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# The Comparison of Video Modeling and Task Analysis to Teach Daily Living Skills to Non-Verbal Students with Developmental Disabilities in a Transition Program

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The Comparison of Video Modeling and Task Analysis to Teach Daily Living Skills to Non-
Verbal Students with Developmental Disabilities in a Transition Program


A Project Presented to

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By

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ABSTRACT

The purpose of this study was to examine the comparison of using video modeling and task analysis to teach independent living skills to students in a transition program. Two non-verbal students with developmental cognitive disabilities participated in this study. The students were taught daily living skills that are part of a functional curriculum (e.g., loading and unloading the dishwasher, brushing their teeth, washing their face, sweeping, and cleaning a table). The first student (Student A), was shown a pre-recorded video of the task being performed and asked to perform the task. The second student (Student B) was presented with a task analysis with visuals for each of the five tasks, breaking down each task into steps. Both students were asked to complete the task, and their performance was rated according to a five-point scale. The level of prompting needed by the student to complete the task was also rated according to the Hierarchy of Prompts. In addition, observations related to the effectiveness of task analysis and video modeling were also recorded during student completion of each task. Based on the data collected over the course of three weeks, there was a higher degree of independence reached and less intrusive prompts needed for Student A to complete the majority of daily living tasks after being provided the video modeling intervention, than for Student B after being provided the task analysis intervention. Based on these results, the use of video modeling to teach independent living skills to non-verbal students with developmental disabilities is recommended as a useful tool to increase student independence and overall performance.

*Keywords:* Video Modeling, Task Analysis, Transition, Developmental Disabilities, Special Education, COVID-19

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CHAPTER ONE

INTRODUCTION

**General Problem**

Employment training, post-secondary planning, and daily living skills are the main

components taught at the transition level for students in special education. Daily living skills that

are part of a Functional Curriculum include washing dishes, loading and unloading the

dishwasher, cleaning tables, sweeping and mopping the floor, loading and unloading the washing

machine, sorting/putting away laundry, completing a personal hygiene routine, etc. Depending

on their current abilities, students with developmental disabilities require a varied level of

prompting, also referred to as a Hierarchy of Prompts, to complete these tasks. In order to reach

an increased level of independence, prompts need to be faded once achieved, and a less

restrictive prompt put in their place, until the student is able to complete the task on their own

without the use of prompts. For example, if a student is able to hang up their jacket when a

verbal prompt is given to do so, a less restrictive prompt, such as a picture cue, needs to replace

the verbal prompt.

There are many different types of prompts that assist in teaching students a task. Physical

prompts (both full and partial), modeling, visual/picture, verbal, gestural, and natural cues.

Investigating which type of prompt helps students to complete these tasks independently is

important when teaching daily living skills. Reaching a higher level of independence in the area

of daily living skills is a goal for many students with developmental disabilities.  Although

prompts are successful in promoting a correct response during instruction, problems with prompt

dependence may occur in students with developmental cognitive disabilities (Gorgan & Kodak,

2019).

## Purpose/ Rationale

The purpose of this study is to examine the use of video modeling to teach independent

living skills to students in a transition program. Extensive research on video modeling has been

conducted with the Autism Spectrum Disorder (ASD) population. However, the use of video

modeling with non-verbal student's needs to be researched in order to discover its effectiveness.

## Subjects and Setting

### Subjects

This study was conducted in a transition program for students with mild-moderate and

severe-profound developmental disabilities in the southern suburbs of the Twin Cities.

Participants include two female students (Student A and Student B) with severe-profound

developmental cognitive disabilities. Both students have similar transitional needs in the areas of

employment preparation and independent living skills.

Student A is a twenty-year-old African American female student with severe-profound

developmental disabilities. She is non-verbal, using mostly gestures and an Augmentative

Communication to communicate. Student B is a twenty-year-old Caucasian female with severe-

profound developmental disabilities, who is also non-verbal and uses American Sign Language

(ASL) to communicate. Both students participate in a daily living skills seminar, where they

practice basis tasks such as cooking, cleaning, and personal hygiene. Participants were selected

based on their disability (developmental cognitive disability) and mode of communication (non-

verbal).

**Setting**

This study was conducted in a transition program for students with mild-moderate and severe-profound developmental disabilities in the southern suburbs of the Twin Cities. This study took place during an independent living seminar taught in the morning. This seminar consists of a group of eight students, two teachers, and three educational assistants. Subject matter consists of a variety of daily living skills, including cooking, laundry, dishes, personal hygiene, and basic cleaning tasks.

