The Influence of Environment: A Holistic Approach to Middle and Secondary Art Room Design

Leslie Y. Roberts
Western Michigan University, leslieroberts1121@gmail.com

Follow this and additional works at: https://scholarworks.wmich.edu/masters_theses

Part of the Art Education Commons

Recommended Citation
https://scholarworks.wmich.edu/masters_theses/5120

This Masters Thesis-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Master's Theses by an authorized administrator of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.
THE INFLUENCE OF ENVIRONMENT:  
A HOLISTIC APPROACH TO MIDDLE AND SECONDARY ART ROOM DESIGN

by

Leslie Y. Roberts

A thesis submitted to the Graduate College in partial fulfillment of the requirements for the degree of Master of Art.  
Frostic School of Art  
Western Michigan University  
April 2020

Thesis Committee:

William Charland, Ph.D., Chair  
Christina Chin, Ph.D.  
Cat Crotchet, M.F.A.
THE INFLUENCE OF ENVIRONMENT:
A HOLISTIC APPROACH TO MIDDLE
AND SECONDARY ART
ROOM DESIGN

Leslie Y. Roberts, M.A.

Western Michigan University, 2020

This thesis takes an in-depth look at the elements within the classroom and how they affect students physiological and psychological needs and the impact those elements have on students’ academic success. I offer suggestions based on the research for changes that can be made to your current environment to increase students’ academic success. Additionally, through years of experience and additional research on classroom environments within this thesis I have created a floor plan for an ideal middle and high school art wing. This thesis also covers several different approaches to teaching, and I have used this information plus my experience as an educator to develop a holistic-friendly middle school curriculum, that aims to teach a child’s physical, emotional, and academical needs. I have broken down each project within each grade level to provide future educators with best practices I have developed and adjusted to incorporate research into these best practices. When an educator considers the physiological and psychological affects the classroom environment has on students and appropriately modifies their teaching style and lesson plans to engage the holistic child, the educator is then choosing to set up an environment where students will be successful in class and into their adult lives.
# TABLE OF CONTENTS

**LIST OF FIGURES** ...................................................................................................................... vi

**INTRODUCTION** .......................................................................................................................... 1

- Research problem .......................................................................................................................... 1

**LITERATURE REVIEW** ............................................................................................................... 3

- The School Environment .............................................................................................................. 3
- Designing the School Environment: A Brief History .................................................................... 3
- The Necessary Elements of Classroom Design ............................................................................. 5
  - Light and academic performance .............................................................................................. 5
  - Sound and academic performance ............................................................................................ 6
  - Scent and mood ......................................................................................................................... 7
  - Temperature and student achievement .................................................................................... 9
  - Mirror neurons: the teacher as working artist .......................................................................... 10
  - Designing a studio culture ....................................................................................................... 11
  - Teacher-student interactions ................................................................................................... 11
  - Peer interactions ....................................................................................................................... 12
  - Displaying student work ........................................................................................................... 13
- The Necessary Elements of the Art Classroom ............................................................................ 13
## Table of Contents—Continued

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elements in an elementary art room</td>
<td>14</td>
</tr>
<tr>
<td>Security and shelter</td>
<td>14</td>
</tr>
<tr>
<td>Social contact and symbolic identification</td>
<td>15</td>
</tr>
<tr>
<td>Task instrumentality and growth</td>
<td>16</td>
</tr>
<tr>
<td>Elements in a high school art room</td>
<td>17</td>
</tr>
<tr>
<td>American disabilities act (ADA) and classroom design</td>
<td>17</td>
</tr>
<tr>
<td>Other Approaches to the Learning Environment</td>
<td>18</td>
</tr>
<tr>
<td>Holistic education</td>
<td>18</td>
</tr>
<tr>
<td>Social-emotional education</td>
<td>19</td>
</tr>
<tr>
<td>Empathy-based education</td>
<td>21</td>
</tr>
<tr>
<td>Teaching for artistic behavior (TAB)</td>
<td>23</td>
</tr>
<tr>
<td>The Holistic Healing Environment</td>
<td>27</td>
</tr>
<tr>
<td>Eco-therapy</td>
<td>27</td>
</tr>
<tr>
<td>Play in the art room</td>
<td>30</td>
</tr>
<tr>
<td>Art as therapy</td>
<td>32</td>
</tr>
<tr>
<td>Summary of Literature Review</td>
<td>34</td>
</tr>
</tbody>
</table>
Table of Contents—Continued

A HOLISTIC APPROACH TO DESIGNING A MIDDLE OR SECONDARY WING.........35

A Brief Introduction to Leslie Roberts’ Education Career........................................35

The Environment...........................................................................................................35

The Necessary Changes to the Classroom Environment, Today..........................36

  Modifying lighting to improve student performance in the classroom.................36
  Fine-tuning sound to improve student performance in the classroom...............37
  Regulating sent to improve student mood and performance in the classroom......39
  Adjusting temperature to improve student performance in the classroom.........39
  Engaging mirror neurons: the teacher as working artist......................................40
  Developing a studio culture.................................................................................40
  Encouraging play and expression........................................................................41
  Displaying student work.......................................................................................42

Designing the Ideal Middle and Secondary Art Classroom...............................44

  The general work area.........................................................................................44
  The demo area......................................................................................................46
  The wet room.......................................................................................................47
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The storage room</td>
<td>48</td>
</tr>
<tr>
<td>The outdoor learning area</td>
<td>48</td>
</tr>
<tr>
<td>Designing a 6th through 8th Curriculum</td>
<td>48</td>
</tr>
<tr>
<td>6th grade curriculum: emphasis, self</td>
<td>50</td>
</tr>
<tr>
<td>7th grade curriculum: emphasis, community</td>
<td>58</td>
</tr>
<tr>
<td>8th grade curriculum: emphasis, global connection</td>
<td>65</td>
</tr>
<tr>
<td>Conclusion</td>
<td>71</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>72</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>76</td>
</tr>
<tr>
<td>A. Sixth Grade Curriculum</td>
<td>76</td>
</tr>
<tr>
<td>B. Seventh Grade Curriculum</td>
<td>77</td>
</tr>
<tr>
<td>C. Eighth Grade Curriculum</td>
<td>78</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

1. Ideal classroom floor plan........................................................................................................45
2. 6th grade mixed media example from collection of author.........................................................52
3. 6th grade self-portrait example from collection of author..........................................................54
4. 6th grade sculpture example from collection of author..............................................................55
5. 6th grade photography example from collection of author........................................................56
6. 6th grade painting example from collection of author..............................................................58
7. 7th grade mixed media example from collection of author.......................................................60
8. 7th grade self-portrait example from collection of author.......................................................61
9. 7th grade group sculpture example from collection of author.................................................63
10. 7th grade photography example from collection of author....................................................64
11. 7th grade contour ASL hand painting example from collection of author..............................65
12. 8th grade mixed media example from collection of author....................................................67
13. 8th grade self-portrait example from collection of author.....................................................68
14 – exam example by Etsy artisan, Darleen Bellan.................................................................69
15. 8th grade photography example from collection of author....................................................70
16. 8th grade painting example from collection of author............................................................70
INTRODUCTION

Research Problem

Currently, educators have many hats to wear, and they must find ways to balance them all. Teachers play the role of the counselor, role model, and disciplinary figure. In addition to the aforementioned, Burke & Burke-Samide (2010) also stressed educators, “are expected to design classroom spaces that are conducive to student’s individual learning styles” (p. 236). The environment must feel inviting, safe, and also facilitate maximum learning. Educators do all this all while attempting to meet the needs of their students who are coming to them with a range of learning disabilities, physical disabilities, emotional instability, trauma, socio-economic status, and so much more.

Since students spend most of their weekdays in school, it can become their safe space away from a toxic environment. Brunzell, Waters, & Stokes (2015) stated, “The National Child Traumatic Stress Network in the United States reports that up to 40% of students have experienced, or been witness to, traumatic stressors in their short lifetimes” (p. 3). Such stressors have an impact on students’ relationships and performance in school.

Brunzell et al., (2015) study found the following:

The effects of trauma on a child severely compound the ability to self-regulate and sustain healthy relationships. In the classroom, the effects of trauma may manifest as attention deficit hyperactivity disorder, conduct disorder, oppositional defiance disorder, reactive attachment, and/or acute stress disorders (p. 3).

According to Brunzell et al., (2015), many young individuals report to school daily in order to meet their social belonging and personal improvement needs. How does a school become a safe space for students? Kidger, Araya, Donovan, and Gunnell (2012) suggested that the school environments, class sizes, student to teacher ratios, educational practices, and quality interactions
all play a role in students emotional well-being. “The school environment also influences students’ academic success indirectly, by impacting students’ behaviors” (Johnson, Burke, & Gielen, 2011, p. 331). Due to the aforementioned effects, it is important for educators to note that the school environment plays a significant role in a student’s life.

Voight and Maury (2016) advised that educators are now seeking different approaches to improve school climate in middle and high school, due to increased attention in education policy. As previously stated, the environment impacts students’ mental well-being, their academic success, and their safety. Creating a safe and inviting space can be an uphill battle for educators because most school infrastructure decisions are out of their control. Poesen-Vandezande & Nicaise (2014) stressed, “School infrastructure can hardly meet the new challenges of the twenty-first century such as sustainability, new teaching methods, and the changing social role of the school” (p. 95). Since much of school infrastructure is out of the teacher’s control, the teacher must make the biggest difference with minor changes to the environment in order to meet their students’ needs and greatly impact their educational careers.
LITERATURE REVIEW

The School Environment

The past section discussed the concerns about the classroom environment, challenges educators face when making improvements to their classroom, and the impact it has on students’ academic success. But what is school environment in simple terms? According to Voight and Maury (2016), “school climate refers to the school physical and social environment and is typically operationalized as the aggregation of individual student and staff behaviors and perceptions” (p. 1). The school climate becomes substantially important during adolescence because this is the time when students need additional support and safety due to adolescents being in a critical phase of personal and intellectual development.

Designing the School Environment: A Brief History

Designing an ideal school environment to create a space that provides optimal learning for students while using current technologies and considering future technologies is not a new subject. In fact, this has been an ongoing topic for decades. In 1938, Smith stated, “normal changes in curriculum naturally result in some changes in building standards, but a clear statement of what is to be accomplished is the plain responsibility of the school administration” (p. 445). Smith agreed with Spain’s claims that:

To meet changing needs of the curriculum, the demands of safety, the dictates of good architecture, and the financial resources of the community, offer a challenge to the superintendent of schools and the architect . . . and make a demand upon their resources which few of them are prepared to meet (Spain, NA, as cited in Smith, 1938, p. 445).

This rings true today as all variables are attempted to be met in order to provide a safe and up to date school environment. Smith (1938) pointed out, “too often have modern working programs
been forced into newly constructed buildings designed without full regard for that program” (p. 445). This insightful comment from Smith is still relevant due to the fast pace in which educational norms are progressing and technologies are advancing. Once all parties have agreed upon school environmental changes, and those changes have been implemented through new construction, the result is that by the completion of these changes, the new additions are nearly out of date.

There have been many influences that required changes to the school environment throughout the decades. In the early 19th century, there was the public health movement that demanded schools address the issue of overcrowding and unsanitary conditions. This was closely followed by urbanization and modernization, which addressed the industrial and commercial economy and pushed curriculum toward manual trainings and technical subjects. This in turn required advances in teacher trainings, new technologies, and spaces to be developed to accommodate the educational needs during this time (Gislason, 2009).

Following the urbanization and modernization of schools in the 20th century was the onset of the teaching philosophy: progressivism. Progressivism pressed for loose configurations of the school environment, which allowed for teachers to be in control of their personal classroom space. This allowed for teachers to be able to move classroom furniture around to meet the needs of their students, educational practices, and not have an impact on the integrity of the school structure as a whole (Gislason, 2009).

