversifying the language they use and the ways they use it (Brown, 2017).

Of course, these language benefits of process drama are by no means restricted to the theatre classroom. Scholars Leah Kinniburgh and Edward Shaw Jr. wrote a 2010 article

describing how process drama can increase elementary school students' literacy in other subjects. Kinniburgh and Shaw Jr. specifically focused on the potential benefits for the subject of elementary science. They recognized that students typically feel overwhelmed or intimidated when faced with the difficult and more nuanced language they encounter in science classes. The high quantity of unfamiliar terms, combined with the difficulty of understanding their contexts, makes science literacy difficult. Kinniburgh and Shaw Jr. explain how Readers' Theatre – a theatrical activity where students read scripts aloud for an audience – can help students become more comfortable with the new vocabulary. This occurs because of both the repetition that comes with practicing the script and the expressions and inflections that come with reading the script aloud (Kinniburgh & Shaw Jr., 2007). Whether the words are improvised or pre-written, theatre education activates language training for students. Given that the performing arts often behave as a means of expression and communication, their instruction would be incomplete without an essential focus on also developing students' language and literacy through their curricula.

Emotional Expression and the Performing Arts

The language skills developed in elementary performing arts programs help to facilitate another learning goal of the performing arts: increased emotional expression and awareness. Emotional expression includes the ways in which students present emotions through speech, behavior, and other activities. Emotional awareness relates to how students understand and perceive a diverse array of emotions, both within themselves and within others. Emotional awareness also has an empathic factor, as students should be able to understand how others are feeling and respond to their emotions in a meaningful way. The significance of emotional expression is well-established in the performing arts, as many successful arts activities and

performances are centered around the students' expression of emotion through their creations. Thus, in elementary school performing arts curricula, emotional expression and awareness are key learning goals.

Music has long been considered as a means for emotional expression. There are many affective emotional norms in music – for example, major chords representing happiness and minor chords representing sadness. Other such norms include the relationship of slow and fast tempos to one's emotional perception of a piece of music, as well as the relationship between rhythmic patterns and basic emotions. These norms are understood both through cultural norms and research on the brain and human development. Research on the brain, for example, shows how emotional development is effectively achieved through listening to, and participating in, music. Such research even goes so far as to suggest that the emotional experiences related to music are on a deeper level than emotional experiences related to language and speech (Reimer, 2004). Furthermore, these connections between music and emotions have served as the basis for a major new field: music therapy. Music therapy uses clinically proven strategies of incorporating music activities – such as listening to music and making music – to improve therapist-patient relationships and to encourage the patient's continued opening up to their therapist. While music therapy does not typically take place in elementary schools, the notion that music allows individuals to "open up" is easily transferrable to elementary school curricula (Drossinou-Korea & Fragkouli, 2016). All of these emotional elements of music are primary targets of early music education, and therefore students quickly learn how to connect their emotional learning within the music classroom to other emotional experiences.

Just as listening to music is a fundamentally emotional experience, so is performing in a theatrical context. Perhaps the most basic use of theatrical material is to express and understand

emotions, especially given how often theatre attempts to capture the human experience. The lines in scripts are meant to be read with certain emotions and expressions, while studying characters within a script is all about understanding their motivations and their reactions, which are both definitively emotional measurements. Both improvised theatre and scripted theatre place a given number of individuals on stage and force them to share their emotions – with themselves, with each other, and with the audience. Thus, in the elementary theatre classroom, emotional discovery is one of the most important goals. Through theatre, younger students learn how to channel their emotions through activities, how to express emotions through language and comportment, and how to analyze the emotions of their classmates. All of this is summarized in Kevin Kane's piece about young students flourishing in a summer dance theatre program. Kane explains that the programs must recognize that each student is unique in their experiences, and furthermore they are all capable of reflection, initiative, and self-expression. These are all ways to increase emotional motivation and engagement in the program. By highlighting these characteristics of the students, Kane believes that these arts programs can be that much more transformational, and can encourage students to take ownership of their learning by believing in their ability to shape their own experiences. Theatrical programs should bring these qualities out in students, especially in a way that empowers the students to connect with their own personal experiences and perspectives, and with others' personal experiences, through story-telling and mutual creative cooperation (Kane, 2013). Thus, students of any age, including elementary school students, can gain invaluable exposure to practice in emotional expression, as well as opportunities for building emotional awareness, through their script and performance work in an elementary theatre classroom.

Finally, dance education is closely tied to emotional awareness and expression, especially because of how much emotion goes into dance-related movements and choreography. The extent to which dance education benefits emotional development, however, is unclear in the critical literature. For example, in 1993, Sheryle Bergmann wrote a piece in the *Canadian Journal of Education* challenging a piece by Colla J. MacDonald justifying the role of dance in elementary schools. MacDonald claimed that dance was important for elementary education because it allowed students to express inner emotions in unique ways through a freedom of movement. Bergmann expressed doubts about whether dance could actually achieve its emotional goals in a way that proves causation, and not simply correlation. And if it could, she then questioned whether dance was really the only subject that could achieve those goals (Bergmann, 1993). In response, MacDonald wrote a defense of her original argument, criticizing Bergmann's assumption that MacDonald did not have enough proof for her claims. MacDonald, who had years of experience in education, wrote that she has closely observed students find opportunities for emotional expression in elementary dance classrooms. She found that the energy, commitment, and concentration exerted in dance especially made the students' emotional experiences even more powerful. Ultimately, she stated, "Only those who have experienced creative dance can appreciate its physical, intellectual, and emotional impact" (MacDonald, 1993, p. 171).

This exchange of ideas demonstrates a similar kind of anti-arts-in-education argument to those mentioned in the first chapter, which ask why we need the arts if other subjects will achieve similar outcomes. With this in mind, it is important to remember that the artistic experiences through which the students gain these benefits are unparalleled in other areas of elementary education. Therefore, it is improper to conflate the benefits of arts education with

benefits of education overall. The arts have special learning outcomes that are their own. The findings MacDonald had are valid: elementary dance classes are indeed excellent opportunities for students to express their emotions in unique ways. Dance may be perceived as entertainment for students, but it can easily be used as a tool for increased emotional expression and self-awareness. This is because choreographed movement benefits cognitive-emotional development and provides students with new means of obtaining emotional intelligence (Bresler, 1992; Hanna, 2008). Through performing arts activities, elementary school students not only learn how to use music, theatre, and dance to express emotions, but they also learn how to contextualize emotional experiences, understand the emotions of themselves and others, and perform emotion in a well-regulated manner.

Cultural Understanding and the Performing Arts

Cultural understanding is a multifaceted concept. It might relate to learning about new cultures, as in the values and traditions of individuals from certain backgrounds or regions. In a broader sense, cultural understanding can refer to being able to understand different people's lived experiences and perspectives, and being able to effectively communicate and empathize with them. Cultural understanding could also involve literally placing oneself into another culture, through examining that culture's social and artistic norms. Finally, cultural understanding could refer to understanding how one should work within their cultural environment, including norms of societal behavior and group processes. For example, how to do we interact with one another, given our culture of democratic ideals? All these skills are connected by the ability to see things from multiple perspectives, and in the process coming to understand more about others and about oneself. Developing cultural understanding is especially important for children, because educational philosophy highly recommends that education

directly relates to the lived experiences of the students and their continued progression of understanding those varied experiences (Dewey, 1997; cited in Colley, 2012). Performing arts education curricula carry immense potential for improving students' cultural understanding in all of these areas.

When it comes to learning about other cultures, teachers should find ways to encourage students of diverse backgrounds to share their experiences and let their voices be heard. The performing arts are an excellent example of this type of practice, as they demand performance and engagement from their students. Therefore, scholars have pinpointed the performing arts as an excellent means by which voices can be given to students who are rarely heard (Colley, 2012; Hajisoteriou & Angelides, 2017). By giving these students voices, new opportunities for students' cultural understanding will arise by students listening to and watching each other express themselves through performance. This self-expression within performance also exemplifies how the performing arts can be used to help students both understand the perspectives of others and learn how to interact with those different perspectives. This type of thinking is known as "theories of minds." Theories of minds refers to the ability of a person to attribute mental states – such as beliefs, intents, and desires – to themselves, while also attributing those same mental states to others and recognizing the major differences in mental states between themselves and others. Before learning theories of minds, young students tend to be very self-centered in their thinking, and therefore find it hard to understand the variety of cultures and perspectives shared by their friends and peers. But, as scholar Liane Brouillette explains, "This enhanced social and emotional understanding enables children to better coordinate their own desires, needs, and interests with those of others as they develop a more

advanced theory of mind. Such coordination facilitates, in turn, the ability of children to collaborate in group activities" (Brouillette, 2009, 21).

So, developing a theory of mind is an essential prerequisite to expanding a student's cultural understanding. Brouillette explains that theories of minds are developed effectively in the performing arts, especially in drama. She observes that drama relies on students stepping into someone else's shoes and looking at life through a perspective that is different from their own. By viewing this different perspective, students can find new ways to explain people's behaviors with respect to their mental states and ideas (Brouillette, 2009). This expansion of theories of minds through arts education further prepares students to understand nuances in others' perspectives. For example, in participatory drama and dance, storytelling through words and through movement allow for common understandings from children to be revealed (Winston & Lin, 2015). In addition, music can be used as an effective means for encouraging students to think about others (Damm, 2006). Finally, through dance, children can explore and express their own and others' cultures, and share their stories in ways that create an increased connectedness between students (Melchior, 2011). Promoting theories of minds development among elementary school students through performing arts education further establishes students' cultural learning.

Finally, performing arts curricula emphasize teamwork and ensemble participation, which means that students gain valuable lessons about group dynamics and cultural structures for interaction through their arts education. One such overarching theme that students learn is how to live democratically with other arounds them. Scholars have found, "according to literature on democracy and education, essential elements in a democracy include participation and access for all, bringing different people together and making connections, interdependence, hearing all voices, creating empathy/valuing diversity, paying attention to interrelationships, movement,

change, and conflict, embracing ideological diversity, seeking and addressing injustice, and the freedom of speech" (Catalano & Leonard, 2016, 65). It is essential that students learn these skills, as they will positively influence how they will behave socially and politically. All of these skills are elements of cultural learning and cultural understanding, and the incorporation of these skills into education helps to encourage citizenship in students, as well.

Above, we have seen how the first half of the skills in this definition of democracy can be covered by performing arts curricula in elementary schools. However, the other skills can also be addressed through the arts. For example, when it comes to embracing ideological diversity and seeking and addressing injustice, the arts provide a valuable avenue for students to push social messages and ideas. For example, theatrical performances allow students to express social ideas both through action depicted on stage and lines that are spoken. This is what has led to the creation of a "theatre of the oppressed," in which the specific purposes of a theatrical production are to make the audience aware of situations involving social injustices or challenges (Landy & Montgomery, 2012). Theatre is also used in order to engage students initially in these social topics, so they can learn about them and then go on to reflect upon them in other theatrical activities (Gallagher, 2014). Music and movement are also media through which social messages can be shared in unique ways, and an emphasis on student composition in school curricula means that students are given these opportunities frequently. For all of these reasons, many artists have drawn a close connection between students participating in the performing arts and recognizing and understanding their own democratic culture. Through this growth in cultural understanding based on elementary performing arts curricula and pedagogies, elementary students can become better able to work in group contexts with others, learn about others' cultures, make connections

between one another, and recognize the importance of living democratically with each other (Neelands, 2009; Catalano & Leonard, 2016).

Creativity and the Performing Arts

One final intrinsic benefit of performing arts education is the development of students' creativity. The creativity that is developed is not just artistic creativity, but creativity in problem-solving and in forming ideas and plans. Creativity is unfortunately a skill that is often left behind in many modern education programs. When schools rely on "skill transfer" curricula, which focus on specific, measurable learning outcomes to determine student proficiency, they standardize the material learned and limit students' opportunities to come up with their own answers. Proficiency measurements also force teachers to teach with curricula and pedagogies that are entirely dedicated to teaching specific information in a highly standardized manner. Thus, the potential for teachers to introduce creative activities into the classroom becomes severely limited. However, when a constructivist curriculum is introduced, and students are given the opportunities to guide their own learning and determine their own growth, the inspiration for creativity increases dramatically for students. Creativity is essential for educating capable students who are able to think for themselves and problem-solve meaningfully in the real world (Sullivan, 2006). Thus, the performing arts, which are most likely to rely on constructivist curricula in modern education environments, are extremely effective at teaching creativity of all kinds. This arts-based creativity enhances divergent thinking skills and capabilities in originality for elementary school students (Sowden et al., 2015).

Performing arts classes encourage students' creativity by including activities that promote opportunities for students to create their own artistic projects. For example, in music classes, music creativity is taught through composition projects that develop students' abilities to express

themselves emotionally and socially through their musical creations (Shouldice, 2014). This creative outlet for students in music classes is not only an opportunity for pure creative potential to be realized, but also a constructivist opportunity for students to lead their own learning. Students become active learners through musical improvisations, including self-guided moments of playing instruments or experimenting with rhythm. Likewise, creating compositions, either in the moment or through a more collected writing process, improves students' confidence with participating actively in the classroom. Thus, through a constructivist curriculum in music that encourages creative behaviors, students' learning experiences become newly energized, which increases student confidence and engagement. This has led to the creation of many curricular models for music classrooms that prioritize the benefits of creative play and student-guided activities as tools for self-discovery and self-motivation (Arslan, 2009).

The same benefits of creativity are true for theatre and dance classes for elementary school students. Theatre classes give students opportunities to maximize creativity through improvisational activities. In these activities, students are given full control to imagine settings, characters, problems, and solutions. Even very young students show a clear affinity for theatrical improvisation through their participation in role-playing games, in which they imagine fulfilling the roles present in a restaurant or a doctor's office. These creative activities encourage thinking that is both divergent and adaptable – students must imagine perspectives and experiences other than their own through these instances of play (Niland, 2009). Likewise, this ability to adapt through improvised or scripted theatrical play helps students improve their creative problem-solving, as they must imagine solutions to problems that they are given or that they create for themselves (Brown, 2017).

