

The ABCs of Activity Scheduling for Students with Autism Spectrum Disorder



Abstract

Our group is composed of special education students who are interested in different techniques to use in our future classrooms. During our time at Longwood University we have learned a lot of techniques that we can include in our classroom to better our students' experiences. Throughout we have learned a lot about Applied Behavior Analytics and the effectiveness of using it in the classroom. We wanted to learn more about the different strategies of ABA and which ones were the most beneficial in a classroom with students who have Autism Spectrum Disorder. The research we conducted is questioning the effectiveness of the ABA strategy of activity scheduling on students who have Autism Spectrum Disorder. We believe that if students with Autism Spectrum Disorder utilize an activity schedule for complex tasks, then they will be successful in completing the task at hand. The findings of our research was successful, incorporating activity schedules for students with ASD has benefits for self, teacher, and peers, daily tasks and interactions. For further research when observing students using activity schedules during class transitions, we would recommend possibly observing the students during transitions at the beginning, middle, and end of the week and compare them to the days during the week. For example, how they would be in the morning on a monday compared to the end of the day on friday.

Background

Intro to Autism Spectrum Disorder:

According to the CDC Autism spectrum disorder (ASD) is a developmental disability caused by differences in the brain that can cause significant social, communication and behavioral challenges (Centers for Disease Control and Prevention, 2022).

Program of Investigation:

Visual activity schedules (VAS) are a tool that is commonly used to assist students with ASD to perform tasks independently. It includes a set of pictures that represents a task or event, which can be used to make a schedule for the student (Miguel et al., 2009).

Background of Activity Scheduling

Ivar Lovaas pioneered Applied Behavior Analytic (ABA) in 1960. He created this therapy to decrease challenges and rather create communicative language (Smith & Eikeseth, 2011, 375). ABA is a type of therapy that is based on the science of learning and behaving. The therapy sets out to increase communication skills, Visual activity schedule is a form of ABA that is often used in special education classrooms, it is a way the students benefit from a visual display that includes a sequence of events.

How Activity Scheduling Helps Students with ASD

Students who have ASD sometimes struggle with staying on task and completing goals. With an activity schedule students with ASD can put their tasks in order and have a visual representation of their goals. Once they complete a task or goal the student can physically check them off or some other way to visually see the completion of this and see that they are now ready for the next task (Pierce et al., 2013) .

Method

- **Research question** - Can the implementation of activity scheduling for children with Autism Spectrum Disorder aid them with completion of complex tasks?
- **Hypothesis** - If students with autism spectrum disorder utilize an activity schedule for complex tasks, then they will be successful in completing the task at hand
- **Procedure-** (1) reviewing the program, and (2) reviewing three research studies
- Studies were performed in the United States

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Discussion- Why do Activity Schedules Matter?

Establishing derived textual control in activity schedules with children with autism

The findings in this article are important as future special education teachers because it demonstrates how students with autism respond to language, and shows that they respond to having pictures and words combined when learning new things, such as new tasks (Miguel et al., 2009, 703-709).

Effects of visual activity schedules on independent classroom transitions for students with autism

The findings in this article are important as future special education teachers because it provides a strategy that is effective in having students with autism have independence and control over their classroom transitions that they are able to utilize on their own (Pierce et al., 2012, 253-269).

Using joint activity schedules to promote peer engagement in preschoolers with autism

The findings in this article are important as future special education teachers because it demonstrates a strategy for students with autism to boost their peer engagement, which tends to be very difficult for individuals with autism as a characteristic is deficits in social connection (Betz et al., 2008, 237-241).

Recommendations & Future Directions

1. We would like to see if there is any significant difference when using this method between boys and girls.
2. When observing students using activity schedules during class transitions, we would recommend possibly observing the students during transitions at the beginning, middle, and end of the week and compare them to the days during the week.
3. When observing preschoolers with the joint activity schedules to promote peer engagement, we suggest observing more into their peer engagement.
4. With this study we are interested in seeing up until what age this method works.
5. With visual activity schedules we recommend possibly providing a take-home version as well.

Conclusion

Overall, yes our results did surprise us. When conducting this research we figured it would be a great method for students with Autism but we did not expect it to be such an asset and necessity in the classroom. It is clear that this technique is very unique but efficient. With careful consideration, all three of us have decided to use the ABC's of activity scheduling throughout college with any students we help guide in the classroom and throughout our journeys in our own classrooms.