Finally, more recently we have the teaching philosophy: constructivism which expands on the loose configurations of the progressive approach to the school environment and puts the student first. This style utilizes student-driven and activities-based learning to support the needs of the learner (Gislason, 2009). With education constantly in flux due to the ever changing state
and federal laws and policies, school environments, technologies, teacher trainings, and students, there is a significant amount of understanding that is needed in order to continue to advance current and future classroom environments.

**The Necessary Elements of Classroom Design**

According to Burke and Burke-Samide (2004), the traditional classroom setting with plastic or metal desks, hard chairs, bright lights, excess noise, unusual smells, and irregular temperature are potentially impairing student academic growth. As discussed earlier, many of the elements of classroom design are selected during the initial designing of the school infrastructure. Unfortunately, many of these decisions are not in the hands of the educator. Seaward (2018) might consider this a roadblock for educators in the environmental design process of their classroom. He describes an environmental roadblock as a, “personal constraints such as time, money, or a host of responsibility that impedes the creative process” (p. 552). It is important that educators do their best with what they have to integrate subtle changes in the classroom that will engage all the human senses. Each element may have considerable influence on the psychological and physiological state of individuals in the environment, student and teacher alike.

**Light and academic performance**

Burke and Burke-Samide (2004) emphasized, “light is one of the elements of the immediate environment that affects some students’ ability to learn” (p. 237). According to Bellia, Pedace, and Barbato (2013), “it has been well established that light induces not only visual responses but also non-visual effects: light affects performance, mood, attention…hormones secretion and others” (p. 50). Bellia et al., (2013) completed research on the effects of natural
lighting and electric lighting in a university classroom that had overhead lights and windows letting in natural light. They found the impact of different wave lengths emitted from the different light sources not only affect an individual’s eyes but also the circadian rhythm of the individuals. Bellia et al., (2013) reported:

> Our findings are in line with these studies in reporting that interior surfaces can diminish the circadian efficacy of a light source through spectral distortions. Therefore these measurements show the influence of the indoor and outdoor environment characteristics on the light that reaches the eyes and consequently on the human circadian system; this means that the choice of surfaces materials and colours is not just merely aesthetic but it has important implications on users' wellbeing (p. 64).

Bellia et al., (2013) suggested that increasing natural daylight in the educational setting is important to improve alertness and performance. This might suggest that with more exposure to natural light in the classroom, students could have a higher level of optimism in their classes which may lead to elevated academic success overall.

**Sound and academic performance**

Sound is not something that immediately comes to mind when thinking of the elements within a classroom. Yet sound can have a significant impact on the overall feel of a classroom and can even impact students’ academic achievement (Burke and Burke-Samide, 2004). Seaward (2018) advised that sound can have significant effects on human physiology. It is important for educators to understand more about sound in order to better prepare themselves to set up their classroom in a way that will support student academic achievement.

Seaward (2018) stated, “sound is energy made audible. It is created through random or periodic vibrations that are represented as waves” (p. 429). Sound is referred to as noise. Unpleasant sound is considered a form of noise pollution. Burke and Burke-Samide (2004) pointed out, “sound is an element of the environment that can affect academic achievement. The
decibel level and kinds of sounds in a classroom can influence students’ ability to concentrate, think, and perform well” (p. 237). Seaward (2018) suggested that white noise can be used to neutralize noise pollution. White noise in the classroom could be as simple as having a specific harmonic frequency playing through the classroom speakers or even allowing students to listen to their preferred music. Seaward (2018) also proposed that when relaxing music is introduced into the environment, there could be physiological effects such as lowered cortisol levels, decreased muscle tension, and lowered heart rate all of which could reduce stress. This might suggest that if there is a lower level of stress through the use of music therapy in the classroom, students could perform with higher academic success.

There is not much empirical evidence that sound or even music can change an individual’s mood, heal the body, or even increase academic success. However, there are many theories and recent studies that suggest just this. Alexander (2019) reported:

Though there have been only four major clinical studies to empirically investigate the clinical impact of sound, they all suggest that music helps PTSD sufferers avoid fixating on recollections of their traumatic experiences, reduces perceived stress and anxiety, boosts self-confidence, and lowers levels of the stress hormone cortisol (p. 211).

As mentioned previously, nearly 40% of students have experienced some type of a traumatic event in their short life (Brunzell et al., 2015). This suggests that including musical intervention in the classroom could decrease student’s inattentiveness, aid in stress reduction, and increase their self-confidence. All of this combined could help improve students’ academic success within the classroom and provide coping strategies into their adult lives.

**Scent and mood**

Scent is an element within the classroom that can greatly impact students in positive and negative ways. This is also one of the areas that educators need to be mindful of students’
sensitivities and allergies. Due to this, educators must use caution when sourcing scents to add into the classroom to manipulate the environment. Scents, no matter where they come from, are molecules. Molecules when entering the body can have dramatically different effects. Alexander (2019) noted, “essential oil molecules are unique in that they can actually penetrate our cell membrane and thus diffuse throughout our skin and tissues, and even get into our bloodstream” (2019, p. 162). Alexander (2019) stressed:

> They have the ability to move quickly throughout the body in minutes, whether applied to the skin or inhaled via the nose. Like nutrients, essential oils are metabolized by the body. However, high-quality organic and food-grade essential oils don’t accumulate in the body over a period of time. The healing oils exert their action and pass on through. (p. 163).

This suggests that a student’s biology would be impacted by the essential oils used within the classroom.

Essential oils are known to have “detoxifying, stimulating, antidepressant, antibacterial, antiviral, soothing, and calming properties” (Alexander, 2019, p. 163). Alexander specifically discussed the benefits of lavender, tea tree, and peppermint essential oils in his book: *The Align Method: 5 Movement Principles for a Stronger Body, Sharper Mind, and Stress-Proof Life*. He pointed out, “lavender is one of the most widely used antibacterial, antimicrobial essential oil in the modern world” (2019, p. 163). He also proposed that lavender can have a calming effect when inhaled or applied to the skin. He suggested that tea tree oil can be used as a cleaning agent due to its antiseptic and antiviral properties. Finally, he recommended using peppermint oil to revive yourself and your environment. Alexander reported, “studies have shown peppermint oil to be anti-inflammatory, antiviral, and to have antioxidant qualities…” (2019, p. 164). He recommended using peppermint oil to help fight seasonal allergies and suggests an added benefit of peppermint oil is an increase to your energy level simply through inhaling it.
Using essential oils in a therapeutic way is nothing new. Alexander (2019) suggested that they have been used for thousands of years. However, only in recent years there has been several studies done on the effects these different oils have on human biology (Alexander, 2019; Bilia et al., 2014; Scuteri et al., 2019). Alexander emphasized, “they’re becoming more and more widely used as a safe and cost-effective natural alternative for numerous health issues and concerns” (2019, p. 163). As mentioned before, use caution when adding the element of scent into the classroom and consider students’ sensitives and allergies before implementing on a daily basis. Allow for student input on the use of scent in the classroom. This will show students you care about their opinions, will help students feel they are a part of the decision-making process, and in turn will build a sense of ownership and improve teacher-student relationships.

**Temperature and student achievement**

It might come as a surprise, but even a marginal change in the classroom temperature and classroom ventilation could have a significant effect on student achievement (Burke and Burke-Samide, 2004) Burke and Burke-Samide (2004) noted, “research on environmental elements of temperature reveals that most students prefer a warm yet comfortable instructional climate” (p. 237). Haverinen-Shaughnessy and Shaughnessy (2015) suggested that the optimal learning temperatures for winter should be maintained between 68-75 degrees Fahrenheit and for summer should be maintained between 73-79 degrees Fahrenheit. They suggested that these prescribed temperatures would be beneficial for classes with sedentary and slightly active students. Haverinen-Shaughnessy and Shaughnessy (2015) reported:

Students’ mean mathematics scores (average 2286 points) were increased by up to eleven points (0.5%) per each liter per second per person increase in ventilation rate within the range of 0.9–7.1 l/s per person (estimated effect size 74 points). There was an additional increase of 12–13 points per each 1°C decrease in temperature within the observed range of 20–25°C (estimated effect size 67
points). Effects of similar magnitude but higher variability were observed for reading and science scores. In conclusion, maintaining adequate ventilation and thermal comfort in classrooms could significantly improve academic achievement of students (p. 1).

This information could help educators understand the importance of how ventilation and temperature in the classroom can affect student achievement.

**Mirror neurons: the teacher as working artist**

Alexander (2019) reported, “55 percent of our communication is body language, 38 percent is voice tonality, and only 7 percent is conveyed through the literal words spoken” (p. 13). This suggests that there is more to the role of the educator than what they teach: how they teach is just as impactful. Educators not only teach specific content but also act as a role model through their actions. How better to teach students to become an artist than by explicitly modeling what that looks like? Jeffers (2009) noted that these actions are not only observed by students but are also registered in their brain through their mirror neurons in the premotor cortex. This means that after students view your actions, a signal is sent to the mirror neurons in the brain, specifically in the premotor cortex, and once registered, the students will likely replicate the same action.

To fully understand this biological drive, educators need additional understanding of the impact the brain structure has on human interaction, behaviors, and understanding. “We don’t just perceive with the visual system, we perceive also with the motor system” (Gallese, 2006, as cite in Jeffers, 2009, p. 19). This means that the entire body is taking in the information presented. The body is using all its senses along with brain messages to understand the information. Jeffers expressed, “through motor activation, the mirroring mechanism allows human beings to experience their own actions, as well as those of others, at an abstract level of
representation; that is, through an embodied simulation” (Freedberg & Gallese, 2007; Gallese, 2006 as cited in Jeffers, 2009, p. 19). She continues to explain that once students observe an action or a static representation of an action via graphics, students can then reconstruct the observed action.

**Designing a studio culture**

There should be no surprise that the art classroom has a different “feel” than most other classrooms. The space may be set up like a studio to promote the “student as artist” feel. The teacher should have designed the classroom space to promote workflow through the positioning of stations and conscious placement of materials. The teacher may have adjusted the lighting, temperature, smell, and sound in the classroom to regulate student’s psychological and physiological states, as read about in the previous sections. The teacher may have used the wall space to display classroom norms and rules, student work, or display instructions and routines. All of these elements help the teacher set up the physical space to promote a studio culture that nurtures the students learning (Hetland et. al., 2013).

**Teacher-student interactions**

Teacher to student interactions are a vital part of a functioning classroom. At the start of a new class, it is important that the teacher sets the tone for what these interactions will look like in order to build rapport with students. “Rapport. Trust. Safety. These traits are fragile. They are built slowly. They can crumble quickly. They can be broken unintentionally. Nevertheless, intention matters less than perception” (Hamilton, 2019, p. 223). This means that if a student thinks and feels that something was intended to shame them, then they internalize the situation and it becomes their reality. The reality is the current generation of students, Gen Z, are known
for being sensitive and overly emotional (Zarra III, 2017). With this knowledge, it is up to the educator to create a space that is safe, inviting, and encourages building strong relationships.

Developing a safe environment that builds rapport and trust starts with the teacher. “Teachers not only design the physical space, they also design informal and sometimes more formal ways that students interact with one another and with teachers to create a social climate that nurtures learning” (Hetland et. al., 2013, p. 16). If the ultimate goal is to have students create like artists, then the teacher must model and give space for this to develop within students. Hetland et al., (2013) has noted:

As students make artworks, teachers observe and intervene. Such observations and responsive teaching is critical to student learning. Teachers are also aware and thoughtful, however, of students’ needs for privacy at times to develop a relationship with materials, tools, and their own work (p. 16-17).

When the teacher provides students with a space that promotes workflow, gives thoughtful responses, and allows students to independently explore different art forms, the students are able to grow in the personal discipline and gain self-confidence.

**Peer interactions**

The teacher must ensure that students feel safe and respected but also create a climate where students engage with one another in a constructive and collaborative manner. The teacher should model for students how to become and remain neutral, clear, and helpful with peer communications (Hetland et al., 2013). Hetland et al., (2013) suggested the following examples to guide communication during student critiques, “I wonder what would happen if you…,” “Have you thought about trying…,” “That makes me think about…,” and “I had trouble with that…and I tried…and it worked pretty well.” (p. 17). Once the students have been modeled how
to positively communicate and support their peers, this style of communication soon becomes a classroom norm.