## Informed Consent

I obtained permission to conduct this study from the Institutional Review Board at Minnesota State University-Moorhead and the school district in which this study took place in. Permission was received from the principal of the school where this research was conducted (See Appendix A). I sent out a permission slip to each participant's parent/guardian (See Appendix B) and I received permission from each participant's parent/guardian before conducting this study. A method of assent statement was read to the participants in this study before starting. The students confirmed their understanding of the method of assent and their agreement to participate in the study via use of their communication device and Sign Language "Yes" and "No" options.

CHAPTER TWO

REVIEW OF LITERATURE

Independent living tasks are one of the essential skills taught in a secondary transition

program for students receiving special education services. A secondary transition program is for

students ages 18-21 who still have transitional needs in the areas of employment, post-secondary,

and independent living skills upon graduation from High School. For students with

developmental cognitive disabilities, lack of daily living skills makes them more dependent on

others and increases the overall burden of care for staff (Haveman et al., 1997). Increasing

independence of daily living skills will help adults with developmental cognitive disabilities in

their future living arrangements. Some adults with developmental cognitive disabilities will go

on to live with s roommate, some in a group home, while others may continue to live at home

with their parents, depending on their level of independence. When teaching independent living

tasks to students with developmental disabilities, different levels of prompting are used.

Examples of prompts used include, but are not limited to, physical, verbal, modeling, gestural,

and visual prompts. Video-modeling, a type of modeling prompt, has been used with great

success in a variety of special education settings, to teach a wide range of content and skills.

Video modeling is an evidence-based prompting strategy that can be used to increase positive

behaviors and help teach skills to individuals with disabilities. It is a teaching method where an

individual watches a video of someone completing an activity and imitates the activity

themselves. In many instances, video modeling has been used to teach skills or content to a

specific group of students with the same disability (e.g., Autism Spectrum Disorder). Though

much research has been conducted on the use of video modeling with students who have Autism

Spectrum Disorder, there has not been much research on the use of video modeling with students who have Developmental Cognitive Disabilities.

### The Use of Video Modeling with Students with Autism Spectrum Disorder

Autism spectrum disorders (ASDs) are a set of complex developmental disorders that involve impairments in social interaction and communication as well as patterns of repetitive behaviors and/or restricted interests (American Psychiatric Association, 2000). Currently 1 in 68 children is diagnosed with an autism spectrum disorder (ASD), with some locations in the United States reporting rates as high as 1 in 47 children (Centers for Disease Control and Prevention, 2014). Video modeling has been used in an extensive amount of cases when teaching skills to students with Autism Spectrum Disorder (ASD). In the article written by Delano (2007), nineteen studies using video modeling with students with Autism Spectrum Disorder were reviewed. The data in the 19 studies reviewed suggest that video modeling interventions were related to positive gains in social–communicative skills, functional skills, perspective taking skills, and problem behavior. As referenced in an article by Cardon (2015), "The rise of personal computers (i.e., the iPod touch, tablet computers, netbooks) as recording and delivery systems has expanded potential applications substantially" (p.407). Initial research suggests, for example, that iPod touches, smartphones, and iPads are viable video modeling alternatives to televisions, laptops, and portable DVD players (Cihak et al., 2010). Moreover, tablet computers like the iPad have increased the use of video modeling in homes and educational settings (Cardon, et al., 2015). According to Shipley-Benamou, et al., (2002), "There is a vital need for teaching strategies that are specifically designed for individuals with autism to help foster their independence." Video modeling has been found to be an effective strategy when teaching students with Autism Spectrum Disorder.

**Benefits of Video Modeling**

Through research, many benefits of using video modeling have been identified. One effective strategy to aide young children in learning social-communication skills is to model the behavior of individuals around them. This process has been termed observational learning or modeling (Bandura, 1977). Video self-modeling (VSM) is a form of modeling that allows individuals to observe their own behavior. Video modeling encourages independence by shifting the intervention stimulus away from adult instruction and toward a medium that requires very little, if any, adult prompting. In addition, although the student may require some assistance and instruction during initiation of the intervention, over time, viewing of the video model can become a completely independent task that he or she initiates (Wilson, 2013). VSM allows an individual to imitate targeted behaviors by observing her- or himself successfully performing the behavior (Dowrick, 1999). VSM has been used across multiple disciplines and populations, including children with attention deficit hyperactivity disorder (ADHD), behavioral disorders, autism spectrum disorders, learning disabilities, cognitive disabilities, and various physical disabilities (Bellini & Akullian, 2007). According to Gelbar et al. (2011), "Video self-modeling (VSM) is an intervention strategy that has shown promise in both teaching skills and remediating problem behaviors for individuals with ASD" (p.15). VSM has been found to be an effective intervention for a variety of deficits present in people with ASD, as well as a skill-building intervention targeted for this population, such as improving language or social skills. Bellini and Akullian (2007) conducted a meta-analysis of video modeling and VSM interventions for individuals with ASD and found that video modeling interventions (including VSM) met criteria for being an evidence-based practice.

