# What are the key techniques required to create instructional videos?

Version 2

**W. Ross Younger**

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# Introduction

*Tell me and I forget; teach me and I may remember; involve me and I will learn.*

– Xunzi, *The Teachings of the Ru*, as attributed by Popik (2012)

From trades and military training to public service announcements, the training video has become a common means of instruction. They are used in educational institutions, companies, military/government service, and nowadays increasingly target the individual via the internet. They allow for standardisation of training, and can be used to free up instructors from repetitive training tasks to make better use of their time.

For the purposes of this essay the subject, the *instructional video*, will be defined in the most general terms: a film that teaches learners something, without implying anything about the depth of instruction, duration, or style of film. Even though the words 'training' and 'instruction' have subtly different definitions, they will be used interchangeably as in popular use – as will 'video' and 'film' – to avoid word fatigue.

One of the first mass instruction programmes in history was instigated by the U.S. forces in World War II, as the need to train millions of recruits became apparent (Burton, Moore and Magliaro, 2004, p. 15). A military unit staffed entirely by professional film-makers, the *First Motion Picture Unit*, was formed and went on to make over 400 educational and informational films over the course of the war (Siegel, n.d.).

A number of effectiveness studies were conducted on the wartime films, but reportedly few of their results were put into practice (Burton et al., 2004, p. 15). Nevertheless it was observed that such films were considered valuable by instructors and had a noticeable effect on the attitudes and beliefs of trainees (Saettler, 2004, p. 192). Brooker observed that "in the long run the period of World War II will mark the crossover from regarding films as educational luxury to regarding them as a necessity" (as cited by Saettler, 2004, p. 193).

However, nowadays training videos are unwelcome in some quarters, often meeting with contempt or outright hostility. An unscientific sample of Internet postings was conducted in an attempt to understand the factors leading to such attitudes. Barr (2012) was frustrated

with poor quality production, citing sound quality, audible artefacts, errors in delivery, and poor or nonexistent editing. Kelly (2012) reported the phenomenon of mandatory corporate training that does not appear to help its recipients in their day-to-day work. Koch (2014) observed that many training materials are "hopelessly generalized".

Where did we go wrong? Commercial pressures may explain the phenomenon, at least when it comes to paid-for or commissioned training; the laws of supply and demand apply in this domain as they do in others and a race to the bottom ensues. Perhaps, to some, training material has become like PowerPoint, something to simply be churned out (Tufte, 2006, pp. 3–5); in other words, a box-ticking exercise, without any real thought for its victims.

It would be surprising if all instructional videos were "bad", whatever that means. There must be some redeeming features we can identify.

Good informational design is the key to creating instructional videos. This essay will examine some theoretical aspects of information design and how they might apply in this context. It will then discuss some studies which attempt to draw a correlation between "good" design aspects and learner engagement on such videos. Finally, it will draw on multiple sources to explore, propose and discuss recommendations – key elements – for creating instructional videos.

## Qualities of Informational Design

In order to assess what might make an instructional video "good" or "bad", it is necessary to consider the underlying principles of design that might apply. Understanding in this field has progressed significantly since early studies.

Carliner proposed a three-level framework comprising *physical*, *cognitive*, and *affective* design considerations (2000, p. 564). While his model was published in the context of written technical publications, the ontology is generic and applicable to other media, such as the list of good practices for software training videos proposed by Swarts (2012, pp. 195–206).

## *Physical design*

The first level of Carliner's model (2000, p. 564) concerns itself with guiding the users to the information they need. This in itself has two levels: *locating* the information, and *physically reading*[1] it.

Locating information in printed matter consists of finding the correct document and page by using an index or table of contents (Carliner, 2000, p. 566), and by using headings as a physical signpost (Swarts, 2012, p. 198).

In the Internet age, locating information is just as important. A contemporary instructional video would be well advised to employ a degree of Search Engine Optimisation in its choice of title, description and keywords. Providing an abstract or summary may also help (H. van der Meij and van der Meij, 2013, p. 208).

The act of physically reading content is tied to its legibility. This means that the document should be presented with a suitable page layout and written in an appropriate style, and with judicious use of graphics or other techniques to draw readers' attention to important points (Carliner, 2000, p. 566).