**Displaying student work**

When a teacher displays student work in the classroom, most often the goal is to encourage students to draw thoughtful comparisons and have productive conversations among each other. (Hetland et al., 2013). This group collaboration continues building the classroom rapport, trust, and safety. Teachers can take it one step farther by getting students involved in the curation process as well. When the teacher allows for student input for classroom displays or large school exhibitions, students gain ownership in the process and take more pride in their work (Douglas & Jaquith, 2018).

**The Necessary Elements of the Art Classroom**

No two art rooms are created equal and, in some cases, a physical art room isn’t even provided to the art teacher. Much of this has to do with predetermined infrastructure and funding for the arts. Art rooms can vary from a more traditional art room to a science lab turned art room or even to art on a cart with no space provided. Each scenario provides its own set of challenges for the educator that is given the space or lack thereof. In addition to this art rooms at the different educational levels can have significant variations from one another when it comes to the predetermined elements provided within the space. Nolte-Yupari (2017) stressed, “art rooms are dynamic and multifaceted, determined by our everyday engagement with them. K-12 art rooms are also an underemphasized element in beginning art teacher pedagogy” (p. 222). This suggests that the elements within the classroom are just as important for an educator’s pedagogy as their teaching philosophy and strategies. What is described in the following sections may not be the
case for every art room but provides some insights to the items one would expect to see in an art room at the different grade levels.

**Elements in an elementary art room**

Jeffrey Broome (2013) performed a case study in Ms. Nancy’s elementary class. He stated that Ms. Nancy had the unique experience of being able to aid in designing her art room as her school underwent renovations. Even though Ms. Nancy’s room may not resemble all elementary art rooms, many of the elements within could be found in other art rooms. Ms. Nancy’s experience in selecting items for her class also provide insight for educators on what might be beneficial to add to their space. Broome grouped his findings with the following headings; security and shelter, psychological security and pleasure, social contact, symbolic identification, task instrumentality, and growth.

**Security and shelter**

Security and shelter were the first category Broome wrote about, “due to the unique and potentially dangerous materials used in art instructions” (2013, p. 40). In this section he observed that Ms. Nancy requested a separate room for the kiln that could only be accessed by key to prevent children from getting close to the hot surface. He also noticed that she had a large storage room for supplies she wanted to limit student access. The storage room also had large windows that opened to the classroom. He noted that the large windows also allowed Ms. Nancy to be able to see her classroom while finding materials. Broome (2013) reported:

> The main instructional area in the classroom was very spacious and was used advantageously in providing a safe environment. Materials that were not age-appropriate were put out of reach, and furniture and materials were arranged in a logical order for clear paths of travel (p. 40).
This suggests that once a safe space has been established, then it is in the best interest of the teacher to consider the psychological security and pleasure that students will glean from their classroom experience.

Broome (2013) observed that many of the surfaces in the classroom are of a hard material. He documented there are hard desks, hard floors, and hard walls without wallpaper and all of which fail to provide a psychologically secure environment. He noticed that Ms. Nancy created a balance within her classroom design by introducing soft items like a carpet to gather for instructions and stuffed animals in the attire of specific artists that will be researched. She also introduced potted plants to bring nature indoors. In addition to the soft items throughout the class, Broome noticed that Ms. Nancy also requested many windows that overlooked an outside patio and had direct access to this space. Broome alluded to the fact that the addition of light and natural elements in Ms. Nancy’s room provide a psychologically secure space that promotes a deeper connection for staff and students to their surroundings.

**Social contact and symbolic identification**

Broome (2013) mentioned that Ms. Nancy’s space was setup in a way that promoted student engagement and collaboration. She had large tables grouped together to encourage student interactions and specifically placed them in a horseshoe shape that allowed easy access for her to assist students. In the table opening she placed a rug, which is used as a place for students to gather for instructions, demonstrations, conversations and is away from tempting art materials. He also noticed that she had items displayed throughout her class that created an all-inclusive environment. Broome noted that she displayed student work, prints relating classroom content, and to books and prints from diverse cultures. He also noted that in addition to items relating to class content on display, she also displayed items of personal interests and student
relationships. These came mostly in the form of photographs. He suggested that when teachers share appropriate information about their life’s students may perceive them as “real people,” which can help build positive foundational rapport in that process.

**Task instrumentality and growth**

Broome (2013) noticed that Ms. Nancy’s classroom was set up in a way that made the space feel like a studio and encouraged students to do as much as they could on their own. The classroom was large enough to have multiple activities going on at one time, and she arranged the space in a way that permitted for student self-exploration. She did this by having many items accessible and organized for students to access. She also arranged the room by grouping similar items. He noted the wet and messy items were grouped near each other in the classroom and away from dry supplies. He also noted that Ms. Nancy requested three wide and deep basin sinks to prevent spills and allow for elbow room. She placed paint supplies and drying racks near the sink to organize similar items and promote workflow.

Broome (2013) noted that while Ms. Nancy was a part of the design team, she did fail to pay attention to the number of electrical outlets available in her class. He mentioned that many times the focal point of instruction in Ms. Nancy’s class were determined by the placement of the classroom white board, LCD projector, and touch-screen SMART board. The consequence of this restricted the placement of some equipment and in some cases were not easily accessible without the use of long extension cords. This further suggests that all elements within the classroom need to be fully evaluated in order to produce the best teaching environment.
Elements in a high school art room

As mentioned previously, a high school art room from school to school and district to district can vary quite dramatically. This is again based on those predetermined items mentioned previously. Nolte-Yupari (2017) stated, “a lot (of being a high school teacher) is site specific as to what you’re going to do. There’s painting and drawing classrooms, there’s 3D, and ceramic. And they all have their own supplies” (p. 227). One should note the stark difference from Nolte-Yupari’s description of multiple locations at the high school setting in comparison to all-encompassing space with a storage room in Ms. Nancy’s elementary class. A common theme Broome (2013) and Nolte-Yupari (2017) mentioned at the elementary and high school level is that, “long-term engagement with the art room meant constantly (re)arranging the art room” (p. 227). The ability to position the room in numerous arrangements is vital to the workflow for different lessons and materials. Some lessons work better when tables are grouped together, and students have the ability to sit in a chair and other lessons work better when tables are spaced apart and chairs are completely removed. Each lesson comes with its own unique environmental setup that facilitates maximum learning.

American disabilities act (ADA) and classroom design.

When a school district hires a design firm to update the school’s interior, the designer is limited in the furniture they can choose to add to a space due to the American Disabilities Act (ADA). In an interview with Sarah Dippel, an interior designer at Raye Design, in West Michigan, she stated:

When a commercial design company is contracted to design a school facility, they are provided with a list of ADA compliant furniture that has predetermined measurements. This takes out the guess work for the designer and ensures that individuals in the space are getting the furniture that follows ADA guidelines.
Many commercial design firms like Herman Miller and Steelcase have their own lines of educational furniture that is created in compliance with ADA standards. (S. Dippel, personal communication, March 2, 2020).

This information provided from Sarah Dippel is informative for the initial design process for newly built schools and schools undergoing classroom renovations.

Even though the physical space and elements within an art classroom may change from the different educational levels, this is only aspect of the classroom environment. In addition to the physical elements within the classroom, the learning environment also has a significant impact on student achievement.

**Other Approaches to the Learning Environment**

**Holistic education**

To bridge the gap from traditional education to a holistic educational approach, the entire persons needs must be considered and educated to. Unesco (1996) emphasized, “education is moving beyond the confines of subject knowledge accumulation towards mastering the instruments of learning and the application of knowledge in a variety of contexts” (Unesco, as cited in Hare, 2006, p. 301). Hare (2006) suggested an evolving focus in education is the learning and understanding of self by developing personal competences, learning to live with others, and educating the whole person. Hare expressed, “the needs of the world will be different in the years ahead and education is evolving into a lifelong, continual process of personal learning and enrichment in whatever context or situation the learner finds him/herself” (2006, p. 302). The article suggested that holistic education is the approach to take to meet the needs listed above.

Clark pointed out, “the ultimate purpose of holistic education is to transform the way that we look at ourselves and our relationship to the world from a fragmented perspective to an
integrative perspective” (Clark, 1991, as cited in Hare, 2006, p. 302). Hare suggested that holistic education enables a person to become their very best self through the development of the whole person both at the cognitive and affective level. In turn, the student becomes an active participant and critical learner. They will also be able to understand themselves in a changing local and global society.

This type of education becomes valuable during the middle years of education when adolescents are in a critical phase of personal and intellectual development. Hare (2006) advised that in order to meet the needs of students in this phase, education must be flexible and dynamic to accommodate these personal differences. It must allow students to question and understand their own values and behaviors as well as being able to observe those around them.

A common theme Hare (2006) mentioned throughout this article is caring: caring for oneself, the community, and the environment. This allows for self-realization, gaining a sense of community, and taking responsibility for one’s actions and passing that knowledge on to others. Holistic education has the ability to help students understand themselves, feel supported, and build relationships with others. Through this educational practice, students develop their social-emotional competence, which will help support them through their educational journey and into adulthood.

**Social-emotional education**

Social-emotional education, “refers to children’s growing ability experience, regulate and express emotions; from close to secure interpersonal relations; explore the environment and learn” (Parlakian, 2003, as cited in Heller et al., 2012, p. 920). Heller et al., research found:

Some of the characteristics indicative of a child’s competence in social-emotional development include confidence, friendliness, attentiveness, good language skills,
the ability to relate to peers without being too submissive or overbearing, the ability to form meaningful relationships with teachers, persistence at challenging tasks, a willingness to give and receive support, the ability to use respectful communication, and the ability to follow instructions (National Education Goals Panel, 1999; Peth-pierce, 2000, as cited in Heller et al., 2012, p. 920).

All of which help a student be more successful in and out of the classroom.

Heller et al., (2012) emphasized, “young children…learn more when teachers interact with them in a stimulating and emotionally supportive way” (Mashburn et al., 2008, as cited in Heller et al., p. 920). The article proposed that social-emotional competence has been linked to successes from early childhood into adulthood. The Early Childhood Mental Health Consultation (ECMHC) has put together a conceptual framework that is a combination of environmental, developmental, and relationship perspective that a child develops through interactions with individuals in his/her life. The framework in the article suggested that changes in the environment or those individuals closest to the child can have the greatest potential for benefit or harm. This indirectly suggests teachers hold this responsibility as an individual who interacts with the child frequently. Heller et al. (2012) study found the following:

The mental health consultant (MHC) helps the teacher to recognize that he or she bears the primary responsibility for creating a quality child care experience for the children in his or her care…the consultant provides the teacher with the knowledge and encouragement to create a classroom environment and teacher-child relationships that will enhance children’s social-emotional and academic competence (p. 922).

This article proposes that the MHC program created by the ECMHC is to connect teachers with a consultant, build safe and supportive MHC-teacher relationships, and educate teachers on the importance of their role in their students’ educational career. Heller et al., (2012) research reported the following:

The MHC helps teachers understand that a high-quality childcare experience rests on the shoulders of each teacher and that the relationship the teachers forms with
each child in his or her care contributes to each young child’s development socially, emotionally, and cognitively (p. 923).

The article continues to report that upon teacher’s self-evaluation on their competence post collaboration with the MHC consultant, there have been positive changes in awareness to children’s social-emotional development.

**Empathy-based education**

In 2018, You, Lee, Lee, and Kim performed a study on an empathy-based learning model in two Korean schools as a possibility to help solve the issue of school violence and bullying. This model was chosen in order to shift from a competitive learning approach and in its place implement a cooperative learning approach. You et al., (2018) suggested this model will help develop positive social-emotional qualities and prepare students to grow as community members. Barker noted, “empathy is generally defined as the act of perceiving, understanding, experiencing, and responding to the emotional state and ideas of another person” (Barker, 2003, as cited in You et al., 2018, p. 1). This might imply that by implementing an empathy-based learning style, students will begin to understand themselves and others, which in turn has the potential to help build relationships and lower violence and bullying.

