

Best practices for developing and disseminating audiovisual contents to promote library and information services

Juan D. Machin-Mastromatteo

Universidad Autonoma de Chihuahua, Mexico

The final version was published as (please use the following reference when citing it):

Machin-Mastromatteo, J.D. (2023). Best practices for developing and disseminating audiovisual contents to promote library and information services. In D. Baker, L. Ellis, C. Williams, & C. Wragg (Eds.), *Benchmarking library, information and education services* (pp. 295-306). Elsevier.
<https://doi.org/10.1016/B978-0-323-95662-8.00024-2>

Abstract

This chapter includes best practices for developing and disseminating audiovisual contents to promote library and information services and as such it is presented as a guide that includes the specifications and issues to consider when developing such kinds of contents for increasing reach, defining an online identity, and building an audience through social media, as the platforms where these contents are usually shared. These recommendations are structured in the main working stages: a) preproduction, with some considerations about conceiving and narrowing an idea, as well as writing a script versus improvising; b) production, including recommendations about equipment and technical specifications for filming the contents and some basics about audiovisual language, according to its various types (people, environments), computer software and smartphone applications; c) editing and postproduction, which detail recommended software for compressing, editing and adding basic effects; and d) dissemination and sharing, which involves managing and matching the characteristics of the resulting content and its accompanying materials with the limitations and features of each social media site, e.g. length of text and metadata, resolutions, image and video sizes, types and aspect ratios, as well as posting, scheduling and promoting. These best practices are intended to set a benchmark for any library or information service to compare it with what they are already doing and consider these recommendations for improving their production values.

Keywords: audiovisual production, content creation, libraries, information services, benchmark, best practices, social media.

Introduction

Libraries and information services can use alternative formats to promote their services, train their users, develop information and digital literacy, in addition to carrying out scientific dissemination tasks from an academic library (e.g., supporting researchers in the institution to share their research results with a wide audience). In this text, I present some considerations and recommendations for making videos, which can be used to establish a

benchmark for libraries and information services to create videos that can be very low budget, but with good production values.

As such, this text is divided in the key moments of video production: a) preproduction; b) production; c) editing and postproduction; and d) dissemination and sharing. The following recommendations are derived from my own experience with the Project Juantífico¹, my own initiative for making videos about scientific research, publication and dissemination, with a touch of technology and pop culture; which aims to increase my reach and visibility, in addition to helping me promote my activities. Despite being a personal project, the lessons learned from this initiative may well be transferred to libraries and information services, as we strive to make educational videos.

The types of audiovisual content we can develop, include: a) tutorials for using technologies, systems or digital services; b) answering frequently asked questions from students, colleagues or users in general; c) providing theoretical explanations, but in a concise and dynamic way; d) promoting reading and the use of information resources; e) comments on relevant news; f) presenting cultural works or places; g) interviews or podcast-like conversations; h) recordings of lectures or conferences; i) summaries of research or publications; and j) raising awareness about social and environmental issues.

Preproduction

The pre-production or planning stage is extremely important, as in any other activity. To plan a video, we can start from a general idea, something interesting, curious, or something that we know our colleagues or users may be needing. The audiovisual format allows us to provide asynchronous responses or tutorials not requiring a personal visit to the library. Start an idea, narrow it, we can fragment large topics into several parts because we want to avoid publishing videos that are too long and perhaps no one will see.

We must decide if we prefer writing a script versus improvising.

Improvisation could lead us to say interesting things that we did not plan at first and allows us to be more spontaneous, but it requires that we have a certain facility to speak once we turn on the camera. Conversely, scripting the videos allows us to take care of the smallest details, including the video's length, preventing errors and enables high levels of synthesis. I suggest aiming for a maximum length of 10 minutes per video (approx. 4 pages), from three to seven minutes is kind of a sweet spot for educational videos (of course interviews, podcasts, lectures, or conferences will be much longer).

If you choose to write a script, consider that one page will be approximately equivalent to three minutes of video; although this is not a precise measure, as it depends on the format of the page and how fast you will read the script. Also, a simple five-minutes video might need at least five hours of production and 10 hours of post-production, which will also depend on its complexity (e.g., if you include footage from other sources and visual effects). Given the importance of scripting, take your time, edit it, go back to it, read it aloud, edit it again, have

¹ <https://www.youtube.com/juantifico>

someone else read through it, edit it again. Make it simple, easy to read and to understand. If you wish to delve deeper into the topic, consider making a series. Be sure that you have a final version before filming it. When scripting, another important choice to make is whether you wish to have the cast showing on camera (if you film the person or persons) versus recording only voice overs and playing them over stock footage (or photos) that you may film or use royalty-free options².

The script may very well be written in a basic three-act dramatic structure: introduction, climax, and conclusion; or setup, confrontation, and resolution. The introduction should present the topic in a simple manner, stating why it is important to learn more about it, and hinting at what will be covered in the video. This may be followed by an intro sequence of the show (if we are establishing a series on the same style). Then, we provide the bulk of the contents, and we end with a conclusion, providing some interesting questions related to the topic and asking the audience if the video was useful, to engage the audience and invite their comments. The script should also specify where we are going to film, if we need to shoot any footage of a particular action, who is going to talk, if we wish to insert fragments of cultural works (of movies, animations, series, songs, memes). It is also important to think about the practical and digital effects we wish to use and about how we are going to film them.

