ArtAbility 2014:
Evaluating the Program’s Overall Impact on Participants with ASD and Teen Mentors

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PART 1: INTRODUCTION

The ArtAbility program represents a collaboration among the Glen Echo Park Partnership, Imagination Stage, Ivymount School and Programs, and the Puppet Company; and was made possible by a TeamUp grant from the Jim and Carol Trawick Foundation. ArtAbility, now in its second year, was designed to serve middle school students with autism spectrum disorders (ASD), by providing them with a wide range of artistic opportunities (including puppetry, drama, music, movement, and the visual arts). An equally important component of the project was using hands-on arts participation to develop vital life-long learning skills such as collaboration/cooperation, communication and social interaction, flexibility, self-advocacy, emotion regulation, and creative problem solving.

This year (2014), ArtAbility served 20 Montgomery County middle school students with ASD. In addition to serving students with ASD, nine high school students were selected to participate in the ArtAbility program as teen mentors. The program was divided into three distinct components: (1), winter teen mentor recruitment and training, (2) a spring session for participants that took place weekly after school over a six week period, and (3) a full-day summer session that took place over a three week period.

This report summarizes results from the 2014 ArtAbility program evaluation study, which measured outcomes for the ArtAbility summer program.

PART 2: METHODOLOGY

Participants

Focus Participants. Five focus participants were selected for inclusion in the ArtAbility program evaluation study. We first divided all 20 participants into one of two categories: “highly verbal communicators” and “minimally verbal communicators.” We then randomly selected three participants from the highly verbal category and two from the minimally verbal category. The intention was to measure whether or not members of both groups were benefiting from the ArtAbility program. Focus participants ranged in age from 10-14 years. All focus participants were enrolled in the summer session, and all had participated in the ArtAbility program during the spring and/or summer session in preceding years.

Parents. Parents of all 20 ArtAbility summer program participants were invited to complete an online survey regarding perceived generalization of social skills. They were also asked whether they had observed evidence of participants engaging spontaneously in creative activities at home or in the community, to rate their satisfaction with the ArtAbility program, and to provide any recommendations for program improvements. Parents of the five focus participants were also invited to participate in a focus group.

Teen Mentors. All seven teen mentors for the ArtAbility summer program were invited to complete an online survey regarding the impact of the program on their understanding of autism, as well as their ability to support individuals on the autism spectrum. They were asked to identify any significant challenges to participating in the program, and whether they felt they received adequate training prior to the program.
Data Collection and Analysis

The ArtAbility summer program took place for three weeks during the summer of 2014. The following five types of data were collected in order to measure program effectiveness:

**Observations**: The five focus participants were each observed at baseline (beginning of the summer program) for 45 minutes and again at the end of the summer program for 30 minutes. A data collection form was used to track numbers of verbal and nonverbal interactions (with verbal interactions defined as speaking turns, and nonverbal interactions defined as nodding, pointing, or using communication devices), as well as whether interactions were directed to peers or adults. The same observers observed participants at baseline and again at end-of-program. We also tried to capture participants interacting under comparable conditions at both points (i.e., conditions offering similar opportunities for interaction), but this was not always possible. Analysis of observation data was conducted by calculating total number of verbal/nonverbal interactions per hour at baseline and end-of-program, and using Excel to calculate average number of verbal/nonverbal interactions, as well as average number of peer-directed interactions across participants. Sample size was deemed too small to calculate statistical significance.

**Teaching Artist Survey/Interviews**: At baseline, teaching artists were asked to complete online surveys about the five focus students’ skill levels. One survey was completed per focus participant. Questions included both 5-point Likert-type scales (e.g., 4 = excellent, 3 = good, 2 = average, 1 = poor, 0 = very poor), and open-ended questions requiring written responses. Questions addressed the following domains: engagement, flexibility, self-advocacy, communication, emotion regulation, empathy, self-confidence, and creative expression. At the end of the program, teaching artists participated in a telephone interview that included the same questions about the same student(s). We used Excel to calculate average growth across participants for each domain. We also conducted qualitative analyses of teaching artist responses in order to identify themes mentioned by more than one teaching artist.

