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by

SONJA FASEN

Under the Direction of Melanie Davenport, PhD

ABSTRACT

This Thesis looks at art education as a tool for meaningful art museum experiences. The study follows students on field trips at the High Art Museum as a process to develop a fully inclusive art educational program. The focus of the process of inclusivity evaluates the personal, socio-cultural, and physical aspects of the learning environment within the museum. The research questions that guide the study are 1) how the inclusive strategies I have found in my art classroom can be utilized to create an inclusive art museum setting, 2) how we can approach inclusive student learning an art museum environment, and 3) how the art museum field trip experience can be designed to create an engaging and worthwhile experience for students on the autism spectrum. This study offers a model of inclusion to an artistic learning environment.

INCLUSIVE ART EDUCATION AS A TOOL FOR ART MUSEUM EXPERIENCES

by

SONJA FASEN

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Masters in Art Education

in the College of the Arts

Georgia State University

2019

INCLUSIVE ART EDUCATION AS A TOOL FOR ART MUSEUM EXPERIENCES

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May 2019

DEDICATION

I would like to dedicate my work to my students, who shared my passion for the arts and celebrated a love of learning with me.

ACKNOWLEDGEMENTS

I would like to acknowledge my thesis mentor Dr. Melanie Davenport, who sat through gave me the encouragement and guidance to complete a meaningful thesis. I would also like to acknowledge my committee including Dr. Kevin Hsieh, and Dr. Jennifer Hamrock who offered insight and constructive criticism to help my thesis be in its best form. Lastly, I would like to acknowledge my husband, Brent Fasen, who sat by my side through many long nights of proofreading and brainstorming and never stopped supporting me.

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1 INTRODUCTION

For the past seven years, as I have worked in art education, I have developed a strong interest in differentiated assessment in the visual arts. In 2012, the seeds of my passion for this topic were planted when I was invited to work on a research team while writing my undergraduate thesis. We began in Orlando, Florida, focusing on the arts integrative efforts of an inner city High School. Our research questions revolved around how teaching through the lens of visual arts contributes to education overall, and what it might look like in practice. We looked at integrating the arts into instructional and assessment methods of every core classroom. This approach was a part of the process already in place as the school adapted to the launch of its arts magnet program. After conducting the Arts Integrative study, results indicated that teachers lacked resources and support to practice effective arts integration. Further research was needed to look closely at the role of the art teacher and core teacher in using the arts to teach collaboratively and effectively. Being an integral part of this study inspired me to look more closely at my own teaching practice hoping to build upon the knowledge and experience I had acquired as a part of the research team. Additionally, I looked forward to utilizing the research we had done towards future research efforts in the area of individualized education. While being a part of the study allowed me to understand new perspectives and practices in differentiated instruction (i.e. arts integration), I wondered if there were also implications to differentiated assessment. Following my involvement in the study, I went on to start my teaching career as a licensed Visual Arts teacher in the public and private school systems. My interest and curiosity in arts integrative curricula have grown over the past five years through my experiences in the art classrooms and as I learned the politics of the school system. I am driven to examine not

only the integration of art into the core curriculum and differentiated instruction, but also differentiated assessment based upon the theory of Multiple Intelligences (MI).

Individualizing education through different approaches to instruction and assessment may provide a more inclusive learning environment, and thus, a more effective one. Through this thesis project, I hoped to develop further understanding and be able to offer recommendations for evaluating and appreciating the intelligences and abilities of our differently abled students with and through the arts I also hope my research may influence the policies and procedures surrounding standardized assessments currently in place.

1.2 Tapestry Public Charter School

In 2016 I was hired as the Visual Arts teacher at Tapestry Public Charter School (TCPS).

TCPS is a fully inclusive middle and high school in a suburban town in Atlanta, Georgia. Of the 250 students TCPS serves, half of them are diagnosed with Autism Spectrum Disorder (ASD) and various other exceptionalities while the other half are neurotypical.

The mission of Tapestry Public Charter School is to offer an inclusive, individualized learning environment that is academically engaging, both for neurotypical students and those on the autism spectrum, and to create a positive school culture that empowers all students to take possession of their innate talents and become creative builders of their own futures. (retrieved from http://www.tapestrycharter.org/)

TCPS introduced a new perspective on educational practice to me that aligned with my own, an approach that is commonly known as inclusive education. Inclusive education allows all students to learn without exclusionary support classrooms as commonly implemented in the public school system. That means that in any given classroom, you may

have students with severe ASD who need many learning supports, alongside average achieving learners, while also accompanied by gifted and accelerated learners. With such a wide range of abilities and intelligences in one classroom there is an obvious need for individualized education.

I felt TCPS was an opportunity to put many of the educational principles and values I held into practice and quickly got to work. As I wove my teaching practice into the inclusive school culture I found it to be an ideal fit. There were many parallels to be drawn between inclusive education and arts integrative practices. I was eager to grow in my new educational environment and gain a better understanding of what an inclusive arts educational curriculum and practice looked like.

As the Visual Arts teacher at TCPS, one of my responsibilities is to lead our partnership efforts with the High Museum of Art in downtown Atlanta. My first year they had received a grant to launch a research initiative studying how to restructure the High's educational programs to be fully inclusive. Based on our schools' inclusive environment and high number of exceptional students they anticipated our field trips to provide much needed insight into the necessary accommodations of their art museum to offer an inclusive and educational environment to their community. During my first meeting with the High Museum team members I shared my background with Arts Integration along with my hopes to fully integrate the field trips into the TCPS curriculum as a part of our differentiated instruction and assessment efforts. They invited me to participate in their research and it was an opportunity for me to continue the research I had began years ago in Florida while also providing room for it to grow.

1.3 The High Museum of Art

Over the next 2 years I collaborated with the High Museum and their team to create inclusive accommodations to their educational programs. Additionally, TCPS core teachers and I worked hard to align our field trips to the High museum with the material that students were learning in their classrooms. This partnership between myself, as acting liaison for TCPS, and the High Museum, came to be one of great collaboration and communication. The process involved utilizing many of the inclusive strategies we have developed at TCPS and translating them to a Museum Setting. I needed to take a reflective approach to critically analyze my teaching practice and inclusive classroom environment so that I might offer insight towards the art museums efforts of inclusivity while also maintaining my own principles of integrating arts into the core curricula.

As the study began, the students of TCPS filtered into the High according to grade level. I kept an ongoing observational journal of our visits. I noted typical concerns you might have in any educational environment such as engagement, student discussions, and general behavior. I also kept record of atypical observations that were specific to considerations of students with special needs such as anxiety levels, environmental triggers, and accommodations to IEPs, 504s, and BIPs. The High Museum and I met intermittently before and after each field trip, sometimes more, so that we could compare our notes and discuss failures or successes as we planned to move forward. Initially, we realized that we couldn't expect this process to be quick, it would take time. The High embraced the change.

This study builds upon the collaborative effort involved with looking closely at the process and outcomes developed by the TCPS team and the High Museum to derive implications for differentiated, inclusive art education. Working on this project leads me to the following

research questions 1) how the inclusive strategies I have found in my art classroom can be utilized to create an inclusive art museum setting, 2) how we can approach inclusive student learning an art museum environment, and 3) how the art museum field trip experience can be designed to create an engaging and worthwhile experience for students on the autism spectrum. To explore these questions, I used narrative inquiry through reflecting and analyzing the collaborative field trip experiences with the High. I also kept a journal record of the initial observations, meetings, and changes made throughout the study to offer insight as to how the field trips contributed to my research.

1.3 Need for the Study

In education today, differentiated instruction and inclusive learning environments are a commonplace progressive policy and practice in our educational systems (Jung & Guskey, 2012). It has become widely accepted in this country that our schools are reflective of our diverse populations and thus our student demographics bring a wide range of learners, both culturally and intellectually speaking (Werberger, 2016). Additionally, the idea of differentiating *assessment* of our learners is in its infancy in our educational systems (Jung & Guskey, 2012). When we teach our students to learn in different ways, but continue to hold standardized expectations of testing we impose negative consequences on their self-efficacy and fail to understand their full intelligence. Many traditional approaches to the assessment of student learning are likely to assess only their test taking skills rather than their intellectual growth (Werberger, 2016). This study supports alternative educational practices to enrich the artistic learning environment of the museum.

The arts integrative efforts developed as a part of the High Museums inclusive and educational programming address individualized instruction and assessment as well as

inclusivity. It enables an aesthetic, interdisciplinary approach to teaching. This approach benefits the museum by allowing for a meaningful artistic experience to their student guests, while also allowing the students to make connections to the learning in their homeschool classrooms supporting their overall education (Muraski, 2018). The evaluation of the program's success and impact on the students involves analyzing student learning through behavioral changes as well as response to artistic discussion and studio participation in creating relevant artworks.

Engaging students in artful thinking and learning strategies can better serve them by creating opportunities to connect meaningfully to the content (Gardner, 1999). In this study, the art galleries and school while also providing more accessibility for exceptional learners who otherwise felt excluded by standardized curriculum design. Jung and Guskey (2012) explain that "[...when] those traditions lie in opposition to current knowledge about best practice and may actually bring harm to students, especially those who are [exceptional] learners, pressing for and facilitating change is imperative" (p. 86). In this study, I hope to develop a model for measuring of student learning through inclusive and individualized practices, using educational technologies to facilitate assessment of learning in a museum environment.

My preliminary research has uncovered limited literature on inclusive museum practices. There have been many studies that reach outward to parent and student conversation to consider challenges to accessibility. Additionally, there are articles that speak to the neuroscience found to support the cognitive benefits between those brains with special needs and the visual arts. In Chapter 2 I will discuss examples of such studies relevant to museum interactions with those who have special needs as support for my own research with the

High art museum. I found the gap in museum inclusivity to be the specific educational program implementations practiced by art museums. This lack of practical application for inclusive art museum programs encouraged my research and called a need for this study.

1.4 Purpose of the Study

This study serves to look closely at the relationship between the art classroom and art museum as collaborative educational experiences and examines the art museum field trips as a method of assessing intellectual growth and provide information to art educators as to what that might look like As they engage in a student centered, aesthetic learning environment, I use different methods of instruction and assessment to reach them on levels that are too often overlooked by a traditional, standardized pedagogy. As we enter the realm of inclusive art museum education, we encounter a field of study that has opportunity for advancement and further research. As our students' cultural environment grows, we educators need to keep pace in order to provide a meaningful and rich education to the future or our world. In consideration of evaluating learning, a balance must be made between the traditional and the new. Educators need to value the approaches to assessment that have proven effective and also recent developments that have the potential to be just as successful. This balance is constantly changing with society. When we consider advancement in science and technology as academic applications towards the differentiated assessment of our students, we can truly embrace an evolution of education. By practicing artful thinking in education I hope to encourage our student's independence, critical thinking, and deep understanding of the curriculum content.

While conducting my research, I analyzed the inclusive practices and processes that I am creating within the art museum experience and how they reflect or differ from that of my own classroom. I also took note of the field trips we conducted in year one of the grant research

project and improving upon areas of concern and need. Through this analysis I hope to provide art teachers and art museums with practical pedagogy applicable towards creating an inclusive art educational environment.

To gain understanding of how the process of inclusion works in an artful environment there are many different parts to consider. In Chapter two, I will discuss the research conducted that helped me understand the need for my study and how it is supported by said research. This research will include current and past inclusive practices in art educational environments. I will also use the next chapter to provide understanding to students with ASD and particular considerations that they bring to the classroom and museum educator. Finally, I will reference specific strategies found in my research that guided the design of my study and the inclusive practices of the field trips at the High.

List of Terms:

Individualized Education Program (IEP) An IEP is a record of the important data concerning a student's disability and any modifications or accommodations necessary to make the content accessible (Jung & Guskey, 2012).

Autism Spectrum Disorder (ASD) "a developmental disability that can cause significant social, communication and behavioral challenges" (CDC, p. 1, 2019)

Learner Profile Data gathered through observation and testing to determine the overall educational needs of a student, most commonly used with students with exceptionalities (Personal Communication, J. Tuefel, 2018).

Project Based Learning (PBL) "[A] method of instruction that encourages students to develop questions and construct projects that encapsulate in some way the results of their investigations" (Werberger, 2016, p. 3).

Artful Thinking Palette (ATP) A series of artful thinking strategies designed by Harvard Universitys' Project Zero designed to encourage critical thinking with an artistic approach through learning prompts (HGSE, 2018).

Inquiry Led Learning (ILL) "Inquiry learning implements a constructivist approach, so students interact with the content by asking questions to increase understanding and comprehension and at the same time construct their own knowledge" (Coffman, 2013, p. 1)

2 LITERATURE REVIEW

The visual arts are a vital asset to an effective learning environment and should be experienced as a part of the learning process. Part of that process includes exposing students to their communities and local art worlds. Art museums are a way for art educators to achieve these guiding principles while including their students in meaningful conversations about the artworks. Practicing art criticism skills translates to interdisciplinary skills as well. This makes museum education a priority in my visual arts curricula as I see the benefits reflected in a multitude of my students' skills. In this chapter I will present literature about current inclusive efforts of art museums around the world, cognitive processes involved art interactions, MI as a tool to teach students with special needs, and differentiated methods of instruction and assessment to support an inclusive educational environment.