**The Use of Video Modeling to Teach Employability Skills**

One area video modeling has been researched extensively is that of employment. According to Burke et al (2013) "One form of support that has been used to bridge the gap between unemployment and employment for individuals with IDD involves a job coach" (p.2). Job coaches often provide vocational and social support training for employment-age adults with disabilities and have been found to be effective at increasing earnings and time in employment for individuals with disabilities. Although the use of job coaches can produce individual successes, they present numerous challenges. For example, the use of job coaches is often time consuming and can involve working with employees with disabilities for up to 20 hours per week for up to 6 months. One potential alternative to job coaches is to take their primary functions (i.e., modeling, prompting, and feedback) and automate them (Cardon, et al. 2015). In an article by English et al. (2017), a study on the effectiveness of video modeling with video feedback (VFB) intervention to teach vocational gardening skills to three adults with autism spectrum disorder was conducted. The findings support a small body of research indicating that video modeling (VM) may be an effective instructional procedure for teaching vocational skills to adults with ASD.

**The Use of Video Modeling to Teach Independent Living Skills**

According to Aldi et al. (2016), "Teaching activities of daily living skills (ADLS) typically requires that the learner perform the behavior in the natural environment. One consideration is how the learner could acquire a skill and perform it in the natural environment with limited prompting. However, these skills also need to be maintained over time. Research has supported video modeling as a prompting procedure that can maintain skills over time

(Burke et al., 2013). Using video modeling to teach independent living skills is an effective

approach that leads to student independence.

## The Use of Video Modeling to Teach Students with Developmental Cognitive

## Disabilities

Though research using video modeling with the development cognitive disabilities

population is minimal, it's effectiveness has been noted in teaching simple meal preparation

skills. One study involving three adult males with developmental cognitive disabilities ranging in

age from age 22-37 involved the use of video modeling to teach participants to make a peanut-

butter and jelly sandwich. The results confirm that video modeling is an effective instructional

strategy for teaching a simple meal preparation skill to adult with developmental cognitive

disabilities (Rehfeldt et.al, 2003). Individuals with developmental disabilities may experience

many potential benefits from video prompting instruction (Sigafoos et al., 2007). First, learners

may more easily acquire a complex skill by viewing a simplified version that highlights the most

essential parts. Second, learners can view and practice each part separately. Further, if permitted

by the instructor, learners can engage in multiple repetitions of the same part (Gies & Porretta,

2015).

## Conclusion

Research on the effectiveness of using video modeling to teach independent living skills

to students with developmental disabilities who are non-verbal is minimal. Much like there is a

vital need for teachings strategies that are specifically designed for individuals with autism to

help foster their independence, it is just as vital of a need for teachings strategies that are

specifically designed for students with developmental disabilities who are non-verbal. Video

modeling has been proven effective in teaching employment skills to students with

developmental disabilities in the workplace. The use of video modeling to teach independent

living skills to non-verbal students with developmental disabilities needs to be investigated

further to test its effectiveness. Using the most effective prompting strategies when teaching

independent living skills to non-verbal students with developmental disabilities allows teachers

to be using best practice techniques that will allow students to reach a higher level of

independence.

## Definition of Terms

### Video Modeling

Video modeling involves a child watching a video of an adult, peer, or him/herself

performing the target behavior, and in turn displaying the behavior (Charlop-Christy et al. 2000;

Miltenberger and Charlop 2015; Sancho et al. 2010).

### Task Analysis

The process of breaking a skill down into smaller, more manageable components. Can be

developed using words or pictures (Szidon & Franzone, 2009).

### Developmental Cognitive Disabilities

A group of conditions due to an impairment in physical, learning, language, or behavior

areas (Centers for Disease Control and Prevention, 2019)

### Functional Curriculum

A functional curriculum is a curriculum that focuses upon independent living skills and

vocational skills, emphasizing communication and social skills (Evans & Fredericks, 1991).

**Hierarchy of Prompts**

The prompting hierarchy is defined as an instructional procedure characterized by an

extra stimulus prompt to guide the individual to the right choice using the least-to-most intrusive

prompt (Repp, Karsh, & Lenz, 1990).

## Hypothesis

Video modeling has been shown to have a positive impact on teaching a variety of skills

and content to students with disabilities. Therefore, it is hypothesized that video modeling will be

a more effective instructional strategy than task analysis when teaching daily living skills to

students with developmental disabilities.

