

The Use of Video Self-Modeling as an Intervention to Teach Rules and Procedures to Students with Autism Spectrum Disorder

Abstract

This research study will demonstrate the effective use of an evidence based video self-modeling intervention. The intervention will be used to teach five grade K-2 autistic children to walk in a straight line while transitioning within the school environment.

Statement of the Problem

Students with Autism Spectrum Disorder (ASD) are visual learners. Most classroom instruction is presented in verbal or written form. Accommodations for autistic children have been used to adapt their environment to one that is more productive and successful for them to learn in. Visual cues such as schedules, lessons and rule expectations have all supported the success of these accommodations. Technology has enhanced accommodation expectations with video modeling, and in particular video self-modeling. The availability of tablets, user-friendly software applications and other devices has made it much easier for anyone to develop lesson videos. While this research is targeting the autistic population the benefits can be transferred to other students who are visual learners as well. This study examines the effectiveness of implementing a video self-modeling intervention including the amount of time on task, length of time to independently acquire the new skill and teacher observation on student performance in acquiring the new skill

Purpose

VIDEO SELF-MODELING INTERVENTION

The purpose of this study will evaluate and compare, does this video intervention help students with Autism improve their ability to follow rules and complete tasks.

Literature Review

Recent studies reveal the effective use of video modeling as an evidence-based intervention especially effective with autistic students (Buggey, 2012). This type of intervention has had positive results in teaching students such critical skills in the areas of language, social skills, and self-care (Cihak, 2012). Instructional implications include less teacher instructional time and more student focus time (Blood, 2011), visual format is more conducive to the learning styles of autistic students (Cihak, 2012), edited videos can eliminate unwanted negative behaviors thus focusing on positive behaviors (Dowrick, 2012), less time needed to acquire the new skill (Blood, 2011) and most importantly is the generalization of the learned skill (Buggey, 2012).

Buggey (2012) reported that once a skill has been learned it is being maintained with the absence of the video modeling intervention and the skill is also being generalized to other people or locations. Buggey (2007) suggests that the video is actually acting like a memory from which the student can draw on and access at any given time. Acar (2012) and Bellini (2007) have documented the success seen with the use of video modeling and video self-modeling as effective interventions, in their meta-analysis of the intervention.

Research Methodology

The participants in this study are five Autistic students (four boys and one girl), in a grade K-2 self-contained class at a public elementary school in Palm Beach County. All but one student was non-verbal. Baseline videos were taken of the students walking in the school

VIDEO SELF-MODELING INTERVENTION

environment for a total of seven days. At baseline, students were shown how to walk on a line through modeling the behavior and verbal instruction only. A new self-modeling intervention video was created via editing from the baseline video showing the students performing the skill successfully themselves. This new edited intervention video was shown to the students instead of verbal instruction, while they walk in the school environment. Data was collected for each day from the baseline and intervention videos for a total of a three-minute period each day. Data was tracked on the amount of time on task for each student. A teacher Likert Scale was utilized to track observations on student performance of skill acquisition for each day of the study. Students were also recorded on the number of days it took each to acquire full independence of the skill.

Findings and Results

Data collection started on January 7, 2014 and was completed on March 7, 2014. Data tracking consisted of time on/off task within the three minutes each day, the number of days to independently acquire the new skill, and observational data from three staff members each day on the level of independence each student had in obtaining the skill. Initial baseline data indicated, considerable time off task, and low ratings by staff (never, rarely, occasionally) on the Likert Scale for skill independence for each student. Upon implementation of the intervention there was a significant increase in time on task, higher teacher ratings for skill independence for each student and two students independently acquired the skill. The significant difference was the self -modeling intervention video. The students saw themselves performing the skill successfully and continued to do so. The intervention video was a continuous 30-second video.

VIDEO SELF-MODELING INTERVENTION

Implications in the Field

The use of video as an intervention to teach autistic or any student a skill could significantly impact the success of many students in school. Previously prepared instructional videos can free up teachers to assist students in their work and decreases the amount of verbal instruction. Student time on task could be maximized by students seeing and hearing themselves doing what is expected of them. The video intervention is teaching to many different learning styles. The availability of user-friendly applications allow for easily produced intervention videos by the teacher. Video interventions will be much easier to implement increasing their use and effectiveness within the classroom.

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VIDEO SELF-MODELING INTERVENTION

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VIDEO SELF-MODELING INTERVENTION

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