2.1 Contextual Learning Model

Many of the studies that look at museum education is valuable but lacks "sophisticated analytical systems" to organize their data (Falk & Dierking, 2000, p. ix). John H. Falk and Lynn D. Dierking responded to this organizational need by offering a way to present the thoughts of the complex nature of museum learning through a contextual learning model (Falk & Dierking, 2000). The contextual learning model allows the development of a museum visit that serves the community by focusing on personal, socio-cultural, and physical contexts. It presents the three contexts as encompassing the process and product of museum learning (Falk & Dierking, 2000). I will use this model and it's contexts as a framework for this study.

2.1.1 The Personal Context

The personal context views museum learning as the relationship between emotional and cognitive aspects of the learners. It describes "all learning [involving] emotion, just as emotions

virtually always involve cognition" (Falk and Dierking, 2000, p. 18). By looking closely at this relationship, a supportive learning environment may be developed. "Humans are highly motivated to learn when they are in supporting environments; [...] engaged in meaningful activities; when they are freed from anxiety, fear [...and...] have choices and control over their learning" (Falk and Dierking, 2000, p. 19). These ideas are supportive of many of the practices and strategies implemented in this study. The underlining concept of the personal context is that people learn when they want to or feel that they have to.

2.1.2 The Socio-Cultural Context

The socio-cultural context views learning "as the process by which a society shapes the mind of individuals" (Falk & Dierking, 2000, p.28). An art museum invites members of the community and the world to be a part of its social environment. That social environment is reflective of a larger social world. Dierking and Falk (2000), explain that "understanding of the social world is a fundamental block of learning (p. 38). Creating meaning within social interactions of museum experiences lie at the heart of it providing a rich learning environment. "Meaningful learning results when a person is able to actively construct and find personal meaning within a situation" (Falk & Dierking, 2000, p. 43). The ideas provided by this context are supportive of this studies applications of inquiry led learning and addressing student anxiety as a factor of engagement.

2.1.3 The Physical Context

When people are asked to remember their museum visit they most often discuss what was seen, what was done, and how they felt about the experiences (Falk and Dierking, 2000). All of these stem from reactions of the visitors to the physical environment of the museum. It is this physical environment that is addressed by the physical context. The physical context specifically

refers to the "architecture and feel of the building" (Falk and Dierking, 2000, p. 57). Art museums have rules and guidelines to establish expectations of appropriate behavior in the museum. Additionally, the museum exhibits and structural design allow for personalized, reactionary behaviors of the guests. These aspects are the physical environment of a museum and can provide stability through creating behavior settings. Falk and Dierking (2000), believe that "learning is always rooted in the physical world [and] influenced by the awareness of place" (p. 62). Focusing on the relationship of museum guests and the physical environment will establish appropriate relationships resulting in an increase of learning, personal security and emotional stability (Falk and Dierking, 2000).

The personal, socio-cultural, and physical contexts of the contextual learning model were used as a framework in this study. They encouraged many of the inclusive strategies implemented in this study. The specific parts organized into the model throughout this study will be explained in Chapter 3 as an application of the research, and more in Chapter 4 and 5 as findings and implications of the research. The contextual learning model and its principles are supportive to an overall inclusive art museum environment.

2.2 Museum Education and Inclusivity

There have been many studies conducted on the correlations between art museum education and cognition. In 2015, a study conducted by the World Health Organization explored these benefits by focusing on the relationship between various cognitive processes and engagement with artworks in a museum setting. This study found that "visual art in particular tended to have a positive impact on cognitive capabilities" (Camic, Hulbert, Tischler, & Young, 2015, p. 368). The results also indicated that the act of discussing and creating "art is linked to multiple neurons in the brain [...and that] the symbolic nature of art is linked to brain changes" (Camic, et. al,

2015, p. 369). Furthermore, analyzing works of art in a museum setting enhanced the participants ability to "integrate aspects of the art work with own experience and knowledge, cognitive mastery, and evaluation and interpretation" (Camic, et. al, 2015, p. 369). The results of this study are supportive of an art museums' role in my students' education and highlight the potential cognitive benefits on a large academic scale. The implications of this study implore me to look deeper into the academic support art museum experiences may offer my students.

Art museums create a positive and aesthetic learning environment and there are many art museums available with educational outreach potential. A problem that many schools and art museums have encountered in developing these relationships is accessibility for exceptional students (Kulik & Fletcher, 2016). One study found this to be true as it conducted research within an art museum in Dallas, Texas to measure parent perception of the museum. The study found that parents with children who have ASD found the ability to participate in museum activities more difficult and experienced negative emotions (Kulik & Fletcher, 2016). The parents of children with ASD continued to explain that they felt "barriers exist that prevent their children from participating as often as children without ASD" (Kulik & fletcher, 2016, p. 27).

As part of the study conducted in Texas, the researchers continued to examine 62 different art museums and took surveys of employees, some of the parents and their children with Autism Spectrum Disorder (ASD) (Kulik & fletcher, 2016). The goals of the research were to gain a better understanding about accessibility barriers identified by those parents initially surveyed (Fletcher & Kulik, 2016). The study found that many of the museum employees felt ill-prepared and expressed intimidation from the amount of training needed to accommodate museum attendees with ASD (Fletcher & Kulik, 2016). The parents indicated that among the logistical

challenges there was little or no predictability, and a lack of inclusive activities. These issues contributed to the overall lack of access to art museum participation for their children (Fletcher & Kulik, 2016).

Accessibility is still a challenge for many art museums and falls short of reaching many children with exceptionalities, especially in the case of those with ASD. Marquetta Johnson, a teaching artist at the High Museum of Art recognized this shortfall and responded by creating a more inclusive environment (Cromartie & Johnson, 2018). Johnson has worked hard to ensure that every student feels "enriched and [...valued] when they enter [the] galleries and workshop spaces" (Cromartie & Johnson, 2018, p. 1). She is known for addressing her "young artists" with an understanding of the challenges they may have and providing them with accommodations and modifications to the field trip tours and workshops that are specific to their needs. The most common accommodations Johnson has created are her tactile books and boards. These tactile objects provide the students with access to the literature and artworks included in the exhibits of the museum, and are utilized while discussing the artworks along the school tours (Cromartie & Johnson, 2018). It is important to note that the accommodations made at the High Museum can be helpful to all students and provide widespread support and accessibility for schools and communities. Through the partnership between TCPS and the High museum I have had the privilege of working closely with this Ms. Johnson and have witnessed her use of visual and tactile engagement to connect artfully with students diagnosed with ASD.

The High Museum of Art is not alone in its efforts towards inclusivity. "Museums and galleries are increasingly aware of the need to transition into more socially inclusive institutions" (Reid, p. 82, 2011). Since Museums are largely government funded institutions, they view their inclusive efforts as a social responsibility to keep up with demographical changes reflected in

society (Reid, 2011). In Montreal, Canada, a local art museum chose to focus a research study on "active inclusion" within their programming (Reid, 2011). The museum used a framework that included a three step process. The first step, dialogue with the community prior to museum visits leads to the second as they implement the workshops and tours (Reid, 2011). The third and final step of the process was a reflection to examine the first and second steps and improve upon future projects (Reid, 2011). Eventually they revised their process with a step in between the first and second that included gallery representatives visiting the community prior to the first gallery visit (Reid, 2011). The process has been bringing more inclusivity to the museum and highlighted on the value of community outreach (Reid, 2011).

The idea of community outreach at the forefront of inclusive efforts is a widespread notion. Peter Brooks, an author who has written several books on the relation of community and museum inclusivity offers a definition of community as "the experience of belonging" and says "[w]e are in a community each time we find a place to belong" (Murawski, p.1, 2018). Building upon that idea and the sense of belonging, Elizabeth Crooke, author of *Museums and Community* writes "To be of value, museums need to find significance within [the community]-without those connections, the museum and its collection will be of little importance" (Crooke, p.1, 2007). This brings attention to inclusivity in light of reaching out to the community it serves and identifying the needs of the exceptional populations.

2.3 Multiple Intelligences and Special needs

Harnessing inclusivity in art museums will be a part of the ever changing nature of society.

Recognizing that there is a process involved and continuing to work together towards a common goal of accessibility is promising. Establishing an inclusive learning environment is done through said process, but its impact is determined by looking at the product of learning. The

implications of the educational outcomes derived from an inclusive learning environment are what bring us to ask new questions. These questions consider what our diverse learners bring to the table, how their learning may look different from neurotypical students and how to assess this learning. Answering these questions may ensure a meaningful and inclusive learning environment as it places focus on the product.

Intellectual potential has many faces in an inclusive environment, and as such requires a different perspective. We can look back in recent history to find those scholarly figures who had a large impact on what we view as cognitive ability and intelligence. One such figure is Howard Gardner, who proposed the theory of Multiple Intelligences (MI) in the 1980s (Gardner, 1996). Gardner challenged the traditional views of intelligence being a singular testable "IQ" by believing that intelligence is "[pluralized...] recognizing many different cognitive strengths and contrasting cognitive styles" (Gardner, 1996, p. 5). In an inclusive educational environment we experience traditional means of comprehension are challenged by students with special needs. Their thought processes and capabilities often require individualized assessment.

The Theory of Multiple Intelligences speaks to the individualization of assessment by recognizing the various forms intelligence may take. Howard Gardner has come to discover 9 types of intelligences. The 9 types of intelligences currently recognized today are visual, naturalistic, musical, logical-mathematical, existential, interpersonal, intrapersonal, linguistic, bodily-kinesthetic, and spatial (Gardner, 1999). The theory of MI defines an intelligence as "a capacity to process a certain kind of information" (Gardner, 1996, p. 6) and explains that we all have a full range of intelligences but that we use them in different ways and at different levels. Considering this view of intelligence and using models of educational practice with foundations

in the Theory of MI can help us understand how to engage students with special needs and provide a meaningful learning environment.

The implications of Gardner's research led to the birth of Project Zero, a research initiative at Harvard University. "Project Zero was founded by philosopher Nelson Goodman at the Harvard Graduate School of Education in 1967 to study and improve education in the arts" (HGSE, 2018). Goodman believed that the arts should be considered a "serious cognitive activity" but found that there was no (zero) advocacy for such a view in society and thus named the group Project Zero (PZ) (HGSE, 2018). In 1967, Goodman was joined by Gardner to embark on a journey of educational discovery benefitting education in the arts. Along that journey the research team integrated critical thinking skills and cognitive science through applications of art education and eventually the theories of MI. Their journey began by analyzing similar schools of thought already in place through observation of schools who also adopted common principles of PZ calling them "smart schools" (HGSE, 2018). These common principles are based on "inquiry into the arts and arts education, while drawing together diverse disciplinary perspectives to examine fundamental questions of human expression and development" (p. 1). PZ is propelled by a passion for big questions about conceptual, interdisciplinary education, the full range of human development, and the arts (HGSE, 2018). Smart schools were found in many forms across the nation and can now be found around the world.

2.3.1 The Key School

In a smart school classroom, critical and creative thinking is encouraged in consideration of the theory of MI. Each student is assumed to have different intelligences requiring educators to differentiate instruction and assessment in order to measure them accurately.

Many schools have adopted the practices of PZ into their curricular structure and daily

routines. At the Key school, in Indianapolis, the curriculum was intentional about stimulating all of the intelligences of their students each day (Gardner, 1999). They did this by using a "flow room" where the students could experience self-guided learning, and also enrolled the students in "pods" where interest groups could explore common educational passions together (Gardner, 1999). The Key school was one of the first and best known of the "smart schools" and influenced many schools to follow in their footsteps. This idea of student led learning as utilized in The Key Schools "flow room" will inspire my use of "creative free share" on the field trips, an inclusive teaching practice I use in my classroom. This sort of free artful discussion promotes a student led learning environment and will be discussed further in Chapter 4.

2.3.2 Project SUMMIT

Gardner discusses MI schools at great length in his book *Intelligence Reframed* and highlights some of the most successful habits and innovations of those schools as part of the SUMMIT project. The SUMMIT project looked closely at 41 schools with proven success of MI applications (Gardner, 1999). The highlights mentioned among these schools looked at include students writing about a person who has demonstrated a specific intelligence as a model, then recreating the intelligence in a classroom presentation. Another successful habit was an after school program designed to nurture the intelligences of their students through specific activities. Other various schools adopted a specific intelligence as a sort of magnet program schoolwide (Gardner, 1999). Project SUMMIT provided examples of MI as a lens for educational programs. The various applications of MI can offer powerful connections with our students vast learning styles. The connections may provide increased accessibility for students with ASD in an artful learning environment. Gaining this understanding of how

multiple intelligences may be demonstrated in an artistic environment has allowed me to have fresh perspectives on inclusive art education in my own classroom. My practices influenced by Project SUMMIT have guided the learning strategies used in this study to design the field trip activities. They have also provided insight into how learning might look different when teaching students with ASD. I will elaborate on how inclusive, artful learning might look through the lens of MI in Chapter 4.