While neither Carliner nor Swarts mention this in as many words, a poorly-contrasting colour scheme for textual or graphical elements obviously makes for bad physical design. Extending this to the context of film production, it is clearly necessary to effectively light the subject and create a visual composition which guides the viewer's eyes to the items of interest. These are standard production techniques well known by film-makers, but it seems that not all those who create instructional videos have such knowledge.

## *Cognitive design*

Once consumers have been guided to relevant information, is it comprehensible? Does it sink in or do their eyes glaze over?

Carliner describes cognitive design as focussing on the user's needs and project goals (2000, pp. 566–567). In other words, why are they reading or watching? What do they want to

[1] Physically is emphasised here because this level of the model does not concern itself with *understanding* the information; that comes at the next level.

get out of the training materials — or, in the case of mandatory corporate training, what does the company want them to learn, and how does this fit into their day job?

Swarts's take on cognitive design is more readily instructive, posing questions of *accuracy*, *completeness* and *pertinence* (2012, p. 198). Training videos should not contain any errors of fact or of execution, and must be well organised in their presentation in order to aid the viewer in creating a mental model of the subject (p. 201). Such videos should include everything they need to, and not include anything they need not (p. 201). While the preceding sentence is tautologous, it is nevertheless an indication that the instructional film-maker, and arguably the designer of any instructional material, should plan carefully and edit judiciously.

In his analysis of a typical "good" training video, Swarts praises the concept of *signposting* (2012, p. 201). The video's title frame declares its goal; there are intertitles to highlight sub-tasks. In other words the user knows in advance what they are going to learn, and the message is regularly highlighted by the framing of steps along the way (Swarts, 2012, p. 201).

Signposting could also be achieved by narration; this is the well-known "multimedia principle", that words with pictures are better than words alone (H. van der Meij and van der Meij, 2013, p. 210). The emphasis here is on co-ordination, not duplication: presenting the same verbal information both aurally and visually at the same time is counterproductive as it overloads the viewer (H. van der Meij and van der Meij, 2013, p. 211). This effect is all too familiar to many as the dreaded "death by PowerPoint" syndrome where a line of a slide is read out, the next line is revealed then read, and so on (Tufte, 2006, p. 6).

A different sort of signposting can be found in the careful use of motion graphics or other techniques to draw attention to important objects, effectively bringing them to the foreground (H. van der Meij and van der Meij, 2013, p. 219). In a software training video this might involve highlighting particular features of the interface or whenever the mouse is clicked. With a real-world video source, this could involve appropriate on-screen annotations created using a graphics overlay, or perhaps a complex 3D composition. These techniques all serve the underlying cognitive design goal: to make sure the user sees what they need to see.

### *Affective design*

The final leg of Carliner's tripodal model (2000, p. 568) seeks to promote the *emotional* impact of communication on its consumers and whether they are *motivated* to make use of what has been imparted. This includes deeper considerations such as whether the material comes across as credible, and any legal and ethical issues which may arise from it (Carliner, 2000, pp. 568–569).

Good affective design starts with engaging the consumer. A video or presentation which does not readily do so is unlikely to be paid much attention. Swarts argues that a smoothly-delivered narration without any stumbles exudes much more confidence than a quiet, stuttering or halting delivery (2012, p. 204).

Even such a simple, perhaps unconscious, decision as the complexity of language employed in a production introduces questions of affectation. Carliner questions whether it may be necessary to use technical language in order to gain credibility with technical readers – his language implies skepticism on his part – and warns of hidden connotations and nuances lurking in supposedly safe words (2000, p. 569). There may also be a sociolectic or ethnolectic factor at work; certain accents may carry implications of intelligence, or lack thereof, as relied upon by many a playground joke. The careful producer, if targeting an audience with wide demographics, should consider creating multiple dubs of a narration. However, it should be noted that attitudes towards accents may change over time; the BBC has in recent years attempted to shift its presenters away from its traditional Received Pronunciation voice, now perceived as too "London-centric", towards a more diverse mix of regional English accents (Martin, 2008).

While good *physical* design of any text component includes a careful choice of font, there is also an *affective* effect in play. For example, the use of *Comic Sans* as a font in anything other than a cartoon environment is likely to evoke feelings of contempt in many readers. This is the same effect as when unsuitable clip-art or unjustified use of strong language attracts attention for the wrong reasons.