**Parent Focus Group**: At the end of the program, parents of the five focus participants were invited to participate in a focus group. Five parents participated. Parents were asked a series of open-ended questions in order to identify their perceptions of the overall impact of the ArtAbility program on their children. Focus group responses were transcribed verbatim, and analyzed for common themes mentioned by more than one parent.

**Online Parent Survey**: Parents of all 20 participants were invited to complete an online, end-of-program survey. Questions addressed whether parents observed generalization of social skills in the following domains: flexibility, self-advocacy, communication, emotion regulation, empathy, self-confidence, and creative expression. As with the teaching artist survey/interviews, questions included both 5-point Likert-type scales and open-ended questions. We received responses from 15 parents. We used Excel to calculate average growth across participants for each domain. We also conducted qualitative analyses of parent responses in order to identify key themes.

**Online Teen Mentor Survey**: Teen mentors were invited to complete an online, end-of-program survey. Questions addressed key ways in which the ArtAbility Program impacted mentors' understanding of ASD and skills for supporting individuals with ASD. We received responses from six of the seven mentors, and conducted qualitative analyses of mentor responses in order to identify common themes mentioned by more than one mentor.
PART 3: FINDINGS

Observations of Focus Participants

On average, the number of verbal interactions per hour almost doubled from 46.3 at baseline to 76.4 by the end of the program (see Table 1), although, for some reason, the average number of non-verbal interactions actually went down from 28.7 at baseline to 12.4 at the end of the program. Nevertheless, a positive trend was maintained when calculating the average number of interactions overall (combining both verbal and non-verbal) which grew from 75 at baseline to 88.8 at the end of the program.

It is important to note, however, that these figures obscure the significant variations across individual focus participants. The increase in verbal interactions was consistent across four focus participants, with only one focus participant engaging in slightly fewer verbal interactions by the end of the program, while the numbers of overall interactions (both verbal and nonverbal) went up, they actually went down for two of the five focus participants due to the decrease in non-verbal interactions over time (see Appendix A for student-specific data).

We used the same observation form to measure whether focus participants were interacting more frequently with peers (as opposed to adults) by the end of the program. There was a dramatic increase in the average number of peer-directed interactions per hour. Verbal interactions directed to peers more than doubled from 14.9 to 36 per hour (see Table 2). Again, we observed a slight decrease in the average number of non-verbal peer-directed interactions (from 8.6 to 2.5), but the number of peer-directed interactions overall (both verbal and nonverbal) remained high – increasing from 23.6 at baseline to 38.5 at the end of the program.

Again, it is important to note that these figures are somewhat misleading. While the average numbers of peer-directed interactions went up overall, this was due in large part to the fact that data for one focus participant increased so significantly. Numbers of peer-directed interactions per hour actually went down slightly for the three other focus participants, and data were missing for the remaining focus participant.
Feedback from Teaching Artists Regarding Focus Participants' Skill Levels

Teaching artists were asked to rate focus participants' skills across a number of domains using a 5 point Likert-type scale, where 4 = excellent, 3 = good, 2 = average, 1 = poor, and 0 = very poor. Feedback from teaching artists indicated that focus participants demonstrated the most significant growth in self advocacy (increasing from an average of 2.2 to 3.2) and communication (increasing from an average of 2.4 to 3.4) (see Table 3). Focus participants demonstrated more modest growth in other areas such as empathy (increasing from an average of 2.2 to 3.0), engagement (increasing from an average of 3.2 to 3.6), self-confidence (increasing from an average of 3.0 to 3.4), and creative process (increasing from an average of 2.8 to 3.2). They demonstrated the least growth in flexibility (increasing from an average of 3.2 to 3.4) and emotion regulation (increasing from an average of 3.4 to 3.6).
In terms of individual focus participants, these patterns for the most part remained constant. Four students demonstrated growth or stability in all areas, although the remaining focus participant exhibited regression in several areas.