2.3.3 Project Spectrum

Some "smart schools" have taken form of collaborative projects of PZ. One noteworthy approach is Project Spectrum, focused on identifying and assessing the intelligences of elementary aged children through play stations. As the children were invited into the classroom their curiosity led them through exploratory learning. The idea behind the approach was that "a good measure of intelligences [is assessed...] when someone is parachuted into a new territory" (Garder, 1999, p. 137). As the children explored the assessments set up as areas of play, they guided their own learning through curiosity and using problem solving skills. As the students engaged with the "play centers" their intellectual growth could be easily observed and measured according to their interactions with the objects in the centers considering intelligence as the "ability to solve problems or fashion products valued by society" (Chen, Krechevsky, Viens & Isberg, 1998, p. 13). Spectrum reexamined how we assess intelligence in children by looking at how they construct meaning in their environments (Chen, et. al, 1998). Looking beyond linguistic and logical-mathematical development as the typical areas of focus of intelligence provides opportunities for depth in our students' educational growth (Chen, at. Al, 1998, p. 41). This playful approach to learning as illustrated by Spectrum has provided opportunities for play

as a strategy in my art classroom. The use of meaningful play also served to engage the students on the field trips in meaningful, artful learning experiences. The play stations of Project Spectrum led us to many of hands on approaches to the museum activities as a way for the students to construct their understanding of the art exhibits. As we implemented the activities we built upon successes experienced in my classroom and discovered some new effective ways to use the act of play as artful learning.

2.3.4 Arts PROPEL

Another notable effort of Project Zero is Arts PROPEL which offers perspective on arts based learning and assessment. The three perspectives it takes on learning are "1) Production: students are inspired to learn the basic skills and principles of the art form by putting their ideas into music, words, or visual form, 2) Perception: students study works of art to understand the kinds of choices artists make and to see connections between their own and others' work, 3) Reflection: students assess their work according to personal goals and standards of excellence in the field" (HGSE, 2018).

It also looked at assessment in two parts- the first was to use studio works as a starting point for exploring the works of practicing artists, while the second component was the "processfolio" which would keep record of student work in each step of the creative process (HGSE, 2018).

The studio workshops during the field trips at the High art museum were greatly influenced by this approach to arts based learning and assessment. Over the course of the study, Arts PROPEL's perspectives on artful learning served to create meaningful connections to the art exhibits and the collaborative STEAM efforts at the High museum. Collaborating with the TCPS curricula and the High exhibits was made meaningful using the

production, reflection, and perception. The teaching artist of the studio workshop began the project by leading into a short discussion to create connections between the project and exhibits students had experienced on the field trip. This relational approach to the project and museum exhibits stresses the importance of "perception" as the second perspective of Arts PROPEL. During this time the students are able to share their ideas about what they had seen on the field trip exhibit tour and brainstorm how they can relate their project to what the featured artists had done. In relating the project to the museum exhibits it supports the STEAM initiatives and speaks to the collaborative nature of this study. Following the short discussion, the teaching artists continue the workshop by highlighting the "production" perspective. They do this by showing the students instructions for the basic skills needed to create the artwork. During this "production" part of the studio workshop the students get excited to learn the skills needed for the projects knowing they would leave that day with their artwork. The final use of the Arts PROPEL perspectives is "reflection". The teaching artists utilize this time by engaging the students in a short art critique. This is a time where they may choose to share their work with the group and provides opportunity for the teaching artist to evaluate their comprehension of the lesson. The specific implementations of the studio workshop strategies influenced by Arts PROPEL are further discussed in Chapter 3.

The influence of MI theory in education has led to more effective and meaningful instructional methodology while also providing alternative and inclusive approaches to assessment. Using this approach allows for more inclusivity in our educational systems. By reaching our students on all levels of intelligence we are able to see successes in exceptional students that are overlooked by traditional, standardized assessments (Gardner, 1999).

Gardner (1999), explains that we use our intelligence in our problem solving and creative construction to produce something that society values. Certainly all of us have something of value to contribute to society and MI provides an approach that allows students the opportunity to reach that potential. This study is supported by the efforts of smart schools and is provided a lens to use them with the theory of MI.

2.4 Assessing Exceptional Learners

When we evaluate the learning of our students, we art educators perceive different levels of ability and ways of learning. MI refers to these abilities as "intelligences" or "cognitive strengths" and the ways of learning as "cognitive styles" (Gardner, 1996, p. 4). Based upon different cognitive strengths and styles, capabilities and other considerations the schools in the United States have come to identify certain students as exceptional learners, including those with disabilities, English learners, gifted learners, and those receiving intensive interventions (Jung & Guskey, 2012). Responsibility for the education of exceptional learners has been assumed under state legislatures and the federal government (Education of Exceptional Children, 2017). The Department of Education estimates that "10 to 12 percent of the children in the U.S. suffer from handicaps [while a]nother 2 to 3 percent are considered gifted" (Education of Exceptional Children, 2017). These statistics are important and relevant to an art museums educational programming because they provide awareness to the needs of their community.

In 1975, the Education for All Handicapped Children Act ensured access for exceptional learners to free and appropriate education in schools (Education of Exceptional Children, 2017). That accessibility is reflected in the current efforts of schools encouraging a more differentiated approach to education and echoed in the inclusive efforts of art museums. As

the idea of differentiated education evolves, considerations are given not only to the instruction but also the assessment of exceptional learners to create an overall inclusive learning environment.

2.4.1 Obstacles

As teachers look for answers in the educational evaluation of exceptional learners in our schools, we find many challenges. Similarly, an art museum docent will incur these same challenges, some to a greater degree because their interactions with students on field trips are brief with no prior relationship. An inclusive classroom places many demands on an educator. Managing a group of students in an inclusive learning environment means providing access to the material for all cognitive abilities and styles within each lesson, discussion, and activity. In this study my approach to creating and managing an inclusive learning environment is differentiated education. Differentiated education offers a student centered practice of teaching to individualize the learning while still connecting with the whole group. The conflicts that arise have been found to reach beyond the instructor and are also experienced by students not categorized as exceptional (Jung & Guskey, 2012). The population of students without special needs, commonly referred to as "neurotypical," have expressed a feeling of differentiated instruction and assessment as being unfair (Jung & Guskey, 2012). This seems a natural reaction to certain students being deemed as deserving "special" considerations and serves as a reminder that inclusivity serves all students without hyper focus on those who need more accommodations to be successful.

2.4.2 Assessment in Art Education

Understanding how the basic instructional and assessment guidelines with accessibility challenges may be experienced when educating students with exceptionalities is just the tip

of the iceberg. Once you find yourself in an inclusive art classroom there is a much larger consideration introduced with the subjectivity of visual arts. The subjective nature of the arts can be especially challenging when trying to assess student learning. Currently, in this country the assessment of visual arts is not universally agreed upon. Since 2016 the National Assessment of Education Progress (NAEP) has established guidelines for assessment in the arts stating that "[e]xercises should be both as faithful as possible to artistic learning and standardized in form, content, and context for a large number of students" (NAGB, 2016). Additionally, the NAEP confirmed that "students should spend a greater proportion of time working on creating exercises (50–70 percent) than on responding exercises" (NAGB, 2016, p. 23). This idea may present difficulty as it asks art educators to quantify or standardize creativity. That challenge has led to current efforts seen across the country to implement performance based assessments in the arts which has also prolonged the exclusion of nationwide assessment of the arts (Butrymowicz, 2016).

Assessing and quantifying student understanding in the arts has thus proven to be difficult, although not impossible. Similarly, the assessment of students with special needs has presented many challenges and additional considerations *but* is possible with intentional planning and analysis of student needs. It is my hope that this research as a part of this study will contribute to current research needed in both the assessment of visual arts and the accommodation of students with special needs.

2.5 Differentiating Learning Environments for Diverse Learners

Under Gardner's theory of MI, our students learn and function at different levels and with different styles of intelligence. As educators, we can use the theory of MI to individualize our classrooms and may apply these practices to an art museum setting. This differentiation is

applicable towards our instruction as well as our assessment of student learning. For the purposes of this study, I focused on the assessment applications of differentiation. Differentiating assessment allows for educators to progressively measure our students learning by allowing for students to demonstrate their understanding in a variety of ways. As illustrated by the MI "smart schools" individualizing learning gives opportunity for more meaningful connections in the learning environment. These connections created by the insight of MI provide a clear lens into the cognitive capabilities of our students allowing us to better assess their learning styles and comprehension. By establishing this lens to accurately measure the intellectual gains of our students, teachers cultivate an inclusive learning environment. In a simplified way, the art museum docent may use this lens as a way to understand and interact with *all* students.

2.5.1 STEAM

Differentiation in education is an approach to individualize our classrooms and to teach each student according to their intelligences. When we look at practices of differentiated assessment, they are widespread and current but not consistent or productive. Many schools have adapted to the inclusive efforts in US education with various perspectives and ideologies much like TCPS and their implementation of a fully inclusive educational model. Although there has been a vast amount of research surrounding intelligence and how to evaluate it in educational environments, there is still much work to be done. In art education, a particularly exciting opportunity can be found in recent arts integrative initiatives such as the Science, Technology, Engineering, Arts and Science (STEAM) programs. These programs are an example of U.S. public education recognizing the power of artful thinking and its place in schools. In the High art museum, the educational programming includes intentional cross curricular learning opportunities for students. The High Art Museum and TCPS used the STEAM program in place to create

meaningful learning experiences in the art museum exhibits that reflected their learning from core classrooms. This will be discussed further as a collaborative process and inclusive implementation in following chapters.

As art educators, we have the ability to play a big role in differentiated assessment as we tap into creativity through various avenues. As mentioned earlier, Project Spectrum took a deeper look at cognition and differentiated education by exploring those avenues. The study lasted ten years and developed innovative approaches to assessment and curriculum (Chen, Krechevsky, Viens, & Isberg, 1998). When Project Spectrum analyzed the traditional, standardized approach to education they determined that it fails to accurately measure a child's ability to use higher order thinking skills and creative problem solving abilities, and furthermore views a child's intelligence an innate and static ability that can be simply quantified by a test with one right answer. Project Spectrum worked to develop teaching practices and assessment methods that could be differentiated towards students' various strengths and abilities (Chen, Krechevsky, Viens, & Isberg, 1998). Their approach gained evidence of student understanding that went beyond the right answer (Chen, et. al 1998). This work supports not only the need for reform in education but more importantly the need for differentiated assessment, which is a positive consequence of an arts integrative approach to learning.

2.6 Student Centered Approach

As art educators refine their practice in an inclusive environment, their assessments should serve as a guide to teach not simply as a means of evaluation (Teufel, J., personal communication, 2018). This insight is reflective of my research and it's efforts towards inclusivity as a process. Each field trip I observed as a part of this study revealed strengths

and weaknesses that were addressed in meetings and improved upon in future trips. Inclusive learning environments are a progressive idea, not a finite practice.

Projects, rubrics, and discussions can support student learning and helps reveal their intelligences. Many studies have been conducted in support of this perspective. One such study looked closely at the correlations between students' intelligences and their academic success, determining they directly affect one another (Tezer, & Ozturk, & Ozturk, 2015, p. 33). This may seem like a common-sense conclusion but, as previously mentioned, much of the standardized approaches to education overlook most of the intellectual capacities of students. With that in mind, neglecting the intelligences of our students may be setting them up for failure. Another study found that creativity is often related to "complex cognitive functions [rather than] basic cognitive functions" (Lunke & Meier, 2016, p. 12). Evidence of the effectiveness of MI and creativity as ways to reach our students on deep levels of cognition and guide them to success further illustrates the need for inclusivity in art education. Moving forward with a differentiated and inclusive environment will, however, require more than just evidence of success. It will also require us to look at the process behind it. Often it can take up to a year to develop a learner profile for a student with exceptionalities (Teufel, J., personal communication, 2018) requiring educators to take a careful and intentional approach to fostering an individualized art educational practice. This supports the approach to this study using art education as a tool to be sued for inclusivity and not a solution. Creating an inclusive environment is complex and has many pieces. As I an inspired to use my art classroom inclusive practices towards a museum environment, I hope to contribute to the conversation about its implications towards the overall idea of inclusivity.

2.6.1 Accommodation versus Modification

When teaching learners in the art classroom with special needs and considerations there are two major ways to adapt the curriculum to their intelligences and abilities known as accommodations and modifications. Understanding the difference in our teaching practice is essential "because accommodations do not affect what is being measured and reported, but modifications do" (Jung & Guskey, 2012, p. 51). Accommodations allow students to fully participate in the learning. They are "supports that provide access to the general curriculum but do not fundamentally alter the learning goal" (Jung & Guskey, 2012, p. 51). In an art classroom, a common accommodation would be to wrap padding around a pencil to allow student with a lack of fine motor skills to grasp the pencil easily and comfortably or provide a special flat compass for that same student to more easily draw a circle with control. Modifications are used when accommodations are not enough and provide additional support for the student. Modifications are changes that will amend the learning goal or expected grade-level skills (Jung and Guskey, 2012). Using the previously mentioned example, a modification may need to be made for a student who cannot draw at all, allowing for a different and more accessible medium to be used or perhaps providing a pre-drawn circle on the paper so drawing is not required. Understanding these principles guide me to make the necessary changes to my curriculum according to the intelligences of my students. I commonly use accommodations to provide access and as a consequence engage the student, which supports differentiated assessment. In more severe cases I may use modifications in my individualized assessments, these are more complicated as they may deviate the lesson from the course curriculum for the student in consideration. Either case calls for intention and planning while also preparing for alternative courses of action should

the student not find success in the changes. These considerations in an inclusive classroom environment can translate to an art museum setting as they call attention to the necessary flexibility of the docents approach to educating their students.