References

Betz, A., Higbee, T.S., & Reagon, K.A. (2008). Using joint activity schedules to promote peer engagement in preschoolers with autism. *Journal of Applied Behavior Analysis, 41*(2), 237-241. <https://onlinelibrary.wiley.com/doi/10.1901/jaba.2008.41-237>

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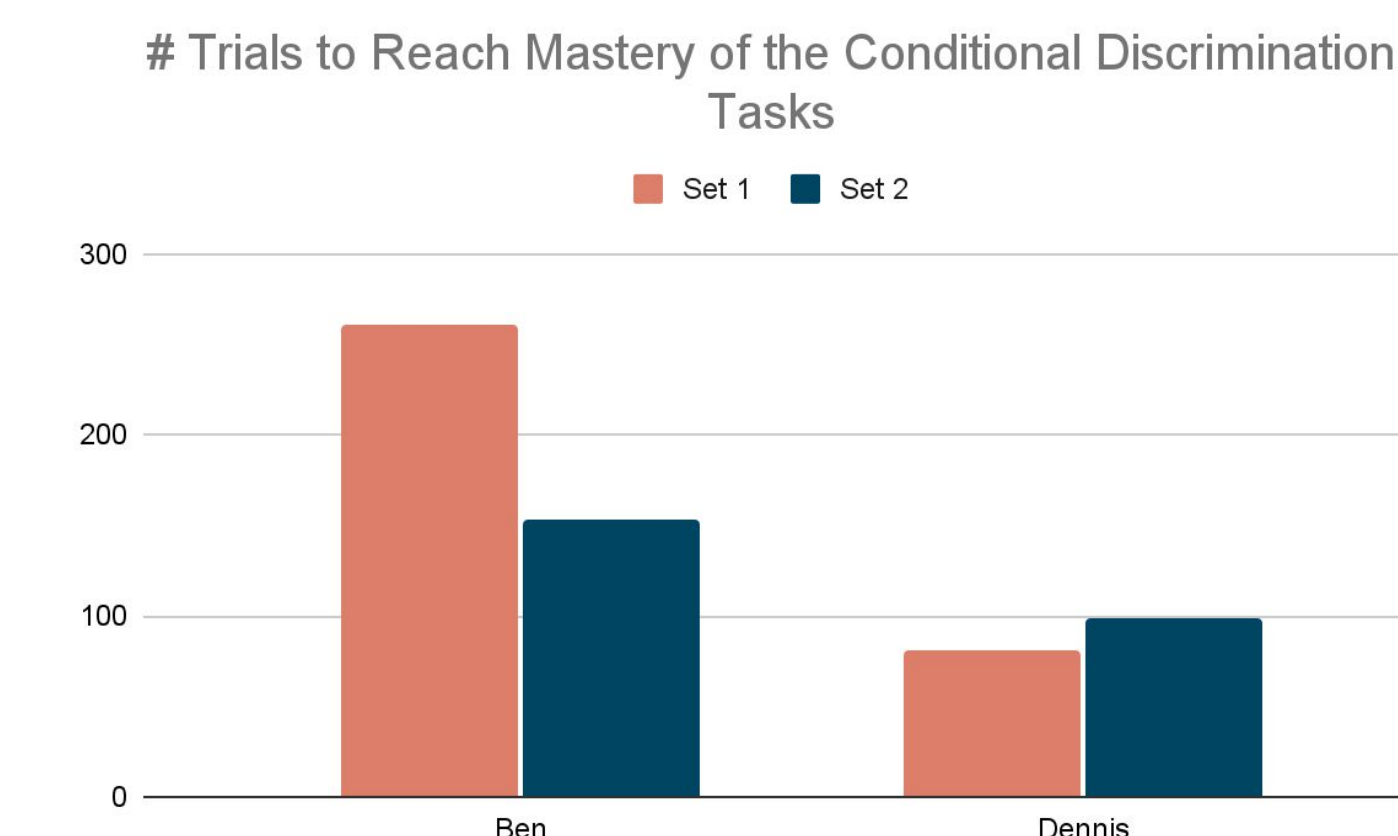
Results

Research Article 1 - *Establishing derived textual control in activity schedules with children with autism.*

The purpose of this study was to determine if using picture activity schedules prior to introducing words were more effective than just using verbal and written words. The study's participants were two 6-year-old children who were diagnosed with autism spectrum disorder, and conducted the study in their preschool classroom. They used 2 sets of 6 words and correlating pictures for the children's activity schedules in 9 trial blocks. The results showed that after learning to match words with the pictures, children with autism responded to print words the same as with pictures (Miguel et al., 2009, 703-709).