Elementary dance classes are also a creative outlet for students. Though some dance class content is structured – such as learning specific dance patterns or routines – much of dance class allows students to experiment with their own creativity and variety of movement. There are opportunities for kinesthetic development and exploration, which encourages students to think about their own creative potential in highly beneficial ways. This development of creativity through movement also benefits cognitive development of creative skills (Bresler, 1992). Creative movement is not just useful for teaching creativity, but also for teaching skills in movement. By improving their physical movement through the arts, students can improve their reception and cultivation of those physical skills. The skills of being able to move freely and with purpose are meaningful even outside of artistic contexts, and tie in nicely with performing arts classrooms' creative learning goals. Ultimately, the performing arts place a premium on creativity, which is an important skill for students' early development.

Conclusion: Intrinsic Benefits and Best Practices

The continuously evolving curricula and pedagogies for elementary performing arts classes are increasingly embracing the intrinsic benefits of the performing arts for elementary education. While it is certainly beneficial to teach the arts specifically for the sake of the arts – for example, teaching music to inspire greater musicianship, or theatre to create stronger actors – this chapter has identified multiple other areas of development that are specifically targeted by performing arts programs, and which are important for the development of an elementary school student. Language and literacy are improved through increased opportunities through the performing arts to learn new language and speech skills, and to understand how to effectively express ideas and emotions through that language and speech. Emotional development is encouraged by giving students means through which to explore emotional expression and

awareness, within themselves and among others. Cultural understanding is addressed in a variety of ways by encouraging students to use their voices to express their perspectives and experiences, to use artistic activities to develop stronger theories of minds, and to transfer skills from ensemble work to skills in group dynamics and cultural participation. And creativity, a major skill that opens students' eyes to improved problem-solving and divergent-thinking skills, is a cornerstone of performing arts education, which prioritizes student discovery through self-guided activities of composition and improvisation. All of these skills, put together, develop a well-rounded student in ways that are inseparable from the best practices in elementary performing arts education.

Though this chapter, and this overall thesis, specifically focuses on these benefits insofar as they are found in performing arts education, it is important to note that they are benefits which can be found in visual arts education, as well. The creation of drawings, paintings, sculptures, and other artistic pieces through a visual art class also develops students' understandings of emotional expression, cultural awareness, and creative possibilities (Hetland, 2013). Indeed, the arts as a whole – both visual and performing – prioritize very similar learning outcomes. The focus on performing arts in this thesis is by no means meant to discredit the visual arts as a medium for well-rounded student learning. In addition, though this chapter and this thesis focus on the intrinsic benefits of arts education, as can be located in specific curricula and pedagogies of elementary performing arts programs, it is important to remember that the instrumental benefits of the arts within other subjects can also help students succeed. The literature that was summarized in Chapter 1 certainly frames the arts as an effective means for improving students' understanding of multiple disciplines, such as English, math, and science. Likewise, the instrumental benefits of the arts extend to improving overall student motivation and engagement

with their classes and with school itself. The instrumental benefits of the arts are worth studying and praising, but, as I explained in Chapter 1, the instrumental benefits of the arts are not as effective for defending the arts' important place in education. Thus, this chapter focused on fully describing the arts' intrinsic benefits, so as to demonstrate that there are skills available within the arts exclusively that encourage successful student development in elementary schools.

So, with the intrinsic benefits of the performing arts for elementary school students fully laid out in this chapter, it is time to consider the next question: how these benefits could especially help students with autism and other developmental disabilities have newfound success in their educational programs. In Chapter 3, I will define autism and describe the various areas of skills deficits that autistic individuals face in their development as students and persons. I will then consider interventions that have been used to help students with autism in the past and evaluate how those interventions attempt to respond to key challenges of autistic development. Once these terms, and areas of difficulty have been identified, I will have the information, and connections, necessary to complete my arts education and special education framework.

Chapter 3: Autism: Definitions, Deficits, and Interventions

Like many other developmental and mental disorders and disabilities, it is hard to come up with a definitive definition for autism. The Diagnostic and Statistical Manual of Mental Disorders' fifth edition (DSM-V), released in 2013, is the most recent attempt by psychologists and psychiatrists to establish criteria for evaluating individuals who might be on the autism spectrum. DSM-V defines autism spectrum disorder as having the following criteria:

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following: deficits in social-emotional reciprocity; deficits in nonverbal communicative behaviors used for social interaction; and deficits in developing, maintaining, and understanding relationships.
B. Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following: stereotyped or repetitive motor movements or speech; insistence on sameness and inflexibility with routines and patterns; highly restricted and fixated interests that are abnormal in intensity or focus; and hyper- or hypo-reactivity to sensory input or unusual interests in sensory aspects.
C. Symptoms must be present in the early developmental period (aka, early childhood).
D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.
E. These disturbances are not better explained by another disability, such as an intellectual disability. (CDC, 2016b)

This definition characterizes autism spectrum disorder as reflecting deficits in social interaction, deficits in interpersonal communication, and a tendency towards restricted and repetitive behavior for those who have autism (Boucher, 2009).

However, while this is the most commonly accepted definition of autism, it is informed by decade's worth of hypothesizing and theorizing about what autism is and how it should be classified. This evolution dates back to 1943, when scientist Leo Kanner offered a preliminary definition of autism based on his observations. Kanner defined autism as involving a lack of affective and emotional contact with others; an intense resistance to changes in routine; muteness or abnormalities in language; and superior memory and visual-spatial skills (Boucher, 2009). This was also the time when Hans Asperger of Germany observed similar behaviors and began referring to the series of deficits and strengths as Asperger's Syndrome (Howlin, 2010). However, Kanner, Asperger, and other scientists at the time also believed that autism was connected to other mental disorders, with some claiming a link to schizophrenia.

It took a few more decades for autism to be affirmed as its own specific disorder, which might be co-morbid with other disorders (especially social and mental disorders), but can also stand alone and cannot be equated to these other disorders (Mesibov et al., 1997). 1980 marks the first time that autism appeared in a DSM – it appeared in DSM-III as "infantile autism." Thus, criteria that attempt to accurately identify autism in children have not been around very long. In addition, the 1980s was when psychiatrist Lorna Wing, along with collaborator Judith Gould, both simplified the model of autism and suggested that autism existed on a spectrum of abilities, rather than in simple subtypes (as a DSM definition might suggest). Wing and Gould determined that the deficits associated with autism were easily grouped in three categories: communication, socialization, and imagination (Prior & Ozonoff, 1998). These simplified categories influenced the DSM-IV definition, which explicitly used Wing and Gould's three categories as distinct groups where certain measurable criteria might fit (Reed, 2016). In addition, Wing and Gould's description of autism as a spectrum became highly influential in

autism research and theorization, and autism today is fully understood to be on a spectrum and is now most commonly referred to as “autism spectrum disorder.”

While theorizing about autism spectrum disorder and its associated deficits has evolved significantly since the mid-1940s, it is still important to remember that autism is not just one specific set of criteria. Instead, autism manifests itself in vastly different ways across people, and also across age, extending far beyond childhood into adulthood (Mesibov et al., 1997). In addition, while manifest behaviors might seem to fit under a definition of autism, it is important not to rely solely on these manifest behaviors in forming a diagnosis, as behaviors present in those with autism might also be present in those with other disorders, or even those who are “typically-developing” (Boucher, 2009). The individualistic nature of autism makes it especially difficult to qualify under one definition, and any definition has to risk either being too broad and accidentally including those without autism, or being too limited and leaving some with autism out because they do not demonstrate particular behaviors. Thus, while the DSM-V’s criteria are indeed helpful, they do not create a perfect picture of autism.

Furthermore, the evolution of understanding the deficits of autism has not yet translated to a meaningful identification of effective intervention strategies for individuals with autism. This is not to say that intervention strategies have not been considered. On the contrary, at the theoretical level, scores of interventions have been proposed, and justifications for those interventions have been created to show how they would effectively address the skills deficits present in those with autism. However, on the evidence-based level, many of these interventions have never been tested, and those that have been tested have either struggled with inadequate experimental models or results that cannot be universalized. Thus, there is a long way to go in understanding effective interventions in those with autism. In this chapter, I will delve deeper

into the specific deficits frequently present in those with autism and will discuss how they relate to the three basic categories of communication, socialization, and imagination. Then, I will consider some prominent intervention strategies that have been suggested for those with autism and analyze them at a theoretical level to see what they are attempting to accomplish and how.

Defining Terms: Deficits or Disorders?

In the introduction, I referred frequently to the skills deficits present for individuals with autism. However arbitrary the term "deficits" may seem, it relates to a major debate, especially in the public realm, about how we should refer to those with autism. In general, this debate has two sides: should we refer to challenges associated with autism as deficits, suggesting that they are just representative of different levels of ability, as exist in any person; Or should we refer to these challenges as parts of a disorder, separating autism from simply being "different" and instead suggesting it is more scientifically significant. The "deficits" side argues that the "disorder" side is too stigmatizing of those with autism, while the "disorder" side believes that the "deficits" side is not treating the fundamental problems of autism seriously enough. Choosing which way we as a society think about autism is incredibly relevant to what strategies we choose to implement to help those with autism. Speaking to the relevance of this debate to intervention strategies, professor Jill Boucher, who wrote the comprehensive book *The Autistic Spectrum: Characteristics, Causes and Practical Issues*, explains that we must consider for whom the interventions are designed, and what they are meant to be doing. And it is impossible to do that if we do not consider the perspectives of those with autism as much as we can (Boucher, 2009).

In fact, articulate individuals with autism, typically high-functioning, are some of the most vocal participants in this debate. Individuals with autism have acknowledged that being "different" can have its own advantages. They take a more positivist view by suggesting that the

deficits autistic people face do not prevent them from living a full, happy life, and that improving these deficits is possible, and is constantly happening (Boucher, 2009). In addition, they see themselves as being much smarter than people typically assume. They acknowledge that sometimes their lack of communication or socialization skills makes it hard to express this to others. But studies have indeed shown that individuals with autism have the capacity to be very skilled in areas such as rote memorization, visual-spatial analysis, and general expertise on certain subjects. This expertise in certain subjects is a positive side effect of the more obsessive, restrictive behaviors associated with autism, which often involves someone with autism being hyper-attentive towards one subject, such as vehicles or animals, and gathering large amounts of information about that subject. Plus, some people with autism may be defined as savants, who are exceptionally and often abnormally talented or skilled in one or many activities. This has led some to suggest that we should treat those with autism as competent and intelligent individuals, even if they might not respond or interact properly when we treat them as such, which would ultimately improve their quality of life (Hussman, 2013).

This is just one of many ways that those with autism who speak up about autism's characterization attempt to break through stigmatization, which they believe comes with the identification of autism as a "disorder." Another way they do this is by questioning the reasons for why everyone thinks about "difference" so negatively. For example, one adult, female blogger with autism wrote on her autistic-experience-centered blog, *Seventh Voice*, about how her behaviors at her local grocery store are so looked down upon, because she prefers to pay with cash instead of with a credit card. She ponders, "I wonder why it is, that just because I do things differently, I'm often automatically seen as doing things wrong, or in the wrong way…[it] seems to be a default position for some people" (Seventh Voice, 2016). This false equivalence between

"different" and "wrong" is damaging for all individuals who have behaviors that stray from the status quo.

At a 2010 seminar about whether autism should be considered a difference or a disorder, professor Simon Baron-Cohen of Cambridge described a new term that is frequently being used by the autistic community to describe themselves – "neuro-atypical." The counter-term for this, of course, is "neurotypical." Rather than using the more stigmatizing term "disorder," these two terms suggest that the only difference between those with autism and those without is in the normality of their behaviors. Baron-Cohen compares this debate to the fact that some used to associate being left-handed with negative psychological effects. Now, however, being left-handed is just seen as slightly different from being right-handed. This kind of simple, non-problematic difference is what those with autism want to see (Baron-Cohen, 2010).

However, as much as many individuals, especially those with autism, may desire a transition away from the term "disorder" in order to remove stigmas, those on the "disorder" side think it is a necessary term to use. At the same seminar at which Simon Baron-Cohen spoke, another professor, Patricia Howlin, argued in defense of referring to autism as a disorder. Her presentation centered around two arguments that she sees as truths. First, referring to autism as a "difference" suggests that society can ultimately come around to accepting it as one. But as we can see from the fact that this debate exists, typically-developing individuals do not see autism as just a difference. Thus, the stigma is almost inevitable because of how society imagines those with autism, and therefore "disorder" is more acceptable to use because it more accurately describes autism and the elements associated with it. The second point for which she argues is that calling autism a "disorder" is necessary for obtaining funding and services to encourage the improvement of the lives of those with autism. She argues, "Particularly in times of economic

pressure, those labelled as just being a bit different are unlikely to obtain help compared to those who more clearly show that they have a disorder" (Howlin, 2010). The term "disorder" certainly carries with it a lot of medical baggage – suggesting a need for treatment, for focused attention, and perhaps even a need for a cure. The term "difference" just does not carry that same weight. Howlin's arguments are two of the most significant on the "disorder" side of the debate, but there are others. For example, some caretakers and mentors who have experience with people with autism think that "deficits" and "differences" do not adequately explain the condition well enough. Especially when it comes to low-functioning individuals with autism, who might show significant amounts of aggressive, uncontrollable, and abnormal behaviors, it can be hard to think of autism as anything but an obtrusive "disorder" (Howe, 2014). Baron-Cohen even admits that for those with low-functioning autism, perhaps "disorder" or "disability" are the best terms to use to define their situations (Baron-Cohen, 2010).

In a way, the debate could be summarized as an idealistic side versus a pragmatic side. The "deficits" and "difference" side is idealistic, in the sense that they truly believe that autism does not bar people from leading successful lives, developing the skills they lack, and expressing other strengths and talents. They do not want these benefits weighed down by having to use the stigmatizing term "disorder." On the other hand, the "disorder" side is pragmatic, recognizing that there is legitimate disappointment with the use of the term, but believing it must be used anyway to accurately reflect the condition and the resources required for it.