2.6.2 Product, Process, Progress

Additional considerations when differentiating assessment involve looking at the overall idea of assessment and breaking it into major parts of a whole. The currently accepted grading systems in our schools, including those of standardized testing, are reflective of our desire for product over process. When the importance of a student's final grade as a product is more impactful than the learning profile of that student, the value of the individual is lost. Furthermore, if the score on a standardized test serves as the determining factor for a student's success or failure in that subject, we overlook growth as a vital part of the assessment of our students' learning. Jung and Guskey (2012) challenge the importance placed solely on product by adding process and progress to the learning goals in our schools. They continue to describe product as being the major cognitive and academic outcomes being sought, process as a focus on classroom behaviors and activities that enable learning, and progress to "consider how much students actually gain from their learning experiences" (p. 17). As one unpacks the ideas of the 3 P's the concepts behind differentiated assessment unravel and form to lead art educators down the path of inclusive education. Although Art museum educators only have a short time with students in the museum, they can still use the three P's to structure the learning process within the museum experience.

2.6.3 Individual Education Plans

For some students with exceptionalities, an Individual Education Plan (IEP) may be required. An IEP is a record of the important data concerning a student's disability and any

modifications or accommodations necessary to make the content accessible (Jung & Guskey, 2012). With nearly two and a half million U.S. students obtaining IEPs, it is important for educators to be well versed in the language and use of IEPs. Jung and Guskey (2012, discuss the "common misconception that individuals with learning disabilities have lower than average intelligence" (p. 5). Contrary to this preconceived notion, students with some exceptionalities like ASD often are found to have an IQ far above average (Jung and Guskey, 2012). This is a much-needed reminder for educators to see IEPs and exceptionalities as opportunities rather than obstacles. Museum educators are not privet to this information as it is confidential information. This aspect of inclusivity illustrates the need for collaboration and support of the teachers as a part of the inclusive art museum experience.

2.7 Inquiry Led Learning

As art educators, guiding our students to look at the "why" is critical to gain understanding both conceptually and technically speaking. Additionally, encouraging our students to look at the why gives them the opportunity to become active participants in learning while giving teachers the opportunity to assess what they know by watching it unfold through creation. "Inquiry learning implements a constructivist approach, so students interact with the content by asking questions to increase understanding and comprehension and at the same time construct their own knowledge" (Coffman, 2013, p. 1). When students approach the world with curiosity, they utilize critical thinking skills and problem solving strategies to question real world problems.

2.7.1 Project Based Learning

A beautifully artful consequence of inquiry led learning is project-based learning (PBL). PBL is best explained as "a method of instruction that encourages students to develop questions and construct projects that encapsulate in some way the results of their investigations" (Werberger, 2016, p. 3). While PBL is a familiar practice to art educators, when combined with inquiry led learning it offers a fresh perspective and practice. Asking questions about what our students want to learn, followed by why and how they want to learn it, opens up a new world of possibilities in the art classroom. It gives our students the power to guide their own learning and practice using their voice in academically productive arenas. It puts focus on the process by encouraging exploration and query which is at the essence of artful thinking. PBL serves as an important reminder that "[t]he artistic process is about clarifying a question, not answering it" (Werberger, 2016, p. 16). As PBL gives our classrooms more creative and intellectual diversity it also makes room for divergent thinking, better known as innovation (Werberger, 2016). PBL offers a more inclusive way to engage learners and an individualized way to assess their cognitive abilities. These concepts are interwoven into the studio practices of my students at TCPS and were adapted to the studio workshops at the High for this study.

2.8 Summary

This literature review summarized important points to express a need for further research into the inclusive practices of art museums. It addresses inclusivity in consideration of community, differentiated learning, and specific strategies that offer a meaningful learning environment for students with special needs. The lack of research and information was found in the specific practices and implementations of a successful inclusive artistic

educational program. The subject of community is also included in the research to stress the importance of collaboration between a school and an art museum. The educational system is a large member of any community. When schools practice community outreach it offers a meaningful way to extend its service to the students.

Differentiated learning provides ways of reaching our students on deeper cognitive levels. The connection art educators establish with their students may break down the barriers often existing between a teacher and students with ASD. Taking a student-centered approach inspired by inquiry led learning, Project Based learning, and the Theory of MI may help us foster an inclusive learning environment. Many studies included in the literature review have shown that our standardized, traditional approaches to education cause barriers for students with ASD or other special needs illustrating the call for efforts towards inclusivity and a need for this study. In the next chapter I outline my approach to undertaking such a study.

3 METHODOLOGY

This study looked at inclusive art education in a classroom environment as a tool to create a meaningful art museum experience for students. I collaborated with the High Art Museum to design inclusive educational programming. My research was conducted as a part of the field trips for our students at TCPS, but our efforts towards inclusivity have implications that extend to all students served by the museum. This collaboration was successful because of the inclusion model of TCPS and the inclusive efforts and grants in place at the High Art Museum. Our collaboration involved the staff and students at TCPS as well as the educational coordinators, docents and teaching artists at the High. Working together, we strived to provide students with an accessible, meaningful, and individualized learning experience. The research questions that guided this study included:

- 1. How might the inclusive strategies I have found effective in my art classroom be utilized to create an inclusive art museum setting
- 2. How we can approach inclusive student learning in an art museum environment
- 3. How can the art museum field trip experience be designed to create an engaging and worthwhile experience for students on the autism spectrum

I addressed the first question by implementing different strategies inspired or created by many of my own art educational practices. These strategies are supported by many already in place through the efforts of smart schools, Project Zero, and Raleigh Werberger. I have found that the MI "smart schools" offer models MI to address the needs of students with ASD. I frequently implement practices of Project Zero to provide inquiry led and student centered prompts that foster engagement. Lastly, the project based learning as described by Raleigh Werberger and his "unhappy meal" inspire focus on meaningful questions that I have found

meaningful in my lessons. I shared my strategies and their inspirational sources with the High as we practiced them on the field trips. Through our collaborative efforts we made adjustments when necessary and adapted them to serve an inclusive art museum environment.

The last two questions were largely supported by the contextual learning model (CLM). This CLM served as a theoretical framework to guide my research. As previously mentioned, it considers the personal, socio-cultural and physical aspects of the process we used to enhance inclusive learning in an art museum environment. It presented learning as "a cumulative, long-term process [...] of making meaning and finding connections" (Falk & Dierking, 2000, p. 12).

The contextual perspectives of the CLM speak to the approach of my research within this study because we considered the experience of the High field trip to be one the students would carry with them and build upon over time. It also supported our intentions of the STEAM collaborations with the TCPS teachers to establish meaningful connections the students would create outside of the museum. Modeling lifelong learning for our students helps them use their experiences at the Museum to build upon those they might have at school, home or in the community. The connections made by relating the exhibit tours and studio workshops on the museum field trips may help in creating a more meaningful learning experience for *all* students.

The first aspect of CLM, the personal, allowed me to categorize the emotional and cognitive "feedback loops" of students as a means to motivate them (Falk and Dierking, 2000). I looked into the second aspect of CLM, the socio-cultural, to provide an "understanding [that] the social world is a fundamental building block of learning" (Falk and Dierking, 2000, p. 38). The socio-cultural considerations support this study by encouraging knowledge of the needs of the students, community, and inquiry led learning to foster intrinsic motivation (Falk and Dierking, 2000). I considered the final aspect of CLM, the physical, as what was seen, done and felt by the

students in the environment of the High (Falk and Dierking, 2000). Creating positive and consistent relationships with the physical space and expectations of behavior allow for a more meaningful, inclusive learning environment (Falk and Dierking, 2000). I focused on the physical environment of the High as having an important role in lowering the anxiety of students with ASD as described in further detail throughout Chapter 4.

I also sought the answer to my third question through my observational research based on the students' engagement during the field trip experiences. As we implemented the inclusive strategies and approaches inspired by TCPS and my art classroom I recorded my observations in my journal. I analyzed my notes and looked for trends. I identified trends using averages based on student group sizes which were consistent during the field trips. Over the course of the field trips and collaborative meetings adjustments were made according to my interpretations of student trends. Each field trip brought different students to the museum which made consistent growth for one student impossible to measure; Instead I kept student groups at same amounts so averages could be derived anonymously so that changes in engagement could be measured.

2.1 Design

The implementation of this study was designed as an interdisciplinary art museum field trip experience. This was the third year of the inclusion grant project between TCPS and the High Art Museum. This study built upon the past two years of collaborative knowledge gained through research with the High Art Museum during which we attempted to establish inclusivity for TCPS students. All of the field trips were split into two parts. The first part of the field trip involved a museum tour where the students were led by docents through the exhibits. During the exhibits engagements activities would be implemented as strategies to foster a more inclusive learning environment. The second part of the field trips were designed as studio workshops. The

studio workshops were led by teaching artists of the High Museum and implemented using the perspectives of Arts PROPEL as a part of their practice. The workshops were also developed using inclusive strategies shared from my classroom and inspired by our research.

The field trips were planned for the Spring and were segregated per grade level including grades six through twelve. The trips were based on prior collaboration with the core teachers for each grade level to ensure the excursions were interdisciplinary in nature. The timeline for each trip was aligned with what the students had recently learned or were currently learning in their core classrooms. The relevant curriculum influenced the galleries and studio workshops included as part of the students' field trip experiences.

Throughout the field trips I analyzed and recorded trends in student engagement as well as how the field trip was modified to support an inclusive art educational environment. We implemented inclusive learning strategies from my art classroom such as kinesthetic engagement activities, visual assessments, and predictability. These approaches included tableaux, creative free share, body language and visual timers. We also added some inclusive strategies that were specific to an art museum setting. These strategies consisted of establishing quiet spaces and time structure lanyards. The implementation of the strategies will be discussed further in chapter 4.

All of my recordings were kept in an observational research journal. The overall process on the trips focused on creating a meaningful and inclusive learning environment. To reach my goals I looked closely at student engagement and comprehension. I used high student engagement as a support for the inclusivity and high student comprehension as a way to measure a meaningful artistic experience on the field trip.

3.1.1 Student engagement

I accounted for the students' visual and physical engagement on the field trips through body language, participation, and responsivity. As the students gained understanding of the galleries and studio projects both from conceptual and technical aspects I used several strategies to assess the relevance of their learning and understanding. I looked at the assessment of student comprehension implemented through inquiry led learning prompts and comparative observations kept in my research journal. as a component of inclusive assessment. Physical and visual assessments included body language, visual cues for understanding (i.e. thumbs up), and activity participation. Elaboration of these inclusive assessments can be found in Chapter 4. As part of the design in this study I used artful thinking strategies that have been developed by Project Zero. Some of these approaches were previously mentioned as a part of the literature "smart schools". Other approaches to assessment were derived from the Artful Thinking Palette discussed in further detail below.

3.1.2 Artful Thinking Palette

In 2006, Harvard University's research team Project Zero designed the "Artful Thinking Palette" (Palmer, Ross, Tishman, 2006). The purpose of the ATP was to encourage "connections between works of art and the curriculum, and to help teachers use art as a force for developing students' thinking dispositions" (Palmer, Ross, Tishman, 2006). The design looks like a painting palette with each color representing an approach to artful thinking strategies. As you go through the different approaches you can tailor the strategies according to your students' grade level, subject area, learning goals, or teaching style. The ATP is a valuable resource for use with inquiry-led learning practices as it encourages artful thinking and leading questions that are all created with intentions of critically thinking and seeing like an artist.



Figure 1: Artful Thinking Palette

("Artful Thinking Palette", Palmer, Ross, Tishman, 2006)

3.1.3 "Painting" with the ATP

There are many strategies available through ATP, I have used them as a guide for my own implementation of inquiry-led learning. The "Questioning and Investigating" category is easiest to accommodate in various ways. I looked at this category and similar strategies because they mentioned the basic steps of observing, asking why, deciding what is or is not, supporting your claims and then following it all up with more questions of wonderment. The specific strategies are listed as "I see, I think, I wonder," "Creative Questions," and "Think, Puzzle, Explore." "I see, I think, I wonder" is very straight forward, three "I ______" statements to lead you through the process. "Creative Questions" is a good way to warm up your brain and get your eyes to *see*, it asks your students to come up with at least 12 good questions about what they see, then narrow down to their favorites and reflect. The "Think, Puzzle, Explore" strategy involves

the students stating an opinion, discussing something that confuses them, then asking a question about what they are seeing. All of the strategies mentioned involve seeing, thinking, asking questions, and of course reflection.