CHAPTER THREE

METHODOLOGY

**Research Questions**

With the prompting hierarchy as the focus of our work as a school staff this year, I have become more interested in how video modeling increases student independence in completing daily living skills. This focus led me to ask the research question, "*What impact does video modeling have on teaching daily living skills to non-verbal students with developmental disabilities?"* In addition to this research question, I created a sub-question to help guide my research. This sub-question is, "*How do the effects of video modeling compare to the effects of visual task-analysis when teaching daily living skills to non-verbal students with developmental disabilities?"* These research questions helped guide me in the data collection and analysis process.

**Research Plan**

The tasks taught that students were asked to complete were: kitchen tasks (loading dishwasher, unloading dishwasher, washing table, and sweeping), and personal hygiene tasks (washing face, and brushing teeth). Student A was presented with video modeling as an intervention, while students B was presented with task analysis as an intervention (See Appendix C).

**Methods**

This study was conducted using a single-subject research design. Two types of data were collected during the three-week study. The first is a two-part rubric score (See Appendix D)

given to each participant after completing the independent living skill. Student A was given a

rubric score after being provided the video modeling intervention and completing each task.

Student B was given a rubric score after being provided the task analysis intervention and

completing each task. The second source of data was qualitative data collected through

observational notes.

**Schedule**

The first week, kitchen tasks (unloading and loading the dishwasher) were taught using

video modeling with Student A and task analysis to Student B. The second week, kitchen tasks

(sweeping and cleaning a table) were taught using video modeling with Student A, and task

analysis with student B. The third week, personal hygiene tasks (washing face and brushing

teeth) were taught using video modeling with Student A, and task analysis with Student B.

**Ethical Considerations**

There were no foreseeable risks involved in this study, as students were asked to perform

tasks they would otherwise perform as part of this independent living seminar. There was no

direct benefit to the subjects for their participation in this study. However, the information

obtained from this study helped provide data on best practice for teaching independent living

skills to students with developmental disabilities. The name of the school and staff was not made

public. Student names were replaced by pseudonyms that made the child unidentifiable.

CHAPTER FOUR

RESULTS

**Data Collection**

The purpose of my study was to examine the use of video modeling to teach independent

living skills to non-verbal students with developmental cognitive disabilities in a transition

program. The focus of my study was to answer the following questions "*How do the effects of*

*video modeling compare to the effects of visual task-analysis when teaching daily living skills to*

*non-verbal students with developmental disabilities?"* and "*What impact does video modeling*

*have on teaching daily living skills to non-verbal students with developmental disabilities?"*.

Data was collected over the course of three weeks, in the form of quantitative data by using

rubrics to rate both task completion, and task independence/hierarchy of prompts used for both

Student A and Student B on each of the six individual independent living tasks being performed.

Student A was asked to complete the task after being provided video modeling. Student B was

asked to perform the task after being provided a task analysis. The task completion rubric used

was a five-point scale, with zero (the lowest score possible) meaning the student completed the

task with four or more errors, and four (the highest score possible), meaning the student

completed the task with zero errors. The task independence rubric was a separate five-point

scale, with zero (the lowest score possible) meaning the student required physical prompts to

complete the task, and four (the highest score possible), meaning the student completed the task

with no additional prompts after task analysis or video modeling of the task was provided to

them. These two rubric scores combined resulted in a highest possible score of eight. Qualitative

data was also collected in the form of comments and observations recorded as both Student A

and Student B performed each of the six independent living tasks.

## Results

**Research Question One: "How do the effects of video modeling compare to the effects of visual task-analysis when teaching daily living skills to non-verbal students with developmental disabilities?"**

For the first task, washing the table, Student A received an overall combined rubric score

of 6, while Student B received an overall combined rubric score of 5. The next independent

living task, sweeping the floor, Student A received an overall combined rubric score of 6, and

Student B received an overall combined rubric score of 5. For the task of loading the dishwasher,

Student A received a combined overall rubric score of 6, and Student B received an overall

combined rubric score of 3. For the task of unloading the dishwasher, Student A received an

overall combined rubric score of 8, as did Student B. For the task of brushing their teeth, Student

A received an overall combined rubric score of 8, and Student B received an overall combined

rubric score of 6. And lastly, for the task of washing their face, Student A received an overall

combined rubric score of 6, and Student B received an overall combined rubric score of 5. A