For the sake of consistency in this chapter, I am picking the "deficit" and "difference" side of the debate. Convincing society to think about people with autism as smart, valuable, and capable of success and improvement revolves around the use of the more normalizing terms: "deficits" and "differences." Every person experiences skills deficits in some areas, and every

person faces various levels of difficulty with building up the skills they lack. Likewise, every person is different. This is not to say that autism does not carry its own patterns of deficits, which in some cases might be more extreme than they are for typically-developing individuals. Instead, it is meant to show that people with autism can learn and grow, rather than simply being stuck with an unmanageable "disorder." In addition, I think that interpreting autism as another form of deficits is effective in educational environments. I am especially influenced by the work of Alan Gartner and Dorothy Kerzner Lipsky (1987) that revolves around rethinking special education. Gartner and Lipsky argue that the stigmatization of special needs and disabilities in societies has placed them at a significant educational disadvantage. The stigmatization has led to them being denied respect and autonomy, and has led to teachers having low expectations about their potential for success, thus negatively affecting the programming that is offered to them. They propose that society must evolve to combine students with and without disabilities into one category with variations, rather than two distinct categories that each require their own distinct funding, services, and environments, if they hope to improve opportunities for special education (Gartner & Lipsky, 1987). For all the reasons advocated by those with autism, and because it directly relates to an improved perspective on special education, I will refer to the challenges associated with autism as "skills deficits" throughout the rest of this chapter and thesis.

Deficits in Autism: Communication, Socialization, Imagination

The DSM-V definition of autism attempts to summarize the criteria for diagnosing autism in as manageable of a way as possible. However, the DSM-V definition, as with any definition, necessarily fails to account for all of the skills deficits that those with autism might experience. As aforementioned, this failure of definition is not a major problem – if the definition was too specific, it might risk leaving some individuals who have autism out. However, given that such

definitions can only do so much, this section will attempt to cover a much broader list of skills deficits associated with autism. Just as in the DSM-IV and Wing-Gould definitions, and, to some extent, the DSM-V definition, I will group these deficits into three areas: communication, including language and speech; socialization, including emotional and social interaction; and imagination, including inflexibility, a lack of creativity, and a failure to put themselves in others' shoes. Though these deficits might appear in various amounts and levels in different autistic individuals, they are all deficits that are relevant to personal development, which can be addressed in the framework through being paired with the benefits described in Chapter 2.

Communication: Language and Speech – Semantics and Pragmatics

While the original Wing and Gould definition of communication includes language, deficits in language are noticeably lacking in the DSM-V definition of autism. However, language impairment is frequently associated with autism. This might be because of co-morbid issues such as hearing challenges or difficulty focusing. However, many see it as connected to instances of impaired sequencing and information processing, as well as difficulty using symbols or processing certain kinds of information related to language (Boucher, 2009). In addition, the amount of knowledge about language and speech possessed by individuals with autism varies greatly from high-functioning autism to low-functioning autism. This is true of other elements of autism, but the ability to use language is perhaps the most variable deficit (hence a reason it may not be a part of the DSM-V definition). But autism is a spectrum, and it is not always easy to separate low-functioning autistic individuals from high-functioning ones. So, these language and speech deficits might be present in any individual with autism, meaning we should examine the deficits holistically. In general, deficits involving language and speech can be split into two

categories: semantics, which involves the understanding of language; and pragmatics, which involves the functional use of language.

When it comes to semantics, one of the most fundamental challenges associated with autism is a general incomprehension of language. Some people with autism have extremely limited vocabulary, and some may not even use their entire vocabulary with any regularity (Mesibov et al., 1997). When it comes to conversations, even if an autistic individual has vocabulary, they often find it hard to summon that vocabulary during the conversations (Mesibov et al., 1997). A lack of vocabulary also correlates with a lack of grammatical complexity. Many people with autism tend to speak in simple phrases, while longer sentences might be full of grammatical irregularities. One such example of this is pronoun reversal, where an autistic individual might say "you" when they mean "I," and vice versa (Happé, 1994). Likewise, there is often an inability in those with autism to understand abstract language and its use. For example, abstract words and ideas are often difficult to comprehend. Concepts such as "I want," "I need," and "I wish" can be difficult for individuals with autism to access, especially when it then comes to connecting such abstract ideas with more literal language, as in phrases such as "I want the ball" (Prior & Ozonoff, 1998). Similarly, autistic individuals will often be able to learn certain phrases, but then will not be able to reassemble that language to create new phrases. If an autistic individual knows the phrases, "It's time for X" and "I want Y," they might never use the phrases "I want X" or "It's time for Y," because their knowledge of abstract language is perhaps accessible only insofar as it is connected to a specific phrase of object (Boucher, 2009).

In addition, when it comes to how individuals with autism interact with language to which they are exposed, there are two opposing problems of imitation that have been observed. On the one hand, individuals with autism, especially at earlier ages, may demonstrate little

ability to imitate words or phrases. They also might fail to imitate simple sounds, articulations, and elements of speech (Prior & Ozonoff, 1998). This may relate to both a lack of language and a difficulty with learning new language. However, on the other hand, many individuals with autism perhaps rely *too* much on imitation when it comes to their understanding of language. This results in a pattern of behavior called echolalia, in which specific words and phrases are repeated in the place of self-created language. Whether these words and phrases come from previous conversation or from television shows or movies, autistic children sometimes rely on these phrases as substitutions for language development. In fact, these phrases may still be used days or weeks after having the conversation or viewing the entertainment that inspired the phrases in the first place (Mesibov et al., 1997). Though echolalia can be seen as a compensation for poor language skills, some do not see this as a bad thing. Some believe that echolalia can be considered a legitimate form of communication, especially because the pragmatic use of these repeated words and phrases is frequently appropriate for a given context. For example, a repeated phrase about sadness might be properly inserted in a moment of sadness for an individual with autism, making echolalia a legitimate means of communication (Mesibov et al., 1997). Ultimately, both a lack of imitation or an excess of imitation are variants on the language semantics deficits related to autism.

All of these semantics deficits translate to similar deficits that autistic individuals have in the pragmatic use of language. The pragmatic use of language occurs primarily in conversations with others, though it might also include one-sided requests such as expressing wants and needs (which, as reflected above, are also a challenge for those with autism). Thus, language difficulties are inextricably linked to social impairments in people with autism (Happé, 1994). One of the first possible problems related to the pragmatic use of language is whether an

individual with autism will use their language pragmatically at all. There is a noticeable trend of mutism in children with autism, whether it is total mutism that bars them from speaking at all, or selective mutism that bars them from speaking in certain environments (Prior & Ozonoff, 1998). Those who are not mute, however, might have significant trouble being understood. Some autistic individuals have abnormalities of prosody: their pitch, intonation, and stressing of sounds can be negatively affected, thus leading to a difficulty in saying certain words or phrases, or slurred or monotonous speech that might be hard for listeners to decode (Happé, 1994).

Even if someone with autism is not mute and is able to speak in an understandable manner, there are many conversational deficits relevant to autistic individuals. Gary B. Mesibov, Lynn W. Adams, and Laura G. Klinger provide four major reasons why individuals with autism fail to have effective conversations. First, the autistic individual might simply ignore the other person in the conversation, thus leading to a one-sided conversation that the autistic individual is monopolizing. Second, the autistic individual might have difficulty changing topics in the middle of a conversation because they are hyper-focused on the topic that is being discussed, and a topic shift is more of a jarring experience for them than it might be for others. Third, the autistic individual might choose to shift the conversation at inappropriate times, in a way similar to ignoring what the other person is saying. The topic shifts may be more comfortable for the autistic individual if they themselves are the ones prompting it, and it also may be bringing them to topics they are most interested in discussing. Finally, the autistic individual might interrupt a conversation not by changing the topic, but by introducing irrelevant details, or demonstrating instances of disruptive echolalic repetition of phrases. All four of these behaviors combined translate to deficits in conversation-making and conversation-maintaining that are present in those with autism (Mesibov et al., 1997, p. 66-68).

This list of language and conversation deficits is certainly not exhaustive, nor will any of the lists in this chapter be. Autism is such an individualistic disorder that someone with autism could show all of these behaviors, and someone else with autism could show none of them. However, it is important to note that a lot of these communication deficits happen in conjunction with each other. This is especially true of the semantics deficits, because those who struggle with the semantics of language will also probably struggle with practical conversations because of their lack of language skills (Boucher, 2009). Thus, all levels of communication – from the words and phrases used, to the ability to form proper sentences and speech patterns, to the ability to maintain a productive conversation – face deficits in most cases of autism.

Socialization: Social-Emotional Awareness and Interaction

Autism Spectrum Disorder is often considered to be primarily a series of social deficits. This is reflected in the first part of the DSM-V definition, and social criteria also play a major role in the Wing and Gould model. In fact, the original Wing and Gould model defined the triad of social impairments in those with autism as "social interaction; social communication; social imagination and creativity" (Wing and Gould, 1979, in Boucher, 2009). The terms for the model were later simplified, but these original terms demonstrate the significance of social implications for one of the most influential definitions of ASD. Challenges in social interaction for those with autism range from difficulties maintaining relationships with other people to issues with sharing feelings and thoughts with others. In addition, inseparable from the social deficits someone with autism faces are the deficits in emotional awareness and expression they face. Without a proper grounding for processing and using emotions, the potential for meaningful social interactions is significantly hindered. Thus, when considering deficits in socialization for those with autism,

one must consider the emotional as well as the social, creating a social-emotional model that connects and correlates many deficits.

Individuals with autism often show difficulties with emotional expression from an early age. Much as with language, infants with autism often struggle to express emotions in ways that typically-developing infants often do. For example, infants with autism will often fail to make meaningful "emotional touch," such as embraces or hand touches, with others – most notably with caretakers, whom infants often form the closest emotional bonds with (Prior & Ozonoff, 1998). A lack of emotional touch suggests an early form of social-emotional isolation, which becomes a bigger trend in individuals with autism as they get older. Furthermore, infants with autism struggle to imitate some emotions performed for them by others and have difficulty reading emotions based on others' expressions or body movement. For instance, at the age where typically-developing children can reasonably be expected to match facial expressions with emotion-related words, autistic children are unable to make these matches. When asked to sort people's faces, autistic children will more often sort based on clothing or facial features instead of the emotions on their faces (Mesibov et al., 1997). Despite this, however, the experiencing of basic emotions is still present in those with autism, and, in fact, people with autism will often display emotions in heightened ways, through such things as excessive laughing or crying. In addition, as individuals with autism grow, their ability to imitate emotions dramatically increases, to the point where autistic individuals show tendencies to pick up and embody the emotions of others. For example, an autistic student might pick up a signal of nervousness from a teacher or caretaker, and in turn they might become more nervous themselves (Boucher, 2009).

As children with autism grow up, one of the biggest emotional deficits they face is a lack of empathy. Individuals with autism do not understand the emotional experiences of those

around them, and therefore find difficulty connecting or interacting with others on an emotional level (Prior and Ozonoff, 1998). The specific cause of this deficit is not entirely clear, but it more broadly might relate to the lack of emotional awareness those with autism face. Though they might imitate emotionally-driven behaviors they see in others, as referenced above, that does not necessarily correlate to empathy. Instead, difficulties in emotional perception and understanding may extend much deeper, and may make more complex emotional interactions very difficult. In other words, an individual with autism's inability to understand their own emotions might directly relate to their inability to understand others' emotions (Boucher, 2009). A lack of empathy may also relate to the difficulty those with autism have in sharing their emotions with others, especially with caretakers (Mesibov et al., 1997). Issues revolving around empathy play a significant role in the DSM-V definition of autism, since two criteria in the definition are a lack of social-emotional reciprocity and a difficulty understanding relationships with others. Overall, an empathic deficit in those with autism represents a major challenge with their developing emotional awareness, which in turn affects their emotional expression.

These difficulties with emotional awareness and expression lead right into many of the social deficits that those with autism are likely to experience. The DSM-V definition highlights two major social deficits – difficulty with forming relationships and difficulty with maintaining relationships. When it comes to the difficulty with forming relationships, those with autism are often very self-isolating. For some, this self-isolation might be caused by a lack of recognition of the importance of building relationships. Such individuals with autism might simply be more aloof and indifferent to developing relationships with others, and are just as satisfied being alone (Prior & Ozonoff, 1998). For others, however, the self-isolation is more troublesome. Some people with autism would like to develop relationships with others, but either do not know how

to, or are not willing or able to put in the focus or effort required for a relationship (Happé, 1994).

And for those who do ultimately form relationships, it can be very hard to maintain them effectively because of other autism-based deficits. Issues with language means that they may have trouble holding conversations, either because of verbal capabilities or because of abnormal conversational behavior, such as interruption. Issues with emotion make it hard for those with autism to have the empathic connections one would expect between two friends or companions. These deficits, combined with one another and along with others, make reciprocal social interaction difficult. This is not only true of one-on-one relationships, but also of group relationships. Assimilation into a group of people, even with a shared mission or purpose, can be hard for someone with autism because of their many deficits in social-emotional interaction. An inability to function well in groups in turn creates challenges for those with autism in many settings, from school to work to public places. Thus, the combination of social and emotional deficits severely limits the potential of autistic individuals to find success in interpersonal and group relationships that are vital to a meaningful life.

Imagination: Creativity, Repetition, and Theories of Minds

When considering the relationship between intelligence and autism, it is important to note that being on the autism spectrum does not automatically equate to a lower level of intelligence. While some studies have suggested that autism might be connected to lower IQ, and others have pointed to difficulties with abstract and interpretive thinking in those with autism, it is generally understood that autism spectrum disorder is not a learning disability, and not necessarily an intellectual disability. People with autism can still be incredibly smart, and many with autism have especially strong memorization capabilities (Prior & Ozonoff, 1998). Even though one may

find both autism spectrum disorder and a learning disability in some individuals, the correlation here does not imply causation. Instead, deficits in mental processing for those with autism are related to areas that extend beyond just intelligence levels. Common "imagination" – in other words, mental - deficits for those with autism revolve around a lack of creativity, a trend towards repetition and routine, and an inability to consider perspectives other than one's own.