In the past, the educational focus on empathy has been on how well a teacher can empathize with their students. In this article, the focus is on the students’ empathy and their cognitive and behavioral outcomes (You et al., 2018). The authors asserted that, “the level of students’ ability to empathize with others has been significantly associated with increased prosocial behaviors, reduced aggression, and reduced social prejudice” (Schonert-Reichl et al., 2012; Bjorqvust et al., 2000; Stephan and Finlay, 1999, as cite in You et al., 2018, p. 1). Due to its success, educators have started to investigate ways to develop empathy competence within the
classroom. In the past this has mostly been focused in reading and literature education, which has been proven to improve one’s “ability to understand others’ thoughts and feelings” (You et al., 2018, p. 2).

You et al., (2018) transitioned from a reading and literature class into an art classroom, with the understanding that “when individuals view art or create their own, this may lead to developing an increased awareness of oneself, the artist, and the world, providing opportunities for empathy and understanding” (Potash et al., 2013, as cited in You et al., p. 2). They emphasized, “when an art class incorporates instructional strategies aimed at developing empathic awareness and the capacity to care, students are more willing to listen to the ideas and options of others, and their artwork becomes more expressive and invested with their values and experiences” (Stout, 1999, as cited in You et al., 2013, p. 2). They found an “empathy-based learning model pursues academic achievement alongside socio-emotional development by having all school activity experiences be based on understanding others’ emotions and communication” (p. 3). School wide integration along with teacher attitudes toward students being respectful and receptive creates a psychologically secure atmosphere. With this type of atmosphere, students more willing to make mistakes and feel comfortable in their surroundings without feeling alienated.

You et al., (2018) furthered their research by working with two middle school art classes, which consisted of thirty-seven ninth-grade students and two teachers, to collect quantitative data measuring students’ empathy, self-esteem, and class participation. One school had nineteen students testing as the experimental group employing the empathy-based model, and the other school had eighteen students as the control group employing the traditional, lecture-orientate model. A pretest-post-test design was the utilized method to collect data.
First, the same pretest was given to students at both the experimental and controlled
group. They also had a three-month window to perform the experiment and were given the same
art textbooks from which instructions were to be given. Both groups were asked to create an art
project that could involve different mediums such as painting, drawing, collage etc. The
experimental group created artwork together based on the topic of empathy and shared their
creations in the end. Within this window, the experimental school teacher taught mini lessons
focused on empathy and communication to aid in student understanding. In contrast, the
controlled group created their artwork based on the topic the teacher selected from the textbook
with no emphasis on empathy or communication, and students submitted their work to the
teacher upon completion. Once the artwork was completed from both groups, a post-test was
taken to collect data and the Interpersonal Reactivity Index was used to evaluate the level of
empathy within their work.

You et al., (2018) noted, “it was found that an art class using the empathy-based learning
model had positive effects on middle school students’ empathy” (p. 9). Their results showed the
experimental school had greater effects on students’ empathy and class participation than the
traditional lecture-oriented instruction. The increased effort in the empathy-based school led to
increased academic success and a greater understanding of empathy. This might suggest that
when students understand empathy, they are better prepared to interpret material and more
thoughtful with their own creations and personal expression.

**Teaching for artistic behavior (TAB)**

Teaching for Artistic Behavior (TAB) is a teaching philosophy that places the child at the
center of the decision-making process. Most often a TAB classroom is setup with different
stations and students get to choose where they want to work and make all decisions in their
creative process. The teacher will provide demonstrations for new techniques but not make them a requirement for student projects. Douglas and Jaquith (2018) define TAB as an instructional approach to “visual arts that will satisfy all the curiosities, interests, and personalities in a classroom of learners” (p. 3). They found, “students need time to explore materials, techniques, and concepts in meaningful ways, and teachers need to connect the art curriculum to the lives and interests of the children” (p. 3). This approach aligns well with the holistic and empathy-based education models mentioned previously because of its focus on students meeting their individual needs.

The TAB curriculum must be flexible, adaptable, and consistent. The classroom must have consistent routines, be organized, and facilitate student planning. TAB assessments must focus on process over product. Most importantly the decision-making process must be “passed from teacher to students so they can pursue personal work in a carefully planned learning environment” (Douglas & Jaquith, 2018, p. 7). When educators allow and support students to oversee their learning, students will increase the confidence, recognize their preferred approach, and in turn will increase their academic success (Douglas & Jaquith, 2018).

**TAB and the studio habits of mind.**

There are many concepts that TAB teachers use to help students explore what artists do. One that is popular in art education is the Studio Habits of Mind. Douglas and Jaquith (2018) reported:

The Studio Habits of Mind describe what artists do, outlining eight distinct thinking dispositions that artists use, in various combinations, during the artistic process. Studio thinking also guides artists as they interpret and evaluate their own work and that of others. These studio thinking habits—Observe, Envision, Stretch and Explore, Develop Craft, Express, Reflect, Engage and Persist, and Understand Art Worlds—provide a succinct explanation of the artistic process.
and support students’ thinking about their own work. As children and teachers assess progress, the studio habits help identify emergent artistic behaviors and target areas for growth (Hetland, Winner, Veenema, & Sheridan, 2007, as cited in Douglas and Jaquith, p. 14).

Providing students with the Studio Habits of Mind framework to guide their personal creations allows students to deepen their engagement and continuously inform themselves about their art-making process (Hetland et al., 2013).

**The art room as the child’s studio.**

The learning environment in a TAB classroom is setup as an artist studio. The goal of this being to get students to behave as artists through authentic experiences. As mentioned in the section on mirror neurons, if students are observing others actively participating in the artistic process, they will begin to do the same. The environment must allow for play and self-driven learning. Douglas and Jaquith (2018) emphasized, “scribbling, experimentation, and discovery learning are necessary beginnings for making art. Play is vital to creativity and leads to divergent thinking about new ideas that may appear in current work or resurface months later in different artworks” (p. 6). They also emphasized:

Young artists need freedom to follow their ideas and learn by taking risks. They need to know that their teachers trust them to make good choices and will support them through failed attempts…If we wish for our students to do the work of artists, we must offer them the opportunity to behave as artists, think as artists, and perform as artists (Douglas & Jaquith, 2018, p. 8).

This information is important to understand if educators want students to be active participants in their own learning. Providing an organized and safe environment will only encourage students to continue to grow and ultimately achieve success with their academics.
**TAB room arrangement.**

A TAB classroom is only as successful as the work put into the learning environment before students arrive. Douglas and Jaquith (2018) proposed:

In choice-based art classrooms, teachers become architects, thinking about issues of space, traffic flow, proximity to resources, and arrangement of supplies and lighting. Designing a cluster of studio centers to meet the many needs of artists is a complex task. With careful planning, the art classroom can be arranged to display an enormous number of resources and materials that facilitate both group and independent work. A consistent layout allows students to work with the comfort of familiarity (p. 42).

This means that with careful planning of the space and resources ahead of time, there is less guess work for both teacher and students once school starts. This planning allows for students to come to a well-prepared class that will ultimately lead to their success. As stated before, the art room should become the child’s studio. The studio should become a place that is familiar, safe, and enables risks.

A TAB room arrangement should be logical, consistent, and flexible. When planning the placement of centers, one should use the items that are already laid out in the classroom in a logical way. Douglas and Jaquith (2018) recommended that a painting center should be located near the sinks and drawing centers should have access to natural light if possible. There should be a consistent meeting/demo area with which students are familiar. This area can be used to present new information from teacher to students but also used as a meeting area for students to share and reflect with one another or in groups.

Materials, tools, and furniture are items within the classroom that need additional planning. Materials and tools, like centers, should be planned in a logical way according to where centers may be located. If a painting center is near a sink, then painting materials and tools should also be close by. Douglas and Jaquith (2018) noted that having an, “organized
arrangement of materials and tools is key to creating a functional center. Provide color-coded containers that are easy to access, carry, and locate at cleanup time” (p. 45). This allows students to feel confident in getting supplies they need and returning them to their designated locations.

Douglas and Jaquith (2018) recommended that the furniture in a TAB room should be flexible. This allows the teacher to adjust the space to improve workflow or meet the needs of the students, to make them comfortable within the space. Many TAB teachers will hunt for additional furniture from thrift stores, garage sales, or estate sales to find the perfect pieces to add into their space. Douglas and Jaquith recommend giving students options like working with or without chairs or allowing students to work on the floor. The careful planning of a TAB room ensure that students will be set up for success and build self-efficacy through the process.

The Holistic Healing Environment

Eco-therapy

Throughout chapter 28 in Seawards’ book Managing Stress: Principals and Strategies for Health and Well-Being, we are reminded that reuniting with nature can provide some of the most healing benefits for the body and mind. This is also known as ecotherapy. Ecotherapy is defined as, “a method of restoring optimal health and well-being through routine exposure to and experience in the natural world” (2018, p. 533). The majority of people can benefit from breathing fresh air, smelling the fragrant scent of fresh cut grass, feeling the warmth of the sunlight on their skin, hearing the array of sounds that come from being still, and taking in the surroundings.

Is it possible for educators to bridge the gap of modern-day technologies and nature to get students to break away from their on-demand, instant-gratification, scrolling mentality, and to
reconnect with nature inside their classrooms? Before building that bridge and making modifications in the classroom, it is important for educators have a deeper understanding of the impact nature has on one’s psychological and physiological states. This will help educators better understand why nature is an important element to incorporate into their classroom to support student’s academic success.

*An indirect nature experiment.*

Gladwell et al., (2012) suggested nature has an impact on one’s psychological and physiological state. Contact with nature improves mood, attention, cognition, and self-esteem (Gladwell, et al., 2012). They found that viewing images of nature had a restorative effect on subjects’ heart rate. Since this was one of the first studies done to understand the physiological effects of gazing at nature, it opened the concept to other researchers.

*Indirect versus direct exposure to nature.*

In 2018, Jeon, Yeon, and Shin, conducted two experiments to examine the influence of indirect versus direct nature experiences on the psychological and physiological aspects of the human system. The first experiment involved participants being directly in a natural setting that had mostly pine trees, was flat, and well lit. The second experiment had participants in a laboratory with controlled temperature and humidity, looking at a picture of a forest projected on a wall. For both experiments subjects were tested on their heart rate variability, semantic differential method or how comfortable a patient is through pleasant/neutral/calm states, and their profile of mood state.

The results showed that having a direct nature experience significantly reduced tension, anxiety, depression, fatigue, and confusion, while only mildly improving anger and vigor. The results from the indirect nature experience found that all moods were significantly improved.
This means that individuals exposed to nature directly or indirectly will experience positive mood states (Jeon et al., 2018).

Due to their findings, Jeon et al., (2018) proposed that even though being in direct nature has the most benefit on psycho-physiological effects, indirect nature is a great alternative if direct nature is not accessible. They discussed the possibly that with advances in technology, virtual reality or augmented reality may be the next best alternative to healing through nature when direct nature is not an option.

**Indirect versus augmented exposure to nature.**

Palancia, Lyons, Cooper, Lee, and Fossat (2019) performed two experiments on how nature and urban settings affect the creative process through direct interactions with nature, indirect interactions with nature, and augmented (digital) interactions with nature. During the first experiment, they had participants watch two different videos: one video was of nature and the other was of an urban environment. Participants watched the same four-minute videos in 2-D and then in 3-D (virtual reality) through an Oculus Rift headset. Participants were then tested to assess divergent thinking and creative potential as evidenced through fluency of test responses, flexibility, elaboration, and originality. The results showed that the participants overall who viewed nature, whether in a 2-D or 3-D setting, increased their cognitive functions and creative outputs in comparison to viewing an urban setting.

Since 2-D nature performed better than expected, Palanica et al., (2019) wanted to compare this against real life settings. Just like the first experiment, they compared natural images to urban images and used the Alternate Uses Test (AUT) to evaluate participant responses. “The AUT involves participants generating alternate uses for common objects (e.g., button, paperclip, tire) in a fixed amount of time” (Palanica et al., 2019, p. 45). They changed the
2-D videos to the exact location as the real-life nature and urban settings. They did this in order to have a controlled location for viewing. The most notable change in this experiment was sound. The 2-D videos had no sound, and the real-life placements had the sounds of the natural settings.