Teaching artists were also asked to elaborate on their responses regarding each skill domain, and the following section provides examples of this:

Engagement – Teaching artists reported that four out of five focus participants were more engaged by the end of the program than at the baseline. Typical comments included:

- “He was engaging in a deeper way by the end [of the program] in activities that weren’t necessarily his favorites.”
- “He always wanted to engage in activities, but would say ‘I’m nervous,’ or ‘Can you help me?’ so we’d do it together first. He was tentative but he wanted to engage.”
- “When he was having trouble staying engaged with an activity, letting him move his puppet instead of his whole body was often helpful and kept him engaged.”
- “As long as we were good about forecasting his turn and giving him that time to prepare himself or offer him some choices, he was great.”
- “He was the first kid to clean up and took so much ownership of the puppets – he made sure they were clean and put away nicely.”

Flexibility – Teaching artists reported that three out of five focus participated demonstrated greater flexibility by the end of the program. Typical comments included:

- “Although he began the program very flexible, he improved in his willingness to try things that made him nervous, to try things that he wouldn’t be good at. In the beginning we were seeing more, ‘No, I don’t want to do that’ … at the end it was more, ‘How can you help me to accomplish this?’”
- “He was able to do more for longer periods – even if non-preferred.”
- “He loves the Metro, and would come in every morning and start writing down Metro stations and making a map, and we were able to get him to actually draw other things – turtles and animals, which at the start was really difficult. He’d say, ‘No thank you,’ but as time went on he was more flexible.”

Self-advocacy – Teaching artists reported that four out of five focus participants were better able to self-advocate by the end of the program, but that self-advocacy remained an ongoing challenge for some. Examples of self-advocacy included participants’ asking for colored markers or sound cancelling headphones, asking permission to take breaks, and speaking up on behalf of other kids.

Communication/interaction – Teaching artists reported that four out of five focus participants were communicating and/or interacting more successfully by the end of the program. Examples included engaging in more parallel play, initiating conversations and/or responding to others’ initiations, joking around with peers and staff, and establishing friendships. Typical comments included:

- “I saw him reaching out to some adults at times, just for physical contact. I didn’t see that at all last year .... He’d hug or lay in your lap, this was really new for him ... his desire to be closer to us, to be more a part of the group and community that was being created.”
• “We developed a handshake with each other, and he started teaching it to other people – really nice.”
• “There were some really great moments where I would be asking him a question about something, or hearing someone else asking him a question, and instead of just answering and moving on, he would ask a follow-up question.”
• “He and another boy had an incredibly close bond. They read books together, were constantly together. In the beginning, I saw him initiating with specific kids in small moments, but this developing a really deep connection was new to him and happened over the course of the program.”

**Emotion regulation/coping with frustration** – Teaching artists reported that three out of five focus participants demonstrated increased emotion regulation skills by the end of the program, although this remained an area of ongoing challenge for a few. Typical comments included:

• “At the beginning, there were activities he’d opt out of. Towards the end, he didn’t ever ask to opt out. He would ask for help, or extra time to think about it, but would always … do it. That ability to handle his nervousness definitely improved for him.”
• “I think performance was hard for him, in that he found he was having conflicting feelings about performance. Being on stage really excited him, but also scared him … He started realizing he was overwhelmed by the roller coaster moments, so he opted out of a part of [the performance] so he could be part of the rest of it. I think that was a good moment of regulating.”

**Empathy** – Teaching artists reported that three out of five focus participants demonstrated modest increases in empathy by the end of the program. Typical comments included:

• “There’s evidence of the fact that he notices what his peers like and don’t like … I would say he’s improved.”
• “His friend had a tough day, and he would scoot over to me and say, ‘Is my friend going to be okay?’”
• “When working with puppets, I heard what he was saying about animals getting together to ‘help each other out’ … he may not ask how someone is doing, but there’s an awareness of empathy – it’s on his radar.”

