

The Effects of Art Education on Social and Emotional Well-Being for Neurologically Atypical
Individuals

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Introduction

Adapted Art classes in Princeton have been an ongoing program that has served a neurodiverse community in Princeton for over 20 years. Originally taught at the YWCA, but then transitioned to the Arts Council of Princeton, the Adapted Art program has had many different teachers and seen a wide variety of engagement and structure. We had the opportunity to sit down (via Zoom, of course) with two of the current instructors of the Adapted Arts Program, Shannon Rose Moriarty and Barbara DiLorenzo, to learn more about how the program is run, who it serves, and what benefits it aims to afford its participants.

Currently, both Shannon and Barbara run the Adapted Art classes in a fluid and individualized manner. They work to focus on the creative process of making art rather than the finished project, and they mold their classes to allow for each student to be working on individual projects that best suit what they like to work with and what they want to express. They teach a very neurodiverse range of students, with an understanding that they are extremely capable of independent, creative accomplishments. Through these classes, a community is cultivated and artist-artist and artist-teacher relationships form, creating an avenue for open and honest conversations that expand social and emotional understanding.

After interviewing Shannon and Barbara to obtain a better understanding of how the Adapted Art classes are run and what the Arts Council was looking for in this collaborative project, we brainstormed concepts that we thought were applicable and relevant to the program for possible research. We settled on three overarching categories: Suggestions for Implementations of Alternative Materials and Methods of Art, the Effects of Art on Values and Social Traits, and a Review of Similar Adapted Art Programs. Our research led us to a variety of information about how that art experience is changing as a result of developments in technology, and ways that it can still be adapted through flexible and movable chairs and tables that can improve the artist experience. Our research includes just some of the many social and emotional benefits that art can afford for this population as well, such as improving self-assertion, providing a sense of empowerment, and increasing the ability to connect with others on a social and emotional level. Lastly, we reviewed a few programs similar to the Adapted Art classes, including the College of Adapted Arts, the Creative Growth Arts Center, and New Horizons, a website containing an index of adapted art programs in the US and Canada.

Suggestions for Implementations of Alternative Materials and Methods of Art

Gazeas, Mel (2012). Current Findings on Art Therapy and Individuals with Autism Spectrum Disorder, *Canadian Art Therapy Association Journal*, 25: 1, 15-22, DOI: 10.1080/08322473.2012.11415558.

In this article, Gazeas reviews an assortment of case studies of individuals with ASD and different modes and activities of art therapy. It should be noted that the individuals in these studies are all under 18 years of age, unlike the neuroatypical adults that partake in the Adapted Art program provided by the Arts Council of Princeton. Nonetheless, the information gained from these studies is very valuable and we believe that the knowledge does not just apply to a younger age group but could also be utilized by the Arts Council, either directly or adapted for their adult students. Throughout the review of case studies, Gazeas emphasizes how “art therapy can help individuals to move from one stage of drawing development to the next; building art as an alternative form of communication” (Gazeas, 2012, 15).

Gazeas reviews a study by Smitheman-Brown and Church, who started each of their art therapy sessions with the drawing of a mandala and found that the warm-up exercise increased attention span and decreased impulsive behaviors. The Arts Council could explore a warm-up exercise like this as a way to introduce a new type of art while also creating a calm and relaxed environment. We also believe that this technique is something that could be employed at any point in the art-making process if the student becomes disengaged or excited. Gazeas also reviewed the study by Elkis-Abuhoff (2008) with an 18-year-old girl, who had the patient create a collage that represented herself. At first, the collage “included no human figures and none of the pictures were touching”, representing the social isolation that she was experiencing as she was having difficulty socializing with peers (18). After 7 months of art therapy, with projects such as using mirrors as a material to stimulate engagement with reflections and facial expressions, the patient was increasingly able to connect with others. When asked to make a collage like the one she made at the beginning of the study, her new collage was now filled with people. This shows how “art therapy can provide a safe and therapeutic environment for self exploration and expression and encourage confidence” (18).