Again, the results were surprising. Participants that viewed 2-D nature had the highest levels of creative responses for all categories compared to the other environmental situations. The real-life settings both performed well but not as well as 2-D nature. This data might suggest that due to the difference in sound from each setting, the 2-D nature with no sound added less distractions. Palanica et al., (2019) suggested after these findings that getting outdoors in whatever setting is around you will ultimately produce higher levels of creative responses.

What this proposes is that even if you do not have access to nature directly, simply viewing it in a 2-D form can still increase creativity. This could be as simple as playing a live stream nature video, with no sound, on your projector screen while students work. Simply having nature available for students to view in their off-task moments could be enough to give students a mental break, allow their minds to wander, but then ultimately have them increase their creative response when they get back on task. In addition to using nature in the classroom to increase student achievement, play is another beneficial tool that could have a significant impact on student achievement.

**Play in the art room**

Play in the art room may raise red flags for some. Educators may think, how can play be possible in an art room when there is expensive equipment, class materials, and student work? This will take some reframing of the term “play” and how it can be a significant asset within the classroom. Let’s look at why play is beneficial for students’ cognitive development and their success in and outside of their school day. According to Jacoby-Garrett (2018):
Play goes beyond sheer entertainment: it provides a framework for developing and expanding a child’s learning. Play offers the opportunity for children to use their imagination, to problem solve, and work through a variety of challenges. Through play, children develop the fine and gross motor skills that help them with developmental tasks, and they increase their social skills when working with others (p. 24).

This might imply that when students are able to embrace play as part of the learning process in an art room, they will have better control of the materials through increased fine motor control, be able to work through challenges that arise, and have a wider depth to their imagination.

Jacoby-Garrett (2018) pointed out that, “other studies have shown a link between free play and higher cognitive and linguistic abilities” (p. 25). Again, suggesting that play will be beneficial for students’ cognitive development.

It should come as no surprise that even though research shows unstructured play time improves student achievement, there has still been a significant reduction of physical activities like physical education classes and recess (Reeves, Miller, & Chaves, 2016). Even though “academic studies have shown that following an unstructured play break, students are more attentive to their schoolwork” (Jacoby-Garrett, 2018, p. 24). This would suggest that educators need to integrate opportunities for physical activity within their classroom to help students regain their focus. “Research indicates that with movement, the body helps the brain to think, create, and perform at a higher level (Reeves et al., 2016, p 119). Reeves et al., (2016) recommended incorporating exercise breaks during class time as an easy option for educators (Reeves et al., 2016). They also advocated that cross curricular communication to help develop these exercise breaks and how they could be incorporated into the classroom (Reeves et al., 2016).

Incorporating play or movement in the art class can come in many different forms. Students could oversee getting out and returning their own materials. Teachers could incorporate a movement break or incorporate games that involve movement and reinforcing their learning.
More on this will be discussed later. But the options for movement within the class are limitless. The more opportunities per day students have to move, the more likely there will be an increase in students’ cognitive development and achievement. Improving students’ cognitive development can also be achieved by implementing art therapy techniques in the lessons.

**Art as therapy**

It should come as no surprise that art can be used as a form of therapy. Now what if art teachers began to incorporate therapeutic techniques within their teaching? Would it still be possible to meet state standards and not cross any clinical boundaries? Albert suggested just this. Albert is a registered art therapist and a licensed art teacher that has used her skill sets to create a hybrid program infusing art therapy and art education (2011).

The goal of her hybrid program is to “increase self-esteem, self-confidence, and self-advocacy; developing frustration tolerance, creative thinking, and healthy risk taking; communicating personal stories; reconnecting to cultural heritage; and validating important life experiences” (Albert, 2011, p. 91). She suggested that students who would benefit from therapeutic intervention often don’t get services during the school day due to potentially setting those students farther behind in their course work. Therefore, she proposed having a blended approach in the art class will aid in student achievement and support their personal and developmental needs. She stated, “I believe that a truly integrated art therapy-art education model exists when one cannot tell where one subject ends and the next begins” (Albert, 2011, p. 91). Albert made a clear distinction between using art as therapy in class versus her class being a therapy session, to not cross any ethical boundaries. Albert reports,

There is no confusion in the model outlined here; I emphasize that this is art class. When students or parents ask about my background, I tell them quiet accurately
that I am an art teacher and that my training is in art therapy. As students realize that the structure and effectiveness of the class is dependent on their willingness to use their own life experiences as inspiration for their work, they become more active participants in the process and they express themselves to the depth at which they are comfortable. When clinical issues arise that cannot be dealt with in the confines of the studio, I refer students to the school counselor or social worker for further attention. My role is not to manage any “cases”; rather, I use my clinical judgment from my training as an art therapist to know when to refer a student to the school’s support services (Albert, 2011, p. 91).

In Albert’s case a clear separation from clinical to classroom is necessary due to her certifications. For the general art teacher who may not have a background in art therapy, they would need additional training in psychology and mental health awareness in order to fully integrate therapeutic art lessons within the classroom.

When building lessons to integrate therapeutic applications, Albert (2011) suggested using backwards design, frontloading, scaffolding, fair and accurate assessment, and student self-assessment. Backwards design involves three steps. First, design lesson plans that meet curriculum requirements and aid in personal expression based on a big idea or concept and have a desired product. The second step is to determine acceptable lesson objectives for the artwork created. The thirds step and final step is to plan learning experiences and instructions (Albert, 2011). She also recommended using frontloading when planning a lesson. This process would involve “teaching background knowledge and pertinent vocabulary before beginning a unit of instruction so that students are brought to the same level prior to their participation” (Albert, 2011, p. 92). Albert (2011) suggested that when planning a unit each lesson should scaffold to the next and build on to one another. She also recommended having assessments rubrics that are fair and accurate and provide students with one to perform a self-assessment. Albert (2011) recommended to allow “students to assess themselves on their work so that they understand how the focus of their learning is on the process rather than on the aesthetic quality of the final
pieces” (p. 94-95). When the lessons are focused on student emotional wellbeing and the student is an active participant in the grading process, they will have a greater sense of self-worth and ownership.

Integrating art therapy and psychological understanding into art class would be an additional way to educate the whole child, as discussed in holistic education. Coupling art class and art therapy has great potential for improving the whole student and setting them up for success both academically and emotionally.

**Summary of Literature Review**

It should be overwhelmingly obvious that past and present research suggests that the elements in the classroom are just as important as an educator’s pedagogical style and have the potential to impact student behavior. In addition to this, the way an educator sets up the learning environment and their means of communication all impact student’s academic achievement.
A HOLISTIC APPROACH TO DESIGNING A MIDDLE OR SECONDARY WING

A Brief Introduction to Leslie Roberts’ Education Career

My education career started in college, where I initially entered with the intent of becoming an interior designer. I have always had a passion for designing spaces that are beneficial for their purpose. I quickly learned I did not want to make a career out of this but instead wanted to use this knowledge and my strengths of being a natural leader to become an art teacher. After graduation, I began my career in art education as a high school art teacher and had the rare opportunity to build the entire art program at the Grand Rapids University Prep Academy, from the ground up, as there was not an established program prior to my employment. This did not come without countless trials, errors, and significant research on best practices and how to utilize the space effectively and efficiently. After several years teaching at the high school level, I took on a new position as a middle school art teacher. This unique transition and experience in developing a curriculum at the high school level prepared me for creating a middle school curriculum that prepares students to be high school ready. Throughout my teaching career, I have made a huge effort to make the classroom environment as much of a learning tool as my teaching style. This experience through my educational journey has led me to writing this research paper and finding research that supports much of what I have implemented throughout my years as an educator.

The Environment

In the literature review there is information regarding the classroom environment and best practices useful in designing a holistic-friendly environment and middle school curriculum. This section will describe ways in which art educators can make subtle changes to their current
classroom setting to have the greatest impact in their classroom environment for student achievement. This section will provide a visual floor plan for an ideal art classroom that represent the best changes to the environment based on the information from the literature review. Finally, this section will provide an outline of a sixth- through eighth- grade holistic-friendly curriculum.

The Necessary Changes to the Classroom Environment, Today

The goal of these investigations is to provide educators with ideas backed by research to make changes to their current classroom environments. Even if an educator’s current classroom has design elements that have been selected due to predetermined factors educators have the ability to add items in by requesting classroom needs from their administration, writing a grant, using public funding websites, or even purchasing with their personal funds.

Modifying lighting to improve student performance in the classroom

As Burke and Burke-Samide (2004) emphasized in the literature review, “light is one of the elements of the immediate environment that affects some students’ ability to learn” (p. 237). Most often many schools use overhead florescent lighting due the cost. According to the Green is Better website, a compact florescent light (CFL) costs $2 per bulb in comparison to light-emitting diodes (LED) that can cost $8 or less per bulb. Even though the initial cost difference is quite dramatic, the cost per use over time is what should be looked at when selecting lighting. A CFL has an average life space of 8,000 hours whereas an LED can last upwards of 25,000 hours. In addition to this, a CFL uses 14 watts while an LED used only 10 watts. When comparing the cost per use of the CFL to a LED over a 23-year period of time, one would use 3 CFL bulbs in comparison to 1 LED bulb. Initially, the cost of a CFL is lower coming in at $6 versus $8 for an
LED, but if comparing total cost of electricity used over 25,000 hours at $0.12 per kWh, there would be a $10 savings by going with an LED. This is not including maintenance costs to replace the CFL within that time period. In addition to the money savings over a long period of time, LED lights do not heat up like CFLs, do not contain mercury, can be used on a dimmer switch, and are available in soft, warm, and bright white hues. LED is clearly the winner here.

It is in the best interest for an educator to advocate for their program and specific needs to administration. There is never harm in presenting a new idea especially if the outcome will aid in student achievement and lower cost for the district. There will be two outcomes. First, administration may agree and move forward with implementing those changes. Second, administration may thank you for your efforts and communicate that it is not within their ability to make the requested adjustments. If the latter is the outcome, that doesn’t mean they should stop, but instead should propel them to find alternative options to make their desire become a reality. One option for educators is to use their personal funds to purchase items they would like added. However, this is not always a possibility and should not be set as a precedent, so an alternative option would be using websites that are specific for fundraising for classrooms. Finally, there are many grants available for educators. If lighting is important and out of the educators means, then grant writing for updated lighting or classroom lamps with would be an option.

**Fine-tuning sound to improve student performance in the classroom**

Sound is a complex element within the classroom due to all participants involved, i.e. students and staff, but it is not impossible to make adjustments that will aid in student achievement. An educator’s classroom management (CM) should be used to monitor sound, as every educator has a personal preference toward sound within their classroom. A valuable part of
CM would include the use of attention getters. In my experience, I have found that attempting to increase my personal volume above the collective volume of students is not effective. Instead, I say, “If you can hear me clap your hands once. If you can hear me clap your hands twice. If you can hear me clap your hands three times.” I wait three seconds between each prompt to give students a chance to participate and notice to what their peers are responding. I do not begin communicating after the final prompt until I have attention from all students.

Another CM tool I use is planned before students enter the classroom. This is a combination of lighting and sound. I start by manipulating the classroom environment by adjusting the lighting. I dim the lights and have soothing music playing through the classroom speakers. I often play solfeggio frequencies found on steaming websites. As mentioned in the literature review, Seaward (2018) suggests that relaxing music could have beneficial physiological effects like lowering cortisol levels, decreasing muscle tension, and lowering heart rate, all of which could reduce stress. In my experience, the combination of these two elements used in this way communicate nonverbally to students to remain calm within the space. Once the classroom lesson has been presented, this is when I might adjust the lights and music depending on the lesson in progress. I also communicate to students that as an artist I almost always have noise canceling headphones on while working to help me get into “the zone.” If students have their own headphones, I allow them to use those while they work, but request that they have one ear open in the case of an emergency, or if I need to gain their attention quickly. If students do not have headphones, I will either continue playing the soft music, ask for music requests from students, or turn the music off. This provides many options for students to be successful. By allowing students to be involved in the music options, the educator is helping build classroom rapport that will further aid in setting up a psychologically secure classroom environment.
Regulating sent to improve student mood and performance in the classroom

Scent in a classroom has the potential to support or hinder student achievement. Different scents or odors could distract students from the task at hand or induce positive or negative physical affects. Odors can come in the form of body odor, perfume, school odor, chemical odor from art supplies, and many other sources. It is important to have ways to eliminate odors, while also being conscientious of how new scents introduced into the environment may physiologically and psychologically affect individuals in that space.