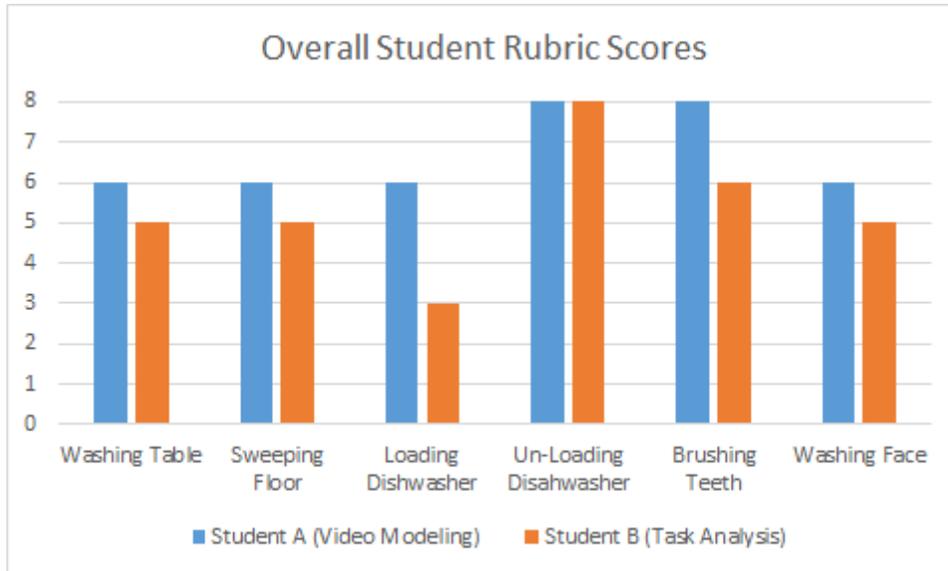visual representation of these results are shown in Figure 1 below.

*Figure 1.* Overall Student Rubric Scores

When looking at the rubric scores separately, the task completion rubric scores are as follows. For the first task, washing the table, Student A received a task completion rubric score of 3, as did Student B. The next independent living task, sweeping the floor, Student A received task completion rubric score of 3, and Student B received a task completion rubric score of 2. For the task of loading the dishwasher, Student A received a task completion rubric score of 3, and Student B received a task completion rubric score of 2. For the task of unloading the dishwasher, Student A received a task completion rubric score of 4, as did Student B. For the task of brushing their teeth, Student A received a task completion rubric score of 4, and Student B received a task completion rubric score of 3. And lastly, for the task of washing their face, Student A received a task completion score of 3, as did Student B. A visual representation of these results are shown in Figure 2 below.
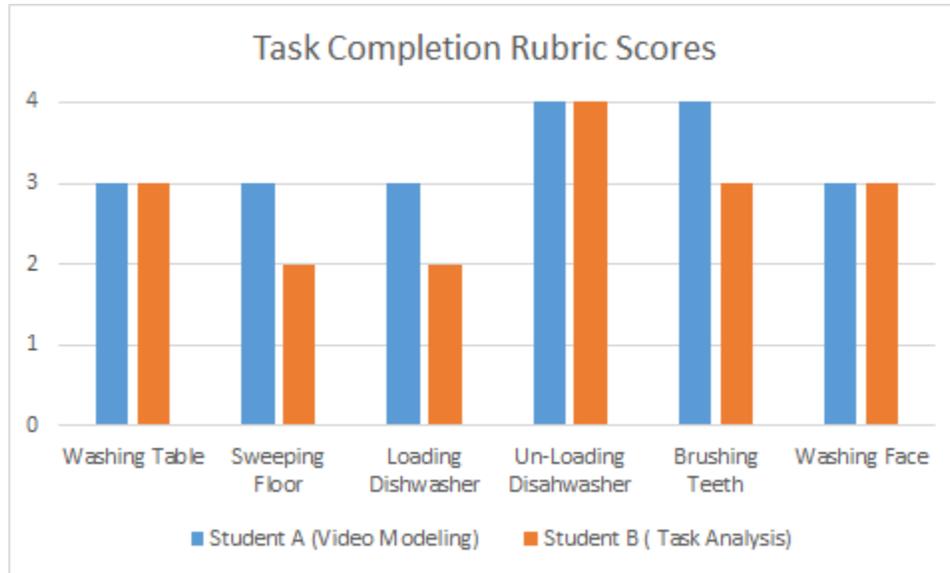
*Figure 2.* Task Completion Rubric Scores