Lastly, although Gazeas does not review any case studies from group art experiences, she does note that “group setting might have potential value as a way of enhancing social skills with art directives that encourage cooperation and interaction” (18). Gazeas suggests members of an art group could use a camera and take pictures of each other, thus illustrating to the group, quite literally, the perspective of others (18). Photography could be a fun and beneficial form of art that could be utilized by the Arts Council of Princeton for the students to see how their fellow artists view the world.

Hacum, I., Regev, D., Salomon, R. (2018). The Principles of Art Therapy in Virtual Reality. *Front. Psychol.*, 9: 2082. DOI: 10.3389/fpsyg.2018.02082.

This article begins by discussing how virtual reality has been and is being used in many different fields including psychotherapy and how it may be applied to art therapy as well. According to the authors, there are many benefits of virtual reality when it comes to art therapy that more traditional methods may not be able to provide, including dimensional space, more

colors, and the different programs available for use, such as Google Tilt brush and Oculus quill (Hacum et. al., 2018, 1-2). This article also utilizes figures and videos to show firsthand how art therapy and the virtual reality landscape are coming together. Although the artist cannot directly interact with the art material themselves, the authors imply that there are other ways in which virtual reality is beneficial. For example, since none of the material is actually tangible in virtual reality, the authors suggest that artists can “‘step’ inside or through elements in the creation” (2), which would allow artists to interact with and learn more about the material from a different point of view. Table 1 in the article compares “classical mediums” with virtual reality, and it is shown that “sense of privacy/isolation” is “low” in “classical mediums” and “high” in virtual reality (4). In other words, virtual reality would provide artists with a more personalized experience than traditional methods. In addition to this, the authors state that virtual reality “allows expression which is unrestricted by natural physical laws” (2) and that it could provide “a unique space in between fantasy and reality” (5). By allowing this freedom and preventing physical limitations from potentially obstructing creativity, we foresee that artists may be able to explore more artistic mediums and use virtual reality to discover which mediums they enjoy or dislike. Though the authors do mention some cons of using virtual reality, such as “nausea and fatigue when using VR systems” and “no possibility for direct eye contact between therapist and client” (5), it seems as though the authors are in agreement that virtual reality may indeed be beneficial in art therapy. In order to combat some of these concerns, we suggest shorter art therapy sessions with breaks in between and a post-session discussion between the teacher and the student to talk about how the session went and ways in which to improve them.

In our interview with two adapted art teachers, it was mentioned that some students may have an aversion to specific materials used in art therapy, such as clay, or are drawn to certain art styles. We anticipate that virtual reality may be a safe way to perhaps introduce these art styles to students. In addition to this, because of the current Covid-19 pandemic, the art therapy classes have been moved online, and it was said by one of the teachers that it was a “challenge to recreate the magic of in person face-to-face classes on Zoom” due to its virtual aspect. By implementing virtual reality into art therapy, which may be quite a different medium than what students are used to, we anticipate that students could explore and expand their creativity through the tools and methods that virtual reality can offer them, especially during this pandemic when most classes are online. Moreover, utilizing virtual reality could also assist in the financial aspect of art therapy in that teachers would be able to save money on art supplies by using those offered through virtual reality programs.

Malley, Sharon M., et. al (2012). *The Intersection of Arts Education and Special Education: Exemplary Programs and Approaches*. 5-131.