**Self-confidence** – Teaching artists reported that all five focus participants demonstrated increases in self-confidence by the end of the program. Typical comments included:

• “In performance, he didn’t need support – he also spoke up with a loud voice and with a lot of confidence .... He definitely came out of his shell; just him speaking up at all was a definite improvement.”
• One of the fascinating new things is he compensates for his self-confidence through puppetry … he struggles with self-confidence ... but he’s able to overcome moments of this through his puppets.”
• “He took on the role of emperor, he really wanted that role – on of the bigger roles. I think if you’re going to do that, you have to have self-confidence. I think the program helped facilitate his ability to take on that role.”

**Creative process** – Teaching artists reported that four of the five focus participants demonstrated improved abilities to contribute to the creative process by the end of the program. Typical comments included:
- “The actual creation of things is what he loves – the time it takes kids to do one cover for the program, and he did five to six happily. In that way, he contributes in an extremely meaningful way.”

- “Much improvement ... he came in a little anxious. His contributions needed to be invited, and he needed narrowed choices at the beginning. Towards the end, he contributed to creation of the story. I remember one time, we were trying to compromise – we had two ideas for the name of the village. One kid wanted it one way, one wanted it another, and he suggested combining the two ideas.”

- “With visual art ... he was willing to do our projects that were for the production instead of just drawing his Metro maps, cars and planes [preferred subjects]. Our theme was under the sea, and so he’d draw under the sea characters.”

- “In spring, we’d be coloring, and I felt it was a half-hearted attempt, and then he’d stop. I’d ask him if he wanted another color, and he’d say ‘No,’ and walk away. In summer, he was doing more – what came out of the puppets, the ownership, taking care of them.”

Focus Group Feedback from Parents of Focus Participants

In order to determine whether participants were generalizing skills from the ArtAbility program to their homes and communities, we gathered two types of parent data: focus groups with parents of the five target participants, and online surveys of all 20 parents. Analysis of focus group transcripts revealed the following themes:

Hopes and expectations – Parents shared a range of hopes and expectations regarding the ArtAbility program. Most commonly, parents mentioned the opportunity for their children to be exposed to new art forms, and for social interaction with peers. One parent mentioned the importance of having an arts program where her son could be himself, without fear of disrupting others’ camping experiences:

- “I just wanted to make sure he had a way to be himself, and express himself, in a structured environment that was also flexible, and where we didn’t feel he was holding up a production.”

All five parents felt that the program met or exceeded their hopes and expectations. Parents mentioned how excited their children were about attending the program, and how much they enjoyed reconnecting with old friends, including favorite teachers and mentors.

Favorite parts of program – Parents mentioned numerous features of the program that they especially liked, for example: routine and predictability of the daily schedule, high quality of teachers and teen mentors, supplementary activities like the puppet show and carousel, and the Glen Echo location (e.g., “There’s something magical about Glen Echo”). Several parents also mentioned how much more they enjoyed this year’s performance than last year’s performance:

- “I think [this year’s performance] was more ambitious, and I think all the participants were up for that – capable of a longer, more involved script, and more structure and moving parts.”

Other things parents liked about the program were the fact that it was free, and that lunch was provided.

When asked what their children most liked about the program, parents most commonly mentioned fun and friends, as well as opportunities for creative expression:

- “Seeing his friends, folks he knew, and also getting to dance and sing.”
**Drawbacks or challenges** – Other than the long commute, parents did not mention any drawbacks or challenges their children and/or families faced in terms of participation in the ArtAbility program.