Trials to Reach Mastery of the Conditional Discrimination Tasks

	Ben	Dennis
Set 1	261	81
Set 2	153	99



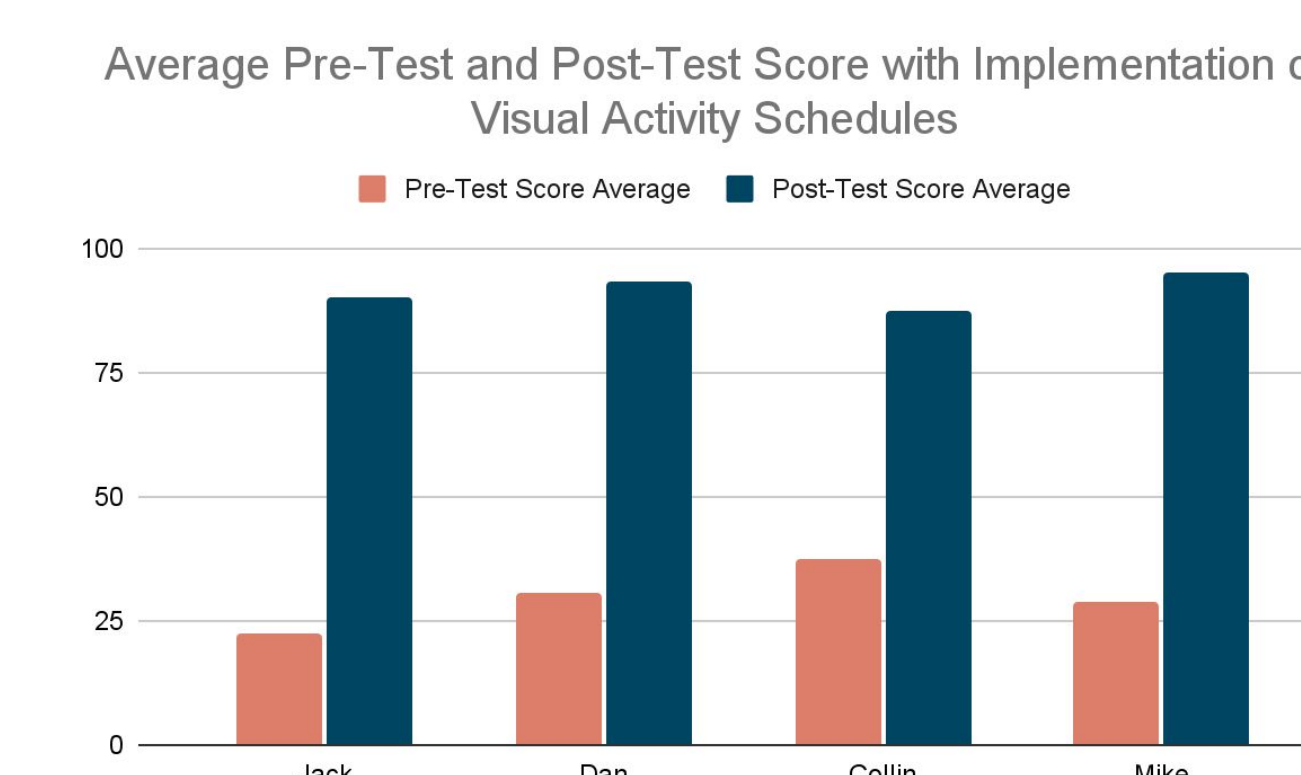
Research Article 2 - *Effects of visual activity schedules on independent classroom transitions for students with autism.*

The purpose of this study was to assess whether activity schedules were effective for students with autism spectrum disorder during classroom transitions. The study's participants were four students with moderate autism and took place in the self-contained classroom. The students were observed in sessions that occurred once a day, five days a week for about 30 minutes each day. The results showed an increase in independent behaviors across all 4 students (Pierce et al., 2012, 253-269).

Student Age vs CARS score for each student

	Jack	Dan	Collin	Mike
Age	11	9	10	10
CARS* Score	42.5	40	33	33.5

*CARS = *Childhood Autism Rating Score*



Research Article 3- *Using joint activity schedules to promote peer engagement in preschoolers with autism.*

The purpose of this study was to determine if the use of joint activity schedules would increase independence and decrease the need for prompting, and overall increase peer engagement. The study's participants were three groups of preschool-aged children diagnosed with autism spectrum disorder, and took place in the play area of their classroom. The students were observed in their groups for 20 minutes to measure peer engagement. The results saw an 80% increase in peer engagement during the maintenance phase of the study, with little to no prompting involved (Betz et al., 2008, 237-241).