This 2012 publication from the Kennedy Center stemmed from a conference it held earlier that year, with several attendees contributing sections on their experiences with adaptive

art education. Two sections are particularly relevant to us, with the first being Dr. Alice Wexler's piece "Art, Developmental Disability and Self-Representation". Wexler describes successful philosophies in adapted art primarily from Oakland, California's Creative Growth Art Center (CGAC), an institution in operation "for 40 years, which makes it the oldest arts center for individuals with developmental disabilities in the world" (Malley et. al., 2018, 74). A link to their website is provided in the *Other Programs* section of our report. The CGAC's primary purpose is to equip artists that utilize the program, considering itself a "non-teaching institution" and terming its instructors "peer-teachers". Additionally, the "'sidelining' of the teaching staff provides room for disturbing thoughts and emotions to be worked out through materials" (75), which goes hand-in-hand with CGAC's policy of making available a variety of materials for artists to use. Additionally, CGAC looks to recognize the merits of the art produced for its aesthetic value regardless of any neurological classifications of the artist, meaning that art is not a means to the end of establishing normalcy or making a diagnosis. Wexler contends that those "who make art in self-contained classrooms and residential facilities are often considered without talent because they cannot render a recognizable human figure, understand the difference between foreground and background or two-point perspective... Assumptions are made about the lack of their internal life that precludes the making of personalized art. Special education constructs the very barriers and walls that are intended to be brought to the ground" (76-77). Thus, she shows that the variety, flexibility and deference for the artists (values echoed by Arts Council teachers in our interview) CGAC provides has allowed the rise of those such as Judith Scott, who "seemed disengaged until she stumbled into the fiber arts 'class,' and went on to become an internationally recognized fiber artist (75).

Another article from the compilation, written by music educators Mary Adamek and Alice-Ann Darrow, describes the process of helping neuroatypical students achieve self-determination. They state that "promoting self-determination has been recognized as best practice in the education of adolescents with disabilities since the early 1990s... however, it has been only during the past decade or so that research on self-determination theory (SDT) has been applied systematically to specific disciplines" (101), and posit that self-determination can be facilitated if it is evident in all aspects of one's education. While the article focuses on music education as opposed to visual and fine arts, there are multiple ways in which it applies to the Arts Council's classroom specifically. In addition to the parallels we can draw between the two sects of education, music can also be present as an auditory phenomenon in any classroom, as it "can be used to provide structure for physical and social activities, to provide emotional support, and to promote lifelong learning and engagement" (102). The authors state that self-determination can be fostered if the supports provided are aligned with the individual's preferences. They provide examples of activities and argue that teachers can support students by asking the students themselves to make choices for their projects, requesting student feedback about curriculum and materials, and even asking students to help design the room's layout and when applicable, flyers, and posters, for instance. They also suggest group work, particularly

when groups are integrated with both neurotypical and neuroatypical students, that gives everyone an important role in the project and promotes conversation about art as ways to assist in social development. The authors also point out that “educators can also do much to encourage the continued musical and social growth of students with disabilities by presenting opportunities for music making in the community” (108), meaning that attending art exhibitions or similar events with students could supplement the skills developed in the classroom. Also included in the compilation are papers highlighting the importance of practical experience in training adapted art educators, the roles of adapted art specialists, and examples of other successful adapted art models from the fields of music and dance.

Wexler, A., Luethi-Garrecht, A. (2015). Beyond Accommodations: Designing for Nonverbal/Nonauditory Learners in the Inclusive Art Room. *Art Education* 68: 2, 14–21, DOI: 10.1080/00043125.2015.11519309.

