Video Modelling

Returning to school during the pandemic could mean distance learning for some or many students, either temporarily or on a more permanent basis. Students who attend school in person will have to learn a number of new skills so that they can comply with health measures and Public Health recommendations.

Video modelling is a technique in which the targeted behaviour is modelled through the use of video.

Video modelling is a strategy that has proven effective for teaching many skills to individuals with ASD. Although it is an evidence-based intervention for learners with ASD, video modelling may also be helpful in teaching skills to all learners whether they are physically at school or not. It could even be used to provide support for parents who are supervising their children's distance learning.

Generally, video modelling consists in having a learner watch a video in which a model demonstrates the target behaviour that the learner must then imitate. Viewing the video enables the learner to see what the behaviour looks like along with how, when and why they should use it.

Benefits of Video Modelling

Promotes visual learning or learning by observation

Modelling shows learners what the skill should look like and provides learners with visual support.

Reduces the number of requests or instructions offered to the learner

Because the learner watches a video containing all the steps, it is not necessary to offer instructions for each one.

Does not require the presence of other people

Certain learners could feel uncomfortable or embarrassed to observe another person model a behaviour and could prefer to watch a video.

Ensures consistent, repetitive and structured interventions

Modelling stays the same during each viewing which ensures a certain consistency.

Allows you to start or stop the video at strategic moments

The video can be stopped or paused at a specific moment so the learner can view a particular element of the modelling.

Increases the learner's motivation and participation

Technological tools are popular with young people and can thus increase their motivation and participation.

Allows you to eliminate insignificant details

During editing, it is possible to eliminate or modify certain details to enable learners to focus more on the essential elements.

Prerequisite Skills to Video Modelling

To benefit from video modelling, learners must be able to **imitate and demonstrate certain skills** required by the target behaviour, and **stay focused long enough to watch the video**. If learners have not yet acquired these skills, they must be taught beforehand in order for modelling to be beneficial.

Types of Video Modelling

1. Basic video modelling

Basic video modelling is the most common type of video modelling. In this type of modelling, a third party (peer, parent, adult, etc.) is recorded performing the target behaviour. After viewing the video, the learner is immediately prompted to practice the behaviour.

When this technique is used, it is recommended that the modelling be done by a same-aged peer or a person who is important to the learner (parent, teacher, etc.). It may also be necessary to have a script and/or to practice modelling before the video is filmed.

2. Video self-modelling

In video self-modelling, the learners themselves are recorded as they demonstrate the target behaviour. This type of modelling is used to show learners what the behaviour looks like when performed correctly.

To do this type of modelling, learners must be able to follow the steps of the target skill with or without assistance. The video therefore serves as a reminder. It may be necessary to record different takes and edit them together if the learner is experiencing difficulties in some aspects of the behaviour.

3. Point-of-view video modelling

In point-of-view video modelling, the video shows what the behaviour would look like from the perspective of the person engaging in it. In other words, the camera acts as the eyes of the person practicing the behaviour. The person chosen to be the model in this type of video can be the actual learner or another person.

4. Video prompting

Video prompting is used with skills that can be broken into several steps. When learners view the video, they watch one step at a time and then carry out that step independently. The same process is repeated until the sequence is completed. This technique allows learners to carry out a more complex task by focusing on one step at a time. It helps to prevent learners from forgetting or reversing the steps of a task.

Planning Video Modelling

1. Identify the behaviour to be taught.

It is important to clearly define the target behaviour by including relevant details for the modelling exercise.

2. Choose the model.

If modelling will be done by another person, it is preferable that the model be a peer of the same age as the learner. However, a teacher, a parent, or another adult can model the skill if a peer is not available. It must be decided whether a script is necessary to ensure successful modelling. If the model is not the learner, they must be given time to practice before filming.

3. Shoot the video.

Record the video in an environment that is as familiar as possible, using the same material the learner will use in demonstrating the target behaviour. Also, it may be important to arrange the environment in a way that minimizes distractions, so the learner isn't more interested in items in their surroundings than in the modelling itself. The video shouldn't be any longer than two to three minutes (three or four minutes of recording before editing).

4. Edit the video.

During the editing phase, a title, headings, verbal instructions, etc. can be added as necessary to promote learning.

Implementing Video Modelling

1. Choose the right time.

To promote success, it is important to show the video just before the student has to practice the behaviour.