## Correlating good design with learner engagement

Naïvely, one might suppose that a video perceived as "good" adhered to these design principles. Some studies have sought to discover a correlation. Owing to the huge number of instructional videos in existence such studies necessarily cannot be exhaustive, but they are nevertheless illustrative.

### *Study 1: small-scale instructional videos*

Swarts (2012, pp. 197–198) conducted a study on a sample of 46 instructional videos from YouTube which had sufficient user views and ratings to be meaningfully analysable. The study used a simple taxonomy which built on Carliner's model. Videos were coded to determine the proportions of introductory, instructional and concluding material, and how much consisted of actions alone, words alone, and words with actions (Swarts, 2012, pp. 197–198).

### *Study 2: large-scale lecture-style videos*

A Massive Open Online Course (MOOC) is a course of study delivered via the Internet, for free, to anyone who wishes to take part. Typically these are delivered as series of lecture videos; some also include a form of assessment.

Guo, Kim and Rubin (2014, pp. 3–4) conducted a study to measure student engagement by data-mining server logs across four MOOCs delivered on the *edX* platform, comprising a total of 862 videos. The study measured the length of time that a video was watched for, as a proxy for student engagement. This was augmented by examining whether students answered follow-up questions after watching each video, as this would further indicate engagement with the material (Guo et al., 2014, pp. 3–4).

The data set used by Guo et al. is remarkable due to its size. Data from four courses across one academic term were analysed. This accounted for a total of 6.9 million watching sessions, reportedly "four orders of magnitude larger than those available in prior studies" (Guo et al., 2014, p. 2). Such a large data set is a proper weight of evidence on which sound decisions can be made.

### *Limitations*

Swarts acknowledges that the small sample size of his study "does not lend itself to robust significance testing" (2012, p.198).

The results reported by Guo et al. come from a large data set but even so must be viewed with caution. It was a "retrospective study and not a controlled experiment" (2014, p. 8). The data also exhibit a lack of generality; they are solely taken from maths and science courses and the students, as early adopters of the MOOC paradigm, may not be representative of students in general (p. 9).

### *Findings*

Swarts (2012, p.199) observed, though did not quantify, a link between videos spending less time on introductory material and their rating poorly. There was a similar relationship between "poor" videos and carrying out actions without explanation. In other words, to achieve a "good" rating, makers of training films should introduce each procedure properly and explain the steps as they go (Swarts, 2012, p.199).

Guo et al. presented a number of findings arising directly from their data (2014, pp. 4–8). The most striking of these is that students engage better with shorter videos, with a median engagement time of no more than 6 minutes whatever the length of the video. Other factors affecting engagement include good planning, the visual format of the video ('talking head' style was found to be most engaging), and the speed and enthusiasm of delivery. They hypothesise that shorter videos are more engaging precisely due to their length, which also forces better planning and hence a better quality video in other ways (Guo et al., 2014, pp. 4–8).

The two sets of results share a common theme in pointing to good planning and organisation of video material. Swarts's main concluding point is a cognitive one, that good organisation is key to usability (2012, p. 205) as it sets up a contextual framework to aid the viewer (p. 199). Guo et al. assert that "instructors must plan their lessons specifically for an online video format" (2014, p. 10), noting that "what works well in a live classroom might not

translate into online video" (p. 6); this is a broad message, with ramifications for the physical, cognitive and affective design of training videos.

Both papers used the results of their studies to justify a list of 'best practice' recommendations. These, and recommendations from other sources, will be examined in the next section.

# Recommendations

The film-maker is concerned with praxis, not theory. This section will draw on the studies cited above, and other sources, to exhibit and discuss recommendations for training videos. A "quick-reference" form of these recommendations can be found in the Appendix (page 15).

## *Planning*

Presenting the goal or learning objectives in a logical fashion was a recurring theme across the literature surveyed. Goals should be re-communicated to viewers along the way (Swarts, 2012, p. 203; H. van der Meij and van der Meij, 2013, p. 215). Khaslavsky and Shedroff (as cited in Swarts, 2012, p. 204) call this "seducing the viewer": promising that they will learn or accomplish something big, then fulfilling that promise through a series of smaller promises. The main message here is one of careful planning. Providing a logical flow makes it easier for the viewer to maintain focus throughout a video or series.