In this article, Alice Wexler and Aleánn Luethi-Garrecht sought to discover ways in which the art classroom can be designed and organized to enhance the learning experience for neurologically atypical individuals, specifically for autistic students who are nonverbal and/or non-auditory. In order to address this issue, Wexler and Luethi-Garrecht first present a picture of what autism is from the perspectives of autists (i.e. autistic individuals) themselves, taking advantage of the recent plethora of narratives that autists have been creating to share their experiences. For instance, Jamie Burke, an autist activist, speaks from his own experience in the classroom setting, expressing that he disliked when teachers condescendingly congratulate him for menial accomplishments rather than challenge him to reach new heights in his education (Wexler & Luethi-Garrecht, 2015, 16). Furthermore, the authors noted that many autists desire close social interactions, but difficulties in translating those desires to language and action and processing social cues often prevent them from doing so (16). Taking all of the firsthand accounts of these autists’ experiences in mind, the researchers decided to conduct an experiment in which Luethi-Garrecht, in a foreign language, would lead a class of art teachers taking a Disability Studies course to make a simple book. While this study was not intended to exactly emulate the experiences of nonverbal/non-auditory autists, the researchers believed that the art teachers would experience similar responses and emotions to the inability to communicate with the instructor as nonverbal/non-auditory autists would experience (15). From this study in the art classroom setting, the researchers offer many suggestions for making the art room an inclusive and conducive environment for teaching and artwork; we hope that some of these suggestions can be incorporated into the Adapted Art classes offered by the Arts Council of Princeton.

The authors first recommend chairs that have swiveling and rolling capabilities. These types of chairs allow for students to easily adjust their posture and position in the chair; moreover, the authors also suggest tables that are equally flexible to different arrangements for group work or individual projects. Such flexibility in the furniture of the classroom enhances the

sense of “bodily freedom” to both move around the classroom to engage with different projects and disengage when the student feels overwhelmed (17). Based on the information we gathered about the art classrooms from our interviewees, we believe the Adapted Art classes would greatly benefit from the incorporation of flexible, movable chairs and tables in order that different students’ preferences can be more easily accommodated. Another aspect of the classroom that the authors recommend greater flexibility and mobility is the display and demonstration board; having such display boards on wheels, for instance, would enable instructors to move about the classroom and thus more closely interact with students (17). The researchers also recommend adjusting the lighting of classrooms. The authors especially encourage the use of natural light from windows due to reduced eye strain from surface reflection of harsh lighting, reduced humming noises from light bulbs, and a lesser sensory load from harsh lights (18). When media presentations are utilized, the authors suggest including readable font sizes, reducing the brightness of the screen, and incorporating more “dynamic movement” to better engage the attention of autists (18).

Effects of Art on Values and Social Traits

D'Amico, M., Lalonde, C. (2017). The Effectiveness of Art Therapy for Teaching Social Skills to Children With Autism Spectrum Disorder. *Journal of the American Art Therapy Association*, 34: 4, 176–82, DOI: 10.1080/07421656.2017.1384678.

In this article, Miranda D’Amico and Corinne Lalonde present their findings from their study of art therapy and its effectiveness in addressing the difficulties that autistic children face in social situations. Six children between the ages of ten and twelve diagnosed with autism spectrum disorder (ASD) were selected to attend weekly, 75-minute group art sessions with two art therapists and improvements in their social skills were assessed (D’Amico & Lalonde, 2017, 179). The art therapists utilized various activities, such as “drawing, mask making, mind mapping, and paper making,” to engage the students and also encouraged the students to verbally explain their creations to their classmates to engender communication skills (179). Furthermore, the art therapists also led the students in verbalizing and drawing their emotions on masks or collages and subsequently facilitated discussions among the students to not only improve their social skills but also address personal self-esteem issues and improve emotional well-being (180). In addition, the instructors encouraged the students to work collaboratively with one another; they interestingly noted that the children even started to work in groups without being prompted to do so (181). Many of these effective strategies, such as diverse forms of art, open discussions about personal emotions, and collaborative art, were ones that our interviewees also discussed as being utilized in their own classrooms; we would thus strongly recommend continued use of these methods in the classroom. However, while the instructors in this study chose to structure their art classes with specific activities, we would recommend maintaining

flexibility in the Adapted Art classes at the Arts Council of Princeton by allowing students to personalize their art-making experience in the classroom. As one of our interviewees explained her role as an instructor, the art teacher should be a facilitator of art-making rather than one who dictates what that art should be.