A similar color on the ATP is the "reasoning" color. Under the category of reasoning there are two different strategies, "What makes you say that?" and "Claim, Support, Question" (Palmer, Ross, Tishman, 2006). The first, "What makes you say that?" has two steps, figuring out what is going on in whatever your students are looking at, then talking about what they see that makes them say that. The second strategy, "Claim, Support, Question" is similar, asking the students to make a claim about what they see, then support the claim by stating something they see as proof of their claim, and finally, coming up with a question about their claim.

The last category to mention is different from the previous two and has been most useful for me at the high school level, "Exploring Viewpoints." This category has two strategies, "Circle of Viewpoints" and "Step Inside." Both of these approaches ask the student to empathize and relate to perspectives within the artworks. In "Circle of Viewpoints," you choose a viewpoint, embrace that perspective as a character, then ask a questions or questions from that perspective. "Step Inside" asks students to choose something they see and give it life, asking and answering questions about what it knows, cares about, and believes, followed by reflection on how you came to those conclusions. These strategies were particularly inspiring to the Tableaux engagement activity we used on the exhibit tours.

All of the artful thinking strategies mentioned have influenced my own course of action in this study and provided a differentiated means of assessment supportive of an inclusive learning environment. They were used to guide student discussion by offering inquiry led learning in the art museum setting. Inquiry-led learning (ILL) is an appropriate compliment to

the ATP as much of its strategies offer prompts for student learning and discovery. I used ILL as a lens for the artful thinking strategies at the heart of this study which will offer a way to engage the students in the learning process. The marriage of ATP and ILL also provided a means of evaluating the effectiveness of the inclusive art museum experience.

3.2 Population and Analysis

This study was intended to reflect on the efforts and addressed the needs of both neurotypical and exceptional students in middle and high school, including grades six through twelve. I analyzed each grade levels' field trip observations to establish correlations between the inclusive art classroom environment and the inclusive nature of an art museum environment. Additionally, I used the interdisciplinary collaboration between Tapestry and the High Art Museum to provide a structure that explored an inclusive artful learning environment. I looked closely at how an art curriculum can be enriched by differentiated assessment in an inclusive learning environment of a school and attempted to translate that idea to an art museum setting. My study served to assess my own practice and the process that I am creating to foster an inclusive art educational learning environment. My research may offer a pedagogical model for any art classroom or art museum.

2.1.1 Timeline and Expected Findings

The field trips for each grade level were scheduled as follows:

- 6th: Friday, December 14th;
- 7th: Friday, January 25th;
- 8th: Friday, February 1st;
- 9th: Wednesday, January 16th,
- 10th: Wednesday, February 13th,

• 11th and 12th: Friday, March 8th..

The field trips have provided me with an opportunity to observe the behaviors of the students as they interact with the galleries. The students were divided into small groups of 8-12 students per group on the exhibit tours so that the observational behaviors are more concentrated. Each group had at least 4 and no more than 6 students with special needs, the remaining members of the student group will be neurotypical. As behaviors were observed the focus was on engagement, learning comprehension relevant to the cross curricular subject area of the gallery, and anxiety levels in the students. Students who were participating in the gallery discussions or wander off from the group will be considered not engaged. Duration of student engagement were noted as well. Students who do not correlate the gallery exhibits and projects with the relevant core curriculum when prompted were considered to have little or no comprehensive learning. Students who were displaying dysregulated behaviors varying from echolalia to nervous and erratic movement will be considered high anxiety. Frequency of student dysregulation were noted.

I scheduled meetings with the High Museum of Art's educational program directors before and after every field trip. During these meetings we discussed observed behaviors of the students. We used our time to go over successes and areas of concern from the previous trip, as well as use these meetings to create plans for improvement to be implemented during the next field trip. I referred to my observational journal during my meetings. My journal included my observational notes, as well as the collective anonymous feedback from teachers and docents who participated in the trips. I also took comparative note of the correlations between my inclusive practices in the classroom and the art museum. Additional notes covered docent practices and instruction to consider opportunities for improvement. The contextual learning

model served as a theoretical framework for the considerations of the process and practice of the study. It provided a guide for my considerations of the process into three outlets of the personal, social, and physical factors. My research offers a model for creating an effective and inclusive art educational environment.

4 FINDINGS

I observed students and noted behaviors concerning engagement, relevant learning comprehension, and anxiety levels. I recorded what I saw in my observational journal. I noted additional feedback that included anonymous, constructive criticism from docents and TCPS teachers. I was able to use inclusive practices in the art classroom as comparative data to the inclusive practices in the art museum environment. The overall inclusive process was guided by the contextual learning model which focused on three facets of personal, social, and physical considerations. I have summarized my findings and considered them as support for the process of creating an inclusive art educational practice and environment.

4.1 Embracing Change Using A Contextual Learning Model

The changes we made throughout the study were exciting and sometimes experimental in nature. This was new territory for all of us. Some of the changes proved to be successful immediately, others needed tweaking, and a few failed completely requiring us to redesign them completely. One example of the types of changes we made is setting up areas to provide "fidgets" to the students as they tour the galleries. A fidget is any handheld item that may be used to ease the anxiety of a student. We noticed very early on that the anxiety displayed by the students in a new environment was no exception for our trips to the High. Even though this is a common experience at my school, it was new to the High and we took action quickly because high anxiety levels in students with ASD is like a brick wall barrier to any hope of learning from or experiencing the museum. Often at TCPS we use fidgets in the classrooms, but at the High we found it convenient to set up baskets full of them outside of the elevators, offering an easy transition from one gallery to the next. The fidgets we set up at the High included small, handheld items that the students could easily carry with them. This is an illustration of the kind

of change we often encountered through our initial research with the High. It is one that evolved over time and will be discussed in more detail later in this chapter. It is also provided a good foundational support for a contextual learning model that will be used as a framework for this study. The fidgets represented consideration of the personal accommodations of students, the physical environment that created the need for the accommodations, and a collaborative effort to come up with a logistically sound solution. These personal, social, and physical considerations create a guide to lead my research with the High and organize it with intentional reflective thought process.

Our collaborative efforts at the museum involved many other innovative accommodations that were specific to the Art Education programs of the High. One of the first, and most important of these was the lanyard schedules. Each student, upon entering the High for a field trip, is given a colored lanyard to assign them a group, this procedure was already in place, but to better accommodate students with exceptionalities we added a schedule of events to the lanyards. Many of our students with ASD have personal considerations of anxiety surrounding time management, and scheduling. During my time at TCPS I have found that creating a consistently scheduled physical environment alleviates much of the student anxiety around the "unknown." Essentially, if a student with ASD understands what and when to expect surrounding transitions and events throughout their day, they are more able to regulate themselves emotionally. With that in mind, I collaborated with the High and we added detailed schedules to each lanyard according to the students' field trip experience so they would be able to easily understand what the field trip would entail and when the transitions would occur. The lanyards were color coded to break the students into small groups and could be worn throughout the field trip. These seemingly minor accommodations are essential to the field trip experience of students with ASD

as their anxiety can easily get in the way of their experience and enjoyment at the High Art Museum. Student anxiety is addressed later in this chapter.

4.2 Observational Journal: Student Engagement

This year as the students experienced the field trips, we addressed student engagement using various different approaches. The approaches we used were similar to previous years field trips and were based on either the exhibit tours or the studio workshops. I kept field notes to record student engagement over the entire course of the field trip as we made new accommodations to this year's trips.

During my initial observations this year I noted that many of the students were not engaged during the exhibit tours. I observed that 3-4 of the students in many of the groups were wandering around during the exhibit tours. I also noticed that discussion participation was minimal and recorded half or less of the groups making meaningful contributions to the conversations. Overall, the students did not appear to be fully engaged with the artworks being discussed by the docent during the exhibit tours.

Studio workshops were conducted with half of the grade levels while the other half was split into multiple groups being led on the exhibit tours. The studio workshop groups varied from 15-20 students at one time, with 7-10 of those being students with ASD. As I observed the studio workshops, I found additional lack of student engagement. I saw that on average 5-7 of the students were off task and 5-10 seemed confused of unmotivated. I also noticed that at least half of the students with ASD seemed to need additional visual aids to help with next steps while working. The teaching artists circulated the room and encouraged the students. I observed many of the inclusive strategies that we had put into practice in previous years including constructive feedback, redirection, and hand over hand instruction as needed. I also observed a lack of time

structure which was an ongoing challenge that we focused on as a part of this year's field trips. The students had general time schedules on their color coded lanyards, which we had created the first year on the field trips but as I observed the continuous lack of engagement, I noted a need for more time structure to the overall workshop. The teaching artists told the students when the workshop ended but the lack of engagement alluded to a need for more.

The High Museum educational coordinating team and I met and discussed the observed concerns surrounding student engagement. We developed several strategies to increase the attention and focus of the students both on the museum tours and the studio workshops. The tour strategies included restructuring the pacing of the field trip and offering relevant hands on activities in between lecture times. Our studio workshop strategies offered additional visual aids with both visual and verbal lists of how to construct the artwork and what it was about. The teaching artist created visual aids that gave the students key words or phrases relevant to the exhibit featured on the field trip and to what they had already learned in their TCPS classrooms. Additional inclusive strategies focused on the predictability of the studio workshops. During our meetings this year the High coordinators and I discussed several accommodations as remedy for the lack of engagement for the workshops.

4.2.1 Engagement Activities

Throughout this year's field trips the docents began implementing new engagement activities that were both individual and group based. The MI smart schools and Project Zero's ATP served as influential guides for the activities designs. The activities varied, but had common themes in structure of visual-tactile stimuli and taking a student centered, inquiry led approach to learning. I recorded my observations of student's engagement based on body language and verbal or visual responses of the students. I considered engaged body language to be students

leaning in towards the activity with focused attention. I also looked for any students wandering as a sign of distraction and disengagement. I considered a medium level of student engagement as half of the group giving visual or verbal responses to the docent questions. If I observed less than half giving responses, I noted it as low student engagement and more than half as high student engagement. The engagement activities as described below will be I See I Think I Wonder, exploratory learning with photography, student led learning with creative free share, and kinesthetic learning with tableaux.

I See I Think I Wonder

As part of their new approach to the exhibit tours this year the docents created more hands on exhibit activities. The docents began several of these activities by allowing the students to create observational sketches. Following the sketches the docents would engage the students in discussion inspired by the "I See, I Think, I Wonder" artful thinking strategy derived from Project Zeros ATP. The docents would start the first step of the strategy by asking the students to take time to quietly observe the artwork. The students would then sketch either the entire piece or focus on one part of it (i.e. the shadows). During these activities I consistently observed 3-5 students with ASD sketching, leaned in and focused. I recorded these observations as high student engagement.

The docents transitioned to the next part of the activity. It was similar to the "I See" technique and began by asking the students what they had observed while sketching. I observed 1 student with ASD in the first group and 2 in another group that were responding to the discussion prompts on the first field trip of the year. I recorded my observations as low to medium student engagement during these initial discussions. After I shared these observations with the High museum coordinators in our next meeting we decided to be more intentional about

provoking discussion. We came up with examples of leading questions that were more specific to parts of the artworks. This change allowed the docents to provoke the student responses with specific questions. We hoped that by occasionally offering the students guidance in our discussion they would be more engaged. During the next field trip I observed an increase in engagement levels. I observed 2-4 students with ASD contributing meaningful observations of their sketches after prompted by the docents. I recorded this as medium levels of student engagement.

The next part of the "I See, I Think, I Wonder" sketch activity required the docents to transition discussion to the "I Think" part of the strategy. Docents facilitated this discussion by trying to have the students focus on their individual interpretations of the artwork. We found this part to be very challenging for the students. I observed one student in the first group and none in the second who could participate in the interpretative part of the activity. I recorded this as low engagement levels. After I met with the High Museum coordinators in the next meeting, we agreed that it was best to approach it similarly to the initial part of the discussion by asking more specific questions. When the docents asked specific questions at the beginning of the "I Think" part of the conversation it seemed to help the students have a more acute focus. During the next field trip following our meeting, docents asked students what they thought about very specific parts of the artwork. I observed a dramatic increase in student engagement as 2-4 of the students with ASD were able to respond with meaningful interpretative thoughts relevant to the artwork being discussed. I recorded a high level of student engagement based on responses. After the students became more engaged in the discussion the docent's questions became more open and broad. We made sure to allow the students time to share their thoughts and opinions about the artworks. I assisted the docents to maintain a safe space where all answers were respected and

built upon. I did this by modeling a technique I often use in my art class. When teaching in my art room I have found that repeating and summarizing each response of a student before asking for the next response supports inclusivity and a better understanding of the whole class. The docent quickly implemented my modeled practice and observed a consistently high level of student engagement. The docents also helped them validate their thoughts and opinions by encouraging them to explore why they felt a certain way about the artwork. I observed that expanding on the thoughts and opinions of the students helped cultivate critical thinking and deeper questions. I found that of all of our questions, the ones that began with "why" had the highest level of engagement.