As Alexander (2019) suggested previously in the literature review, essential oils (EO) are an effective way to adjust the smell of a space and provide positive psychological and physiological benefits. He also mentioned that the quality of EO needs to be considered due to how they break down in the human system. As mentioned in the literature review, it is also important to consider students medical needs since EO are both inhaled and can be absorbed through the skin. Once these considerations have been made, diffusing lavender EO can have a relaxing effect and peppermint EO can have an energizing effect. Both EO and their benefits are discussed in greater length in the literature review. In short, the EO an educator chooses to diffuse within their classroom have the potential benefits for students psychological and physiological wellbeing and can aid in their school achievement.

Adjusting temperature to improve student performance in the classroom

The temperature in the classroom can have as much of an effect on students as the previously mentioned elements. Based on Haverinen-Shaughnessy and Shaughnessy study in 2015, they recommended classroom temperatures to be set between 68-75 degrees Fahrenheit in the winter and between 73-79 degrees Fahrenheit in the summer. If a classroom thermostat is not
available, then the best option would be to connect with school maintenance and request these changes at the appropriate time.

**Engaging mirror neurons: the teacher as working artist**

Modeling artistry can be easier than it seems and can be done in a few different yet effective ways. It is important that the teacher models the act of being a working artist for students. This engages their mirror neurons and increases the likelihood that they will also begin mimicking the teacher’s artistic process. The easiest way to do this is to set up a workstation and work while students are working on their assignment. This workstation could be near or at the teacher’s desk or at the front of the classroom where all students can see their teacher working. Another effective method is to settle in at a work area with students. This will model creating as an artist and will build rapport with students by situating oneself near them. Due to proximity to students, students may observe more closely the teacher’s process and may be prompted to ask questions they wouldn’t have asked if the teacher was at the front of the room working. In addition to this, having proximity to students is a beneficial CM tool to keep students engaged and on task.

**Developing a studio culture**

Developing a studio culture takes a significant amount of preplanning and very intentional implementation from the teacher. The preplanning should come in the form of setting up the elements within the classroom to promote workflow. First, adjust the lighting, sound, smell, and temperature as aforementioned in the previous sections. Second, have everything organized and labeled in the language(s) appropriate to the school’s student demographic. This helps students find materials but also helps them feel a sense of belonging when their preferred
language is used within the classroom. Third, place supplies in a logical arrangement based on
the lesson and materials needed. Fourth, setup classroom routines and visual and written
instructions that support these routines within the classroom and have project schedules visible.
Finally, repeat classroom management and classroom routines often. Students thrive when there
is consistency. As noted early in the literature review, Brunzell et al., (2015) noted that nearly
40% of students have dealt with some type of a traumatic event in their lives and these events
could manifest in many ways that impact their learning. This may suggest that if student home
lives are chaotic, then consistency within a classroom can provide students with those unmet
needs.

Encouraging play and expression

A huge part of developing a studio culture in the art room comes from encouraging
experimentation, play, and expression. As mentioned in the literature review, play and movement
are vital for students’ brain development. By having all accessible items labeled for students to
get and return, the teacher is utilizing movement as an integrated part of the CM. Another way to
incorporate movement in the classroom can be through creating movement games when
introducing new techniques or theories.

The following will detail an example movement game I created to help students learn
color theory. When students enter the room, give them a small color card cut from construction
paper. Have one long piece of tape, taped to the floor, in an area large enough for all students to
gather. Have students create two lines on either side the tape placed on the floor; there should be
about one foot from students to the tape. Begin by checking student’s prior knowledge. Ask
students to hold up their card if they are a primary color. Next, ask students to hold of their card
if they are a secondary color. Next, instruct students to jump from their starting position on to the
center line if they mix to make the secondary color you call out next. If you call out green, students with blue and yellow cards should jump in. Complete several rounds of this before introducing complimentary colors. First, tell students all complimentary color sets, i.e. red and green, blue and orange, purple and yellow. Next, instruct students to only jump in if they are the compliment of the color you announce. If you announce purple, then all yellow students should jump in. Again, complete several rounds of this. If there is time, have students switch cards with someone else and again call out different color theory options.

Another way to incorporate movement in the classroom is through movement breaks. These can come when the teacher notices that students are fidgety or are lacking engagement in the lesson. The teacher could instruct all students to get up and walk laps around the perimeter of the classroom. It might also look like the teacher setting a timer and having students perform jumping jacks, knee highs, lunging in place, or any other form of movement. In my personal experience, I have noticed these are best used halfway through student independent work time.

Another important part of a studio culture is expression through experimentation. When students are provided with a space that encourages self-driven exploration, the means to utilize new materials and techniques, and are encouraged to have choice in their artwork, students are likely to gain confidence. In turn, students begin to feel more comfortable expressing their thoughts and emotions by exploring through the creative process.

**Displaying student work**

Displaying student work should happen in the classroom, in the hallways, and in an exhibition. First, displaying students work within the classroom is a great way to start conversations with students and at the same time honor their artistic process. One might consider
any form of social media as an extension of the classroom. In my experience, social media apps like Instagram are a great resource to connect students, parents, and other individuals into your classroom. Students gain a sense of pride when their work is shown on the classroom feed, and parents can easily share their children’s work by a click of a button. Other educators can reference your Instagram for lesson ideas and collaboration.

Next, displaying student work within the hallways, display cases, and throughout the school is imperative. This again builds students confidence and it also promotes the art program within the school. Colleagues and visitors to the school get to see what is happening within the art room.

Finally, having an end of year art exhibition encompasses the last two elements by showing off the teacher and students hard work and dedication from the year. If possible, display all students work. However, if this is not possible due to the number of students, artwork created, and the space used to exhibit said work, this is a great opportunity to get students and staff involved in the curation process to narrow down the work that will be displayed. One way of doing this could be that the teacher first narrows down the work to a certain number. Then using classroom displays to hang the teacher selections for students and staff to vote on for the top ten works per assignment per grade level. This allows the students to feel a sense of ownership in the curation of the final exhibition. By getting staff involved, they will begin to feel ownership in their students work and the art program.

Displaying student work is vital and the more locations to do so, the better. The more involvement from staff and students, the more the entire school can transform into a place where everyone feels like they are a part of something large, because they are.
Designing the Ideal Middle and Secondary Art Classroom

Figure 1 depicts my ideal floor plan for a middle and high school art wing. The wing would be divided into five spaces; the general work area, the demo/work area, the storage room, the wet room, and the outdoor learning area. Each space functions as a vital element for optimal learning and student success. This space is designed so it would operate with the feel of an open concept from one space to another even with walls dividing the space. It would feel as if the outdoor and indoor work areas are one unified space due to the number of windows placed on the interior and exterior walls.

The general work area

The general work area is where most of the learning and independent work time will take place. When looking at the teacher’s desk in the middle of the north wall, one will notice the teacher’s desk is positioned perpendicular to the white board and smart board. This ensures that the teacher can see both the students and the content being presented without needing to turn around, like one would if the teacher was situated in front of the class and boards. Next to the smart board is a large drying rack that has been placed near the sinks that are positioned within the lower cabinetry. The upper cabinetry would house all of the painting supplies and the faces of the cabinetry would have labels for students to find items easily and be used to show off student work or curriculum material. Above the upper cabinetry and drying rack are windows that have remote operated blinds. This ensures that an adequate amount of natural light can flood the space and at the same time the blinds can easily closed.
Figure 1 – Floor plan designed by Leslie Roberts & illustrated by Sarah Dippel.

Moving to the east wall, there is a floor to ceiling window next to the large glass garage style doors. These garage doors would be fully functioning in order to open the general
workspace into the outdoor learning area. Next to the garage door is an exit door that would act as an emergency exit.

Beginning at the floor level on the south facing wall in the general work area, there is a cubby storage unit. This space could be used to house student work, supplies, and so much more. The top of the cubby storage would act as a countertop to display potted plants. Ideally the pots would be made by students in a ceramic unit. It would also be a great space to frame student artwork and photos of art related class trips. Above the cubby storage is a dividing wall that is made up of large windows in order to look into the wet room from the general work area. I would hang potted plants from the ceiling. Finally, in the center of the general work area one would find the workstations. These workstations would have two adjustable drawing desks joined together by flat work storage drawers. Each workstation would have ergonomic stools for students to use but could also be easily moved away for a standing option. By assembling these workstations together into group of three or four large workstations, the room would have a collaborative feel, that also ensures an efficient workflow throughout the space.

**The demo area**

Moving from the general work area into the demo area, one will notice the open area concept being utilized. This space would be used to demonstrated new techniques, project critiques, setup a still life and easels, or used as a photography area. On the north wall behind the teacher’s desk, there is a wall of upper and lower cabinetry. This cabinetry would be used to house dry supplies that students would need regular access to. This might include markers, colored pencils, pastels, paper and so on.
On the west wall there is a large space that would be used to display student work. There would be a system that is attached to the wall to hang work but can easily be moved around to accommodate the different project sizes. Next to the display area on the west and south walls are two pull down photography back drops. These would be utilized by students for photography assignments and to take photos of their work. Next to the south wall backdrop is an additional white board and next to that is a technology cart. This cart would house a classroom set of iPads for students to use for assignments. On top of the cart would be a classroom printer, so students and staff do not need to leave the space.

The wet room

The wet room is attached to the general work area. This space would be used for ceramics, printmaking, or sculpture. On the north wall there is a half wall of lower cabinets that will house tools needed for sculpture and printmaking projects. Next to the cabinetry is a printing press and a slab roller. On the east wall there is another large glass garage style door that opens into the outdoor learning area and looks upon the garden boxes. On the south wall there is a door opening to a kiln room. The kiln room is necessary to keep students away from extreme temperatures and would also house extra clay, a reclaim clay bucket, and additional storage for student projects. The wall joining the kiln room and the wet room would have additional storage for wet and dry work that is made specifically for ceramic work. These storage units are necessary to monitor the dry time of ceramic projects to ensure they don’t dry out too quickly and break. On the west wall there are two large and deep basin style sinks. These sinks allow multiple students to use them at one time and reduce messes from coming out of the sink. In the center of the wet room are several large workstations for students to create. Ideally, all students would be able to fit in to this space while working on projects if needed. These workstation
tables would be resting on top of locker style storage cubes. These storage cubes would allow for even more storage of in progress wet work.

**The storage room**

The storage room would be used for additional supplies the teacher would like students to have limited access too. The north wall is open to allow for additional items to be stored there when all other spaces have been filled up. The east wall would house cabinets for flat storage of paper. The south and west wall would be lined with open style cabinetry. Additionally, on the west wall there would be windows above the cabinetry allowing for natural light to enter the space. In the center of the storage room would be two worktables. These would be used for cutting paper, matting artwork, sealing artwork, and so on.

**The outdoor learning area**

The final area for the art wing is the outdoor learning area. In this space one will find a paved patio with four raised garden beds and a sensory garden. This space would be used to engage students in the gardening process and as an area to glean inspiration from. Ideally the sensory garden would back up to a science wing, so this space would have multiple uses for the school. This would also encourage cross-curricular lesson planning.