**Key program outcomes** – Parents had the most to say about the outcomes they observed as a result of their child’s participation in the ArtAbility program. Most commonly, parents mentioned increased spontaneous artistic expression (including drawing, photography, puppetry, and building), greater self-confidence/self-assurance, and improved social initiation. Typical comments included:

- “When he was younger, [my son] didn’t have any sort of imagination, and now he makes up stories and comes up with new things, and he’ll say, ‘I’m using my imagination!’ ... I think ArtAbility has been great for him.”
- “School has been really tough for [my son] the last couple of years, and I don’t think he feels he has any successes, so to have something where people are applauding ... and giving him kudos, and it’s fun ... and it’s a success, I think it’s really helpful.”
- “I think his opening up and just being more social with kids of all kids is really nice to see.”

Other outcomes parents mentioned included preparing participants for greater independence (e.g., participating in a sleep-away camp following ArtAbility) and improved emotion regulation.

**Recommendations** – A few parents had suggestions for how to improve the ArtAbility program, including making the program more inclusive. For example:

- “It would benefit to have some typical kids with some autistic kids. I think it would benefit both communities.”

Parents agreed, however, that this might not be ideal if it meant limiting opportunities for as many children with ASD to participate. Another recommendation was to provide more systematic feedback to parents throughout the program (e.g., weekly updates) regarding students’ growth and/or participation.

**Online Survey of All Parents Regarding Generalization of Social Skills**

As mentioned earlier, we also conducted an online survey of all 20 parents, and received responses from 15. Results are as follows:

Because students received direct instruction in dancing/movement, music, dramatic play, visual arts, and puppetry, parents were asked whether they noticed an increase in spontaneous artistic expression after participating in the ArtAbility program. Thirteen out of fifteen parents said “yes,” and typical comments included the following:

- “He made a giraffe with large, snap-together blocks. He did not base the giraffe on an illustration or any instructions on the box. This is a huge step for our son, who rarely – if ever – puts things together on his own without a schematic.”
- “He has been doing freehand copying of other pictures and coloring them in.”
- “He’s very excited about creating a storyboard for a movie using Lego bricks.”
- “He has been imagining making wands that cast spells of different types to address challenges in his life!”
- “We have noticed an increase in puppetry. He uses the puppet he made during ArtAbility, and is walking around with it on his hand, acting out skits.”
Parents were also asked whether they noticed generalization of a range of skills for which ArtAbility provided indirect support. Although there was no dramatic growth for any of these skills, parents reported noticing modest growth in the following areas: communication and interaction (increasing from an average of 1.9 to an average of 2.3), self-confidence (increasing from an average of 2.0 to an average of 2.3), flexibility (increasing from an average of 2.3 to an average of 2.5), and empathy (increasing from an average of 2.2 to an average of 2.4) (see Table 4). Parents did not report any growth in self-advocacy or emotion regulation. Nor did parents report regression in any skill areas.

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Parents were asked to provide examples of any generalization they observed in the above skill areas, and typical comments included the following:

**Flexibility** – Several parents commented on how ArtAbility improved their children’s flexibility, for example improving their ability to participate in new activities and to handle scheduling changes. Typical comments included:

- “We were very happily surprised that our son managed to be involved in activities he was not familiar with, such as participating in a show.”
- “One thing that ArtAbility does well is prepare students for the schedule and for activities, and I am sure also preparing the participants for any changes to the schedule that may come up for whatever reason.”

**Communication and Interaction** – Another common theme was increased communication and interaction, including the development of friendships, following participation in the ArtAbility program. Typical comments included:

- “Our son’s largest area of growth this year was in engaging his peers. He wasn’t exactly the ‘alpha’ child, but I could see him playing more of a leadership role this year, with some of the new kids especially.”
- “Our son’s blooming friendship with another camper has helped him to open up and invite the child to his party.”
Empathy – Several parents noted that their children’s acceptance and tolerance of others, especially those with more significant challenges than their own, had increased notably following participation in the ArtAbility program. Typical comments included:

- “Because the participants at ArtAbility have varying needs, it has really helped him see everyone has strengths and challenges. It has helped him see everyone with an open mind and acceptance.”
- “Being with children with more severe disabilities than him has definitely provided our son with perspective about his own condition, and improved his level of patience towards ‘unusual’ people.”