Following statistical analysis of the changes observed in the social skills of the students, the researchers found that there were “statistically significant improvements in assertion, coupled with decreased hyperactivity and inattentive behaviors...such as temper tantrums, fidgeting behaviors, and inattention” (181). D’Amico and Lalonde believe that these improvements may have been a result of the collaborative artwork and opportunities in verbal discussions or art to express emotions that gave students tools to control these behaviors (181). The researchers also note that the clear therapeutic benefits of art therapy with respect to hyperactivity and inattention may also allow autistic students to not only enter but also thrive and succeed in the educational setting, both in their academic studies and social interactions (181).

Hemmati Alamdarloo, G., Shojaei, S., Shalini, B., Ali Hossein Khanzadeh, A. (2016). THE EFFECT OF A GROUP ART THERAPY ON THE SELF-RESTRAINT OF STUDENTS WITH ATTENTION DEFICIT/HYPERACTIVITY DISORDER. *Indian Journal of Fundamental and Applied Life Sciences*, 6: S1, 461-469.

Hemmati Alamdarloo et. al.’s study explores group art therapy with young students ranging from second to sixth grade who showed symptoms of Attention Deficit/Hyperactivity Disorder (ADHD), as determined by the Connors’ Teacher Rating Scale and the DSM-5 (Hemmati Alamdarloo et. al., 2016, 463). When explaining the parameters of their study in the Abstract section of the article, the authors note that 24 students were engaged in the study and were randomly split into a control and an experimental group (461). In order to study the effectiveness of art therapy, “the experimental group participated in 9 sessions of group art therapy, while the control group did not” (461). However, before stating their findings, the authors discuss the symptoms of ADHD and why group art therapy may be beneficial to individuals with ADHD. According to the authors, younger individuals with ADHD or those who may not be able to articulate their emotions by vocalizing them may use art therapy as a way to convey them (462). Table 1 shows the specific types of art that were used during art therapy sessions which included a group mural, peer figure drawing, friendship boxes, and an art show (464). In addition to this, Table 2 reveals the success of art therapy for students with ADHD, particularly “the effect of art therapy intervention on self-restraint”, and according to this table, students in the experimental group showed more self-restraint than the students in the control group (464-465). During our interview, one of the adapted art teachers touched on the variety of techniques that were used in her adapted art classes and that she had many non-verbal artists in her class. Though the authors focus more on the results and findings of their study, the adapted art teachers may draw from the art making methods that were used in this study for

future classes since the article also lists the intended goals of each method and information on how to carry out these methods (464).

However, it's important to note that the authors do not mention *how* the art therapy sessions were conducted and how much instructors were involved with the students and their artmaking. Therefore, it may be beneficial for both the students and the instructors to establish how much the student would like for the teacher to be involved in their artwork. In addition to this, the participants in this study fall under a very young age group, which is different from the older age demographic of students from the adapted art classes at Arts Council Princeton. Because of this, some of the methods used in this study may need to be adjusted to suit older students.

Hinz, L. D. (2017). The Ethics of Art Therapy: Promoting Creativity as a Force for Positive Change. *Art Therapy*, 43: 3, 142-145. DOI: 10.1080/07421656.2017.1343073.

In *The Ethics of Art Therapy*, Hinz explores “creativity as a basic human right, promoted through freedom of artistic expression with clients to promote positive change,” (Hinz, 2017, 142). Hinz’s article is incredibly insightful, and she discusses many key points in his article that were also raised by our interviewees. She uses Richards’ (2014) definition of creativity “as the combination of things or ideas in ways that are novel or useful,” and, under this definition, explains that creativity is not “a special skill limited to an elite few, but a basic ability that all persons share” (144). This viewpoint aligns with the desires of the Arts Council of Princeton and the importance that individuals of all neurodiversity be considered equal under the notion that creativity is a human right. The Arts Council of Princeton’s Adapted Art programs gives neuroatypical adults a space to create; they do not “pathologize those who are differently abled or outside the normative group,” but “include marginalized people to give them power and a voice to express their unique concerns through the creative process” (144).