When looking at the rubric scores separately, the task independence rubric scores are as follows. For the first task, washing the table, Student A received a task completion rubric score of 3, and Student B received a score of 2. The next independent living task, sweeping the floor, Student A received task completion rubric score of 3, and Student B received a task completion rubric score of 3. For the task of loading the dishwasher, Student A received a task completion rubric score of 3, and Student B received a score of 1. For the task of unloading the dishwasher, Student A received a task completion rubric score of 4, as did Student B. 1. For the task of brushing their teeth, Student A received a task completion rubric score of 4, and Student B received a score of 3. And lastly, for the task of washing their face, Student A received a task completion score of 3, and Student B received a score of 2. A visual representation of these results are shown in Figure 3 below.
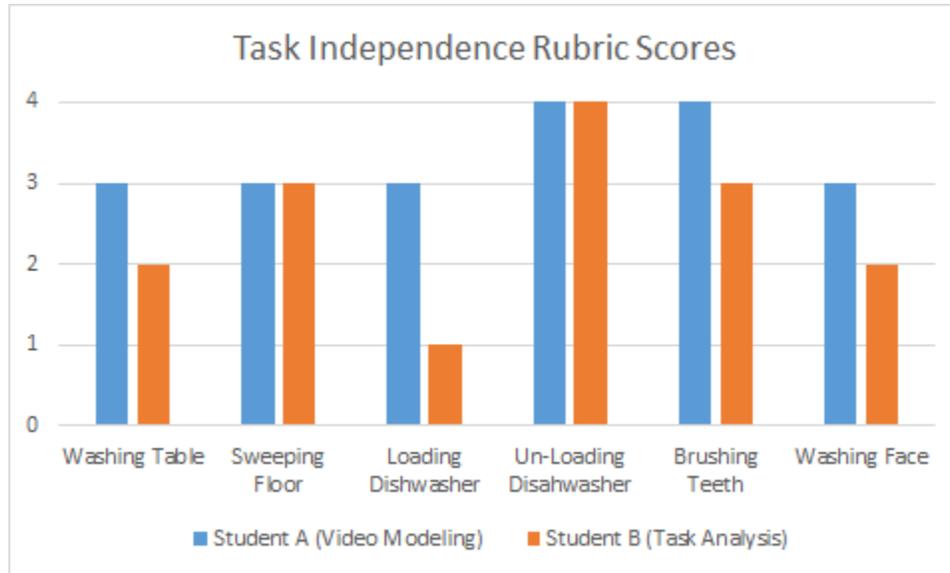
*Figure 3*. Task Independence Rubric Scores

When analyzing the data that was collected over the course of these three weeks, specific

themes became evident. Overall, Student A received higher overall scores than Student B, on all

tasks except un-loading the dishwasher, where both students received the same overall score. I

was somewhat surprised that both students received the same overall score on the task of

unloading the dishwasher, as this task had the most steps to complete, and I would have thought

one or both students would have received a lower score in general, due to needing one or more

prompts to complete the task.

When looking at just the task completion rubric scores, there is less of a discrepancy

between the scores of Student A and Student B than of the combined rubric scores previously

reported. On the tasks of washing the table, un-loading the dishwasher, and washing their face,

Student A and Student B received the same score, completing the task with one or fewer errors.

On the other three tasks, sweeping the floor, loading the dishwasher, and brushing teeth, Student

A received a score 25% higher than Student B. Student B completed the task with fewer errors

than Student B.

When studying scores solely from the task independence rubric for Student A and

Student B, both participants received the same score on the tasks of sweeping the floor and

unloading the dishwasher. However, for the tasks of washing the table, brushing teeth, and

washing face, Student A scored 25% higher than Student A. On the task of loading the

dishwasher, Student A scored 50% higher than Student B. This was reflected in the qualitative

observational notes which reported that Student B required a modeled prompt (after both visual

and verbal prompts were not successful) when they forgot the step of rinsing a dish.

Based on the data collected, the effects of the video modeling intervention allowed for

Student A to complete daily living skills with a higher level of independence and less intrusive

prompts, when compared to the task analysis intervention used with Student B.

**Research Question Two: "What impact does video modeling have on teaching daily living
skills to non-verbal students with developmental disabilities?"**

Qualitative data was taken through comments and observations written down while the

students were completing each task. These comments and observations provide more detail as to

what errors were made and what prompts were needed and sued with each student. The

comments and observations have been organized in the table below.