Stolovitch, Keeps and Rosenberg espouse a five-step model for structuring in-person training sessions, which they assert has achieved "demonstrable success" over hundreds of cases (2011, p. 79). Under their model, each training session begins with its rationale and learning objectives; most time is taken up with learning activities tailored for the objectives, before wrapping up with an evaluation of learners' performance and the solicitation of feedback (2011, pp. 71–98). In the video context – as with in-person training – it is important for the rationale and goals to be presented succinctly to maintain viewer engagement. It may be challenging to effectively evaluate performance or elicit feedback from a video alone, though a broader training package could incorporate these elements.

### *Format*

Learners prefer procedural (tutorial-style) videos to lectures (H. van der Meij and van der Meij, 2013, p. 217), although this styling will not be suitable for all subjects. When the use of the lecture format is justified, the setting should be carefully considered. There is evidence to suggest that a video which resembles an informal face-to-face chat with the teacher is better received than that of a traditional classroom lecture (Guo et al., 2014, p. 6). The film-maker should choose the presentation style and format carefully, which in turn has implications for the cinematographic aspect of the production.

Material should be tailored specifically for the intended delivery format. It is possible to film lectures of a traditional length and edit them down to smaller packages, but Guo et al. found that this leads to an inferior result (2014, p. 7). While the editor looks for natural pauses in which to create breaks in the material, such places may not exist, forcing an awkward cut. Furthermore, it is difficult to retrospectively insert rationale and goal-setting if it was not already present at that point in the lecture.

Swarts observes that the trend in training videos, at least on YouTube, is to make lots of very specific content, tag it well, then "let the users sort it out" by way of ratings and view counts (2012, p. 205). However, tightly-focussed videos do not always impart a sense of the bigger picture, nor do they teach problem-solving skills. Do learners really know what they want in this regard, as Swarts claims (2012, p. 205), or is this just a side-effect of the ever-decreasing attention spans of the modern world? The question is open.

### *Duration*

Recommendations for the length of a training film are broadly aligned – that they should be kept short – but vary in the detail. Guo et al. are strident on the basis of their data in advising video producers to "invest heavily in pre-production lesson planning to segment videos into chunks shorter than 6 minutes" (2014, p. 2). Three minutes may be a better target (Guo et al., 2014, p. 4; H. van der Meij and van der Meij, 2013, p. 221). Plaisant and Shneiderman go further in recommending a duration of just 15–60 seconds (2005, p. 6). It is hypothesised that

videos of shorter duration are more engaging precisely because they force greater planning; while Guo et al. acknowledge they lack supporting data for this (2014, p. 5), it would represent an improvement in cognitive design.

Not all tasks or subjects will fit neatly into this duration constraint. It is important that each video forms a logical unit on its own, to support learners dipping in as they see fit (H. van der Meij and van der Meij, 2013, p. 221). Breaking larger topics down into bite-sized chunks may challenge the film-maker and subject matter expert alike.

### *Scripting*

Not all topics lend themselves to a fully-scripted video. Often, when physical processes are being filmed, asking for another take is either impractical or would violate continuity. Nevertheless at the very least a storyboard or outline script should be employed and any voice-over scripted (Swarts, 2012, p. 203).

Having identified the learning goals, these should be presented to learners as relevant and contextual (H. van der Meij and van der Meij, 2013, pp. 215–217). This is the 'rationale' recommended by Stolovitch et al (2011, pp. 71–98). It must be clear to the viewer why they should watch the video; otherwise, they are unlikely to engage.

Procedures should be *demonstrated*. That is to say, they should be shown and explained at the same time. Doing without explaining, or explaining without doing, are cognitively inferior (Swarts, 2012, pp. 202–203), leading to less good learning outcomes. The imperative voice is recommended when describing actions the viewer is expected to take (H. van der Meij and van der Meij, 2013, pp. 218–219).

Longer tasks should be broken up into a series of subtasks. These should be kept clear and simple, to match the learner's mental plan. It is important in doing so to keep cause and effect linked, particularly on topics such as software where the system maintains hidden state. (H. van der Meij and van der Meij, 2013, pp. 218–219)

Swarts advises reassuring the learner (2012, pp. 204–205). Some learners may be unfamiliar with or fearful of the tools and materials used, so may need a confidence boost.

Therefore, narration should be confident and include regular reassurances, which will rub off on the viewer (Swarts, 2012, pp. 204–205).