Creativity, especially in the form of creative play, is expected in typically-developing children. It is expected to be presented in the forms of reality-based play, where children pretend they are in a restaurant, a doctor's office, a home, etc; or fantasy-based play, where children create made-up worlds and characters with which to interact. However, one will not find a tendency towards creative play in many children with autism. Some think this is because individuals with autism might have more of a preference for facts and tangible things, instead of fictional creations (Happé, 1994). Others think that it is related to challenges of executive function, specifically with regards to cognitive flexibility, which allows individuals to look at things in more than one way (Boucher, 2009). For whatever reason, autistic children demonstrate a striking absence of spontaneous and imaginative play. They also have trouble entering imaginatively into a story, especially one that is not of their original creation (Boucher, 2009). In addition, when they do enter a creative environment, their contributions and creations will often be repetitive in nature. They might perform the same actions with the same items every time they enter a given creative environment, even if others around them are attempting to do something completely different. In other words, autistic children will participate in creative play repetitively, and without consideration of the contributions of others (Prior & Ozonoff, 1998).

Beyond the repetition found in creative play, individuals with autism often are inflexible when it comes to changing routines or patterns. On the one hand, this could be seen as a strength

– individuals with autism tend to be very organized when it comes to using their time and completing their tasks. However, this lack of flexibility is often seen as a burden, especially as it relates to a lack of creativity (Reed, 2016). The constant repetition of routines is comfortable for individuals with autism, while a change in routine is especially troubling. Because of this, individuals with autism often lack motivation for trying new activities, since they might interfere with their comfortable, pre-determined routines (Prior & Ozonoff, 1998). The excessive amount of repetitive behavior in individuals with autism, paired with a relatively low amount of creative behavior, account for one of the largest imagination deficits for those on the autism spectrum.

One other major imagination deficit for those with autism relates to something known as theories of minds. As was discussed in Chapter 2, having theories of minds is defined as being able to understand the beliefs, understandings, and perspectives of others. Some refer to it as the ability to "mind-read." Multiple studies have suggested that most autistic children lack these theories of minds, and therefore struggle with "mind-blindness" – an inability to comprehend that others think differently than oneself. One groundbreaking study on this deficit was performed by researchers Simon Baron-Cohen, Alan M. Leslie, and Uta Frith in 1985. In their experiment, children with and without autism watched a puppet show, and saw one puppet hide a marble in a certain spot in the room. Once the first puppet left, a second puppet came in, took the marble, and hid it in a new location. The first puppet then returned, and the children were asked where the first puppet would go to look for the marble. The majority of typically-developing children successfully identified that the puppet would look in the first hiding location, since the puppet would be unaware the marble had been moved. However, the majority of children with autism said that the puppet would look in the marble's new hiding location, seemingly failing to understand that the puppet did not know what they knew. Ultimately, Baron-Cohen, Leslie, and

Frith took the results of this experiment to be proof that children with autism do not develop sufficient theories of minds – they were not able to understand that the first puppet would be thinking differently than they were (Baron-Cohen et al., 1985, in Happé, 1994).

The theories of minds deficit has become quite influential in autism research, with some even believing that this deficit could be a single cause for all other deficits associated with autism. Leslie theorized that the "mind-blindness" that results from a lack of theories of minds makes it difficult for those with autism to build relationships, since they are unable to understand others emotionally and socially. Leslie adds that this inability to "read" the minds of others might also make those with autism confused, leading to their withdrawal and their difficulties with communication (Leslie, 1987, in Prior & Ozonoff, 1998). Frith thought that deficits in mentalization led to problems of motivation, experience, deception, and expression – all of which directly relate to the verbal, social, emotional, and imaginative deficits discussed thus far (Frith, 1992, in Happé, 1994). However, others struggle to accept a theories of minds deficit as the singular cause of autism. For one, though it is a deficit found in many individuals with autism, it is not found in *all* individuals with autism, at least not to the same levels. In addition, theories of minds deficits can be found in individuals without autism, making it hard to suggest that it is sufficient for identification on the autism spectrum. Finally, some do not think it truly can explain all other deficits that might be found in those with autism, especially deficits in language and emotional processing (Boucher, 2009). However, regardless of whether a theories of minds deficit plays a crucial role in autism overall, it is still absolutely a major deficit in imagination and mental processing.

Interventions in Autism: What, Why, and How?

Since there are so many deficits that might potentially occur alongside autism, and since so many of those deficits severely limit these individuals' abilities to build relationships and find success, discovering intervention strategies for those with autism has become a major focus of autism research. Some interventions target broader deficit categories related to autism, while others focus on developing specific skills. However, despite there being an overwhelming amount of theorizing about interventions for autism-related deficits, no intervention has been found to be definitively effective. There are many reasons for this. First, it is hard to conduct meaningful research that could scientifically prove the validity of a given intervention. This research is difficult for many reasons. The best subjects for effective research would likely be autistic children – and it is hard to obtain consent from this population. In addition, most intervention strategies are intended to take effect over a long-term period, which means a study would have to take a similar amount of time. These studies are costly in money and time, and participants in such studies are even harder to recruit, further adding to the complications surrounding getting consent in the first place. Finally, even if studies do manage to get enough subjects, and spend enough time as the intervention requires, it is still incredibly difficult to measure the results of interventions. Some results might simply be based on correlation – related to a confounding variable, such as the subjects naturally developing with age or having other experiences outside of the specific intervention. Other results might not be sustainable once the intervention ends – if a skill is only developed effectively when the intervention is happening, and that development starts reversing once the intervention ends, the intervention might not be seen as having the same effectiveness.

Furthermore, even if a successful study conducted on an intervention, with appropriate subjects and times, was able to show promising, causal results, that is not enough to be able to universalize it for overall application. Since autism is on a spectrum, and every individual with autism is different and faces various deficits and various levels of intensity, it is likely that there is no one intervention that will help everyone with autism. And since no one has identified a singular cause for autism yet, there is no clear singular area that an intervention should target. All this is to say that there is no agreement on what kinds of interventions would be most effective. This issue is especially problematic for any intervention that is considered "comprehensive." For an intervention to truly be comprehensive, it must be capable of being the only form of intervention provided for an individual, and it must be used to encompass multiple different areas in need of intervention across multiple different types of individuals. This is further complicated because interventions are typically individualized and are not always meant to be universally applicable. Because autism, and its deficits, are so individualistic in presence and intensity, it is increasingly difficult for any intervention to meaningfully claim that it is "comprehensive" for any individuals with autism (Reed, 2016).

Thus, on top of all of the barriers related to researching interventions into autism, there are even more obstacles that await in trying to recommend a given intervention strategy for all individuals with autism. This might explain why there are no autism-focused intervention strategies that have been absolutely confirmed as effective, despite countless studies (Reed, 2016). My intervention suggestions, like those of others, must be recognized as theoretical. That being said, my examination of interventions within this chapter will focus less on their scientific validity, and more on a brief overview of interventions from the theoretical perspective. For each broad category of intervention strategies – behavioral approaches, environmental approaches,

and developmental approaches – I will describe the goals they are looking to accomplish and how they go about accomplishing those goals. While this theoretical overview avoids having to provide proof of effectiveness, it shows trends and data points across multiple intervention types. And while there may not be agreement on which specific interventions could be most effective for individuals with autism, there is much agreement across intervention types about the "what" "why" and "how" of helping address skills deficits in individuals with autism.

In this overview, I will be sticking to the non-physical intervention strategy categories outlined above. There are physical interventions – including biological and medicinal ones – that are worthy of examination, but because the intervention strategy I am suggesting is a non-physical one, it is important that I examine trends among other non-physical interventions. This is especially true because non-physical interventions address different areas of development, and do so in a way that allows for more individualized attention (Boucher, 2009).

Behavioral Interventions

Behavioral interventions seek to address skills deficits, or categories of skills deficits, through patterns of drilling and practicing. Behavioral interventions are sometimes preferred because they can focus more on individual deficits through specific training. In many cases, the skills that behavioral interventions seek to address are ones in which the individual with autism is deficient. However, in some cases, behavioral intervention might be used to stop problematic behaviors that are demonstrated by individuals with autism. In these instances, behavioral intervention appears to be primarily focused on creating socially-acceptable behavioral patterns in individuals with autism, therefore improving their social standing and their ability to adapt to other communities (Harris, 1998). Some behavioral interventions might be highly individualized based on what certain individuals with autism require, while others focus on broader strategies

for addressing behavioral categories. By focusing closely on building certain skills, behavioral interventions are meant to achieve strong, consistent improvement and accomplishment in one given deficient category.

The broad strategies used in behavioral interventions often revolve around some sort of standardized and repeated engagement of the skill in question. For example, a behavioral intervention might have a student working throughout the week in small blocks of time, completing trials and drills that are targeted at developing the skill in question. The drills will often involve the production of a task, the performance of that task, and a consequence based on the accuracy of the performance. Good behavior shown during these drills is then often reinforced positively, perhaps through rewards (Reed, 2016). Within this broad intervention strategy, there is a lot of space for individualization. Some behavioral intervention strategies focus on one skill at a given time, but incorporate many skills into the overall intervention program. Others, however, might focus very closely on one skill and a multi-faceted development of it. This might include such skills as language, emotional expression, and normative behavior that avoids aggressive behaviors. While various behavioral interventions might hope to achieve many ends, their means of using drills, regimented training sessions, and consequence-based reinforcement remains mostly constant across them all (Reed, 2016).

Environmental Interventions

While behavioral interventions use strategies that target specific skills, environmental interventions attempt to address deficits more holistically by recommending changes in the environments in which interventions, or intervention-like activities, are administered. Primarily, environmental interventions are focused on educational settings and how classroom experiences can be improved to more effectively cater to the development of students with autism. The

theory behind environmental interventions is that modifying classroom experiences to match the learning styles of students with autism allows them more opportunities to acquire skills. In this sense, environmental interventions can complement behavioral interventions, because by improving the environments in which behaviors are taught, they can more directly reach students with autism and encourage their growth. Environmental interventions rely on the central idea that a classroom should cater to the individual needs of all of the students in it, and all students are benefited by experiencing an inclusive education where individual needs are met in this way. Thus, in order to improve the likelihood of successful skills development for individuals with autism, environmental interventions emphasize the need for the educational and interventional environments themselves to be intrinsically beneficial (Reed, 2016).

Different environmental intervention strategies prioritize different environmental modifications, all with the same purpose of increasing the likelihood of autistic students' growth. In his comprehensive review of interventions for autism, professor Phil Reed describes three major environmental interventions – which he identifies as major because they have been frequently implemented and researched. The first is the Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) program. This program, first created in 1971 and modified since, prioritizes the need for accepting differences in students and developing individualized strategies for addressing the students' needs. The TEACCH model places a special focus on the physical layout of the classroom, specifically emphasizing the significance of visual representations of routines and schedules. Routines in classrooms are effective because they accommodate an autistic student's need to understand their schedule and maintain a sense of consistency and security. The TEACCH model also encourages teachers to

include multiple different teaching media in their lessons to accommodate various learning styles. This allows students to feel empowered in the classroom (Reed, 2016).

Reed's second environmental intervention is the Learning Experiences and Alternative Program (LEAP). This program, primarily aimed at preschoolers but applicable to all students, places the most emphasis on the benefits of an inclusive classroom. LEAP argues that inclusive educational settings are highly beneficial because students with autism can learn academic and social skills not only from their teachers, but also from their typically-developing peers. Likewise, typically-developing peers can benefit from inclusion, as interaction with individuals with autism helps to destigmatize autism for those who might have preconceived notions of what it is. The LEAP program also encourages reinforcement strategies similar to behavioral interventions, but they think that such reinforcement should come from observing unforced actions, rather than coming from trials and drills. Finally, LEAP, like the TEACCH program, encourages a holistic teaching strategy that addresses all relevant deficits and areas of development, both in the classroom and at home.

The final environmental intervention Reed describes is Daily Living Skills Therapy, also known as the Higashi model. The Higashi model makes specific recommendations about what activities should be implemented in classrooms to have the maximum benefits for autistic students. This model recommends activities that involve the physical creation of some product: for example, activities in music, dance, and visual art. It also recommends group activities that will encourage students with and without autism to interact with each other, develop emotional skills, and create socially beneficial relationships (Reed, 2016). Whether the interventions involve classroom modifications, teaching strategies, or activity suggestions, environmental

interventions are intended to make educational experiences more accessible and beneficial for students with autism.

Developmental Interventions

There is one major similarity between behavioral interventions and environmental interventions – they involve a more "top-down" model of intervening with autistic individuals. In behavioral interventions, caretakers or specialists run the trials and provide the positive or negative reinforcement. In environmental interventions, it is up to teachers and special educators to reform classroom spaces and experiences to better cater to all of their students, with and without autism. While these interventions certainly have their merits, some wonder whether interventions for individuals with autism should be more "bottom-up" in nature. In other words, should interventions be informed by how individuals with autism actually behave, rather than how we want them to behave? And should these interventions be more subject-informed than they currently are? Some argue that "top-down" interventions may fail because they do not consider the subjects closely enough. Even if the interventions are individualized, some believe that they still carry certain assumptions about how individuals with autism should behave, and how they can best be helped – assumptions which might not hold up for all autistic individuals when put under scrutiny (Boucher, 2009).

In response to this, developmental interventions have been created that more closely focus on the interventional lessons that can be learned from the subjects themselves. As Reed explains, "The advocates of developmental approaches tend to assume that a child's learning is driven by complex and dynamic processes, chiefly involving interactions between the child and their environment…As a consequence, these approaches often attempt to promote and enhance relationships between parents/caregivers and their children in order to facilitate the child's

movement through the assumed typical stages of development" (Reed, 2016, p. 157). By enhancing relationships between caregivers and their autistic children, these developmental interventions allow caregivers to observe more closely how their children learn naturally through their own unforced behaviors. Based on this heightened awareness, the development of treatment goals can be more directly based on the children's interests and strengths. Likewise, this heightened awareness encourages more recognition of naturally occurring teaching opportunities, rather than drill-and-trial-based opportunities (Reed, 2016).

There are many developmental interventions that have become mainstream, and many interventions differ in the skills that they suggest they are best suited for developing. However, whether the outcome is communicative, social-emotional, or imaginative in nature is irrelevant in examining the common strategies these interventions implement. For starters, as a way to encourage more caregiver awareness of an autistic subject's behavior, most developmental interventions will place a premium on creating opportunities for play between the caregiver and the subject. This play gives caregivers the chance to see how the autistic child behaves in an unprompted, unfiltered manner – such play immediately allows for identification of skills that are being developed, and that are in need of development. Many models will also recommend that caregivers be imitative in their play with the autistic subjects, because then they can encourage and reinforce positive behavior without having to bring in a sense of forcedness to the intervention. Similar play-based developmental interventions can also be put in place in educational settings in order to achieve additional benefits from the observation. Overall, developmental interventions prioritize autistic subjects' needs by creating subject-led and subject-motivated opportunities for observing skills deficits and development, thus creating opportunities for even more effectively individualized interventions in the future (Reed, 2016).

