

The Effective Use of Videos in Medical Education

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Used well, videos engage learners and help them retain information over time.

Limited guidance exists to assist faculty in the selection and use of videos in medical education. This AM Last Page provides tips on how to select and use videos—as a handy addition to the medical educator's toolbox—for optimal educational effect.

Millennial learners respond to “fractal” communication: novelty, utility, emotional impact, conversation, and entertainment.¹

Multimedia presentations enhance learning efficacy.²

Videos are easier than ever to find. Check out YouTube, Twitter, *MedEdPortal*, or Vimeo. Ask your colleagues or learners.

↓ Important considerations when integrating videos into your teaching ↓

VIDEO SELECTION



Emotional connection

Choose videos that evoke emotion or connect to learners' prior experience.³



Relevance and credibility

Ensure that your learners will recognize cultural references² from movie or television clips.

Introduce the clip beforehand if needed.

Seek trusted sources for videos demonstrating skills (e.g., role modeling, procedures).



Duration

Retain learner attention with videos that are 6 minutes or less.^{3,4}

Remember that learners view at varying speeds (1x, 2x).



Production value

Ensure sharp picture and clear sound.¹

TECHNICAL CONSIDERATIONS



Location

Pre-test sound and visual display systems.¹

Check that the LCD* is connected to the computer.

Ensure that the video can be seen and heard throughout the entire room.¹



File size and compatibility

Consider file size limitations in relation to internet speed.

Move the video from the thumb drive to the desktop if using a file.¹

Remember that all videos must work with the technology learners have.



Internet accessibility

Engage your information technology leader to assess the adequacy of the available infrastructure.¹

SESSION PLANNING



Congruence

Align video with pedagogical need (e.g., demonstrate skill, regain learner attention).⁴



Timing

Consider

... assigning videos *before* the teaching session, to allow for longer videos and flipped classroom.

... showing videos *during* the teaching session, to ensure videos are watched, to create a shared experience, and to monitor responses.

... assigning videos *after* the teaching session, to reinforce learning over time.



Debriefing

Facilitate discussion from diverse learner viewpoints.⁴

Consider debriefing strategies (e.g., 1-minute reflections, think-pair-shares) to inspire thought.⁴

REGULATORY REQUIREMENTS



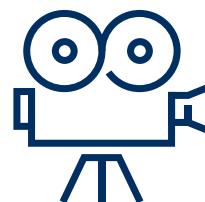
Copyright

Consult with a medical librarian to understand copyright requirements.¹



Accessibility

Follow ADA* or locally appropriate rules for learners who are visually or auditorily impaired.



Can't find the video you want?

Use your mobile device, or find a team, to create a video that suits your learners' needs. Consider sharing with others via YouTube or other video hosting sites—or, if scholarly, *MedEdPORTAL*.

*Abbreviations: LCD, liquid-crystal display; ADA, Americans with Disabilities Act.

References:

1. Dong C, Goh PS. Twelve tips for the effective use of videos in medical education. *Med Teach*. 2015;37:140–145.
2. Hurtubise L, Martin B, Gilliland A, Mahan J. To play or not to play: Leveraging video in medical education. *J Grad Med Ed*. 2013;5:13–18.
3. Hirt C, Wong K, Erichsen S, White JS. Medical dramas on television: A brief guide for educators. *Med Teach*. 2013;35:237–242.
4. Williams R, Evans L, Alshareef NT. Using TV dramas in medical education. *Educ Prim Care*. 2015;26:48–49.

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