### *Production*

The film-maker should use their tools well. While it is not necessary to record in a studio to achieve best learner engagement (Guo et al., 2014, p. 6), the filming and sound recording must still be competent in order to maintain credibility (Swarts, 2012, p. 202). Swarts recommended filming in HD where possible (2012, p. 202); the time may come in future where 4K or even 8K pictures may be justifiable, but these formats should only be employed if they add to the production and can be effectively delivered, not as gimmicks for their own sake.

Everything that appears in the cut should be correct. Rehearsals can help avoid mistakes and stumbles, and any that do happen should be edited out (Swarts, 2012, pp. 203–204). Any errors in the film – even if corrected immediately – diminish the presenter's credibility and may confuse viewers.

If the video employs a voice-over, the editor should take care that it remains correctly synchronised with the structure of the film (H. van der Meij and van der Meij, 2013, pp. 210–212). That is to say, the words heard must relate to what is seen. Any timing skew will confuse learners.

Graphics may be useful to help understanding. Highlighting techniques can be used to make relevant features appear to come to the foreground (Swarts, 2012, pp. 203–204; H. van der Meij and van der Meij, 2013, p. 218). These are particularly useful in visually busy pictures, in that they draw the viewer's attention. Animations can also be used to give a change of pace, which may help viewers retain focus.

### *Cinematography and visual storytelling*

Reknowned cinematographer Joseph Mascelli wrote that "non-theatrical films should be as pictorially beautiful as possible within realistic confines" (1965, p. 169). Do high art or beauty have a place in a utility video? Perhaps not, but beautiful pictures may yet yield some mileage

as an affective tool to increase confidence in the film, that the film-maker knew what they were doing.

The nuts and bolts of the cinematographer's trade apply here as they do in all genres. The scene must of course be lit effectively. The cinematographer should choose shooting angles to give a sensation of depth (Mascelli, 1965, p. 34), and preserve visual continuity and flow (pp. 68–74).

The choice of shots is also particularly important. Swarts recommends using master shots and long shots to establish the scene, followed by close-ups for detail (2012, p. 203). The visuals must be kept faithful to what the learner will see when they carry out the task themselves (H. van der Meij and van der Meij, 2013, p. 210); this makes the point-of-view close-up shot best for many training films (Mascelli, 1965, p. 191). If an extreme close-up is justified, consider keeping fingers or tools in shot as a cognitive scaling cue (Mascelli, 1965, p. 173), but avoid letting them flash in and out of shot (p. 193).

The visual planning of the shots should take the delivery format into account. These days, this means providing lots of close-up detail. Learners increasingly watch videos on mobile devices, so the pictures must still work on a small screen when viewed at 360p or 480p.

### *Talent*

The presenter should appear as a credible source of information about the subject matter. Viewers can be sexist, ageist, or racist in ways that may not be obvious at first glance. The film-maker may find themselves in a difficult ethical situation, on the one hand wanting to cater to the audience for maximum effectiveness, but on the other not wanting to support prejudice.

The sources consulted did not agree over how fast the narration or voice-over should be delivered. Swarts recommends pacing videos "just slower than ... a typical competent performance" (2012, p. 202). Morain and Swarts call for a conversational tempo, not too quick (as cited by H. van der Meij and van der Meij, 2013, p. 212). However, Guo et al. observed a correlation between faster speaking rates and enthusiasm for the subject, leading to better student engagement (2014, p. 8). If possible, the instructional film-maker should consider what they know of their audience demographics and what speed is likely to work for them.

### *Video Delivery Platform*

Features of the video platform are generally not within the control of the ordinary film-maker when delivery is Internet-based. That said, there are multiple technologies available with different features.

Learners like to interact with videos. Both the pace of the video, and the player itself, should support interactive behaviour including repetition and skimming of segments (Guo et al., 2014, p. 2; H. van der Meij and van der Meij, 2013, pp. 212–214). It may be worthwhile to build in visual signposts within the video which would stand out during a skim of the video or of its thumbnails, where this ability is present.

The platform should support a rich metadata. Videos should be designed to be findable, with suitable title, keywords and description (Swarts, 2012, p. 205; H. van der Meij and van der Meij, 2013, pp. 208–209). In an increasingly large ocean of content, good metadata is particularly important as many users are likely to navigate by a simple Google search, at least in the first instance.