Table 1
*Comments and Observations*

| Task | Student A (Video Modeling) | Student B (Task Analysis) |
| --- | --- | --- |
| Washing Table | Made one error while completing this task by not putting soap in the water. When visual prompt was given by showing the video paused on this step, Student A completed this step. | Followed the task analysis but needed a verbal prompt to put the rag in the basket at the end of the task when she left it on the counter. |
| Sweeping Floor | Had one error (not putting the dustpan away when finished) and was given one visual prompt, the video paused on this step and show to the student. | Student B swept the designated area, but skipped two lines (one line on two separate occasions). A verbal prompt "Sweep this area please" was given. |
| Loading Dishwasher | Left the soap on the counter. Staff showed a visual by pausing the video on this step, and Student A put the soap away successfully. | Forgot to rinse one dish and staff modeled how to do so (after visual and verbal prompts were not successful). She left the soap on the table and was provided a verbal prompt to complete and did so successfully |
| Un-Loading Dishwasher | Completed all steps following the video model with no errors needed for additional prompts. | Followed all steps on the task analysis and required no additional prompts. The students did have pictures on the outside of the cabinet doors to show which cabinet each item goes in |
| Brushing Teeth | Completed all steps following the video model with no errors or need for additional prompts. | Skipped last step to put all items away and required one visual prompt (a picture showing to put all items away), then did so successfully. |
| Washing Face | Completed the task with one error, food was still left on her face. Staff paused the video on the step "look in mirror and wash face until clean" and Student A completed with step with no additional prompts. | Followed the task analysis, but did still have food on her face when finished and required one verbal prompt to "wash face until clean". |

The quantitative data collected through comments and observations served as valuable insight into what kinds of errors were made, and which kinds of additional prompts were required for each student to complete each task. Upon reviewing the comments and observations made for each student, I found that Student B required more intrusive prompts, in the form of verbal, visual, and even modeling prompts, to complete the task. Student A required less intrusive prompts, never needing a more intrusive prompt past a visual prompt of the video paused on the step they missed. This leads me to believe that video modeling allowed Student A to more independently complete the task.

## COVID-19 Pandemic Implications

While conducting research for this study, the COVID-19 pandemic put a halt to "normal" education, as we knew it. Minnesota entered into a time of distance learning, in which buildings closed and instruction continued online. As I am writing this in April 2020, we are continuing the distance-learning model, while we teach and learn from home until the end of the school year. In response to distance learning, my co-worker and I developed a visual schedule for students and parents/guardians to follow throughout the week. Visual schedules have proven to be a vital tool for students to keep routine and provide prompts before transitions. The schedule is revised each week and different employment, post-secondary, and independent living activities are linked within the schedule. Students are also provided with a choice board of assignments. Video models of the tasks being performed are embedded within the visual schedule for the week. Examples include doing the dishes, taking out the trash, making their bed, and sorting recycling. Students are asked to document completion of their assignment by sending a picture or video of them completing the assigned task.

This transition to distance learning has provided us with the opportunity to continue the use of the video modeling teaching strategy implemented in this study, and expand it to teach daily living skills for students to practice and perform in their homes. This unique opportunity has provided the participants in this study, as well as the other students in our transition program, the ability to perform the task in the natural environment and to maintain these skills over time. This is in alignment with what was discovered in reviewing the literature, that teaching activities of daily living skills (ADLS) typically requires that the learner perform the behavior in the natural environment and these skills need to be maintained over time. Research has supported video modeling as a prompting procedure that can maintain skills over time (Burke et al., 2013).

**Conclusions**

Throughout this study, I observed an increase in independence when both students, Student A using the video modeling intervention, and Student B using the task analysis intervention, completed the six daily living skills for this project. Based on my findings, there was a higher degree of independence reached for Student A completing the majority of daily living tasks with video modeling than for Student B with task analysis. Just as referenced in my literature review for this study, although the student may require some assistance and instruction during initiation of the intervention, over time, viewing of the video model can become a completely independent task that he or she initiates (Wilson, 2013). Through the data collection process of this action research study, I found this to be true as Student A required less intrusive, and at time, no additional prompts, to complete several of the daily living skills in this study.

CHAPTER FIVE

**Action Plan**

After studying the effectiveness of using video modeling to teach independent living skills to transition-age nonverbal students with developmental disabilities, I plan to continue using this strategy in future years of teaching. I also plan on expanding the use of video modeling to teach community-based skills, such as bagging groceries, using a cross-walk, and using public transportation. I am excited about the increased independence the use of video modeling has allowed my students to demonstrate when performing independent living tasks.

**Plan for Sharing**

Throughout my research, my students, fellow co-workers, as well as parents and guardians, were eager to hear the results of my study. I plan to hold a professional development presentation during our monthly staff meeting to inform them of the results of my study, and ways to continue implementing the use of video modeling for our students. At our spring commencement ceremony, I plan on having a table set aside for parents and students to see articles and results from the study. I also plan on having a handout with suggestions on using video modeling as a strategy to teach skills at home such as cooking, performing basic household chores, and community activities.

Moving forward, I will use the information I acquired from completing this study to better my teaching practice and utilize daily when teaching students new skills. I will also use this information to provide other educators, related service providers, and parents/guardians with insight on the effectiveness of using video modeling as a teaching strategy.