The docents and I transitioned to the final "I Wonder" part of the activity by provoking further discussion and brainstorming about the intent of the artist. We found that this final stage of the activities and discussions were valuable in creating far reaching questions. We focused on coming up with questions, not answers to their questions. I observed 4-6 students with ASD participating in the "I wonder" part of the activity. I also noted that many of the students with ASD responded visually with pictures or written questions on their sketches. The students expressed excitement by the new questions and curiosity to answer them when they got back to school.

4.2.2 Exploratory Learning: Photography Activity

The docents constructed another type of engagement activity that was implemented while visiting the photography exhibits. These activities were very hands on and collaborative. Students learned about cropping, as it was relevant to the exhibit, and also discovered how cropping can have a dramatic effect on the photograph. We divided the students into small groups and gave them several black strips of paper for the cropping. Docents disbursed various

photographs and implored the students to experiment with cropping their photographs. The small groups experimented with cropping for several minutes. During this time I observed the body language of the students. I noted that 4-6 of the students with ASD were leaning in towards each other and the activity and recorded it as a high level of engagement. After the small group cropping, the students worked together and participated in shared discussion as a whole group. The students shared how the cropping effected the photographs. I observed 1-2 students with ASD participating in the small group discussion and recorded a low level of engagement. I also observed that when we shared our thoughts as a whole group that 2-3 students with ASD were able to share meaningful thoughts about the activity. I recorded it as a medium level of engagement. The docents continued the activity as we discussed how the artist used cropping in the exhibits to send a particular message or imply meaning to the viewer making connections to our collaborative activity. The docents used this as a meaningful way to bring up issues of social awareness and civil rights into the discussions. A few students were able to make connections to what they had been learning in class. I recorded this as a low engagement level but noted it as significant because it connected to our larger cross curricular goals. The verbal contributions to the cross curricular connections were few but when we checked for understanding I observed more positive results. I observed this when the docents asked for a thumbs up if everyone understood, more than half of the students with ASD responded with yes in each group observed. I averaged the low verbal responses and the high nonverbal responses of comprehension as a medium level of engagement during the final parts of this activity. This activity echoed the hands on approach to learning as discussed of Project Spectrum used in their "play stations".

4.2.3 Visual Tactile Stimuli: Color Theory Activity

The last type of activity was relevant and implemented in the abstract art exhibits. The docents used this activity as an opportunity to focus on color perception and placement. The students had the option to work individually or in groups. The docents gave the students various colors of transparent strips of plastic and one larger rectangular opaque sheet of plastic. The students then experimented with layering the colored strips over each other on top of the larger sheet of plastic to create new color compositions. Group discussion was based on discoveries the students had made while experimenting and comparative observations they could make towards the artworks. I observed 4-6 of the students with ASD leaning in and focused on the activity. I record high engagement levels during this activity. The docents followed the activity up by asking the students what they had discovered during the activity. They implemented our strategy of using specific questions to prompt student answers and understandings. I observed 2-4 students with ASD responsive to the questions. Many of their answers were simplistic but meaningful discoveries regarding color mixing. I recorded a medium level of engagement.

The engagement activities contributed positively to an inclusive artful learning environment as they offered tactile opportunities for the students to learn about and relate to the artworks with. The hands on, exploratory nature of the activity was similar to the approach of Project Spectrum's "play stations". The activity centered the learning around student curiosity. The students were learning about color theory while constructing a technical understanding of the artists applications in the artwork of focus. I observed the students with ASD more engaged by having something in their hands and seeing something up close to direct their focus and attention. This tactile and visual stimulation is a repetitive theme in my observations of meaningful engagement of students with ASD. I also recorded a decrease in distraction and

wandering after providing the hands on activities. I observed on average that half of the students with ASD were wandering or distracted during the exhibit discussions on the first field trip. After many discussions the docents were prepared with specific prompts to ask the students and guide their focus and understanding in the discussions. I observed an increase in overall student participation. On the final field trip, more than half of the students with ASD were observed as being fully engaged, leaning into the activities and working with the materials in an appropriate and meaningful way. I also found that the same students with ASD that were more engaged with the hands on part of the activity were not as able to contribute during the discussions. I observed that the students with ASD needed more motivation during the small group instruction and more redirection during the whole group discussions. I also noted that tactile objects were especially useful when working with students with ASD during large group discussion. The fidgets were especially useful in helping them focus their attention on the docent's questions.

4.2.4 Student Led Learning: Creative Free-share

I noted that during docent lecture time on several of the initial field trips this there was a low level of student engagement. I observed 4-6 students looking at artworks that were not being discussed, looking at their phones, and wandering. After I noted the lack of student engagement and loss of focus I suggested a strategy I use in my own classroom called "Creative Free Share". Creative Free Share is a student led learning strategy that was inspired by the Key school and their "flow rooms". I find this approach to be very basic in comparison to the flow rooms *but* it was expressed as intimidating and "out of the box" by a museum docent. I implement Creative Free Share as an inquiry/student led learning practice where the teacher asks a question or makes a leading statement and lets the students freely and openly share thoughts, ideas, or perspectives. The students have a couple minutes after this free and open discussion begins to engage with

little or no teacher interruption. I have found that it's a way to stir the pot and get the students excited. It also lets them help guide the lesson. As I stand back and let the students talk amongst each other without me, I observe what they really care about and what they are thinking about. I will eventually insert myself back into the conversation by building upon my observations and incorporating it into the lesson. There are many different versions of this approach, but I like to lead it with a bit of a radical question or sort of statement as a prompt for student response. I have found that the engagement of the students comes from a level playing field established by the inquiry led learning approach; They are excited to share their thoughts, especially when it contributes to the direction of the conversation.

I find the beauty of this approach to be the high engagement level. The docents found that the approach, although effective is also intimidating as they voiced concern at a chaotic potential and loss of control. Teaching and leading inquiry led discussion is artful, it ebbs and flows with energy. I offered to model the practice and adapt it for the field trip tours. As I modeled this approach for the docents they felt more comfortable and implemented it in their educational tours with the students. On the last couple of field trips I observed an average of 4-6 students with ASD fully engaged in the creative free share activity. I recorded a high level of student engagement. I find this approach is especially useful towards maintaining an inclusive environment as it creates a "safe space" for free flowing conversation. I noted that at the beginning of the creative free share there were often some student responses that seem random or irrelevant. As the teacher you can choose to gently interject and channel the conversation of sit back and let it work itself into the right direction. In my experience at TCPS the latter is the best and most meaningful for the students. I have often observed in my art classroom that students who are otherwise insecure or less likely to contribute will feel more comfortable during

Creative Free Share. Similarly, I observed the practice in success during the High museum field trips.

4.2.5 Kinesthetic Engagement: Tableaux

I have come to learn that students with ASD of TCPS often require walk and movement breaks during class to balance focus, and regulate their anxiety levels. As a part of my regular practice I will integrate opportunities for movement within the lesson we are teaching. I am more able to allow for this movement in my art classroom as it is a studio environment and moving freely does not disrupt the lesson. In the museum exhibit tours, however, we needed a different approach as wandering would take away from the discussion and activities. After I shared this experience with the High museum coordinators we discussed this observed need while on one of the field trips. I shared an idea I tried in my class several times when teaching art history. The activity is very similar to the theatre practice of tableaux and involves movement with a bit of acting. What we would do first in this activity is identify the people and objects an artwork being discussed with the students. Then we call for volunteers or assign students to model those specific objects or people in the artwork. After the students are called upon to volunteer to pose you place them according to the composition in the artwork to recreate a live version. It is a fully interactive experience. The students who are not posing are helping to position or simply observing and considering how the live version (tableaux) reflects the artwork. It can be followed up with discussion after or during the poses to engage the students in thoughtful consideration of how the people might have been feeling in the artwork. I observed the docents on our field trips use the "Viewpoint" strategies from Project Zeros ATP to support this activity. They discovered that the "Viewpoint" strategy was supportive because it allows for students to see the artwork from the perspective of the subjects of the artwork itself. This activity can easily

be modified to work for individuals or groups rather than an entire class activity as we modeled. I observed all students participating during this activity. Some, who were nonverbal posed for the tableaux, others were helpful to put it together. I recorded a high level of engagement during this activity as it was implemented during the field trips.

4.2.6 Pacing of Exhibit Tours

Additional observations I made of student engagement were observed as being directly impacted by the pacing of the tour and activities. In simplest terms, when something takes too long, student attention spans dwindle and wandering or other distracted behaviors were observed (i.e. loss of focus, inappropriate responses to questions). In the past couple of years distracted behaviors and wandering had been a challenge for all of our students. In our first meeting prior to the trips we discussed these past observations and the relevant overall management of time on the field trips. We decided to set some guidelines and boundaries as resolve to the low engagement levels. These solutions included keeping the exhibit visits to 5 minutes or less before moving on and giving one-minute notice of when it would be time to move onto the next exhibit. I have found in my classroom that being clear and transparent with time restrictions and schedules while working with students with ASD is especially effective in maintaining high levels of engagement. When the docents provided more structure and limited time spent on each exhibit I observed a higher level of engagement. I made additional notes that the structured and intentional scheduling lowered student anxiety, which will be discussed in further detail later as I address student anxiety observational notes.

Over the past trips I made other important pacing observations as the docents waited for responses to questions from students with ASD. In our meetings with the High museum coordinators they shared that the docents felt wait time was often too long. They expressed

concern with what was perceived as little or no response from said students. I shared the common misconception made from responses of students with ASD in educational environments. I explained that the misunderstanding here is made because the type of responses we are used to seeing from neurotypical students can look very different from students with ASD. We discussed and compared our experiences coming to decide that moving forward we would be sure to educate the docents to be attentive to and perceptive of other forms of response. The coordinators agreed that it was important for the docents to understand the types of responses more commonly seen from students with ASD. These atypical responses include visual responses such as a drawn response, body language or movement, or a head nod. Another popular strategy to assess a student's comprehension we use at TCPS is a thumbs up from our non verbal students with ASD or other special needs. As I observed the field trips this year I recorded the docents implementing the new response strategies. I noted that in previous years less than half of the students were able to stay focused during the long wait times and discussions. This year I observed an increase in student responsivity. The docents were mindful to the nonverbal responses of the students with ASD and 2-6 were consistently responsive and focused among the groups. I recorded this new level of engagement as medium to high.

4.3 Observational Journal: Relevant Learning Comprehension

While observing the field trips I took diligent notes on the relevant learning comprehension of the students. This was important because of the cross curricular nature of the field trips as an intention of both TCPS and the High. In the past years during the meeting teachers expressed concern about students making meaningful cross curricular connections while on the field trips. We met prior to the field trips this year with the High Museum educational program coordinators and the entire teaching staff of TCPS. We structured the meeting with a

"speed dating" style. As each grade level met with the program coordinators separately they were given time to learn about which exhibits at the High had particular connections to STEAM. The TCPS teachers also had time to share what they would be teaching in their classrooms at the time of the field trip. TCPS teachers worked closely with the High program coordinators to make connections relevant to the learning experiences the students would be having. In previous years we met and discussed as a whole staff instead of breaking up into smaller concentrated groups. This year in addition to our "speed dating" meeting style, we also had teachers bring their computers so we could all look at the galleries together during our meetings. We also provided the teachers of TCPS with High Museum brochures. As we engaged in the collaborative process, I made note of how useful it was to create meaningful field trips that reflected the arts integrative practice I believed in so strongly in. Sharing this information as we structured the field trips also helped to prepare the docents so they could better lead a cross curricular discussion on the exhibit tours. An important piece that I observed during the field trips this year was if the students were actually making those connections. I assessed the student learning on the trips through their responses to the docent prompts and also through the Creative Free Share. I evaluated the level of relevant learning comprehension (RLC) by comparing student response topics to the relevant of the exhibit and the relevant lessons provided by the teachers. I occasionally noted responses relevant to what the students had been learning in their TCPS classroom. I averaged my observations of relevant, cross curricular responses among all of the field trips this year and calculated 2-4 students with ASD and recorded it as an overall medium level of RLC.

4.3.1 Inquiry led learning

The students were guided by the docents from one exhibit to another during the field trips. I observed an intentional effort made towards allowing students to make connections with the artworks and their school curricula. The docents asked questions to offer connections to teachers' content and the art exhibit being discussed. Common themes offered by the High exhibits were physics, civil rights, and technology based. We used the themes to make meaningful connections with what the teachers at TCPS had been teaching in their classrooms, making appropriate contextual adjustments for grade levels. Questions were centered around the ATP strategies of "creative questions" and "what makes you think that". During the first few field trips this year I observed the docents starting with a more open forum for thoughts to be shared. I often observed these open forum discussions and recorded 0-2 students with ASD responding with cross curricular comments. I recorded a low level of RLC. After meeting about these observations, the docents began to build upon the student responses a bit more to redirect and guide them to a more relevant place. I observed this kind of questioning. I noted specific examples on one of the civil rights photography exhibits where there students were prompted with questions like "who are these people in these pictures?", "how do they think they feel?", "why do you think they feel that way?", "what kind of civil rights do you think these photographs might be about?". The docents attempted to use these leading questions as a meaningful and arts integrative learning environment and utilized the inquiry led approach. I noted a small amount of increased RLC on average 2-3 responses made by the students with ASD were correlational to the High exhibit and TCPS curricula. I recorded this as a mediumlow level of RLC.