Self-Confidence – Parents also commented on their children’s improved self-confidence, resulting from participation in a performance-based program. Even children who were typically very quiet and reserved discovered a side of themselves that enjoyed being on stage. Typical comments included:

- “He seemed to walk taller [at the end of the program]. I think he really got a lot out of being a big fish in a little pond – he enjoyed being on stage.”
- “Our son was given the opportunity to participate in the making of the show – including drawings, paintings, making props, and acting. It was a very good experience for him, and good for his self-esteem.”
- “The experience let’s our kids shine and brings them so much confidence.”
- “Our son feels like a rock star at ArtAbility. He loves everything about it.”

Online Survey of Teen Mentors

Based on online surveys of teen mentors, we found the following:

Perceptions and Knowledge of Autism – All six teen mentors reported that their perceptions of individuals with ASD, and their knowledge of autism had changed significantly since participating in ArtAbility. Several mentioned learning that autism truly is a spectrum, and that individuals with autism can communicate in a wide range of ways. Typical comments included:

- “The biggest change I noticed was my perception of intelligence as a result of verbal skills. I had preconceived notions about children who could not communicate verbally being less intelligent than individuals who could communicate verbally ... I quickly learned I was wrong after working with students.”
- “I know that a diagnosis of autism does not in any way limit one’s capacity to be successful or happy, because these kids are some of the happiest, friendliest, hardest working I know.”
- “Even if someone communicates differently, they can still understand what is happening and have something to say.”
- “The affinities of individuals on the spectrum are unique and individual, and should be looked at as a passion not a prison.”
- “I learned that autism is truly just a disability, an inconvenience the kids fight through every day ... all the kids are truly amazing and talented in their own way, they just have a slightly harder time expressing their talents and processing information.”

Skills for Supporting Students with Autism – All six teen mentors reported an increase in in skills for supporting students with ASD. Some of the things that they learned included how to help
students self-regulate, communicate more effectively, and transition successfully from one activity to another. Typical comments included:

- “I now feel very comfortable using timers, counting down from five, prepping kids way in advance before a transition, and offering choices .... I have also become a lot better monitoring my own behavior to set a good example, such as sitting up straight and always being calm and polite.”
- “It was best if I only used one to three words at a time. I had to adapt a lot of instructions and stick with the same key phrases, which was challenging at first, but I got the hang of it.”
- “It is amazing how much more comfortable and successful I was with the kids by the end of the summer session.”

**Most Significant Challenges** – Teen mentors most commonly identified challenges related to working with nonverbal students, giving directions without getting any confirmation that they had been heard/understood, limiting language, and having to generate multiple approaches to solving a problem.

**Lessons Learned About Self** – Most commonly, mentors reported learning patience and self-confidence. Two noted that their experiences as teen mentors had caused them to consider a career in special education. Comments included:

- “I learned that I want to consider a career that helps people with disabilities. I have loved being a teen mentor at ArtAbility, and I would love to continue doing something similar as a career.”
- “Working with kids with disabilities is something I really want to continue.”

**PART 4: RECOMMENDATIONS**

**Parents’ Overall Satisfaction with Program**

We asked parents to rate their overall satisfaction with the ArtAbility program using a five point Likert-type scale. Satisfaction levels were incredibly high, with twelve parents reporting that they were “very satisfied,” and the remaining three that they were “satisfied.” Typical comments included:

- “What I love the most is the inclusivity of the program. Arts are so important for the growth and well-being of everyone, and yet it’s not easy for children on the spectrum to have access to affordable arts programs. ArtAbility is free! The staff members take all the participants at wherever they are developmentally, and patiently push them to expand themselves and their comfort zones.”
- “I appreciated the communication that we received about the daily schedule, so I could prepare our son in advance for the following day’s activities.”
- “We were very grateful to ArtAbility for taking the measures to accommodate our son’s severe disability and to allow him to be exposed to art, and to enjoy the experience of camp with peers. We were very impressed by how patient, kind, and professional the whole team was.”
- “The program and personnel precisely recognized my daughter’s strengths and weaknesses and made program adjustments to compensate. The program personnel are excellent.”
• “The program is developing special people for our future on both sides: participants and mentors. I really can’t imagine it getting any better or helping our community more than it is doing now.”