Ultimately, all three of these intervention strategies – behavioral, environmental, and developmental – might be effective, and perhaps could be more effective in conjunction with each other. However, more research must be done to prove these interventions' efficacy, in order to go beyond just the theories presented here. The theories themselves, however, are promising.

Conclusion: Back to the Framework

If there is one major lesson to take away from this chapter, it is that we still have much to learn about what autism is and how we can best address it through interventions. More studies must be run, more research must be conducted, and more must be done to broaden the definition of autism to acknowledge the broad scope of deficits that might be associated with it. However, the information in this chapter reflects the deficits that appear in many cases of autism, and the intended goals and strategies of some of the most popular – if not scientifically validated – intervention strategies. With this information, we have identified the problems to which my performing-arts-based special education framework hopes to offer solutions, and we have identified patterns of intervention with which my framework might be able to align. The groundwork has now been set for the framework to be built.

Chapter 4: An Arts-and-Special-Education Framework

Now that we have established the intrinsic benefits of performing arts education in Chapter 2, and the skills deficits present in individuals with autism in Chapter 3, we can begin to connect the necessary dots for creating a comprehensive educational framework. Initially, one can see that the categories for both the arts' benefits and autism's deficits are similar – language and speech, social-emotional behavior and understanding, and creativity. Within those categories, specific benefits from the arts can be reasonably expected to address the deficits associated with autism. Some practices in the arts might offer multiple beneficial effects for different deficient areas, while other practices might be more precisely targetable to specific deficits. Furthermore, the areas of the performing arts can be broken down based on their benefits and connections to deficits, showing ways in which, for example, music education might benefit similar or different areas than theatre education or dance education.

In this chapter, I introduce a taxonomic framework for understanding the skills deficits which frequently accompany a diagnosis of autism and their intersection with the skills benefits of music, dance, and theatre education. The skills deficits used in the framework are selected from the deficits which were identified in Chapter 3, which were collected from many comprehensive sources on autism and its associated behaviors. Therefore, while the list of deficits is not exhaustive, it does contain a strong overview of the various deficits one might find in an autistic individual. Within the taxonomy, the rows represent specific types of skills deficits, which are grouped into the larger categories of deficits in communication, socialization, and imagination. Its columns represent the performing arts, broken down into music, theatre, and dance, and the intrinsic benefits of each art that were determined through a review and analysis of the literature. Within the framework, each deficit is paired with at least one type of performing

arts activity that can directly address it. Many pairings will speak for themselves, because of the inherent connections between the activities and deficits in question, but some pairings might be more abstract. To address this, I will later provide examples of how certain activities, and their associated benefits, can be effectively used to address the deficits they connect to in this framework. This framework is by no means exhaustive of all possible connections between performing arts curricula and autistic development, but its information is comprehensive and well-justified by the research discussed in both Chapters 2 and 3. The framework follows on subsequent pages.

Framework for Justifying Performing Arts Integration in Special Education

Communication – Language Development and Use, Speech Development			
Skills Deficit	Music	Theatre	Dance
Difficulty with learning new vocabulary and grammar, and other semantical language elements (e.g. pronouns, abstract expressions).	- Learning reading and phonics through singing songs with lyrics. - Learning the symbols systems within music, as a means for learning other symbols systems like vocabulary.	- Understanding vocabulary and grammar through constant exposure to scripts. - Learning, and becoming comfortable with, challenging new vocabulary through process drama activities.	- Learning a system of terms associated with dance, in a way like learning a new language. - Using language to abstractly describe choreographed works.
Difficulties with imitation of language and speech patterns.	- Imitative singing exercises, especially choral ones.	- Repeated practice of lines and other types of line work.	
Abnormalities of prosody, including pitch, intonation, and stressing of sounds.	- Learning musical expression through dynamics, rhythms, and pitches.	- Learning dramatic emphasis and recitation skills. - Learning how to effectively read a script aloud to an audience.	
Struggles with maintaining effective and productive conversations.	- Singing as a means of learning story-telling skills. - Through musical ensembles, using language for strong coordination and communication. - Learning best practices for ensemble music performance, such as listening, not interrupting, etc.	- Learning to use language for jokes, stories, etc., through theatrical activities. - Studying effective dialogue by working with scripts. - Improvisation as a means of practicing spontaneous conversations.	- Using language to express emotions when describing dances and movements.

Socialization – Emotional Awareness and Socio-Cultural Understanding			
Skills Deficit	Music	Theatre	Dance
A lack of emotional touch or emotional expression, especially in early childhood.	- Using the affective qualities of music (e.g. major keys as happy, minor keys as sad) to work towards emotional expression. - Implementing strategies of musical therapy, namely using music to help students 'open up.'	- Studying characters within scripts and theatrical works to understand their motivations, reactions, and emotions. - Practicing expressing emotions through scripted and improvisational performances.	- Learning choreographed movements to benefit cognitive-emotional development. - Teaching students how to express themselves through movement, physicality, etc.
Challenges with empathy and understanding and interacting with the emotions of others.	- Creating a shared emotional experience in a setting of musical performance.	- Using theatre as a means for reflection, engagement, and self-expression. - Studying characters with a lens towards different characters' emotional situations.	- Creating a shared emotional experience in a setting of group choreography.
Difficulty understanding the significance of building and maintaining relationships, resulting in self-isolation.	- Understanding the significance of collaboration among many performers, whether singers or instrumentalists.	- Examining characters' relationships in theatrical works. - Understanding the importance of every member of a theatrical team, on and off stage.	- Understanding the different effects of solo and group choreography and dance.
Inability to function well in groups and establish strong group relationships.	- Learning skills of democratic group processes and participation through musical ensemble work.	- Learning skills of democratic group processes and participation through theatrical ensemble work.	- Learning skills of democratic group processes and participation through dance ensemble work.

Imagination – Creativity, Repetition, and Theories of Minds			
Skills Deficit	Music	Theatre	Dance
A lack of creativity, especially in creative childhood play.	- Involving students in music composition projects. - Providing outlets for musical improvisation, such as playing with instruments and experimenting with rhythm.	- Teaching improvisational theatre techniques to encourage creative problem-solving and situation-making. - Role-playing games in a theatrical context.	- Providing opportunities for students to experiment with their own movements freely. - Involving students in choreography projects.
Inflexibility with regards to changing routines or patterns.	- Maintaining a consistent order of music class (e.g. warmup, group work, individual work, etc.). - Teaching standardized drills for practicing music and pieces.	- Maintaining a consistent order of theatre class (e.g. warmup game, script study, etc.). - Running lines and scenes as opportunities for repetition and practice.	- Maintaining a consistent order of dance class (e.g. stretching, warmup, choreography). - Consistently repeating choreography for practice and improvement.
Challenges with theories of minds – understanding that others have views and beliefs different than one's own.	- Encouraging students to share their own stories and make their own voices heard through their music, thus raising awareness of their different experiences.	- Using theatrical performance to make students put themselves in a character's shoes to understand their views. - Teaching story-telling through theatre that allows for common understandings to be revealed.	- Encouraging students to share their own stories and make their own voices heard through their movements and choreography, thus raising awareness of their different experiences.

Other unsorted major benefits of performing arts education

- Significance of constructivist curricula, present in performing arts, for student growth.
- Increases in student motivation and engagement with education through the performing arts.
- The performing arts as a means for socio-political expression for those without voices.

Reflection on the Framework

This framework seeks to demonstrate that basic elements of curricula and pedagogy in elementary music, theatre, and dance classrooms can provide meaningful intrinsic benefit to students with autism because the qualities inherent to arts education directly address the skills deficits which are often manifest in autistic individuals. None of the activities listed above are abnormal for elementary performing arts classes – indeed, many of the activities in the framework are fundamental to learning these arts. Understanding expressive qualities in music (rhythms, dynamics, etc.), putting oneself in another character's shoes for theatre, and learning emotionally expressive movement in dance are just some of the learning goals listed above that would be easy to find in the activities' respective performing arts classrooms. Other activities, such as composition projects in music, improvisation in theatre, and choreography projects in dance, are natural extensions of the basic activities used, and the basic skills built, in performing arts classes. For the most part, the connections between these activities and the deficits they are meant to address are straightforward. Composition and choreography projects will tap into creativity. Ensemble work in the performing arts requires students to build group relationships. And individual presentations of the arts allow students to make their voices heard and visions manifest in meaningful ways that encourages others to recognize different lived experiences. However, some of the connections within the framework might be a little less straightforward. I will quickly examine some of such connections and explain my reasoning for including them.

Language Imitation in the Music Classroom

Imitation is essential to learning the performing arts, especially for younger students who are at the beginning stages. Whether it is the imitation and repetition of a series of pitches in music class, or the imitation of movements in dance class, students in performing arts classrooms

constantly are learning by observing and recreating the behaviors of others. The centrality of imitation to performing arts classrooms also relates to the imitation of language. In music classes, students are not just imitating pitches and rhythms, but also vowels and words, especially in sung music. Music classes that focus on singing will often begin class with vocal warm-ups. These warm-ups often consist of exercises that involve singing vowels on pitches going up and down musical scales. Other warm-ups might involve words in a similar fashion. Beyond warm-ups, teachers might teach music with lyrics in a call and response manner, speaking or singing the line to the students and having the students repeat that line. All of these are ways that language imitation is present in the music classroom, and therefore these are all activities that could help autistic students improve their language skills. Furthermore, since some autistic individuals already have natural tendencies to repeat language, such as through echolalia, this focus on imitation in music allows autistic students to turn a deficit into a strength.

Group Coordination in the Music Classroom

Within any ensemble of performers, it is important that consistent structure is created and maintained in order to allow for the most effective artistic performance. This is especially true in music ensembles, in which musical thoughts and moments are carefully organized, and mistakes in performance will be easily recognized. When students sing or play instruments in groups, they must listen to each other carefully. Without listening, musical lines may be played at improper times, some performers might be too loud compared to others, and the overall musical product might decrease significantly in quality. Along with listening, students must learn not to interrupt each other musically, instead waiting for their appropriate turn to begin playing their musical part. And when everyone is playing music together, students must recognize that all of the parts involved in the ensemble are equally significant – without any one of them, the

ensemble would be missing an important element. All of these lessons can be more broadly applied to effective group coordination and group relationship building, which can help autistic students improve their social interaction. Furthermore, skills such as not interrupting and actively listening can build conversational skills in these students as well, making group coordination in the music classroom also an effective strategy for teaching pragmatic language skills to students with autism.

Empathy in the Theatre Classroom

Theatrical works feature a variety of characters, with a variety of emotional experiences and behaviors. Even simple theatrical performances, like elementary renditions of fairy tales, feature characters with different emotions. For example, in *The Three Little Pigs*, the pigs are scared, the wolf is angry, and the pigs end the story happy, to put it simply. Therefore, students performing *The Three Little Pigs* would need to understand how to express those emotions, and this in turn would increase their awareness of how those emotions are typically portrayed. And just as basic emotions can be understood through these simpler theatrical stories, more complex emotions can be learned through other theatrical performances. It is through these more complex emotions that students can learn empathy. To refer to the previous example, the Big Bad Wolf in *The Three Little Pigs* is often strictly a bad character, with only hunger as a motive. However, most stories do not feature solely bad characters, but instead feature characters who initially appear bad but are revealed to be more troubled. These characters might behave badly because they feel left out, because of a difficult past situation, or for many other reasons. Students who study such characters will learn in the process that no one can be defined by just good or bad. This will force students to think empathically, to understand why someone else is feeling the way

they are and to offer connections to that way of thinking. Thus, even with just simple stories, complex emotional work that encourages empathy in students can be achieved.

Shared Emotional Experience in the Dance Classroom

In a dance classroom, students often do not perform individually. Instead, they are performing as a group, relying on the energy of one another in order to create the best performance. This is also the case in times of free movement, in which students are still able to interact with each other, imitate each other's movements, and team up for movement, allowing a freedom of emotional expression that can encourage increased emotional awareness. Likewise, in a dance classroom, students learn to associate certain elements of movement with emotions, especially when the movements are paired with music. Upbeat songs that musically suggest happiness will be paired with more energetic movements, while slower songs that musically suggest sadness or pensiveness will be paired with slower, more precise movements that add weight to the moment. There is strength in performing these types of choreography alone, but the strength is increased when a group performs together. Just as the students rely on each other's physical energy, they also rely on each other's emotional energy and commitment to the piece. Thus, they learn not only how to express the emotions themselves, but to sense and register an awareness of the emotions of others.

Standardized Schedules with Variations in the Performing Arts Classroom

Students with autism have a strong tendency towards repetition of routines and patterns, and tend to be inflexible when it comes to significant changes to that repetition. Thus, intervention strategies for students with autism will often focus on strategies which are repeated, but which include slight variations each time, to span a larger scope of topics and skills. In a

behavioral intervention, for example, the structure of a drill might be the same each time (e.g. set a timer, complete a drill, obtain a consequence), but the drill itself – both its content and its length – might change each time. Thus, within the overall order of the intervention, there can be variation. Standardized schedules with variations are essential to performing arts classrooms, especially for younger students. In a music classroom, for example, students will often begin the class with some simple warm-ups, such as breathing or vocalese (syllable-based vocal warmups). Then, the students will move to their main activity in the class, such as working on a piece of music or learning how to play an instrument. Finally, the class might end with some time for free, creative play with instruments, such as percussion.

This is, of course, not the only model for the curriculum of a music classroom. It is instead meant to demonstrate that each music class can have a standard routine (warm-up, main activity, free time) that can provide comfort to students with autism who rely so heavily on the psychological comfort provided by that routine. Then, within that routine, variations can be created which allow for covering the content and skills necessary for the class. The same goes here for theatre classes, which might begin with an improv game, move into script work, and end with creative play; or with dance classes, which might begin with movement warm-ups, move into choreography, and end with free movement time. Within all of these classes, sticking to routines is essential for productivity and efficiency, and those routines can have major benefits for students with autism. Sticking to routines is also essential to performing arts education when considering the constant need for practice in an artistic environment. Practice, based in repetition, also makes the arts more accessible to autistic students. And adding in flexibility within a routine might help to encourage students with autism to be more flexible themselves.