**Designing a 6th Through 8th Curriculum**

Designing a middle school curriculum that meets the social and emotional needs of students, allows them to have choice, and pushes their understanding of themselves and the world is not an easy task. The following curriculum has been developed through years of experience as an art educator and incorporates valuable elements from the material learned in the literature review to create a holistic friendly middle school curriculum.
It is imperative that a middle school art program flows not only from one grade level to the next but also from middle school into high school. This can be done by appropriately scaffolding material presented to students. This material should be scaffolded both within the grade level from project to project and from one grade to the next. Each unit building upon the last unit and setting students up to be independent creators by the time they leave eighth grade and move into high school art classes.

The following sixth, seventh, and eighth grade curriculum are first scaffolded by theme. In sixth grade the theme is self, as this is a time that students are truly trying to figure out who they are. In seventh grade the theme is community, as this is a time where students begin to figure out where they belong with their friends, with their activities, and within the local community. In eighth grade the theme is global connection, as this is a time that students begin to deepen their understanding of themselves within our global community.

When looking at the different grade level curriculums in the appendices, one might notice that each grade level has the same project titles; mixed media, self-portrait, sculpture, photography, and painting. Now this does not mean that a middle school program is limited to these projects but instead is laid out in this way to have a starting place. Within each grade level, there are different project objectives that relate to each grade level theme. Sixth grade has the most learning to acquire. In seventh and eighth grade, lessons and techniques are added to their prior knowledge and each year more choice is passed on to the students. The consistency of projects has an advantage for the educator as an easy means for data collection. When students are creating similar projects year to year, the teacher can collect both visual data through photographs and numerical data through students’ past and present grades. This data collection
shows growth from year to year and works as an adequate form of data collection to provide to administrators.

6th grade curriculum: emphasis, self

Above I mentioned that sixth grade has the most learning to acquire. This is with the assumption that the sixth graders are new to the middle school and have not yet had me as their teacher. This is also assuming that sixth graders are coming to middle school with the prior knowledge of mostly symbol making and minimal work with developing observational skills.

The most noticeable difference from sixth grade to seventh grade is the project structure. Again, assuming that much of students’ previous experience has been guided step by step along the way, we begin in a similar pattern. This helps the transition by having a process that may be similar to their past experience. This means that the beginning few lessons in sixth grades will be presented, all students work for the same duration, and then all work is collected with one deadline. Throughout this process, I remind students that they will soon be given two assignments with one deadline to help develop their time management skills.

It is the responsibility of the teacher to provide all necessary material in an easily accessible location for students to reference as they work independently. In my class, I have a Google Classroom that I have posted all lessons that students will work and have written out project instructions in great detail. On their Google Classroom, students can also find supporting materials like past student examples, YouTube tutorials, and digital copies of handouts. In addition to my Google Classroom, I have my classroom website linked within Google Classroom for students to reference at any time. My website houses each grade level curriculum, all projects that have been done year to year, and additional reference material. By providing all information
up front to students, I remove the potential for excuses as to why a lesson did not get completed as everything students need to be successful is available via a click of a button and can be accessed in school, at home, and on the go. This is similar to hybrid online classes that students may have in high school or college. Getting students familiar at a young age with the process ensures an easier transition as they move through the grade levels. This process remains consistent throughout my middle school program. Once students learn these routines in sixth grade, they expect it in seventh and eighth.

*Mixed media.*

It is important to get students creating as much as possible as soon as possible in the art room. The sooner they begin to create and explore new mediums, the sooner students begin to buy in to the process. On the first day I briefly introduce myself, the classroom, and have the standard conversation about classroom expectations with students. After this, I make it a point to communicate to students that art is a vulnerable process and the bottom line for being successful is erasing old patterns of thinking, i.e. the “I can’t” or the “I’m not an artist” self-talk. I ask students to show respect first to me, next to themselves, then to their peers, and finally to the space. By scaffolding respect, modeling what this looks like, and being consistent, the classroom environment begins to feel like a safe space. Due to this setup students begin to buy in to the process. They allow themselves to be vulnerable through while learning from each other and with each other.

Once this message has been communicated, we begin the first assignment: mixed media. I provide students with a handout that has them work on generating symbols that represent who they are. By day two, I prompt students to open their Google Classroom, which has provided them with step by step written instructions and videos to help them complete the background of
their project. This is a no question day. The goal is to get students exploring and trusting the process without asking me if they are doing it right every step of the way. In addition to this, I walk around the room and compliment the smallest achievements. This helps students build their self-esteem and feel successful even though their questions are not being answered. The following days students work on a short writing assignment that will later be applied to their work, and then they begin assembling their project based on the lesson objectives. These lesson objectives are simply there to provide students with a form of guidance and to have concrete items for the educator to look at and grade. This removes any ambiguity in the grading process because most objectives can be viewed or counted.

Figure 2 – 6th grade mixed media example from collection of author.
In Figure 2, it is evident by the student’s written words, “I never knew how hard it would be to know that someone that is really close to you leave. I never knew if I would see her again,” that they found a sense of security within the classroom that allowed them to be vulnerable within their artwork. This project helps develop introspection and creative thinking skills by allowing experimentation and expression.

_Self-portrait._

Next we transition into the self-portrait project. The goal of this project is to teach students how to use the grid method in order to grow their observational drawing skills and learn new shading techniques. Before students start drawing their portrait, we spend one week practicing drawing the facial features. This is known as face week. The facial features are presented to them in a way that scaffolds the least difficult to the most difficult facial feature, i.e. eye, nose, mouth, and ear. In addition to this, I set up stations for students to sit and choose how they would like to learn. Station one has printed step by step tutorials. Station two has the option to use their computer to watch YouTube tutorials that I have linked on their Google Classroom. Finally, station three has the option of both print and digital learning. I always let students know that I am available for one on one teaching as some learn best in this manner, but they have to ask me to come to them. This helps students advocate for their own educational needs and helps them understand their personal learning style. While honoring students where they are at and allowing them to explore in a safe and controlled environment. At least one of the days during the week, I challenge students to try out a new station to push them out of their comfort zone. Through this process, I also provide students with packets for different shading techniques and encourage them to try them out during face week. This helps students find their drawing style. Once we have spent several days practicing the facial features, we then move into creating the
grid on a drawing paper then on their printed photo and finally begin drawing. This project helps develop students technical drawing skills, critical thinking skills, and incorporates math concepts for cross-curricular learning.

![Image of a drawing](image)

Figure 3 – 6th grade self-portrait example from collection of author.

_Sculpture._

Next, we move in to creating our sculptures. By this point, students have gained confidence in the process within the art room, know where supplies are located, and feel comfortable expressing and exploring. Because the drawing project is such a technical project, I planned the sculpture project after due to its explorative nature. In the student example in Figure 4, you will notice that it is made from magazine pages. The beginning process is to simply tear
out magazine pages. I tell students that as they tear each page out, to use it as a form of therapy, and to notice how they feel after they have torn out several pages. Students are always surprised by how good they feel from this simple process. It allows students to disengage from their schoolwork for a brief time as it is a repetitive process. Once they have enough pages, they are then directed to Google Classroom to watch a tutorial provided on how to begin creating their sculpture. The objective for this project is to create a unique vessel based off a word that describes them. The example in Figure 4 was based off the word “blooming.” This project helps develop critical thinking and time management skills.

Figure 4 – 6th grade sculpture example from collection of author.
Photography.

For our next project, we take learning outside. I have a classroom set of iPads that students use as their cameras. The added benefit of this is that the iPads have photo editing apps available to use all in one location. Before we venture outdoors, students learn about the rule of thirds and how to use the rule of thirds to have an intentional focal point. Once we have discussed this, we go outside with the objective to take a photo that used a reflection as the focal point. This project helps develop critical thinking skills and utilizes the surrounding environment as an educational tool.

Figure 5 – 6th grade photography example from collection of author.
Next, we use the inspiration from being outdoors to inspire our atmospheric perspective painting. Students know how to set up a composition now that they understand the rule of thirds. Before we begin painting, we play the color theory movement game previously described. This gets students moving and the movements help students remember color theory better. By sixth grade, students should know how to mix tints and shades, so we expand on this by learning how to add depth in color by mixing complimentary colors to darken one another. Students choose one color they would like to paint with and practice painting a color scale. Once they have their color scale completed, they move into designing their landscape, cityscape, or seascape. We discuss how things far away are both smaller and cooler and up close are larger and have a fuller range of color. The objective for this is to create a unique scape and add silhouettes within. The silhouettes help students understand scale and the painting helps students understand atmospheric perspective through color mixing. The most important thing to note with this assignment is that students do not use black to darken any of their colors. In Figure 6, you will notice the closest layer appears to be dark, but upon closer inspection you will notice that it is a deep orange tone. This was achieved by the student adding blue into their mixture. This project helps students develop their critical thinking, time management, and creative thinking skills. By the end of sixth grade, students have experienced a wide range of materials, techniques, and lessons that provides a skill set that will be added to in seventh grade.
Figure 6 – 6th grade painting example from collection of author.

7th grade curriculum: emphasis, community

In sixth grade, students have been primed with the background knowledge that will set them up to be successful in seventh and eighth grade art. The first notable change from sixth grade to seventh grade is the theme, which transitions from “self” in sixth grade to “community” in seventh. All projects are based around this theme.

The second notable change from sixth to seventh grade is the means in which projects are completed. In sixth grade the bulk of the projects are completed as a group with the same timeline per project. Nearing the end of sixth grade, students are given two assignments with one deadline to complete them. In seventh grade, the first project is done together the first week of class, and then the self-portrait and group sculpture have one deadline and photography, and
painting have another deadline. This allows students choice on which project they would like to work on. The group project at times will need all members working together and at other times only a few individuals are needed, which allows additional time for students to work on their self-portrait project.

The beginning conversations with students remain the same moving into seventh grade. I give a quick reminder about how art is a vulnerable process and how we scaffold respect within the class. The consistency in language and project structure help students feel a sense of comfort and familiarity. At this point students know where all the materials are. They are familiar with my teaching style, and I tell them only minor things will change throughout our time together with the most notable change being how projects are worked on and collected. Once all of this has been recapped, we begin the first project, mixed media.

*Mixed media.*

Since students have done mixed media in sixth grade, they confidently work through the process but are more thoughtful in the application of their symbols and words applied. Getting them creating right away and builds confidence because they are familiar with the process. The changes to this project in seventh grade are noticed within the symbols students select, which represent them in their community versus themselves in sixth grade. The written word that appear within their art stem from a different writing prompt than what students had in sixth grade. As you can see in Figure 7, there is a wider range of materials students are using in a collage manner to complete this project in seventh grade. In sixth grade much of the items were hand drawn.
Figure 7 – 7th grade mixed media example from collection of author.

*Self-portrait.*

Again, working with the same sequence of project order, students begin their self-portrait project. In sixth grade, students learned how to use a grid to draw accurately and learned how to apply a range of values through shading. They use this knowledge in seventh grade to create an abstract self-portrait. They use an online editing program to break down the grey value scale into levels and from their grey scale create their own color value scale from lightest to darkest. In addition to this, in the background space, they use their personal narratives that have been written in their English class. This develops their skills further, allows for choice, and reinforces learning across curriculums.
As I stated at the start of the seventh grade section, the self-portrait and group sculpture are worked on together with one deadline. I first introduce the self-portrait and give students a few days to get comfortable with those lesson objectives before introducing the group sculpture. For this project, random groups are assigned. I do this to encourage students to get to know one another, but also as a real-world experience of working with individuals who have different personalities, skills, and opinions. It is important that projects facilitate real world experiences as often as possible to provide students exposure in a safe space to navigate the process and learn to
appropriately diffuse frustration. Another important message I give students is that for the group assignment, they will all be graded the same as their group members, but everyone will receive the same grade as the lowest achieving individual in the group. This encourages students to support one another and hold each other accountable. In my experience I have had few issues with this model due to the safe space we have collaboratively created in my room.

