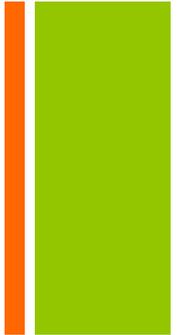# Using Video Modeling and Video Prompting to Teach Employment Skills

Ryan Kellems, Ph.D., Brigham Young University

Vidya Munandar, University of Kansas

+ Who Are we?

Ryan

- Currently an Assistant Professor of Special Education at BYU
- Former high school special education teacher
- Received my Ph.D., from the University of Kansas focusing on Secondary Transition
- Currently conducting multiple studies using video modeling, video prompting and augmented reality to teach transition related skills
- Conducts Professional Development on how to implement VM and VP across the country

Vidya

- Currently a doctoral student and Graduate Research Assistant at KU
- Former career counselor for college students with disabilities
- Received M. S. E., from the University of Kansas focusing on Autism Spectrum Disorder
- Currently conducting a study using video modeling, video feedback, and career coaching technique to teach job interviewing skills
- Involved in a completed study using video modeling to teach customer service skills for an employee with autism

Webinar Objectives
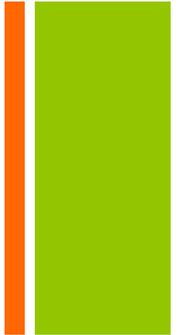
- Discuss the basic principles and research surrounding video modeling and video prompting

- Describe the general ways video modeling and video prompting can be implemented

- Give practical ideas on how video modeling and prompting cab be incorporated into your vocational work with students

Video Modeling is Based on Social Learning Theory

- Social Learning Theory (Bandura, Ross, & Ross, 1961): individuals learn by observing the behaviors of those around them

  - Children observed adults playing either aggressively or non-aggressively with a Bobo doll; those who witnessed aggressive play performed significantly more aggressive acts than the control group or non-aggressive play group

  - Modeling leads to faster behavioral acquisition than reward- and punishment-based behavioral interventions endorsed by B. F. Skinner (Bandura et al., 1961)
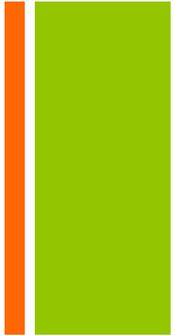
Observational Learning Theory
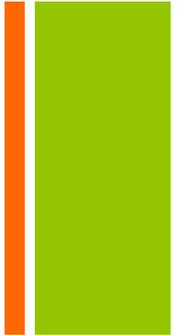
We learn by watching

Bandura (1977)

Video Modeling

Video modeling is a form of observational learning in which desired skills and behaviors are learned by watching a video demonstration and then imitating the behavior of the model.
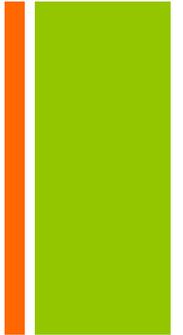
Video Self-Modeling

- Video Self-Modeling is when a student watches him- or herself perform a task at a greater capacity than he or she could typically manage

- VSM videos are primarily created in 2 different ways
  1. You film the students performing the desired behavior unprompted and edit out the mistakes.
     - So if you are trying to teach social initiations you film the student for an hour and then make a vide using the one social initiation they performed during that hour.
     - This can take a very long time
  2. Instruct the student to perform the task in the desired manner, prompting them along then way.
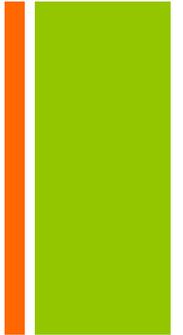
     The video is edited to remove the prompts

Video Feedback

- Video Self-Modeling involves:
    - Videotaping a student performing specific behaviors
    - Co-reviewing the videotape to evaluate the behavior performed

Video Prompting

- Video prompting uses the same video that would be created for video modeling, but adds breaks for the learner to perform that step of the task

- Video Prompting is good to use for students who may have a hard time remembering multiple steps at a time.

- This is what I have used most in my practice and my research.

+ Video Priming
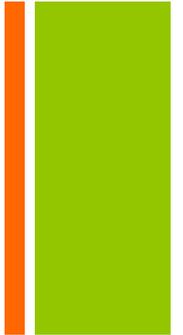
- Think of it like priming a pump

- The video is shown prior to completing the task. This may be several hours before hand.

- An example is an individual may watch a video prior to work that discusses all of the things they need to know for work such as
  - How their uniform should look
  - Commonly performed tasks
  - What to do if they don't know how to do something

- It is meant to remind students rather than teach new skills

Students who benefit from VM
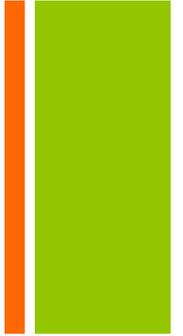
- Students who are visual learners

- Individuals who may have difficulty processing language

- Individuals who rely heavily on prompts, cues, or reminders about tasks or routines

- Individuals with
    - Autism
    - Traumatic Brain Injury
    - Intellectual Disability