My hope is that these explanations have not only served to clarify some of the less obvious connections present on this framework, but have also helped to demonstrate how the ideas presented in this framework may be applied. The activities and learning goals presented for the performing arts classrooms should inform performing arts curricula and pedagogy, respectively, in order to help students with autism succeed and develop skills.

Conclusion: Expanding the Scope of the Framework

This thesis has centered around the ways in which elements of the curricula and pedagogy of performing arts education can cater to the needs, and address the deficits, of students with autism. Hence, the framework focuses on the deficits commonly associated with autism, and the threads connecting them to arts' intrinsic benefits. However, though this thesis and framework use autism as an instance of special needs for the sake of a limited scope and a deeper dive into specific benefit-deficit pairings, this in no way means that this framework cannot be more broadly applied. This is because, as acknowledged in Chapter 3, the deficits connected to autism are by no means limited to autistic individuals. Similar deficits can be seen across most individuals, both typically-developing and atypically-developing. For example, while theatrical work has the potential to help increase emotional awareness in students with autism, this specific cause-and-effect relationship is not exclusive to those with autism. One can easily imagine typically-developing students, in need of emotional awareness and empathy skills, benefitting greatly from similar performing arts activities in the classroom.

Furthermore, just as each person with autism has a highly individualized manifestation of autistic tendencies, people without autism likewise cannot be approached as if they all share the same experiences. Hence, the pedagogical emphases on student-guided learning and individual growth instead of proficiency in performing arts education offer prescriptive potential for how

any classroom, with any types of students, should be organized and led to access the students' greatest potentials. In a sense, then, this framework offers a meaningful perspective on how we might reimagine our education system to be more equitable for those with and without special needs. By breaking down a potentially stigmatizing term such as "autism" into its component deficits, and by normalizing it by comparing those deficits to deficits experienced by many other students (albeit at various levels), this framework provides us with an understanding that carefully-crafted educational strategies can be effective for diverse student populations. My proposal of this central strategy, of course, is informed by performing arts. And even if some disagree with this proposed strategy, I hope they approve of the underlying justifications surrounding it and the educational implications that this framework has on how we think about including students of different abilities and needs within pedagogical and curricular design.

Of course, my proposed performing arts strategy will remain central to my next and last chapter. In Chapter 5, I will consider how my educational framework can be successfully implemented in the classroom. Specifically, I will consider how teachers and special educators, as leaders in educational environments, can use this framework and its underlying justifications in creating beneficial educational opportunities for their students with autism (and thus, for those without autism, as well). While the discussion of these topics will be primary theoretical, the chapter will also include a case study, examining how one performing arts education program – the School of Performing Arts in the Richmond Community in Richmond, Virginia – shape their activities and lessons to cater to students with and without special needs. I will conclude by offering final thoughts on the implications on my framework and educational recommendations for future research, educational policy, and the students it serves.

Chapter 5: Applying the Framework - Recommendations for Special Needs Arts Education

When discussing intervention strategies in Chapter 3, I noted that the theoretical implications of various interventions could not be conflated with their potential practical efficacy. The two topics must be considered separately, especially because interventions require proper execution in order to be effective. Though there are some practical implications in my framework, specifically relating to what types of performing arts activities should be implemented in classrooms, the framework is ultimately more theoretical. Even though the activities have been shown to provide benefits to special needs students' development, those activities must be introduced and integrated into a classroom carefully. There are many important considerations in this field, including the ways in which curricula are crafted, the types of environments created in classrooms, and the expectations for and behaviors of teachers. All of these considerations must be addressed when attempting to successfully bring a framework from theorization to implementation.

The framework is the strongest when it comes to recommending curricula and pedagogy for autistic students in performing arts classrooms. The research-based connections that have been made between the intrinsic benefits of performing arts activities and the deficits associated with students with autism are in and of themselves prescriptive. Any of the recommended activities within the framework could play a role in student development, but curricular creation does not happen in a vacuum. Therefore, in this chapter I will offer my own recommendations for how classrooms can best be shaped to incorporate performing arts education to benefit students with special needs. I will then compare my suggestions to classroom practices observed in an existing performing arts education program for special needs learners. Finally, I will make broader recommendations for future research and educational policy.

Classroom Recommendation 1 – Revisiting Constructivist Curricula and Student Growth

In Chapter 2, I described the ways in which performing arts curricula are inherently constructivist, and how constructivist curricula are beneficial for student development because of their focus on student growth. As a reminder, a constructivist curriculum is based on ideas of student-centered learning – knowledge and beliefs are best formed within students when those students are given opportunities for self-guided learning, student-to-student reflection, and self-motivated participation in classroom activities. Such a curriculum is almost standard for performing arts classrooms, both because the performing arts often place a premium on students' self-driven exploration and participation, and because a constructivist curriculum offers stronger means of evaluating student development in the arts, such as by being able to individually evaluate students' compositions, instead of having to hold them to a certain standard (Montgomery & Hanley, 2005). Such means include a focus on growth-based measurements of student success, as opposed to proficiency-based measurements. Growth-based measurements of student development encourage student-centered individualization with regards to expectations and goals, which subsequently allows teachers more opportunities to cater their curricula and pedagogy to the needs of different students to encourage growth across all of them. Student-centered learning also allows for teachers to provide more individualized instruction, create more active-learning experiences that require student-driven participation, and attend to students' various levels of ability (Nave, 2015).

There are many reasons why this type of constructivist curriculum, paired with an emphasis on measuring student growth instead of proficiency, is the most appropriate choice for my framework. Since the framework centers around activities in a performing arts classroom, and since it was determined in Chapter 2 that performing arts classes are best approached

through constructivist curricula, the framework would also best be implemented through constructivist curricula. A constructivist curriculum is also useful for my framework with regards to catering to students with autism. Though autism is not necessarily associated with intellectual disabilities, the two are often found to be co-morbid, especially in individuals with low-functioning autism. For this reason, as was observed in Chapter 1, proficiency-based measurements are often not achievable for students with autism. The same would be true for a performing arts classroom that overemphasized proficiency. If a student with autism can benefit greatly simply from participation in these artistic activities, as the framework suggests, then we would be doing a disservice to these students by thinking less of their participation in class simply because they lack a certain level of skill. For example, if a dance classroom's evaluation method involved measuring achievement based on students demonstrating a certain level of skill – such as the ability to successfully complete a given pattern of movements – then autistic students who may not be able to perform to this level, either due to motor challenges, co-morbid intellectual disabilities, or any other deficit, would struggle to succeed in the class. This would be discouraging to these students, and this might turn them away from wanting to participate in these highly-beneficial activities. But if a student with autism shows progress, even slight, and the curriculum is based on measuring growth, then even the least proficient students can be rightfully praised and recognized for their improvements.

So, if autistic students in the performing arts classroom would be best supported through growth-based measurements of success, the classroom must be focused on encouraging their individual growth. This brings us back to the ideals of the constructivist curriculum discussed above. The development of students with autism will be most achievable if the students with autism feel self-motivated to participate in the activities which benefit them. This concept was an

essential part of the theoretical basis of the developmental interventions discussed in Chapter 3 – if students can learn certain behaviors and ideas on their own, those behaviors and ideas can be much more successfully reinforced and emphasized to encourage further development. One question that might arise here is whether the lack of creativity demonstrated by students with autism might hinder the benefits of student-centered learning. If autistic students are more apt to stick to a routine, how might they be expected to discover new things without the guidance of others? In response, I would suggest that opportunities for creative play in performing arts classrooms provide exceptional outlets for student-centered learning, even if that learning is repetitive in nature. Practice and repetition are normal elements of any performing art, and with practice inherently comes improvement. An autistic student in a music classroom, for example, might repeat the same rhythm on a drum or the same vocal line during different instances of creative play, but with each repetition should come some improvement, which will hopefully encourage the student's further active participation in the classroom.

Finally, I would like to reemphasize that student-centered learning does not only refer to self-driven learning by students, but also refers to teachers catering curricula and pedagogy to the needs of different students. This is certainly important for students with autism, especially if they are placed in an inclusive classroom alongside typically-developing students. Student-centered learning addresses concerns of the dangers of top-down, teacher-centered education by setting expectations that teachers will demonstrate flexibility in working with various students and their different educational and intellectual needs (Delaney, 2011). So, by championing a constructivist curriculum that emphasizes student-centered learning, and, in turn, using student-centered growth measurements to judge student improvement, any classroom, and especially a performing arts classroom, can be better suited for the success of students with autism.

Classroom Recommendation 2 – Creating Inclusive Classrooms to Break Stigmas

Classrooms with constructivist curricula and a focus on individualized attention to students' various needs would appear to be strong candidates for becoming inclusive classrooms. In this instance, an inclusive classroom is defined as one in which both typically-developing students and students with special needs are educated together, with the help of a carefully crafted curriculum and a well-organized team of educators[1]. However, it is not easy to suggest a switch to an inclusive classroom model. In fact, there remains an ongoing debate about whether inclusive classrooms truly are best for the education of students with special needs. Those who advocate for inclusive classroom see its benefits from many perspectives. Perhaps most significantly, these advocates see this type of inclusivity as a moral right for students, related to a moral right for equal educational opportunity. To prove this right, they turn to past examples of classroom segregation, especially race-based, to demonstrate how separate classrooms are socially unjustifiable (Reed, 2016). This side believes that equal educational opportunity requires students to have access to the same tools, resources, and opportunities - goals which are best achieved in inclusive classrooms (Kodelja, 2016). Other arguments are more practical. Some believe that inclusive classrooms are good because they require teachers to be trained more effectively in working with students with special needs, and creating a classroom that encourages individualized attention. This in turn helps to improve overall educational options for students with special needs, as more teachers become able to assist them (Idol, 1997). Finally, advocates for inclusive classrooms will emphasize the opportunities created in these classrooms for

[1] While there are many ways a classroom may be considered inclusive, including by race, age, gender, etc., the use of "inclusive" in this chapter specifically refers to the integration of students with and without special needs, regardless of other factors.

students with and without special needs to meaningfully interact, in a way which will ideally remedy existing social stigmas (Lipsky & Gartner, 1996; Anderson, 2007).

While these advocates are vocal about the potential benefits of inclusive classrooms, others question the efficacy of inclusive classrooms. They argue that inclusive classrooms might be beneficial for more high-functioning students with special needs, but will be detrimental or meaningless for more low-functioning students. They argue that students who have difficulties with regards to learning should receive more attention and more resources than other students, which justifies having a separate program that can closely focus on those students' best progress (Meyer, 2016). An inclusive classroom that tries to offer the same resources to special needs students as a classroom more devoted to special needs education would might begin to trend towards paralleling a special-needs-focused classroom, making the presence of inclusion seem somewhat arbitrary with regards to student success. And while advocates for inclusive classrooms will ideally believe that mixing students with and without special needs together will lead to the breaking of stigmas, those who are more doubtful of inclusive classrooms will turn to research that suggests that students with special needs in inclusive classrooms have higher rates of depression and isolation (Reed, 2016). If this is the case, they believe, perhaps the stigma is only reinforced by inclusive classrooms, since it increases special needs students' exposure to potentially bullying, teasing, or other behavior. Ultimately, those against inclusive classrooms wonder whether those who believe in such classrooms have students' best interests at heart.

In this debate, both sides have merits and reasonable arguments, which can make the choice for switching to inclusive classrooms difficult, encouraging many classrooms to maintain the status quo. I understand that in some classrooms, it might be difficult to fully integrate students with special needs in a meaningful way. But when integration is possible, it absolutely

should be pursued, and a performing arts classroom is especially well-suited for promoting inclusivity. Because performing arts classrooms place such an emphasis on community-building and ensemble work, they require students to work together constantly. Simultaneously, a performing arts classroom, especially in early education, is likely to have students with wide ranges of talents. In a theatre classroom, some students might have performed in shows before, while others might never have been exposed to script work. However, since these differences in artistic development are normal in any performing arts environment, performing arts educators have learned how to work with them. They can pair students with different abilities together, and they can cater activities towards different ability levels. Thus, the ensemble work that is essential to a performing arts classroom is going to pair students of different abilities together, and will require them to learn to work with each other and build each other up.

This all being said, a performing arts classroom is a natural fit for creating an inclusive environment for students with special needs. Some students with special needs may not have the same levels of artistic development or creativity as their typically-developing peers, but that does not bar them from participating actively in the group activities which are central to the arts, since groupwork is so central to the curricula and pedagogy of performing arts classes. Likewise, these different levels of abilities do not prevent students with special needs from growing as artists in an integrated classroom – all students have different abilities, and a performing arts classroom focuses on encouraging the growth of each student, regardless of where they are starting. Therefore, a performing arts classroom responds effectively to many of the concerns introduced by those who are wary of inclusive classrooms.

With those concerns addressed, we can highlight the benefits of an inclusive performing arts classroom for students with autism. A heavy focus on ensemble work encourages student

interaction and provides autistic students with a structured means of building social and emotional relationships with other students in the classroom, including typically-developing students. Typically-developing students, in turn, are given the opportunities for meaningful interaction with autistic students that are necessary if society is to lower the effects of stigmas against autistic individuals. Groupwork in an inclusive classroom also provides autistic students with a support system that will help them be less isolated and more willing to fit in with a community. Finally, inclusivity allows for a greater appreciation of the uniqueness of different students when it comes to their artistic development. With this appreciation of uniqueness comes greater freedom for these students, since they can feel empowered to express themselves authentically (Zitomer, 2017).

For all these reasons, I believe that an inclusive classroom is a highly appropriate environment for implementing my framework, as autistic students can benefit greatly from the heightened social interaction they can experience through group work with other students of differing abilities. They can also more successfully grow as artists and community members in a classroom that emphasizes unity alongside uniqueness. But there is one more critical component to an effective inclusive classroom: the teacher, or teachers, in the classroom must be effectively trained and well-prepared to work at an individual- and class-wide level with these students of varying abilities. However, one teacher does not, and should not, have to do this alone.