This project begins with all members creating a design for their sculpture. Next, students vote for a final design. Then they make any adjustments needed to the design; this might include elements from other team members original design. Once they have all agree upon the new design, they work together to create a material list, write a step by step construction plan, and complete drawings of all side of their sculpture. This process gets students thinking in 3-D and helps them envision their final result before they begin sculpting. An additional challenge for this project is that they are provided with minimal supplies from me. I provide students with the random items that have been donated and adhesive materials. Students then work together to use found materials or paper mache, but nothing bought to create their sculpture. This encourages student communication, organization, time management, and creative thinking skills. In Figure 9, students worked together to create this hanging jellyfish. The jellyfish is made of recycled tissue paper left over from celebrations, i.e. birthdays, baby showers, and so on. The main structure of the jellyfish head is made from skewers that have been adhered together using hot glue. Additionally, this group created a small basket underneath the head that holds a battery pack for the twinkle lights.
Figure 9 – 7th grade group sculpture example from collection of author.

Photography.

Seventh grade photography adds on to prior knowledge from sixth grade through using their knowledge of perspective and the rule of thirds. For this assignment, students work in teams but are creating their own individual photos. Their photos must manipulate perspective to look as though something is real, when in reality it is not. This is called forced perspective. They develop their creative thinking skills, communication skills, and advance their photography
skills. In Figure 10, you will see what appears to be an individual walking along the top of a book. The reality is this couldn’t happen, but students have used their understanding of perspective and have been able to communicate to their peers exactly how to be positioned within the composition.

Figure 10 – 7th grade photography example from collection of author.

**Painting.**

In the seventh grade painting project, students use their prior knowledge of color mixing and apply that to watercolor to paint their American Sign Language (ASL) hands that have been drawn from observation. Students gain the skill to draw from observation without relying on the
grid as a drawing tool. In figure 11, this student used the word “quiet” that was chosen from his peers as a word that defines him. This particular student used true color to paint the hands, but students could also use arbitrary colors as well. The goal for painting is to get a value range of tones within the hands to make them appear as they naturally would with shadows. In addition to this, students learned ASL through the observational drawing process. Students not only practiced and drew their word, but also attempted to spell additional words and names because of their interested in this new language. This project develops students observational drawing skills, their painting skills, and encourages cross-curricular learning.

Figure 11 – 7th grade contour ASL hand painting example from collection of author.

8th grade curriculum: emphasis, global connection

By the time students reach eighth grade, they have been primed with the majority of the skills needed to be successful in art class. Eighth grade focus is on student impact on a global level and developing time management skills. The beginning of the class again starts with the same conversations as sixth and seventh grade and begins with the same mixed media assignment. The consistency from year to year builds the classroom environment up to be a familiar and comfortable environment that students feel confident, supported, and able to explore within a safe space.
Mixed media.

For the eighth grade mixed media, the most notable difference is the meaning behind the symbols. The symbols selected represent student’s connection to the global setting or their potential to global connection as many students may not have had an opportunity to build these connections yet. Each year I use a sea turtle as a symbol that represents me. I tell students that in sixth grade this sea turtle represents my love for the water and is my spirit animal. In seventh grade, I tell students this sea turtle now represents my desire to take care of our waters and local environment, and I get a group of friends together to have a beach cleanup for our community. In eighth grade, this sea turtle now represents my potential global impact. I explain to students that my community action of cleaning the beaches has the potential of becoming popular by others observing my actions. If those who observed my actions create their own event inspired by mine and share their experience by posting on social media using a universal hashtag like, “#RobertsSavesTheWaters”, then my small action could gain momentum and have a global impact. This project develops students critical thinking skills, creative thinking skills, and their understand of the world through art.
Figure 12 – 8th grade mixed media example from collection of author.

**Self-portrait.**

The eighth grade self-portrait project is exactly the same as the sixth grade portrait project. The only difference is the scale. In sixth grade students work on a 9” by 12” drawing paper and in eighth grade they work on a 12” by 18” drawing paper. The goal of having a repeat of this project is having an initial starting point and ending point to show student growth. When all criteria remain the same, students know what to expect and the teacher has qualitative evidence of growth, both through the visual results and students’ final grades. This project develops students drawing skills, time management skills, and their ability to engage and persist.
The eighth grade sculpture project will pull concepts from their mixed media project. The goal is that students will take one of the symbols they used from their mixed media project and turn it into a sculpture. These symbols represent their potential for global impact through their actions. These sculptures are made from polymer clay and are done in a miniature style. The goal
of these miniature sculptures is to bring to life a symbol from the mixed media project. Figure 14 depicts an example I have shown students that represents my sea turtle symbol.

Figure 14 – example by Etsy artisan, Darleen Bellan.

Photography.

The eighth grade photography assignment takes the skills learned from sixth and seventh grade to sharpen their skills. The goal of this assignment is for students to take a photo that has the potential to have the viewer ask questions about what is going on in the photo. I talk to students about how cropping an image can change the focus and how when a photo is zoomed in, it increases the potential for question asking about the photo, i.e. “What am I looking at?” or “Where is this location?”. Students then use photo editing apps to add to their personal photography style. This project develops students critical thinking skills, increases awareness for the viewers, and increases student observation skills.
Painting.

The eighth grade painting project continues to develop students’ technical painting skills and encourages students to get involved in making a difference by bringing attention to social issues that are happening at the global level. Through this project students will be challenged to engage and persist, stretch and explore, and understand art worlds. They will also continue to develop their critical thinking skills, time management skills, and their creative thinking skills.
Conclusion

In summary, the classroom environment, routines, and curriculum can aid in student well-being and achievement. There are many options educators can do to adjust the environment, their classroom management style, and projects to have an entirely different outcome for all involved. It is the teacher’s responsibility to provide a space that students feel comfortable and confident to come to daily and create. When students’ needs are met at an educational level and their holistic needs are met, students are setup for success through their educational journey and into adulthood.
REFERENCES


*European Journal of Applied Physiology*, 112(9), 3379-3386.


Hare, J. (2006). Towards an understanding of holistic education in the middle years of education. 


### APPENDICES

A. Sixth Grade Curriculum

<table>
<thead>
<tr>
<th>Project</th>
<th>Project Objective</th>
<th>Medium</th>
<th>Studio Habits Focus</th>
<th>National Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Media</td>
<td>Students will design an abstract piece of art that incorporates personal visual symbolism to convey who they are</td>
<td>Example: Marker, Colored Pencil, Paper, Ribbon, so on</td>
<td>Envision Stretch and Explore Express Reflect</td>
<td>VA:Cr1.2.6a VA:Cr2.1.6a VA:Cr2.2.6a VA:Cr2.3.6a VA:Cr3.1.6a VA:Pr5.1.6a VA:Re.7.2.6a VA:Re8.1.6a VA:Cn10.1.6a</td>
</tr>
<tr>
<td>Self-Portrait</td>
<td>Students will create a realistic self-portrait that explores different drawing techniques and develop a personal style</td>
<td>Graphite</td>
<td>Develop Craft Observe Engage &amp; Persist Reflect</td>
<td>VA:Cr1.2.6a VA:Cr2.1.6a VA:Cr3.1.6a VA:Pr5.1.6a VA:Re.7.2.6a VA:Re8.1.6a VA:Cn10.1.6a</td>
</tr>
<tr>
<td>Sculpture</td>
<td>Students will design a unique vessel that is based off a word that describes them self</td>
<td>Example: Magazine, Clay, Found materials, so on</td>
<td>Envision Observe Understand Art Worlds Reflect</td>
<td>VA:Cr2.1.6a VA:Cr2.2.6a VA:Cr2.3.6a VA:Pr5.1.6a VA:Re8.1.6a</td>
</tr>
<tr>
<td>Photography</td>
<td>Students will take a photo that uses the reflection as the focal point</td>
<td>iPad, Digital Camera, Cell Phone</td>
<td>Observe Reflect</td>
<td>VA:Cr2.1.6a VA:Cr2.2.6a VA:Cr2.3.6a VA:Pr5.1.6a VA:Re8.1.6a</td>
</tr>
<tr>
<td>Painting</td>
<td>Students will design a monochromatic landscape with atmospheric perspective and incorporates their silhouette</td>
<td>Acrylic Paint</td>
<td>Envision Develop Craft Stretch &amp; Explore Reflect</td>
<td>VA:Cr2.1.6a VA:Cr2.3.6a VA:Pr5.1.6a VA:Re8.1.6a</td>
</tr>
</tbody>
</table>
### B. Seventh Grade Curriculum

<table>
<thead>
<tr>
<th>Project</th>
<th>Project Objective</th>
<th>Medium</th>
<th>Studio Habits Focus</th>
<th>National Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Media</td>
<td>Students will be able to create an abstract piece of art that incorporates personal visual symbolism to convey who they are within their community</td>
<td>Example: Marker, Colored Pencil, Paper, Ribbon, so on</td>
<td>Envision Stretch and Explore Express Reflect</td>
<td>VA:Cr2.1.7a VA:Cr1.2.7a VA:Cr2.3.7a VA:Re7.2.7a VA:Cn10.1.7a VA:Cr3.1.7a</td>
</tr>
<tr>
<td>Self Portrait</td>
<td>Students will create a self-portrait in the style of a regional contemporary artist</td>
<td>Graphite</td>
<td>Develop Craft Observe Understand Art Worlds Reflect</td>
<td>VA:Cr2.3.7a VA:Cr3.1.7a VA:Cr1.2.7a</td>
</tr>
<tr>
<td>Group Sculpture</td>
<td>Students will work together to create a sculpture that incorporates a story</td>
<td>Example: Magazine, Clay, Found materials, so on</td>
<td>Envision Observe Understand Art Worlds Reflect</td>
<td>VA:Cr3.1.7a VA:Re8.1.7a VA:Pr6.1.7a VA:Cn10.1.7a</td>
</tr>
<tr>
<td>Photography</td>
<td>Students will work together to capture an image that use forced perspective</td>
<td>iPad, Digital Camera, Cell Phone</td>
<td>Observe Express Reflect</td>
<td>VA:Cr3.1.7a</td>
</tr>
<tr>
<td>Painting</td>
<td>Students will create a painting using contour lines, color theory, and positive words that describe them from their peers</td>
<td>Acrylic Paint, Watercolor</td>
<td>Envision Develop Craft Stretch &amp; Explore Reflect</td>
<td>VA:Cr3.1.7a VA:Cr1.1.7a VA:Cr1.2.7a</td>
</tr>
</tbody>
</table>
### C. Eighth Grade Curriculum

<table>
<thead>
<tr>
<th>Project</th>
<th>Project Objective</th>
<th>Medium</th>
<th>Studio Habits Focus</th>
<th>National Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Media</td>
<td>Students will create an abstract piece of art that incorporates personal visual symbolism to convey who they are within the global setting</td>
<td>Example: Marker, Colored Pencil, Paper, Ribbon, so on</td>
<td>Envision</td>
<td>VA:Cr1.1.8a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Develop Craft</td>
<td>VA:Cr2.1.8a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Engage &amp; Persist</td>
<td>VA:Cr2.3.8a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Observe</td>
<td>VA:Cr3.1.8a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stretch &amp; Explore</td>
<td>VA:Re.7.1.8a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Understand Art</td>
<td>VA:Re.7.2.8a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Worlds</td>
<td>VA:Re8.1.8a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Express</td>
<td>VA:Cn11.1.8a</td>
</tr>
<tr>
<td>Self Portrait</td>
<td>Students will create a self-portrait exploring different drawing techniques</td>
<td>Graphite</td>
<td>All studio habits</td>
<td>All national standards</td>
</tr>
<tr>
<td>Sculpture</td>
<td>Students will create a miniature sculpture that has a chosen theme</td>
<td>Example: Magazine, Clay, Found Materials, Polymer Clay, so on</td>
<td>All studio habits</td>
<td>All national standards</td>
</tr>
<tr>
<td>Photography</td>
<td>Students will take a photo that makes the viewer ask questions</td>
<td>iPad, Digital Camera, Cell Phone</td>
<td>All studio habits</td>
<td>All national standards</td>
</tr>
<tr>
<td>Painting</td>
<td>Students will create a painting that stems from a social or global issue</td>
<td>Acrylic Paint, Watercolor</td>
<td>All studio habits</td>
<td>All national standards</td>
</tr>
</tbody>
</table>