Parents’ Recommendations

Parents generated the following recommendations for improving the ArtAbility program:

• Increase communication with parents during the program (e.g., emails half-way through the program citing challenges, overall progress, and breakthroughs).
• Provide additional support in identifying potential friendships and sharing information with parents so that they can pursue those relationships at the conclusion of the program.
• Provide more actual dramatic exercise (e.g., practicing lines, getting into character).
• Consider offering a version of the program that targets higher functioning children with ASD.
• Offer a year round program that meets weekly during the afternoon.

Teen Mentors’ Satisfaction with Training

All six responding teen mentors reported that they received adequate training and support prior to the ArtAbility program. Typical comments included:

• “I think the mentor training was incredibly beneficial, and taught me a lot I didn’t know beforehand.”
• “The training was superb.”

Teen Mentors’ Recommendations

Teen mentors generated the following recommendations for improving the ArtAbility program:

• Expand the program (e.g., lengthening the spring program and/or adding a fall/winter session).
• Clearly articulate confidentiality rules.
• Provide more opportunities for staff to communicate with participants’ parents.
• Reduce training for returning mentors in order to avoid redundancy.

PART 5: LIMITATIONS

Results of this program evaluation study should be interpreted with several precautions in mind. Outcomes are notoriously difficult to quantify for a three-week program like ArtAbility, and especially given the small sample size (n=5), quantitative data should be interpreted cautiously. For instance, in several cases, students had more opportunities to interact during the times when we collected baseline than they did during the times when we collected data at the end of the program, which skewed findings so that it looked as if a few students did not increase their social interactions over time, and/or did not increase the number of interactions directed toward peers. In some cases data suggested that total numbers of interactions and peer-directed interactions actually decreased – in spite of qualitative evidence to the contrary. In order to more reliably quantify outcomes, we would need a larger sample size, and baseline/end-of-program data collection opportunities that are as similar as possible in terms of the number of opportunities provided for interaction.
PART 6: SUMMARY

In summary, outcomes for the ArtAbility program were very positive. Observational data, while inconsistent across focus participants, nevertheless provided evidence that by the end of the program, focus participants engaged in higher levels of verbal interaction. These data did not, however, support the notion that focus participants engaged in higher levels of non-verbal interaction, or in higher levels of peer-directed verbal interaction by the end of the program. In terms of teaching artist surveys/interviews, it appeared that the program resulted in greater overall levels of self-advocacy, communication/interaction, and empathy. Although some focus participants demonstrated greater growth than others, these patterns of growth were for the most part born out across participants. Online parent surveys, designed to measure generalization of ArtAbility learning to home and community contexts, indicated significant growth in students’ spontaneous artistic expression, and modest growth in a few key areas, namely: communication/interaction, self-confidence, flexibility and empathy. The parent focus group confirmed many of these findings. Finally, the teen mentor surveys indicated that mentors learned a lot about ASD and how to support individuals with autism as a result of their ArtAbility mentoring experiences. Overall satisfaction with the program was high, with almost all parents reporting being “very satisfied.” Mentors were also satisfied with the training they received.

ACKNOWLEDGEMENTS

ArtAbility staff gratefully acknowledge all the families who completed surveys and/or participated in focus groups for sharing their time, insights, and experiences. Their contributions will be used to help ArtAbility staff make improvements to the program in coming years.