Classroom Recommendation 3 – Encouraging Teacher-Special-Educator Collaboration

Within any successful educational program, there are many players beyond just teachers in the classroom. This is especially true for special education programs, in which one will find many special educators and paraprofessionals who are tasked with closely working with students with special needs. However, often special educators and paraprofessionals are faced with

uncertainty when it comes to how they should function in a general education program. Since I am suggesting that my framework would be most effective in an inclusive classroom in a general education program, this must be addressed. From the perspective of special educators and paraprofessionals, they may feel as if they are being simultaneously overworked and undervalued. Far too often, special educators and paraprofessionals in general education settings are expected to take full responsibility for the education and wellbeing of students with autism or other special needs. Whether this involves these students being placed in separate classrooms with special educators, or special educators playing a minor role in the main classroom, this responsibility not only places high expectations on those in special education, but gives general teachers an excuse to not pay as much attention to the needs of these students. This is not to say that some teachers will not go above and beyond to work with these students, but, given current systems in place, some teachers might think they can easily place all the responsibility for dealing with students with special needs onto special educators, taking no responsibility themselves (Giangreco & Broer, 2005).

With this responsibility comes the fact that special educators and paraprofessionals are fully expected to produce the most effective results for the students under their purview. However, in many instances, special educators do not have enough resources to be doing as much as they can for these students. The lack of resources could result from poor funding for special education or from being separated from the main classroom, and thus from the many resources a general classroom can offer its students. This is one way in which special educators may feel undervalued – they are expected to do substantial amounts of work for these students, but are seemingly not given enough with which to do so. They may also feel undervalued in terms of pay, as special educators, and especially paraprofessionals, receive low salaries, often

even lower than general teacher salaries. With these low salaries comes a lack of interest in the positions, which leads to an additional burden of under-staffing (Griffin-Shirley & Matlock, 2004). All of these factors together lower morale of special educators and paraprofessionals, increasing the difficulty they face in fitting in with a general education program.

My framework relies on an inclusive classroom that contains educators who can provide individualized attention and direction to the students within it. In such a classroom, there can be little room for a disagreement between teachers and special educators as to which party must take responsibility for the successful development of students with autism or other special needs. So, my third recommendation emphasizes how crucial it is that general teachers, special educators, and paraprofessionals understand how to cooperate and collaborate as a team in an inclusive classroom. The norm right now, of teachers and special educators perceiving their work as belonging to two different spheres, is not sufficient for a fully supportive and inclusive classroom environment. Teachers must include special educators actively within the classroom, rather than isolating them to just working with one or a few students. Likewise, special educators and paraprofessionals must be willing to both help teachers execute effective programming for special needs students, and to train teachers through practice on how they can be more aware of the developmental and intellectual needs of these students. In building this relationship, the most important values are those of mutual respect and of effective communication. Without these values, these groups might feel that the others are not doing their fair share of work, or they may perceive a suggestion as an attempt at criticism or one-upmanship. A group dynamic must be established that makes it clear that the teachers and special educators alike are all working towards the same goal of supporting students, and any collaboration or communication in that regard is ultimately meant to be constructive and respectful (Douglas et al., 2016).

In an inclusive performing arts classroom that caters to students with special needs, this kind of teacher and special educator partnership and collaboration is especially valuable for striking a balance between individualized attention and overall class learning. If the main teacher of a performing arts classroom is focused on creating and executing programs and activities that are meant to be beneficial for all students, they cannot simply teach curricula that are geared toward those with the least ability. If they did so, then those in the classroom with more experience, or more potential, would feel as if they were not gaining anything valuable from such simplified activities. By effectively integrating special educators into the classroom, the general classroom teacher can teach at a higher level, since special educators can help those with special needs on a more individual basis. However, to avoid this situation becoming too similar to the negative dynamic I expressed above of teachers relinquishing responsibility for special needs students, I believe that special educators should have an active say during class on how activities should be structured and completed. This say should play a role in both curriculum planning and in the real-time running of the classroom (Draper, 2016). For example, a special educator might have suggestions on how a rhythm activity should be structured so that autistic students can best participate – these suggestions can also be made as the activity is happening, with the special educator constructively recommending ideas to the teacher. Overall, teachers and special educators can bring different expertise to the realm of the performing arts classroom, which ultimately benefits all students, and especially students with special needs.

For all of these reasons, an increased collaboration between general educators and special educators is essential for providing individualized attention to students in an inclusive classroom. Such an increase in collaboration could be achieved in many ways. On a simple level, new training sessions could be introduced that would require both teachers and special educators to

make curricular decisions and recommendations together. In addition, special educators could be more clearly linked to the general classroom, by having their presence be constant and giving them opportunities to exercise their own leadership. Finally, teachers and special educators could divide the teaching of curricula, based on their own expertise and abilities, to have a more mutualistic participation in classroom activities. Any of these strategies would prove effective for increasing this meaningful collaboration.

Classroom Recommendation 4 – Promoting Teacher Leadership to Motivate Change

Given my previous three recommendations, it is clear that there is much work that can be done to improve existing educational programs. However, perhaps one of the most significant challenges that educational programs face when it comes to trying to implement change is institutional lag. Teachers often need approval from their school's administration, their district's administration, and in some cases from higher institutions. All of these systems can be slow to implement change, especially when a school's institutional lag is multiplied due to other concerns, such as funding and mandates. Therefore, these recommendations might be incredibly difficult to implement if one attempts to go through these existing systems. However, there is another strategy I would encourage for motivating quicker and more impactful changes to curricula and pedagogy: teachers should be reminded of, and trained for, their roles as leaders not just in a classroom setting, but also in their educational system overall.

Teacher leadership is a relatively new concept in education literature. Teacher leadership can be defined as "the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of school communities to improve teaching and learning practices with the aim of increased student learning and achievement" (York-Barr & Duke, 2004, p. 287-288). In essence, teacher leadership affirms the idea that one does not need a

formal leader position, such as principal or superintendent, in order to play a fundamental leadership role in shaping schools and curricula. Under teacher leadership, teachers, thanks to their experience in the classroom, their exposure to students and the challenges that face them, and their significant roles in executing curricula, are considered to have built up enough credit to earn a say through more informal leadership opportunities. Through this informal leadership, teachers can improve conditions for students, other teachers, and various programs. Teacher leaders also can call for transformations of a school's culture to create an environment that values collaboration and understanding (Castner, 2017).

The benefits to a school environment when teachers take more ownership of their potential as leaders in educational planning and execution are significant. For example, teacher leaders are able to apply their expertise in specific areas to larger administrative considerations of curricula planning or school culture reevaluation. This ability for them to be specialist leaders makes their voices extremely valuable in their interactions with administration (Bush, 2015). However, this exercising of teacher leadership alone is not enough, as the problems of institutional lag will still be present even if teachers use their voices as leaders to directly propose and defend changes. Instead, teacher leaders need to use their influence as leaders at other levels in order to promote meaningful change. Perhaps most crucially, teacher leaders can use their leadership in a transformative way, by helping other teachers understand how they can reshape their own curriculum and pedagogy in ways that might be more beneficial to their students. By establishing mentor-mentee relationships with other teachers, teacher leaders can cut out the lagging administrative middleman in a sense, instead opting to encourage other teachers to alter their teaching methods and competencies. And as mentors, teacher leaders can

go beyond seeing their role as just one of support, and can instead see their role as one of transformation (Brondyk & Stanulis, 2014).

These combined skills of using expertise to shape educational programs and using transformational mentorship to encourage curricular revisions among other teachers make teacher leadership a fundamental recommendation for the integration of my framework into an active educational context. To start, through teacher leadership, teachers can create conditions necessary for a certain curriculum to be properly implemented, both in their own classrooms and around the school. So, if a teacher believes in the benefits of the performing arts for all students, and especially students with disabilities, they can encourage other teachers to implement similar curricula, or integrate related activities into their classroom (Cera, 2013). This avoids administrative challenges that might come with such a proposal, such as trends of defunding the arts in schools, or administrative uncertainties about the true long-term benefits of such classes for students with special needs. With so many standards to uphold, one can hardly blame educational administrations for many times being slow to implement new policy. But with teacher leadership as an alternative, extremely impactful change can be implemented with greater efficiency. One important thing to note is that teacher leadership, as described in this section, is not simply meant as a means of increasing teacher self-motivation. The implications of teacher leadership are much wider-reaching, and through effective teacher leadership, any of my recommendations from above can be rather painlessly introduced, while still dramatically improving any educational environment. As authors Celine Coggins and Kate McGovern described in a 2014 piece about goals for teacher leadership, “When we treat teacher leadership as a tool for fixing the critical challenges facing education and we measure its effects on those challenges, then teacher leadership becomes more than a nice idea. It becomes an indispensable

avenue for school improvement and for building a high-performing, sustainable teaching force for the next generation" (Coggins & McGovern, 2014, p. 21). In this sense, teacher leadership is not a lofty goal that we have to take steps to achieve – it is a practice that teachers can and should be embracing right now in affecting change in their school environments.

These four recommendations – student-centered learning, inclusive classrooms, collaboration between general and special educators, and an embrace of teacher leadership – could in fact be applied to almost any educational setting, and could be major improvements. Regardless of their universal potential for application, all four recommendations are vital to creating the most effective performing arts education programming to support students with special needs, in the smoothest and most well-thought out way possible.

A Case Study – SPARC and LIVE ART in Richmond, Virginia

In order to best understand how a framework that emphasizes the benefits of performing arts education for students with autism could be implemented, and in order to consider what recommendations I might want to make to teachers and administrators in general education environments to apply that framework, I observed the LIVE ART program at the School of Performing Arts in the Richmond Community (SPARC) in Richmond, Virginia for its 2017-2018 rotation of classes. The LIVE ART program was started in 2011, when educator Erin Thomas-Foley had the idea of creating an inclusive arts education program that would give students with special needs meaningful opportunities to develop and perform as artists. Thomas-Foley also believed that the program, by virtue of being inclusive, would encourage typically developing students to feel more comfortable with developing relationships with fellow students with special needs, thus removing social stigmas ("LIVE ART – About the Program"). Since 2011, the LIVE ART program has become immensely popular, drawing in hundreds of students

each season for a number of classes that focus on different areas of performing arts, including music, theatre, and dance. Each year, the LIVE ART program puts on a public showcase at the end of their class rotation, giving the students a valuable opportunity to demonstrate their growth and express their skills through a meaningful live performance.

I observed two classes within LIVE ART's 2017-2018 season by becoming an in-class volunteer. The first class I observed was Modern Movement B, a dance class in which students learn choreography involving hula hoops. The second class I observed was Human Heart, a largely improvisational class that combines movement exercises, live music, and – in this rendition of the class – blindfolded choreography. Both of these classes meet for an hour each on Saturday mornings, and each class consists of 25 to 30 students. As Thomas-Foley intended, the students in the class are almost evenly split between students with and without special needs, and, furthermore, the students range in types of disabilities, ages, and backgrounds. Each class is also thoroughly-staffed, with at least 5-10 faculty members in the classroom at any given time, ranging in expertise from arts teachers to special educators to mental health professionals to one-on-one volunteers. Through my year-long observation of these classes, and an interview I conducted with Thomas-Foley, I have had the opportunity to see how performing arts education practices similar to those in my framework can benefit autistic students, as well as students with other special needs. Beyond that, I have also had the chance to see how the classroom recommendations I have made thus far in this chapter, if applied properly, can greatly improve the efficacy of such a program.[2]

[2] As a disclaimer, all the names of LIVE ART students and teachers whom I have observed and am discussing, with the exception of Erin Thomas-Foley, have been changed, for the purposes of this paper, to protect their confidentiality.

Student-Centered Learning in an Inclusive Classroom in LIVE ART

The LIVE ART program is crafted in such a way that its classrooms being inclusive is central to its success. By making the classroom inclusive, LIVE ART can provide a built-in support system for students with special needs who might be nervous about participating due to a lack of performing. As I discussed in the inclusive classroom section above, performing arts classrooms are particularly well-suited for inclusivity because the ensemble-based activities allow for frequent and meaningful collaboration between students with and without special needs. This collaboration naturally encourages students to support each other, trust each other, and move away from social stigmas. Thomas-Foley believes that every activity in the classroom is geared towards building class-wide support, which she describes as a learned behavior that deserves immense attention (Thomas-Foley, 2018). That way, students who may not have ever interacted before can build true camaraderie by the end of the program.

The inclusive classroom environment is well-established in LIVE ART. Every class starts with an opening circle where everyone would say their name, and often the students would need to include an affirmation directed towards another person or towards the class. This establishes support from the very beginning of every class. Movement warmups in both classes often are in a follow-the-leader style, in which students one at a time come to the front and lead the class in movement to a given song. This gives each student an opportunity to express themselves individually, but also encourages the rest of the class to respect that student by following his or her movements. This is highly empowering for students, especially for those with special needs. One female student with Down Syndrome in Modern Movement B, who frequently is rather slow when it comes to following and executing choreography, always was at her most active and excited when she got to be in the front of the classroom leading everyone else. In that moment

she would leave behind her slow movement, and instead would opt for moving across the floor, shaking hands and hips, and smiling widely at all the other students following her. I think this can be attributed to dance's ability to increase students' emotional expression, as noted in the framework. And furthermore, I think the success of this follow-the-leader movement exercise comes from giving each student a chance to celebrate their uniqueness – a benefit that is provided in the unified environment of an inclusive performing arts classroom.

Furthermore, the LIVE ART classes balance their inclusivity and their desire for every student's growth very effectively through their curriculum. When Thomas-Foley conceived of LIVE ART, she was aware that students with diverse backgrounds and experiences would come with completely different levels of abilities. For this reason, she wanted to focus on creating classes that were centered around activities that no students were likely to have had experience with before. For Modern Movement B, this new activity was dancing with hula hoops. For Human Heart, it was doing a blindfolded movement piece. Other activities offered include creating a sign language choir and painting by walking on paint and a canvass. Through all of these activities, students in LIVE ART classes can feel as if they are on an equal playing field, no matter how much previous experience they have had with performing arts. By creating this equal playing field, the students feel that they are learning alongside each other, and thus are able to develop an even stronger group dynamic (Thomas-Foley, 2018). This equal playing field method is further reflected when small groups are created in class, either to practice choreography or to experiment with creating choreography. Teachers always make a conscious effort to divide students up so that students with and without special needs, and with and without performing arts experience, would be working together. Since these curricular challenges are all new to these students, they must work in a truly collaborative manner in these groups.