Current features of *YouTube* and *Vimeo* were examined critically. Both sites provide a video player with play/pause controls and the ability to jump to any point in the timeline. YouTube also supports automatic generation of thumbnail images, which pop up as the mouse is hovered over the video timeline: this provides a visual skimming ability. By comparison, the *lynda.com* learning platform is richer, adding a 10 second rewind, detailed bookmarking, variable-speed delivery, closed captions, and transcripts that link to the appropriate point in the video when clicked. However it is a subscription service and heavily biased towards software tutorials; this may not suit all situations.

## Conclusion

Effective communication, in all media, challenges us to think about the consumer, our message and how the two relate. Education is a special case of communication, in that we want the recipient to learn something – whether it be for subconscious repetition, or a higher-level understanding, generalisation and adaptation.

There will always be jobs for trained, experienced film-makers to make educational films. However, they will forever – as they do now – have to compete with lower-cost operators of potentially inferior quality. The smart film-maker will strive to educate their clients as to why they offer best value for money. It may be worthwhile to invest resources into making a really good basic training video, then allow the teacher to concentrate on more advanced topics in person.

Video allows for *standardisation* of training. In some learning contexts, for example noisy workshops, it can be difficult to hear what the instructor is saying, or there may be distractions in the room. On the other hand, learners can cheaply re-watch training videos until their understanding is sufficient. A further benefit to standardisation is being able to later prove what was actually said. This may be valuable to the organisation commissioning the training in some regulatory contexts or when questions of liability arise, such as investigations into industrial accidents.

Effective instructional film-making requires a careful synthesis of the film-maker's art and pedagogical communication. Training videos work when they are well-made and thoughtfully deployed; they are well regarded by learners, often found much more engaging than a presenter droning on at the front of the room. Video should be merely a tool in the instructor's toolbox, designed or chosen carefully because it makes sense as part of their message to their learners in their context.

At a theoretical level, the key elements of creating instructional videos are precisely those of Carliner's model (2000, p. 564): good physical, cognitive and affective informational design. All three aspects are vital. A well-made video is useless if learners do not perceive it as credible, exhibiting poor affective design. A video that is credible will not help if for example the explanatory narration is inaudible – bad physical design – or if it is lacking in cognitive design through illogical ordering.

All the concrete recommendations presented in the preceding section can be readily traced back to these three aspects of design. These recommendations form a long-list of key elements for instructional videos, which may be summarised as good planning, scripting, production and delivery.

# Appendix: Quick-reference recommendations

Planning

- Each video should have a rationale and a set of learning objectives.
- Promote and re-promote the objectives.
- Seduce the viewer: express goals as promises of what they will learn or accomplish.

Format

- Students prefer tutorial videos to lectures.
- If you do make a lecture, consider an informal face-to-face setting.
- Tailor the material for duration and delivery format.
- Consider making lots of small, specific videos.

Duration

- Keep it short. Aim for three minutes per video; don't go above six.
- If you break a long task into a series of shorter videos, each must form a logical unit on its own.

Scripting

- Use a storyboard or at least an outline script.
- Make goals relevant and contextual to learners. Why should they watch?
- *Demonstrate* procedures: show and explain at the same time.
- Keep subtasks clear and simple.
- Match the learner's mental plan for the broader task.
- Keep cause and effect linked.
- Reassure the viewer.
- In a tutorial, use the imperative voice.

Production

- Use film-making tools well.
- Work in HD where possible.
- Everything that appears in the cut must be correct. Rehearse. Edit out any stumbles.
- Narration or voice-over must be in synch with the video.
- Use visual highlighting.
- Animations can provide a change of pace.

Cinematography

- Light the scene effectively.
- Choose shooting angles to give a sensation of depth.
- Preserve visual continuity and flow.
- Establish with long shots, then use close-ups for detail. Consider a master shot.
- Keep the visuals faithful to what the learner will see when they do it for real. Consider the point-of-view close-up.
- In an extreme close-up, keep fingers or tools in shot for scale, but don't let them flash in and out of shot.
- Know the viewing format. If learners will watch on mobile devices, make sure the pictures will work on small screens.

Talent

- Talent should appear enthusiastic and credible about the subject.
- Use a conversational tempo, unless you know your audience will prefer something else.
- Use a confident tone.

Video Delivery

- Platform should support interactivity: skimming videos, repeating sections, perhaps transcripts and variable playback speed.
- Design for findability: title, keywords, description.

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