4.3.2 Assessing student comprehension

During my observations I focused on how we can assess students learning in an inclusive art museum environment. I came to see many parallels made from the way I assessed students in my inclusive art classroom and what could be applied on the field trips. I have come to understand that RLC is important but that general comprehension must be obtained first. If the students do not understand what is going on, they cannot make the relevant STEAM connections. I used student participation in the discussions surrounding the artworks as a clear indicator of understanding. If half of the students showed visual or verbal understanding I noted it as a medium level of comprehension. I also noted less than half of the students showing visual or verbal understanding as low student comprehension. More than half of the students showing visual or verbal understandings was recorded as a high level of comprehension. I shared my knowledge of nonverbal comprehension assessment with the High museum coordinators. We agreed on some strategies that could be implemented into the museum tours. Docents would use some strategies with students who were non verbal based on visual responses. Docents would also sometimes base student levels of understanding and participation on the sketching activities previously mentioned. Additionally, I observed docents offering a non verbal student a paper and clipboard to draw on and respond with several times even if there was not a specific drawing activity. The docents used the thumbs strategy to ask for understanding as well which I noted as effective and inclusive.

Another change we made this year was being more intentional about displaying and connecting with the student artwork created on the field trips. When the students brought their artwork back to TCPS, the teachers opened up further discussion about what they had experienced at the museum. TCPS teachers also made intentional efforts to incorporate some of

the artwork the students had seen on the field trips into their lessons. Finally, the teachers would display the students artwork. This school to museum collaboration brought a meaningful, cross curricular experience to the field trip. The students experienced community and real world application with many of their lessons at TCPS in the classroom while they were at the museum discussing exhibits. After the field trips, displaying their artwork may help to reinforce and support their cross curricular learning.

The engagement activities were of particular help in assessing the students understandings, as there were many times I observed a student learning through the activity itself. One example of this was at the Alexander Calder exhibit where we discussed physics and balance with the middle schoolers. Initially, I observed little to no participation and recorded low student comprehension. 2-4 of the students with ASD were observed as distracted or wandering. The docents introduced the activity. Students were split up into small groups. Each group had a kit that included hangers put together in various figurations with hooks on the ends to attach differently weighted objects. The students had several minutes to construct their mobiles inspired by the mobiles of Calder. I observed that the discussion following the activity had a buzz of excitement and curiosity. I heard many students wondering about how he made his sculptures so balanced, and others respond by explaining what they had experienced while making their own mobile balanced. I observed learning while doing as important in the museum tours as illustrated in the Calder activity. The student's responsive participation through relevant discussion and construction of the Calder mobiles was recorded. I observed 4-6 students with ASD engaging in the activity, focused and making contributive comments to small and large group discussion. I recorded it as a high level of comprehension.

I took influence from the Theory of MI and applied it to the museum visits in my observational journal. I found the Theory of MI was effective in assessing student comprehension. I used these intelligences as identified by Gardner in his book, *Intelligence Reframed*. Here is an example of behaviors I looked for during the field trips and how they are similar or different from what I look for in my art classroom.

- Naturalistic: student ability to classify, categorize or differentiate between artworks,
 techniques, conceptual meanings of artworks
- Musical: student response to auditory art exhibits, recognizing patterns and creating
 relationships from the music to its visual representation in the artwork it accompanied
- Logical-Mathematical: student problem solving during engagement activities, student response to mathematically specific questions about the artworks (i.e. the Calder exhibit activity)
- Existential: student response to considering a deeper unknown meaning in artworks,
 student ability to recognize significance outside of ones self in understanding artworks,
 student response of total immersion into a work of art
- Interpersonal: student behavior in group activities (i.e. communication, collaborative problem solving), student response to analyzing artist intent and message in artworks
- Intrapersonal: student ability to regulate anxiety levels in museum (i.e. self awareness),
 student response to relating to artworks by drawing upon personal feeling or experience
- Linguistic: student responses to prompts being relevant and well spoken
- Bodily-Kinesthetic: student responses to Tableaux activity, student participation in the studio workshop of the field trip

Visual-Spatial: student responses to observing artworks, recognizing patterns in the
compositional space used, student participation in the studio workshop of the field trip,
student awareness of museum space (i.e. staying an arms length away from artworks,
awareness of personal space towards others and for self)

Understanding that students have various ways of demonstrating intelligence and how to assess them is fundamental to supporting an inclusive learning environment. I often use the theory of MI to help me recognize behaviors as assessments of various student intelligences and abilities. I have found that this application of the Theory of MI in my classroom helps me to better connect with my students and reach them on a meaningful level. Museum educators can also recognize the behaviors I listed above as signs of specific intelligence levels to help them connect with a student. The art museum docents only have the short time of the field trip to connect with the students, the ability to connect with them by recognizable intellectual behaviors may help support inclusivity in their artistic learning environment.

4.4 Observational Journal: Student Anxiety

As a teacher at TCPS, I use constant awareness and sensitivity to student anxiety. I have found this awareness is crucial to creating an inclusive and meaningful learning environment. Anxiety is at the forefront of many students who have ASD and can be recognized, sometimes even prevented, if you know what to look for. I have learned that many of our students have anxiety "triggers". Anxiety "triggers" are certain environmental stimuli that can effect students with ASD quickly and cause a dysregulated emotional response. The triggers can be anything from too much noise, to a color, to unfamiliarity with their environment. At TCPS we have developed an understanding of these student triggers on an individual basis. This recognition is supported by IEPs, 504s, or BIPs. At the High Museum of Art on field trips, it can present

additional challenge due to the confidentiality of student documentation. In our initial meetings when we first began the field trip inclusivity research we discussed some of the hypothetical and more common triggers we might be able to identify. We also recognized that there were many that would be unexpected and so there would be equal focus on preventative measure. We also agreed that remedial supports would me necessary to help student with ASD who may experience anxiety. I observed anxiety based on physical and emotional behaviors of the students. I noted that these behaviors are unique to each student. I generalized them as physical or emotional behaviors.

4.4.1 Fidgets

In Chapter one, I briefly discussed fidgets and what they are. Using these handheld, tactile objects have become a daily accommodation for many of TCPS students who have ASD. I always have a stock of them in my art room. For many students with ASD, having a fidget can mean the difference between ability to fully engage with the art lesson, or complete emotional and physical dysregulation. I learned early on how important fidgets are. As mentioned earlier, Marquetta Johnson, a teaching artist our students often work with in the studio workshops, has created many tactile objects for docents to hand out during the exhibit visits and discussions. They are made to reflect the artwork being discussed and offer lower anxiety levels and as a result higher engagement levels during the discussions. As I observed the use of these tactile objects during exhibit tours, I noted an overall decrease in student emotional and physical anxiety. In previous field trips students with ASD would need to take a walking break or step away as they became dysregulated on the exhibit tours. This year there were only 2 students across the entire grade levels who became dysregulated on the field trips. These observations reinforce the important role of fidgets.

Fidgets come in many shapes and sizes, each with it's own appealing tactile function (i.e. squishy, soft, prickly, kinetic). In our earlier days of the inclusive partnership we decided to have them in baskets outside of all of the elevators, as easy "walk by and grab" kind of accommodations, and as a quiet way for any student who needs one to have it accessible. We found however that this semester there was an increase in the need to have them more accessible as we walked around the museum exhibits. As a solution, the docents began to light shoulder bags with them at all times. One docent would have a shoulder bag with activity supplies, the other with a bag full of various fidgets. In doing so, teachers and students could grab them as needed easily throughout the field trip. I observed this change in fidget accessibility as a major decrease in anxiety levels of the students with ASD and a positive contribution to inclusivity.

4.4.2 Quiet Spaces

At the beginning of every field trip, the students and teachers arrive at the High Museum of Art and collect in the lobby with various other schools in the Atrium of the museum. The Atrium is a large, beautiful space which offer a beautiful aesthetic but challenging auditory environment for students with ASD. The spatial acoustics of the Atrium echo the chaotic voices of what can sometimes be hundreds of small children as they get ready for the field trip to begin. The High museum coordinators and I recognized early on during the field trips that the noise level was an obvious trigger for many of our students with ASD. I observed and noted frequent emotional and physical anxiety in our students with ASD. We met and discussed that a separate quiet space could offer an easy remedy to this problem. The High Museum program coordinators and I worked hard to find a space that was quiet and easier for the students with ASD to wait patiently for the trip to begin. We also worked to identify "quiet spaces" throughout the museum

where dysregulated students could go as needed. Once we established these "quiet spaces" I observed a lower level of anxiety in the students with ASD.

4.4.3 Predictability

Students with ASD at TCPS are very regulated by predictability and routine. In my art room I strive to achieve routine in the daily schedule. After implementing a routine I learned that even if the artwork or project discussed is different from day to day, the overall structure of class is the same. I have found that even placement of materials and cleanup procedures offer opportunities to apply predictability as a support for an inclusive art educational environment. Since a field trip to the High is not a regular event in most cases, we met early on and established some accommodations and predictability strategies.

Schedules are a major strategy for lowering emotional anxiety. In our first meeting we designed color coded lanyards with time schedules of the field trip on them for each individual student. Even this Spring I observed many of our students with ASD refer to them throughout the trip. This year, on our initial field trips I observed many students showing emotional anxiety and often asking when an activity would end or feel rushed because they did not know the scheduling of the studio workshops. I noted these observations as frequent emotional anxiety. The High museum coordinators and I talked about how to lower emotional anxiety during the workshops. We agreed that an increase in predictability was a good solution. I shared some strategies we implement at TCPS. One strategy shared was using our visual timers, which count down the amount of time for a task with a brightly colors visual block on a circular timer. A visual timer is like a colored slice of pie on an otherwise white circle that slowly gets smaller as the time passes. At TCPS we have found these to be very effective during tests, projects, or anything that has a time limit during class. At the High, we found them to be most useful in the studio portion of the

fieldtrip. When we gave the students the chance see how much time they have to brainstorm, create, and clean up, the predictability is increased and the emotional anxiety is lowered.

At the end of the exhibit tours, when the students walked into one of the studio workshops they would be taught about a project that related to the exhibits. When it was time to create, the timer was set so they knew how much time they had to work on the projects. The docents also utilized the visual timers when to set a time for cleaning up. I noted a decrease in emotional anxiety from previously high to little or none during the studio workshops.

I made additional notes concerning emotional anxiety during the studio workshops. I noted that during the first few field trips 8-10 with ASD students, or an average of half of the whole group seemed confused, distracted or unmotivated during the studio portion of the workshop. After I observed this disengagement in the workshops, I shared the need for specified and consistent placement of materials and directional supports for the projects, as I practice in my art room. This strategy offers additional increase in routine and predictability. During a meeting with the High coordinators I shared my experience in the importance of routine with placement of visual aids and materials. The High shared our meeting notes with their teaching artists. I later observed the materials during the studio workshops being designated to each table of students and the directions were clearly posted in the front of every workshop from there on out. I observed an overall increase in predictability and a decrease in student emotional anxiety from those with ASD. I recorded only 2-4 students with ASD as disengaged over the final field trips of the year.

4.5 Contextual Learning Model: Personal, Social, and Physical considerations

After I completed the unpacking and analysis of my observational journal I used a contextual learning model to organize the process of inclusivity. I used three facets of

consideration per the model that are the personal, social, and physical considerations. As I organized the process with this model I hoped to provide clarity and simple practicality to the inclusive art educational environment. The model may offer an art teacher or museum educator more ease as they implement inclusivity in their existing art educational practice. I have summarized and restated some of the information from previous chapters per the three facets of the contextual learning model. The model may offer a way to build a bridge of inclusivity from the art classroom to the art museum experience.

4.5.1 Personal

As I considered inclusivity, I found there is individualization and differentiation as essential parts to the practice. I have found that every student with ASD brings different considerations and needs to the learning environment just as every neurotypical student does. I came to understand the difference lies within the types of challenges they present. Many students with ASD require specific accommodations or modifications as required by the legal documentation provided in an IEP, 504, or BIP. In me art classroom, I have had the privilege to all of that information which has placed my challenge at familiarizing myself with the students and their special needs as a part of my daily practice and awareness. In an art museum setting, the docents do not have the access to such personal information of the students. They must rely upon teacher support, preventative measures, and training/professional development on inclusion and ASD to better understand their student guests. Many of the preventative measures have been discussed in the preceding literature of this Chapter. Having an understanding of what a trigger might be, what a dysregulated student may look like, what a fidget is, and how to integrate tactile-kinesthetic activities into your practice may all be helpful inclusive tools in the toolbox of an art museum educator. The personal considerations and needs of the students are the

framework to the bridge from inclusive school to inclusive museum environments. Knowing what the students need is foremost in inclusivity.

4.5.2 Social

Throughout our partnership with the High Museum of Art, our consistent and open communication was crucial to the success of offering an inclusive learning environment in their educational programming. Our first meeting was to lay out our goals, to our "speed dating" style meeting with all of the TCPS staff and High coordinators. In our intermittent meetings throughout the field trips and our final meetings to conclude the study, communication was key to collaborative growth. Our meetings allowed us to create a cross curricular structure to the field trips, which made it a more meaningful and connected experience for the students. Our collaborations also allowed us to practice inclusivity in both environments.