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APPENDIX A

**Action Research Study Consent Form**

**Title of Study:** The Effectiveness of Using Video Modeling to Teach Daily Living Skills to Non-Verbal Students with Developmental Disabilities in a Transition Program

**Purpose of the study:** The purpose of this study is to look at the effectiveness of using video modeling to teach independent living skills to non-verbal students with developmental disabilities

**What you will do in this study:** In this study, you will be taught to perform various independent living tasks, first with the use of task analysis, and then with the use of video modeling.

**Time required:** This study will take place during a sixty (60) minute independent living skills seminar, three days/week over the course of six weeks.

**Risks:** There are no foreseeable risks involved in this study.

**Benefits:** There will be no direct benefit to you for your participation in this study. However, we hope that the information obtained from this study may help provide information on best practice for teaching independent living skills to students with developmental disabilities.

**Confidentiality**: The name of the school or my colleagues will not be made public. Student names will be replaced by pseudonyms that will make the child unidentifiable.

**Participation and withdrawal:** The participant is free to withdraw from the research at any time, for any reason and without prejudice.

**Contact:** If you have any questions about the study, you may contact:

| | |
|---|---|
| Kasey Anderson | Ximena Suarez-Sousa |
| Co-Investigator | Principal Investigator |
| ph. (651)-307-8898 | Minnesota State University Moorhead |
| Email: kanderson@isd191.org | Email: suarez@mnstate.edu |

**Whom to contact about your rights in this experiment:** Any questions about your rights may be directed to Lisa Karch, Ph. D., Chair of the MSUM Institutional Review Board, at (218)-477-2699 or by emailing lisa.karch@mnstate.edu. You will be given a copy of this form to keep.

**Agreement:** The purpose and nature of this research have been sufficiently explained and I agree to participate in this study. I understand that I am free to withdraw at any time and my withdrawal will not affect any future relationship with Kasey Anderson.

Signature of Guardian: _____ Date: _____

APPENDIX B

District Approval Form

January 16, 2020

To Whom It May Concern,

This letter is to grant Kasey Anderson permission to conduct an action research study at BEST

Transition Services in Burnsville-Eagan-Savage School District 191 during the 2019-2020

academic year. I understand that this study poses no risk to those persons involved or to the

Burnsville-Eagan-Savage school district. I also understand that all information received will be

kept confidential and will only be used for purposes of this study.

Sincerely,

Dr. Jennifer Middendorf

Student Services Supervisor
Burnsville-Eagan-Savage School District 191

APPENDIX C

Task Analysis

## Unloading the Dishwasher

- [ ] Open dishwasher door.
- [ ] Take cups out.
- [ ] Put cups away.
- [ ] Take bowls out.
- [ ] Put bowls away.
- [ ] Take plates out.
- [ ] Put plates away.
- [ ] Get silverware.
- [ ] Put silverware away.
- [ ] Close dishwasher door.

## Sweeping

- [ ] Clear floor.
- [ ] Get broom.
- [ ] Get dustpan.
- [ ] Sweep dirt into a pile.
- [ ] Sweep dirt into dustpan.
- [ ] Put dirt into garbage can.
- [ ] Put broom away.
- [ ] Put dustpan away.

## Visual Task Analysis: Brush Teeth

- put toothpaste on toothbrush [ ]
- bottom teeth [ ]
- brush teeth [ ]
- brush teeth [ ]
- gargle [ ]
- top teeth [ ]
- wipe face [ ]

APPENDIX D

Data Collection Sheet

<u>Student:</u>   Student A       Student B

<u>Task:</u>

<u>Intervention:</u> Task Analysis        Video Modeling

Task Completion Rubric

| 4 | 3 | 2 | 1 | 0 |
|---|---|---|---|---|
| After task analysis or video modeling was provided ,the student completed the task with zero errors | After task analysis or video modeling was provided, the student completed the task with 1 error | After task analysis or video modeling was provided, the student completed the task with 2 errors | After task analysis or video modeling was provided, the student completed the task with 3 errors | After task analysis or video modeling was provided, the student completed the task with 4+ errors |

Task Independence/ Hierarchy of Prompts Rubric

| 4 | 3 | 2 | 1 | 0 |
|---|---|---|---|---|
| The student completed the task with no additional prompts after task analysis or video modeling was provided | The students required visual prompt(s) to complete the task after task analysis or video modeling was provided | The students required verbal prompt(s) to complete the task after task analysis or video modeling was provided | The students required modeling prompt(s) to complete the task after task analysis or video modeling was provided | The students required physical prompt(s) to complete the task after task analysis or video modeling was provided |

Score:  /8

<u>Comments/Observations:</u>