2. Eliminate distractions.

During viewing, you want the learner to focus their attention on the video, not on what is present or going on in the environment.

3. Prepare the material.

Make sure the lighting and the learner's position do not interfere with viewing. Then, have all necessary material ready to be used so the learner can practice the behaviour following modelling.

4. Show the video to the learner.

The learner views the video, with or without help from an adult. If learning happens remotely, the teacher will have to indicate clearly to the student when they should view the video. The video must be placed in a strategic location that is readily accessible to all students and parents.

The adult can play different roles during the viewing, depending on the learner's needs and level of independence.

- If the learner is capable of managing the technological equipment and viewing the video independently, the adult can simply supervise the activity.
- If there is a strong chance that the learner will become distracted or try to handle or play with the computer, tablet, or telephone, the adult can manage the technological equipment.
- The adult may also choose to show the entire video or to stop it at certain points to allow the learner to carry out the step in question.
- During the viewing, the adult make sure the learner is paying attention to the video and can provide prompting if needed.
- When learning happens remotely, the cooperation of parents/guardians may be required if the student needs support to view the video. Teachers could also show the video on their computer during a virtual meeting. That way, they ensure that all students have viewed it, and they can stop it at opportune times if necessary.

5. Prompt the learner to demonstrate the target behaviour after viewing the video.

Prompting is an aid provided before or while the learner demonstrates the target behaviour to encourage a correct response. During viewing, the adult can prompt the learner to pay attention to the video through gestures or words. After the video has been viewed and while the learner is performing the task (e.g., raising their hand to ask to speak), the adult can use different types of prompting to help the learner succeed:

- physical prompts (e.g., gently raising the learner's arm);
- verbal prompts (e.g., whispering to the learner to raise their hand);
- gestural prompts (e.g., pointing at the learner's hand or arm to remind them to raise it);
- visual prompts (e.g., showing the learner an image of another learner raising their hand);
- textual prompts (e.g., showing the learner a card, on which is written, "Raise your hand to ask to speak.")

6. Offer reinforcement to the learner for responding correctly and correct any errors that occur.

Use continuous reinforcement (i.e., reinforce each occurrence of the behaviour) while teaching a new behaviour to promote learning. When the learner engages in the behaviour independently, gradually fade reinforcement by progressively decreasing the quantity or intensity of reinforcement or by increasing the conditions required for the learner to obtain reinforcement (e.g., after two occurrences of the behaviour).

If the learner makes a mistake, let them view only the relevant part of the video and practice.

7. Collect and analyze the data.

You can collect data on the frequency or duration of the target behaviour, as well as specific information about the learner's performance (e.g., the learner has trouble doing up their zipper but successfully manages all the other steps). The data are used to view progress and decide when it is time to fade prompts, reinforcement, and video modelling.

8. Gradually fade video modelling.

When data show that the learner is successfully engaging in the target behaviour, it is important to gradually fade modelling so the learner can become independent and maintain the newly acquired skills. To fade modelling, you can insert a delay before the modelling starts, gradually eliminate the first steps in the modelling process, or stop the video before it's over. You can also remove certain scenes or parts of the video that the learner has mastered.

What if the learner does not show any progress?

Here are a few thoughts:

- Is the target skill defined in observable and measurable terms?
- Is the task too difficult? Is it possible to do a task analysis to break it into smaller steps?
- Are there any pre-requisite video modelling skills that need to be taught to the learner?
- Is the strategy being used frequently enough?
- Is video modelling being implemented effectively?
- Is the learner motivated by the reinforcers?

Summary

Video modelling is an evidence-based intervention that is particularly effective with individuals with ASD, but it may also be effective with all learners, especially when learning is taking place remotely. It's an intervention that promotes learning by observation and that helps to reduce the number of instructions that need to be given to learners and the number of social interactions for learners who find these challenging.

There are four types of video modelling: basic video modelling, video self-modelling, point-of-view video modelling, and video prompting.

Regardless of the type of video modelling used, several steps are involved, and special preparation is required. The adult must guide the learner, as needed, during the intervention, while encouraging the learner to be independent. The adult must also prompt the learner at various times during the intervention and offer reinforcement after the learner has demonstrated the target skill.

Last of all, the data collected will help determine when it is necessary to offer prompting and reinforcement and when it is time to start fading these strategies. The data will also tell you if you need to reassess video modelling and its implementation, and when you can start its fading.