Using Video Modeling and Video Prompting to Teach Employment Skills

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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 can 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)
We learn by watching

Bandura (1977)
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 video 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 the 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 beforehand.

- 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 can 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**
    - 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.