In addition to giving this group of people an outlet for expression, the Arts Council of Princeton is providing a healing environment. Hinz explains that being creative and the process of creating can help people feel “great satisfaction, moments of joy, and enhanced well-being,” (143). Based on Hinz’s review of the ethics of art therapy and the determination that, based on the interview conducted with two teachers of the Adapted Art program, the program complies with what Hinz argues (that all people have the capacity to be creative, that creativity is a right, and that creativity is beneficial for wellness), the Princeton Art Council’s program is ethically sound. So long as the program continues to give a space to this neuroatypical community to enable them to creatively express themselves, they will continue to promote the healing quality that the freedom of artistic expression and creativity can render.

I think Hinz says it best when she says, “Creativity can uniquely give voice to concerns that might otherwise remain unacknowledged. Creative work can increase a person’s inclusion in the dominant culture, promote posttraumatic growth, enhance self esteem, and bring a myriad of

other positive benefits. In addition, the very nature of creativity allows for the celebration of differences rather than their reduction to singularity within the dominant culture” (142).

Similar Adapted Art Programs

1. College of Adaptive Arts (San Jose, CA)

“Welcome To College Of Adaptive Arts.” n.d. College of Adaptive Arts. College of Adaptive Arts. Accessed May 8, 2020. <https://www.collegeofadaptivearts.org/>.

Founded in 2009, the College of Adapted Arts (CAA) is now home to over 105 students and a plethora of programs, including fine arts, music, dance, theater. The school offers various degree programs ranging from one-class certificates to post-graduate work, encouraging students to work at their desired pace. CAA draws parallels between their model and those of community college and special olympics, focusing on building community and even offering extracurricular activities such as golf and student leadership (College of Adaptive Arts).

2. Creative Growth Arts Center (Oakland, CA)

“About.” n.d. Creative Growth. Creative Growth Art Center. Accessed May 11, 2020. <https://creativegrowth.org/about>.

Another adapted art program similar to the program run by the Arts Council of Princeton takes place at the Creative Growth Art Center in Oakland, California. According to their website, the Creative Growth Art Center was founded in 1974 and houses more than 150 artists who work alongside professional artists (Creative Growth). They are “guided by the principle that art is fundamental to human expression and that all people are entitled to its tools of communication” (Creative Growth). Their artists work with an array of materials, and some of the artistic media they work with include painting, drawing, ceramics, and more, which are mediums that the adapted art classes at the Arts Council of Princeton use as well. In addition, the work of their artists are exhibited “at national and international art fairs every year” and have been “acquired by prominent collections worldwide, including MoMA, SFMOMA, the Smithsonian” and more (Creative Growth).

One of the adapted art teachers that we interviewed was interested in “outsider art” and how art-teaching changes when artists are able to get paid for their artwork. The artists at the Creative Growth Art Center are paid for their artwork, since “the sale of each artwork is split 50-50 between the artist and Creative Growth” (Creative Growth); however, the website does not explore how this changes teaching methods. It would be interesting to see how art styles and

teaching methods differ between the Creative Growth Art Center and Arts Council of Princeton. Perhaps, in a collaborative project, artists from both programs could connect with each other and create even more art.

3. *New Horizons* (Index of Programs)

“New Horizons Un-Limited Inc.: Providing Access to Information and Life Experiences for People Impacted by Lifelong Disability.” n.d. New Horizons Un-Limited. New Horizons Un-Limited. Accessed May 8, 2020. <https://www.new-horizons.org/>.

New Horizons describes itself as a “grassroots, non-profit organization for our families, friends and neighbors impacted by disability since 1994” (New Horizons). Their website houses an [index](#) of adapted art programs in the US and Canada, including East Coast offerings in NY and MA that the Arts Council of Princeton could explore.