Teaching Young Children with Moderate to Severe Disabilities

Through Teacher-Made Video Mediated Instruction

Graduate Student-Faculty Collaborative Initiative in

Research and Scholarship

Proposed by: Marie Sampson (Special Education Graduate Student)

With support from faculty member Dr. Lee (Special Education)

Proposed Activity

When students transition from a preschool program into kindergarten classes on an elementary school campus there are new procedures to learn for every part of the day. As students with disabilities enter this fast paced environment they must learn academic skills, social skills, and self-help skills to enable them to participate in the class. In the first 2-4 months of the school year, it is important that students with disabilities learn to become independent on the school campus; the ability to perform self-help skills in all settings increases the students' level of independent functioning (Norman, Collins, & Shuster, 2001).

With the increased use of smartphones and tablets, video mediated instruction has regained its popularity among teachers. The technology allows teachers to create instructional videos and deliver video mediated instruction with ease. Video modeling is a type of video mediated instruction, in which students learn by observing others or themselves perform target skills. It has shown to be effective in teaching functional skills and social/communication skills (Taber-Doughty, Bouck, Tom, Jasper, Flanagan, & Bassette, 2011; Plavnick, & Ferreri, 2011). Video modeling allows students to watch the video as many times as is necessary to learn target skills, without the modeling of an adult or another student each time, allowing for more opportunities to view the skill completed accurately (Hammond, Whatley, Ayres, & Gast, 2010).

The purpose of this research is to examine the effectiveness of a teacher-made video to teach "going through a lunch line." The participants are 5 to 6 year olds with moderate to severe disabilities. They are selected based on their instructional needs of "going through a lunch line."

Method

A 2-3 minute video of a student, similar in age, who is proficient at going through the lunch line, will be made. The video will have audio of the teacher giving instructions during each step in a task analysis, explaining how to perform the task, and important points for success. Table 1 presents the steps involved in the target behavior.

A single subject research methodology (a multiple baseline design) will be used to evaluate the effectiveness of the video model. Subsequent to baseline data being collected, students will be taught with an initial lesson of 5-10 minutes in length teaching each of the 7 steps of going through the lunch line; at the end of the lesson the students will view the video. During the following weeks students will view the video daily within the 15 minutes prior to going to lunch. Data will be collected on the number and level of prompts necessary for each student to succeed at each step in the task analysis. The prompt hierarchy is as follows from least intrusive to most intrusive: verbal, gestural, modeling, partial physical and full physical prompts

Each student will continue to view the video with teacher's verbal instruction until he or she independently performs the target skills 6 out of 7 steps in a lunch line for 3 consecutive days. Maintenance will be measured with the same criteria weekly for 3 weeks after the participants reach the predetermined criteria.

Overall, my project consists of 4 phases: (a) recording of the video model, (b) implementing the video modeling intervention, (c) monitoring of student's response to the video modeling intervention, (d) planning of next steps (e.g., collecting maintenance data or modifying the intervention).

Table 1: Task Analysis for going through the lunch line

Task		Response Definition
1.	Wait in line	Stand in line against the wall and move forward with the line.
2.	Pick up tray	Pickup the tray from the top of the stack.
3.	Place tray on serving surface	Hold the tray with two hands while placing it on the serving line.
4.	Pick up a milk	Choose a milk: 2% white milk, or chocolate milk. Place the milk on the tray in one of the small sections.
5.	Make choices	Respond to cafeteria server's question "Would you like some" with "yes" or "no" (verbally or with a head nod).
6.	Walk to the table	Carry the tray in with two hands (in the correct position to balance) while walking to the table.
7.	Sit with a friend	Follow the instruction of the paraprofessional on where to sit on the bench in the cafeteria.

Expected Outcomes

I expect that students will learn the target skills through video modeling and generalize the skill to the actual lunch line. The acquisition of the skill will promote participants' independence and provide opportunities for interaction with their peers without disabilities.

This action research project is a partial requirement of my master's culminating project. I will write up this research and submit it to my Master's committee. I will also present this research project at a student research event or in a research class (EDSP 688: Research in Special Education).

Justification, Significance, and Importance

Students with disabilities are taught in their least restrictive environment; this means that many students with moderate, and sometimes severe, disabilities are being educated in the general education setting for the majority of their day. While the general education classroom provides ample opportunities for socialization and allows students to learn along with their peers, it makes many techniques, such as discrete trial training, constant time delay, and other teaching strategies commonly utilized by special education teachers, more difficult to implement. Banda, Dogoe, & Matuszny (2011) found, through a literature review, that the use of video modeling/prompting increases academic and behavioral skills and improves the experience of inclusion for students with disabilities. The more successful experience a student with a

disability and his or her family has during kindergarten can set the tone for a positive educational experience. Teaching social skills is probably the most important factor of success because it allows the student to independently participate with his or her peers in a wide variety of activities during the school day.

Video modeling/video prompting is considered as evidence based practice in the field of special education (Banda et al. 2011). Literature has reported that video modeling is a noninvasive and socially valid intervention strategy and a teacher-friendly. However, a thorough review of literature reveals that a great number of studies involved students with autism spectrum disorder. Furthermore, a great number of interventions have been delivered in a 1:1 teaching arrangement, which is almost impossible in a real classroom setting. Hammond and Whatley (2010) found on only two research articles in which the researchers used a group setting rather than a 1:1 setting. My research will expand the knowledge base by providing a video modeling intervention to a group of kindergarteners with moderate to severe disabilities.

Plan to meet the initiative outcomes.

- Throughout the project, I will maintain regular contact with the Graduate Student Center and participate in relevant workshops. I will also record and reflect on my meetings with Dr. Lee.
- Upon the completion of my project, I will write up the project and present a written and oral summary at a student research event and/or a special education related conference.
- I will submit a manuscript for publication to a peer reviewed journal with Dr. Lee's assistance.

References

- Banda, D., Dogoe, M., & Matuszny, R. (2011). Review of video prompting studies with persons with developmental disabilities. *Education and Training in Autism and Developmental Disabilities*, 46, 514-527.
- Hammond, D.L., Whatley, A.D., Ayers, K.M., & Gast, D.L. (2010). Effectiveness of video modeling to teach *iPod* use to students with moderate intellectual disabilities. *Education and Training in Autism and Developmental Disabilities* 45(4), 525-538.
- Norman, J.M., Collins, B.C., & Schuster, J.W. (2001). Using an instructional package including video technology to teach self-help skills to elementary students with mental disabilities. *Journal of Special Education Technology* 16(3), 5-18.
- Plavnick, J.B., & Ferreri, S.J. (2011). Establishing verbal repertoires in children with autism using function-based video modeling. *Journal of Applied Behavior Analysis* 44(4), 747-766.
- Taber-Doughty, T., Bouck, E.C., Tom, K., Jasper, A.D., Flanagan, S.M., & Bassette, L. (2011). Video modeling and prompting: a comparison of two strategies for teaching cooking skills to students with mild intellectual disabilities. *Education and Training in Autism and Developmental Disabilities* 46(4), 499-513.