

**The effects of a visual activity schedule on students with ASD Multiplication
fluency**

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Abstract

The purpose of this investigation is to evaluate the effectiveness of visual activity schedules (VAS) on increasing multiplication fluency in students with Autism Spectrum Disorder. This study will take place in a cluster classroom. Results are expected to demonstrate that the implementation of a VAS will increase academic performance.

Statement of Problem

As students with ASD leave the comfortability of their home and school settings and enter the real world workforce, learned skills such as independency will be crucial. When students with ASD do not acquire the independent abilities necessary for future success, they will lack the crucial skills essential in their adult lives and will have a difficult time problem solving, holding jobs, live independently, and be functional citizens of the real world. Problem solving is a strand closely tied to being independent, not knowing how to problem solve issues in their daily lives, can greatly affect their adulthood.

As the country embarks in an age of accountability, all students, including those with disabilities are expected to master the same skills being introduced to students in general education. However, most instructional programs for students with ASD tend to focus on social, communication, and functional life skills only. In recent years mathematics has been an area of concern for all students with ASD. These students need to have a basic understanding of all mathematical concepts in order to apply them in the real world. Teaching students with ASD through fluency centers and activities may help them increase their understanding of mathematical concepts.

Purpose of study

The purpose of this study is to describe the effects of the implementation of a VAS on the academic achievement of students with ASD. Research on the implementation of a VAS only focused on reducing off-task behaviors, transitional times, and independence. However, the effects of the implementation of a VAS on the academic progress of students with ASD are very scarce.

Literature Review

As the inclusion model of instruction becomes increasingly common in our nation, many students with ASD are being exposed to general education classrooms. According to researchers, about 36% of students with ASD are participating in general education classrooms for more than 80% of their school day (Hart Barnett & Cleary, 2015). This number has increased drastically during the recent years due to the rising numbers of advocates promoting full inclusion for students with disabilities and recently updated federal laws. Even though many of these students' needs and services are determined by their Individualized Educational Plan (IEP) the national/federal expectation is that they will access and learn the same curricular content as their general education peers. It is important to keep in mind that many instructional programs provided to students with ASD focus on communication, social, functional, and life skills (Hart Barnett & Cleary, 2015). Content area skills may not be thoroughly instructed or taught.

Many students with ASD lack the skills necessary to master mathematical understanding. Math is an area of concern for the nation because about 25% of students with ASD deal with some type of mathematical disability (Hart Barnett & Cleary, 2015). Recent research indicated a much slower growth rates in calculation skills as likened to students with disabilities.

Researchers have extensively analyzed the effects of Visual Activity Schedules (VAS) and determined that the evidence-based practice has helped students with ASD reduce off-task, behaviors, dependency on adults, and facilitates smooth transitional times (Spencer, Evmenova, & Boon, 2014).

Findings/Results and Implications

Findings and results will be available in time for the conference and will be presented.

Research Methodology

The action research will take place in 3rd through 5th classroom for students with autism. The four students involved have been identified as having ASD. Of this group of students, three are male and one is female. The three males are Hispanic and the female is African-American. The Special education teacher will be responsible for implementing the strategies and collecting the data. The necessary resources for the action research plan include, but are not limited to, Broward County's Math intervention curriculum, Mathematics Florida Standards (MAFS), XtraMath.com (Multiplication fluency web-based program), and parental and administrative consent to conduct the action research.

References

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