While many of the strategies LIVE ART uses are meant to increase group cohesion and support, educators in the LIVE ART classrooms are also greatly focused on ensuring every student is growing. If a student has been in the performing arts before, the teacher's job is to challenge them, both by introducing these new curricula to them and by encouraging their further exploration and mastering of movement. But for a student who has little or no experience, or lacks capability, in the performing arts, the teacher needs to learn to appreciate even the smallest instances of growth (Thomas-Foley, 2018). To compare two students in the class as examples, in both Modern Movement B and Human Heart there are two students: Monica, who has had years of dance and theatre experience before, and Vanessa, who has never been in a performing arts program and has learning disabilities. When working with Monica, and other experienced students like her, the teachers would emphasize a real commitment to getting the movements exactly correct, with the right timing, and then pushing the movement further with more individualized inflections on the movement. However, with regards to another student, Vanessa, who not only struggled to do the right moves with the right timing, but sometimes struggled to do the moves at all, the teachers would be certain to work closely with her (and typically one staff member was paired with her specifically) so they could praise any instances of appropriate movement with appropriate timing.

Whether students like Monica needed to be challenged more to continue to grow, or whether students like Vanessa needed to be praised for more basic movement accomplishments, both identifications of growth are absolutely legitimate. In a standards-based system, Monica's achievements might be the only ones that make the cut, while Vanessa might fall short. But in a growth-based system, such as the one SPARC has created, both Monica and Vanessa can find success in their own ways. In addition, I chose Monica and Vanessa as examples specifically

because Monica often tries to help Vanessa with the movements. Because LIVE ART has inclusive classrooms, Monica is able to be both a peer and a mentor for Vanessa, thus improving Vanessa's experience and making her exposure to the performing arts that much more rewarding. This, likewise, is rewarding for Monica, because this is a meaningful relationship for her as well. The ways in which LIVE ART's curricular planning and classroom behavior is influenced by student-centered learning practices and values of inclusivity ensure that LIVE ART's students can feel encouraged and challenged in the arts, all while learning to support each other.

Teacher Collaboration and Teacher Leadership in LIVE ART

With so many students in the classroom, at different levels of ability and with different needs, SPARC makes it a priority to have its LIVE ART classes be exceptionally well-staffed. SPARC's staff comes from a broad range of backgrounds. Many are involved in arts education, ranging from general music, theatre, and dance teachers to more specialized experts such as a hula hoops professional performer or a certified sign language translator. Others are special educators or mental health professionals, who are there to work closely with the students with special needs, to ensure the teachers are handling class in a way that is well-suited for all the students and to be a vital resource on all things regarding special needs. Others still are general staff, who either are assisting in teaching the art, or assisting as a paraprofessional with one student or a group of students, or perhaps wearing many hats throughout a single class.

All this is to say, with sometimes close to ten staff members in the room at one time, it can be easy to feel as if there are too many cooks in the kitchen. Yet all of the staff members need to be present, whether because of their expertise or their resources, so it is crucial that LIVE ART determines how to enable the staff to collaborate effectively. And LIVE ART does this at all stages of the educational process. It begins in curriculum planning. Thomas-Foley explained

that the roles the teaching and supporting staff play in planning curricula and planning strategies for working with certain students are invaluable. All of the staff bring their own expertise and experiences to the table, and determine how to best create activities and pieces that are well-suited for all students, especially students with special needs (Thomas-Foley, 2018).

Having planned the curricula and activities, the teaching staff transition to the classroom, creating entirely new collaborative needs. In any given class LIVE ART class, there are one to three teachers leading the main artistic activity at any given time, one to two special educators surveying the room to ensure all the students are performing well, and at least five supporting staff members working one-on-one with students, providing additional assistance to the teachers, or doing any of a number of tasks. Though there may seem to be a hierarchical structure within this layout of the staff, within the classroom the teachers and staff are typically on as much of an equal playing field with each other as they hope the students will be among themselves. They are modeling the kind of collaborative, supportive behavior they hope to see from the students.

The single most important aspect of the teacher collaboration that is central to LIVE ART is the constructive synergy that is created among the educators. In the typical management of a LIVE ART class, any staff member might have a say in how an activity should be handled, or how an approach to a certain movement or idea might be shifted. For example, in Modern Movement B, dance instructor David might be going through a new series of movements for a piece of choreography, and from the back of the room staff member Christina might request that David explain one of the moves in a little more detail. Christina is asking for this clarification because she is working with a student who is struggling to understand exactly how the move works, and is frustrated because of that lack of understanding. In this type of situation, which is a constant occurrence, it is crucial that the different staff members are willing and able to listen to

each other and take others' directions without being offended or thinking the comment made was an attempt at one-upmanship by another staff member (Thomas-Foley, 2018). Both educators are working towards the same goal of helping the students, so such comments are not meant to embarrass, but instead are meant to support. The best way to ensure that staff members can understand that comments such as these are supportive and helpful is to make sure that they are open to constructive collaboration, and accepting of the fact that every teacher's perspective is legitimate and every teacher's expertise will lead them to have different ideas about what should happen in the classroom in order to support the students. SPARC encourages this constructive collaboration through all-staff training sessions, at which they explain best practices in working with students with special needs in the performing arts. Such trainings are especially helpful for general educators who might have less expertise in how to adapt their typical teaching strategies to accommodate various types of students with special needs.

While there is teacher leadership in SPARC, it is of a slightly different nature than the teacher leadership previously discussed because SPARC is specifically an arts education program, and not just an arts education program within a larger educational setting such as a school. Given that, many of the LIVE ART teachers double as SPARC administrative leaders, which already all-but-eliminates the teacher-administrator gap and institutional lag. Without such gaps and lags, and because of SPARC teachers' administrative roles, the informal leadership that is typical of teacher leadership is less present. However, LIVE ART teachers still demonstrate another crucial element of teacher leadership: a willingness to mentor other teachers on what the best practices are and how they should best be implemented. The benefits of this type of mentorship are apparent when considering how well LIVE ART staff collaborate with each other to execute the best programming possible in the classroom.

This mentorship is best illustrated with an example. One staff member, Andrea, was working with a student named Melanie in Modern Movement B. Melanie has low-functioning autism, and while she enjoys dancing, she is rather shy, prefers to be socially isolated, and can often be hard to motivate. One of the mental health professionals in the classroom, Joy, had explained Melanie and her situation to Andrea at the start of the first class. But after a class or two, Andrea was really struggling to convince Melanie to participate and to break her out of her isolation. Andrea called on Joy frequently, and every time Joy was more than happy to help – whether it was teaching Andrea how to best communicate with Melanie, or whether it was taking a turn with Melanie herself to demonstrate how she could get her motivated, Joy proved to be a very useful mentor figure for Andrea. And Joy was able to be a mentor for more teachers besides just Andrea. Indeed, Joy's ability to use leadership to help mentor others on how to work effectively with the students with special needs in LIVE ART makes her a fantastic teacher leader. So, while teacher leaders at SPARC do not need to have as lofty of goals as they might have in a general school, teacher leadership is still consistently revealed in LIVE ART staff when they collaborate together and use their various expertise to provide helpful mentorship.

ACE Curriculum – Connecting Art and the Social-Emotional in LIVE ART

Thus far, I have demonstrated how the interactions that I observed between students and staff at LIVE ART prove the effectiveness and benefits of the educational recommendations I have made in this chapter. However, there was one aspect of LIVE ART that, though it does not fit in with any of my recommendations above, is especially significant with regards to my framework. This aspect is what is known as the ACE Curriculum, and it is an aspect of LIVE ART that explicitly explains the extra-artistic intrinsic benefits of the performing arts in such a way that those benefits could easily address the deficits listed within my framework. ACE stands

for Acceptance, Compassion, and Empathy – three major areas of social-emotional development that SPARC and LIVE ART hope to emphasize and build upon constantly in the classroom. In the description of the ACE Curriculum on LIVE ART's webpage, it states that the curriculum is meant to help students build relationships with one another and gain a better understanding of one another ("LIVE ART – About the Program").

Considering both the three main categories of the ACE Curriculum and the description of the curriculum on the website, there are many immediate connections that can be made to the benefits and deficits listed in my framework. Acceptance plays a key role in social interaction, while compassion and empathy are major components of emotional development – all three are often deficient in autistic individuals. Students learning to build relationships with each other directly targets deficits of social interactions, while students gaining better understandings of each other is clearly connected to building stronger theories of minds, which are often lacking in those with autism. So, built into the curricula of the LIVE ART classroom, we already have an additional focus on many areas that I considered to be intrinsic benefits of performing arts education. Thomas-Foley explained that the curriculum is meant to teach basic, raw human connection that we sometimes take for granted, and that sometimes might be extremely difficult, especially for students with special needs (Thomas-Foley, 2018).

By directly intertwining these ideas of acceptance, compassion, and empathy into the arts education environment, a close connection between the two is formed. This was extremely apparent in my observations of the Human Heart class. Since this class is more improvisational in nature, the students spend more time experimenting with creative movements. Many times, to create inspiration for that creativity, the teachers will lead the class in a big discussion about one of the three ACE components. One day, the class talked about acceptance, and teachers and

students alike discussed topics such as how hard it is to accept others, how hard it is to accept oneself, why we should accept others, etc. Another day, the class talked about empathy, with topics including why we should be empathic towards others, how we can recognize someone else's emotions, how we can response to their emotions supportively, etc. From those discussions, students will move into creative movement with musical accompaniment. After the discussion of acceptance, students moved around the room and "accepted" others they came across by briefly copying the other student's movements. After the discussion of empathy, students moved around the room in various emotive manners and were "empathic" towards each other by changing their movement to reflect the emotion of a student they passed. In these instances, and many others, the ACE Curriculum directly informed the art-making process, including the community- and ensemble-building aspects that play such a fundamental part in that process (Thomas-Foley, 2018). I believe these close connections between social-emotional ideas and developments and artistic processes increase the effects of the benefits suggested in my framework, simply by making students actively think about how the performing arts can directly relate to non-artistic development. And for students with autism, this would prove to be extremely beneficial for their social-emotional skills-building.

My opportunity to observe LIVE ART is not yet complete – I will still be helping out with their showcase in June, and I look forward to seeing how all of the work the students did in classes pays off in the form of confidence and enjoyment when they perform. The LIVE ART program is an excellent model for how my framework, and my recommendations, can best be applied to benefit students with autism and other special needs.

Conclusion: A Different Kind of Learning, for a Different Kind of Learner

The framework and subsequent recommendations within this thesis, though based on much evidence, are ultimately theoretical in nature. Further research is needed, and absolutely encouraged, to determine whether my framework will produce the benefits for autistic individuals that I have proposed it can produce, and, if so, whether my educational recommendations will create a proper environment for the successful application of my framework. As I noted in Chapter 3, studies along these lines are difficult due to challenges of time, resources, and subjects. However, within my framework are a multitude of benefit-deficit pairs that could become the bases of smaller-scale experiments. For example, one might be able to test whether autistic students who dance together in choreographed movement are less likely to be socially isolated in a non-artistic context; or whether autistic students who study and practice dialogue in scripts are more likely to maintain effective conversations with peers. Any one of the elements of my framework could be tested to check for any cause-and-effect relationship, and gradually these studies could begin to provide a more holistic view of the validity of the framework. I look forward to seeing more research in the field of arts education for students with autism and other special needs, whether or not it involves my framework.

Additionally, there are some broader recommendations that I would like to make regarding arts education and special education programs, based on my findings in this thesis. My first recommendation is that basic arts education should become a part of any teacher's overall training. Pre-service teachers – students studying to be teachers – have to be at least minimally proficient in many areas ranging from math to science to English. However, teachers do not have to be minimally proficient in music, unless their desired position specifically calls for it. This has led many preservice teachers to lack an understanding of how the arts might benefit their

curricula, especially elementary curricula (Hash, 2010; Battersby & Cave, 2014). Without a sufficient understanding of the performing arts, there is no way that many teachers could find ways to integrate my framework into their educational practices, even if they wanted to. Beyond that, the studies suggest many intrinsic benefits of the performing arts, and so it is a shame that teachers are not automatically trained in them. If arts education was added to preservice teacher education, even minimally, it would dramatically improve the potential for the performing arts' success in diverse classrooms.

Some other recommendations I have are directed towards policy changes school administrators should consider. To start, school administrators should begin to recognize teacher leadership for the value it has, and, in turn, they should offer professional programs that could improve the leadership performances of teacher leaders. This will give teachers an even greater role in the realm of curriculum-planning and promoting change in the school, and that change could potentially be crucial in a smooth and well-organized rollout of my framework. Next, administrators should come to understand the benefits of an inclusive classroom, and from that they should see the necessity for providing more effective training for general teachers on how to work with students with special needs. Likewise, the administrators should provide more resources to special educators and paraprofessionals, in the forms of salaries, trainings, and supplies, so that these educators can sufficiently serve the students under their purview. Finally, school administrations should stop defunding performing arts programs – and all arts programs, for that matter. This thesis has demonstrated that the intrinsic benefits of the performing arts can directly motivate and support the development of students with autism, and likewise can support the development of all students. The arts are not something trivial that should be easily cut – they have value far beyond the obvious artistic values.

This thesis began with two problems that I hoped to answer with a singular solution. Based on the recommendations above, I believe that both problems have been sufficiently addressed. We should stop defunding arts programs because we should recognize the many non-artistic intrinsic benefits of the arts, and the positive effects they can have on students. We should change our special education programs to be more student-centered and inclusive, because it is in these environmental conditions that my framework can best be implemented. Likewise, student-centered learning – par for the course for performing arts education – will fundamentally improve the way we consider the educational success of students with autism and other special needs. And inclusive classrooms will not only help autistic students improve their social-emotional interaction, but it will help remove long-held social stigmas held by typically-developing individuals, and perhaps down the road the disappearance of these stigmas will lead to a more normalized place for autistic individuals in the public sphere. We should take the intrinsic benefits of the performing arts seriously, especially as they may pertain to helping individuals with autism address their deficits, develop key skills, and find success.

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