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Lights, Camera, Action - Part II

The Use of Video-based Supports and iPods in Employment Settings

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As discussed in part one of this two-part article, one relatively new strategy for supporting learners on the job involves the use of video-based supports – either presented on computers, portable DVD players, or mobile devices such as iPods and cell phones. Mobile devices are desirable because they're portable, relatively inexpensive, and used frequently among individuals with disabilities – which makes their use socially acceptable and reinforcing.

The purpose of this two-part article is to provide an overview of different strategies for supporting learners through video-based supports – whether they are presented as a rehearsal strategy (prior to going to work), or as a support used to prompt task completion in employment settings (through the use of iPods or other portable devices).

The video modeling and video prompting strategies were explained in part one. The video prompting section explained how this strategy assisted a young man who was employed at a pet shelter. It was mentioned that error correction video feedback was also used to correct errors. Part two picks up from there.

Additional Video-based Supports

❖ ***Error correction video feedback*** involves having learners review a positive or correct video demonstration of someone performing the skill after they make an error (Goodson, et al., 2007); Van Laarhoven, et al., 2007; Van Laarhoven, et al., 2009). In the example of the young man working at the pet shelter, once he made a task-related error, staff asked him to refer back to the video so that he could correct his errors (e.g., "watch that again"). For instance, if he had difficulty attaching the sanitizing solution to the hose, he was asked to look at the video again so he could review the positive example and make corrections in his performance. This form of video feedback is often used in conjunction with video modeling or prompting procedures whereby learners first view a video of the task or step in a task, and then refer back to the video following an error so that they have an opportunity to correct it. Other video feedback involves videotaping the individual while he or she engages in the target skill.

❖ ***Self-evaluation video feedback*** involves having learners watch a video of their own performance following task engagement. Self-evaluation feedback has often been part of a treatment package and used to reduce challenging behavior (Embregts, 2000; 2002; 2003), and to teach social communication (Maione & Mirenda, 2006; Thieman & Goldstein), daily living (Lasater & Brady, 1995), and shopping skills (Haring, Kennedy, Adams, & Pitts-Conway, 1987). With self-evaluation video feedback, learners are videotaped while they perform the target skill and are then shown the video and asked to evaluate their performance. This form of evaluative feedback is often used in sports (e.g. watching a golf swing and evaluating it) and seems particularly well-suited to tasks that involve quality of actions or social interaction. For instance, if social skills were a concern, employees could be videotaped while interacting with customers and then asked to review the tapes at a later time to evaluate their "real life" performance.

Self-evaluation feedback may also be used in conjunction with video models that present appropriate social skills. For example, a learner with emotional disabilities or mental illness could view a video-modeling sequence that demonstrates how to interact with customers while clearing away their table at Red Robin (e.g. asking customers if they need anything else). This video clip may provide examples – and non-examples – of how to interact with customers. The learner could then be videotaped while on the job, review the tape, and self-evaluate their performance. An evaluation scale of, *"I did a great job"* or *"I need to improve interactions with customers"* could be used with specific feedback (e.g., *"I should smile at the customers and provide eye contact."*)

This type of self-evaluation feedback can be extremely powerful because some learners are completely unaware of how they might be perceived by others. They may not recognize that they may be displaying offensive behavior or inadequate social skills until they are allowed to view and critique their personal performance.

Fading Supports

One potential drawback of using video prompts or video models in employment settings is that employees need time to view the videos while on the job. This can take time away from productive work time and could be problematic for some employers. To reduce time spent viewing videos, several researchers have recommended fading the video prompts once the individual becomes more independent. Some have recommended fading from video prompts to picture and/or auditory prompts (Van Laarhoven & Van Laarhoven-Myers, 2006), or to fade video prompts to video models (Sigafoos, et al., 2007) so individuals can review video models prior to going to work.

For example, during initial job training, learners may need more support to learn "how" to perform tasks (e.g., certain video segments can be created to demonstrate all steps in a skill sequence). Once they become more proficient with the task, the picture or text representing each step in the menu might be enough information for them to perform the step independently. By fading out or "scaffolding" supports, learners have the ability to complete skill sequences more quickly and efficiently.

For instance, in a recent study conducted by Brady, et al., (2010), the authors compared the effectiveness and efficiency of two different procedures for fading video prompts. Four participants were taught two different cleaning tasks using video prompts. The tasks were systematically faded from either video prompts to video models, or from video prompts to picture prompts. Results indicated that both methods of fading were effective for increasing the participants' level of correct, independent performance.

Similarly, in a study conducted by Van Laarhoven, Olson, et al., (2010), three young adults were taught to clean a bathroom initially through the use of video prompts delivered on an iPod Touch – and then the video prompts were faded to picture/auditory prompts. All three participants maintained their performance once the video prompts were faded, and two continued to increase their independent correct performance once picture/auditory cues were introduced. This suggests that video supports can be faded to less intense supports once learners become familiar with the tasks.

Another possibility is to use a combination of picture/auditory cues for skills that learners have already acquired and embedding video prompts or video models for skill sequences that are more difficult for learners (Van Laarhoven, Brady, et al., 2010).

Summary

There are several benefits to using video-based supports to promote independence in employment settings. First and foremost, video-based supports often result in increased independence, generalization, and maintenance of job-related skills for learners – and less reliance on job coaches or co-workers, all of which are critical for sustaining competitive employment. In addition, the availability of video supports allows learners to repeatedly view modeled tasks if more support is required. This is an attractive feature because this form of repeated modeling might not be feasible or desirable for co-workers or supervisors to provide in a work setting when they are simultaneously responsible for completing their own job-related tasks.

Another positive attribute of using video supports is that they can provide learners with the ability to rehearse their tasks prior to going to work – and can also serve as refreshers for employees with memory problems, or for employees who've been away from work for an extended period of time.

Employers often appreciate video-based supports because they can profit from their use to train *all* new employees, which assures cost effective and streamlined training of new hires. In addition, once organizations have numerous samples of videos available from different employers, or that depict a diverse collection of job tasks, learners can view the array of videos to identify and indicate their job preferences.

Although video-based supports have several benefits, one of the biggest barriers in providing these supports is lack of expertise with the technology. To assist direct care providers with providing video-based supports, we created a Wiki with resources and tutorials for creating video-based instructional materials. The Wiki address is http://denali.cedu.niu.edu/groups/videosupportsipods/ We hope that you find these resources useful! ■

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