Skills Successfully Taught Using VM
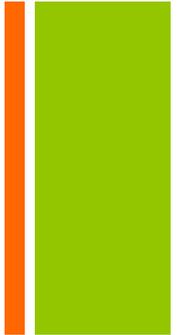
- **Vocational Skills**
  - Cleaning kennels
  - Locating items in a library
  - Preparing first aid kits, making copies, sending a fax
  - Cashier: providing change
 - Opening a combination lock

- Functional Skills
  - Self-help (cleaning eyeglasses, zipping jacket)
  - Setting a table, preparing orange juice, preparing letter to be mailed
  - Purchasing/ordering fast food
 - Hygiene

- Social/Communication Skills
  - Job Interviewing
  - Conversational speech
  - Understanding different perspectives
  - Social initiations
  - Transitioning between activities

Device Considerations
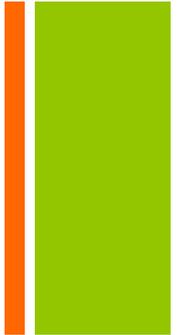
- VM and VP is versatile and van be created and viewed from any device that allows video playback.

  - iPad or other tablet (Kindle Fire, Nexus, Android, etc.)
  - Smartphone
  - iPod
  - Laptop
  - Computer
  - TV/DVD player
  - Other portable media devices

- I typically use iPads which allows me to edit (iMovie) and deliver the videos on a single device.

- Best device is one that you have access to

Create a Video Library
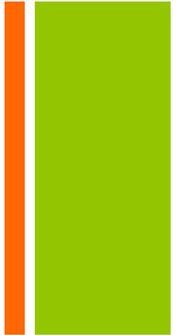
- You should use the videos with as many students as possible

- One idea is to create a video library of videos future students can use

- Get consent from the models in all of the videos so they can be used with other students

- A well done video can be used for many years with countless students

- I have done this successfully with google drive, dropbox, HP Reveal

Steps for Implementing VM and VP
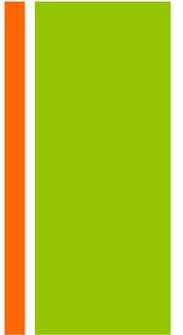
- 1. Obtain necessary equipment
    - Recording device: video camera, iPad, or smart phone

- 2. Identify target tasks
    - Tasks need to be observable

- 3. Observe the student performing the task without any assistance
    - If the student can already perform the task there is no reason to create a video

- 4. Task analyze the skill

Steps for Implementing VM and VP
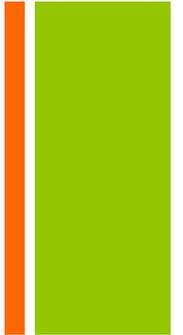
- 5. Decide what type of video are you going to make?
  - Video Modeling, Video Prompting, Video Self-Modeling or Video Priming

- 6. Which perspective?
  - Point-of-view or Spectator

- 7. Who will serve as your model?
  - Self (VSM), Classroom teacher, Teacher Aide, Peer, Employer, Co-worker

- 8. Create a script for filming the video based on the task analysis

- 9. Film each step of the task analysis

Steps for Implementing VM and VP
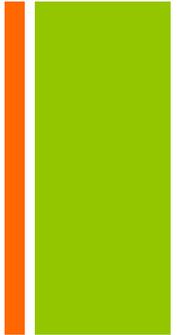
- 10. Edit the video making sure that each step in the task analysis is shown

- 11. Consider video delivery
  - Device and Application (Will the video will stop at the end of each step? This can be done using apps such as Keynote, HP Reveal or SnapGuide)

- 12. Load the video onto the device the video will be viewed from (smartphone, tablet, iPod, iPad)

- 13. Train student to operate device and access the video independently

- 14. Fading the video
  - Chunking, Time delay, Error correction, Scene deletion

- 15. Monitor and review progress

Tips and Tricks for using VM and VP in vocational settings
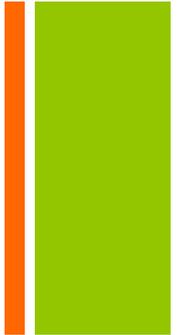
- Start with high impact videos
  - Skills you find yourself teaching multiple students all the time

- Add voiceover to the videos
  - This can be done after the video is created or simply providing commentary while filming the video

- Videos do not have to be perfect for them to be effective

- The model does not seem to make a huge difference
  - So use whoever is available

- Be creative and flexible
  - Use different perspectives and be willing to modify videos that are not working

Additional Examples & Augmented Reality
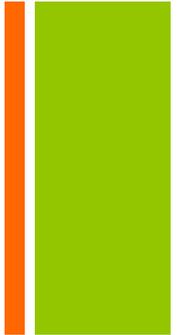
- **Dr. Kellems Youtube Channel**
  - http://bit.do/videoprompting
    - Already made VM and VP Videos
    - Task Analysis and data collection sheets are provided in links below videos

- Augmented Reality to trigger VM and VP videos
  - Recently I have been using augmented Reality as a means of triggering the VM and VP videos to start to play.
    - Students scan an image and that image triggers a predetermined video to start playing.
    - You could have pictures up around the job site at key locations that students could use to trigger a video to start playing about how to do that particular task.

- I use the HP Reveal App

+ Contact Information

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- Ryan is always looking for collaborators for research projects and is available to provide professional development to help your state, district, school or agency implement video modeling and video prompting

- I would also love to hear about your success stories with video modeling/prompting