When the High coordinators and I collaborated with the TCPS teachers it was also important to consider the contributions of different perspectives. A special education teacher, core curriculum teacher, paraprofessional and art teacher will have valuable and sometimes very different viewpoints. Each teacher in the school contributed as an important part of the process and had something special to give to the inclusive practice of the museum. We strived to maintain an honest, constructive, and open line of communication from the school to the museum as the foundation of the bridge to inclusivity from one to the other. Collaboration was at the heart of our progressive steps towards inclusivity.

4.5.3 Physical

After I considered the personal and social factors that make pathways for the social and emotional environments, my last consideration as a three part process of inclusivity was the physical environment. I found that within this physical environment all of the personal and social

factors come to fruition. Having fidgets, tactile objects, and quiet spaces is what makes the field trips effective and connective to the students with ASD. Implementing inclusive strategies into the field trips also supported the social-emotional environment we had created through the other two considerations. A physical environment is the brick and mortar of the bridge to inclusivity and the final consideration to the adaptation of an inclusive environment. The supportive physical environment of the art museum and art classroom is essential to the practice of inclusivity.

5 ANALYSIS

The research questions I used to guide this study asked how the inclusive strategies I have found in my art classroom can be utilized to create an inclusive art museum setting, how we can approach inclusive student learning in an art museum environment and how the art museum field trip experience can be designed to create an engaging and worthwhile experience for students on the autism spectrum. This chapter will provide reflection on the intentions and outcomes that were guided by my research questions. With these reflections I hope to provide further insight into my process.

5.1 Classroom vs. Museum

The first question I asked was how the inclusive strategies I have found in my art classroom can be utilized to create an inclusive art museum setting. I intended to use my own practice as a starting point to the process of inclusivity in an art museum setting. TPCS has a mission of inclusivity and as their art teacher I have adapted those principles into my teaching practice. The High museum of art hopes to bring provide a more inclusive educational

environment through their museum and school programs. Working together with the High while using my classroom and inclusive strategies I hoped to help them achieve that goal.

I conducted my research with the High, using our field trips and meetings as a collaborative process to reach our goals. My inclusive art educational strategies provided a lot of help as we started to look comparatively at the programs that were already in place at the High. We discussed my strategies in our meetings and put some into practice during our initial field trips. We found that much of the inclusive pedagogy used in the art program at TCPS was applicable to the art museum field trips of the High museum. We also discovered along the way that some adjustments were needed to be practical in a museum setting. Additionally, we found that the collaborations between the High museum and TCPS were vital to the process. The feedback from TCPS staff and observed behaviors of the students were also essential to the inclusive goals of the High.

5.1.1 Interpretation

I derived several conclusive thoughts from using my classroom practice as a model of inclusivity for the inclusive efforts of the High museum of art. I realized the importance of an art museum's role in a community. I also came to understand that in order to serve the community in a meaningful way and provide inclusivity the art museum may need to first consider the needs of the community it aims to be a part of. Similarly, as a school hopes to serve the families of the community it is a part of it would take the same first step. As TCPS and the High worked together, many of our considerations revolved around the challenges students and other guests would encounter as part of their visit. I initially thought it would be the same challenges I confront in my classroom. Through this study I came to see that there are certain parallels and also some major differences when comparing practices of an art classroom to that of an art

museum. The identification of the challenges experienced by those we serve was one of the most important parallels discovered. I also figured out that after we identified those challenges, we were able to better understand the needs of those the museum strives to serve. Once we established the needs of the communities we hoped to serve, it gave clarity to the necessary actions towards our goals. Many of my practices look different in an art classroom versus an art museum educators tour but our ultimate goal of serving our students in a meaningful and artful way remains the same.

5.2 Inclusive Assessment in an Artful Learning Environment

The second research question I asked was how we can approach inclusive student learning in visual arts. I found this question most relevant to our collaborative process of inclusivity because it pertains to the rich and meaningful art programs both the High museum and my own art curricula hope to implement. The High hoped to pursue more inclusive programming in their museum but also to maintain the integrity and quality of those programs. In order to evaluate the quality of an art program in a school or museum we can analyze the tools used to assess the students learning.

The High museum and I worked together and used various methods to initiate student learning during the field trips. Some were modeled after Project Zeros ATP as a part of inquiry led learning. Other methods were the activities put into practice during the exhibit tours. We also used the studio workshop as an opportunity for student learning. As I observed the student behaviors while they were participating in the tours and workshops I recorded their responses, questions, projects, and overall engagement levels. I found that the relevancy and frequency of student interactions were the most revealing to student learning. I also found that using the theory of MI gave deeper insight into how the students expressed their learning. As the students

participated in the field trip discussions and activities it provided me with a lens to see their learning. Many students learned differently, which I expected from my experience at TCPS. I observed that students made deep and meaningful connections between the field trips and TCPS curricula which was a pleasant surprise.

5.2.1 Interpretation

The High museum and I established a common language of assessment through this study. This common language of assessment provides validation to the quality of both the art museums educational programming and that of the schools it serves. The foundation of these artful and inclusive assessment methods is built upon collaboration. I found that we needed the art museums insight into their exhibits to create meaningful art museum field trips. Similarly, they needed us to help understand what inclusivity looks like. As we worked together we found that we needed each other in equal measures to translate inclusive and artful learning to a museum environment. This collaborative approach to inclusive assessment was vital to its success.

5.3 Meaningful Inclusivity

The last research question guiding this study was an overarching concept. I asked how the art museum field trip experience can be designed to create an engaging and worthwhile experience for students on the autism spectrum. Inclusivity extends beyond removing barriers and continues to ensure a meaningful experience for those it includes. I found that this idea of the value of inclusivity was difficult to validate due to the irregular nature of its practice. The High Museum and I experienced many different forms of inclusivity throughout this study. A meaningful experience can look very different from one student with ASD to another. At TCPS I have experienced the individualization of inclusive educational practice as ever changing. As I

conducted my research with the High I experienced the same process. We used strategies to remove barriers at the forefront of our inclusive efforts. When we removed the barriers we found that it provided a window of opportunity for the meaningful experience that we were hoping to give the students with ASD. We took our next steps to engage them in the same learning experiences that the neurotypical students had access to during the field trips. We found that inquiry led learning, hands on activities, small or large group discussions and studio workshops all provided that access. As we encountered additional barriers within the program we made accommodations. These accommodations were often individualized to each student with ASD and their specific learning styles, capabilities, and intelligences. I observed that our goal of figuring out what meaningful inclusivity looked like came in many forms.

5.3.1 Interpretation

I recorded the inclusive practices and strategies implemented during the field trips. I also observed and noted changes made to that pedagogy. The High Museum and I had many successes in creating an inclusive art educational environment. Our successes were based on many failures, educated attempts to accommodate existing curriculum and a collaborative approach to problem solving. We took away new discoveries about how to make inclusive and artful learning environments rich and meaningful. I often observed that the component that was crucial to our collaboration during the process of creating artful inclusivity was humility. We tried to avoid feeling that our successes were the final answers to our goals.

Every student with ASD brings unique needs to an educational environment. The most effective strategies I found through this research were intentional collaboration and a humble approach to problem solving. As we embrace inclusive learning environments in the arts our biggest ally may be the realization that change is necessary for progress. I noted many times in

my observations the need to reevaluate a previous success with a different inclusive strategy. Meeting the needs of the students provides a powerful avenue to a meaningful and inclusive learning environment. If that success is based upon meeting the needs of our students than a progressive, collaborative, and humble approach may lead us down that path.

5.4 Future Implications

After conducting this study, I found there are many areas that offer opportunity for growth. Inclusivity is a practice that will change often in art education. Some of the changes may be new, others may be reformatory to traditionally accepted ideologies. I found that there is little research into the issue of inclusivity in art museums. More research may further our understanding into this area of concern. Another void in current research is immersive art as an opportunity for inclusive art educational environments. I was inspired by the successes found within the tactile and movement activities we implemented during the field trips at the High. Immersive art may offer growth to that success. As I researched the relationship between brain activity in a person with ASD and the visual arts I found very few studies of specific or related topics. If we understand how students with ASD perceive visual information in an artwork it may allow for us to provide a more meaningful inclusive, cognitive experience in art museum environment.

Lastly, the feedback from TCPS teachers frequently included the need for further collaboration and operational understanding between the art museum and classrooms. Many teachers felt that opportunities for STEAM connections within the art exhibits were missed. Additionally, TCPS teachers expressed the need for museum docents to be more intentional about informing the teachers of contextual organization of the exhibit tours *prior* to the field trips. I have stressed the collaborative component of this study many time as being an integral

part of it's successes. There is a need for more field study in the collaborative nature of inclusivity in the educational practice of art museums. The more we communicate and understand each other the better we may serve all students to provide an inclusive art educational environment.

REFERENCES

- Butrymoqicz, S. (2016) Grading creativity: can a standardized exam save arts education? *The Atlantic*. Retrieved from https://www.theatlantic.com/education/archive/2016/08/cantesting-save-arts-education/494798/ on January 12, 2019.
- Camic, P., Hulbert S., Tischler, V., & Young, R. (2015). The impact of viewing and making art on verbal fluency and memory in people with dementia in an art gallery setting.

 Psychology of Aesthetics, Creativity, and the Arts, 9(4), pp. 368-375
- Cromartie, N., & Johnson, M. (2018). *Please Touch the Art: Tactile Learning and Accessibility* at the High Museum. Retrieved data from https://medium.com/high-museum-of-art/please-touch-the-art-tactile-learning-and-accessibility-at-the-high-museum-ac2e9503f5fa on September 15, 2018.
- Crooke, E.M. (2007). *Museums and Community: Ideas, Issues and Challenges*. New York, NY: Routledge.
- Dando, C., Ormerod, T., & Mattison, M. (2018). Drawing the answers: Sketching to support free and probed recall by child witnesses and victims with autism spectrum disorder. *Autism:*The International Journal of Research & Practice, 22(2): 181-194.
- Edwards, H.S. (2015, February 16). Leaving tests behind. Education Nation, 18-32.
- Exceptional Children, Education of. (2017) Funk & Wagnalls New World Encyclopedia, 1.
- Entropy Media (2014). *History of SAT: A timeline*. Retrieved data from https://www.pbs.org/wgbh/pages/frontline/shows/sats/where/timeline.html.
- Falk, J.H, Dierking, L.D. (2000). Learning from Museums: Visitor experiences and the making of meaning. United States: Rowman and Littlefield.

- Fletcher, T.S., Kulik, T.K. (2016). Considering the museum experience of children with autism. *Curator-The Museum Journal*, 59(1), pp. 28-38.
- Gardner, Howard. (1996). Multiple Intelligences. New York: Perseus Books Group.
- Gardner, H., Feldman, D.H., Krechevsky, M. (1998). *Building on children's strengths: The experience of Project Spectrum*. New York, NY: Harvard College.
- Gardner, Howard. (1999). Intelligence Reframed. New York: Perseus Books Group.
- Harvard Graduate School of Education. (2018). *Project Zero*. Retrieved from http://www.pz.harvard.edu on November 10, 2018.
- Jung, L.A., Guskey, T.R. (2012). Grading exceptional and struggling Learners. Corwin: United States.
- Lunke, K., Meier, B. (2016). Disentangling the impact of artistic creativity on creative thinking, working memory, attention and intelligence: Evidence for domain-specific relationships with a new self-report questionnaire. *Frontiers in Psychology*, 28 (7), https://www.frontiersin.org/articles/10.3389/fpsyg.2016.01089/full
- Muraski, M. (2018). Towards a more community-centered museum, part 3: Defining and valuing community. Retrieved from https://artmuseumteaching.com/category/inclusive-practice
- National Assessment Governing Board. (2016). *Arts education assessment framework*. Retrieved data from https://permanent.access.gpo.gov/gpo84429/2016-arts-framework.pdf on January 12, 2019.
 - Palmer, P., Ross, J., Tishman, S. (2006). *Artful Thinking Palette*. Retrieved data from http://pzartfulthinking.org/?page_id=2 on August 12, 2018.

- Reid, N. (2011). Inclusive art gallery practices: Exploring collaborative processes and pedagogy in outreach community programming. *Art & Collaboration*, *38*, *68-83*.
- Stuart, B, & Ritter, G.W., & Jensen, N.C., & Rose, C.P. (2010, March). Teachers say the most interesting things-an alternative view on testing. *Kappan*. 50-54.
- Tezer, M. & Ozturk, R., & Ozturk, C. (2015, February). A case study on the effect of geometry course in high schools by multiple intelligence theory. *Procedia: Social and Behavioral Sciences*. 31-37.
- Tienken, C.H. (2012, July-Sept). The influence of poverty on achievement. *Kappa Delta Pi Record*. 105-107.
- Thompson, G. (2007, January/February). The truth about students of color and standardized tests. *Leadership*, 22-38.
- Werberger, R. (2016). From project-based learning to artistic thinking. New York: Rowman & Littlefield.