There are some important extras that should be considered apart from the main contents of the videos. I started making videos from my office at the university, but when the pandemic and the lockdowns came, I resumed filming at home and when watching the news and assessing the overall emotional wellbeing of people, I came to the conclusion that I should include more humour in the videos, to provide some light-hearted touches on the topics and to include some jokes that, although silly, it would be great for me if that made someone smile or laugh, which I believe it's very necessary nowadays, even in educational and more serious videos than what are the average contents available on social media platforms. Humour will also reduce the presenter's rigidity, while providing more dynamism and improve the attention of the audience (particularly younger audiences), especially if we are discussing topics such as information, methodology and research, which might be inherently boring for most people. Managing humour may be difficult, think about silly situations, common criticisms or misconceptions toward the topics discussed; you should not direct a joke at anyone in particular (including groups) but yourself (or the characters you create), to avoid offending anyone.

Working with colleagues or students, which may help identify or develop some jokes, use memes (already existing or transform them with your own text³) or using fragments from cultural works. If using the latter, include less than five-second excerpts and present them in such a way that it seems you are interacting with it (presenting it, showing it, and then reacting or answering to it), which will allow you to use them under the fair use doctrine. This specifies that using copyright material in your videos is allowed if the use is

² A good source of free-to-use stock footage is <https://www.pexels.com>

³ You may find the latest memes at sites such as <https://knowyourmeme.com> and make your own over existing images at <https://imgflip.com/memegenerator>

transformative, it is limited (very short fragments), and it is being done with the purposes of analysis, review, criticism and/or parody. This is vital to avoid copyright strikes and open the possibility of monetizing the videos. However, also avoid overloading videos with too many elements and an extended length; as designers usually say: ‘less is more’.

It may be useful to create characters for your videos, it allows you to get into other ‘persona’. This may help introverts to present themselves and talk more at ease, as it might not be easy to feel comfortable in front of the camera. Creating other characters will also facilitate having discussions or counterpoints (even if you play all characters). Counterpoint is a common expressive resource in music, and it is typical in Latin American folklore⁴ narratives, to present a debate between (usually) two characters. Other characters may also serve the function of ‘comic relief’, leaving most of the jokes to them, for using them as vehicles for demonstrating the importance of the topics or for developing an underlying narrative behind the educational contents of the videos, in a sort of a story within a story⁵. Comic relief characters help provide the humoristic touch and can make videos more enjoyable when setting up a good dynamic with them.

Another relevant extra that provides a sense of periodicity and continuity is to design and include introductory and closing sequences in the videos. Given the characteristics and format of a continuous show that you wish to establish, provide the series with a short and catchy title. In YouTube, create a playlist for each of the series to add any new episodes there, sorted by newest first. Create an introductory sequence for each series and design a closing sequence, which may be shared among all series. The latter can include credits, links, special thanks, and an invitation to support the channel, subscribe, comment, and watch other videos. For YouTube, it is useful to have the last 10-15 seconds of our closing sequence without any text or voice, as it is possible to use the ‘End Screens’ function to add buttons over the video, which may link to other specific videos, playlists and/or to the subscribe function; in this way, the audience can continue engaging with our content.

Production

It is recommended for the cast of the videos to be aware of and manage their presence on camera, including a good and steady tone of voice, project confidence and enthusiasm toward the topics presented. When speaking to the camera, perhaps we think that we are overacting, but when looking at the filmed results, it seems that some exaggerated gestures, voice volume and tone, as well as an overflowing enthusiasm may work better, or else we will have the typical educational audiovisual content that does not stand out: because it is dull! It is also vital for the cast to have a good rest the night before recording, especially if they appear on camera (as opposed to just voice-overs). I have had to repeat filming some videos, and hence

⁴ Such as the Venezuelan poem ‘Florentino and The Devil’, which has been adapted to into film, television, music and theatre formats.

⁵ You might find the most typical example of comic relief characters in ‘C3PO’ and ‘R2D2’ from ‘Star Wars’ or in ‘The Hidden Fortress’ by Arika Kurosawa, which inspired George Lucas. These kinds of characters provide most of the comical situations and drive the story forward, even if they do not seem to be as important as other characters. For creating characters, some useful references are the Jungian archetypes and works such as ‘The Hero with a Thousand Faces’ by Joseph Campbell.

wasting time, because sometimes I look completely exhausted on camera, you do not want to project that image! I also suggest that you host a sort of audition at the library to see who is willing to be on camera and who has ‘that presence’ on camera that we want. Perhaps some of the librarians will be good choices, but maybe some users would like to collaborate!

Before filming, be sure to test all your equipment, charge batteries beforehand, and take some time to rehearse the script. When filming a script, print it. Sometimes, something good may come out of errors or improvisation. If you modify anything on the script, write over it; the editor will need it on the next stage of production. To be more practical, try filming the script in order, you may alter it if there are several locations, people or angles involved, but film it in the most precise order to the script and make annotations if needed, it will be more time-effective and your editor will thank you. Some production ingredients to gather are the following:

- Video recording equipment, preferably a camera, but a good smartphone may suffice, add an external microphone for best results in audio.
- Screen recording and live broadcast software: Camtasia is a proprietary software, but it is the best for recording computer applications, a good option to record smartphone applications is XRecorder (both for Android and iOS), and Open Broadcaster Software (OBS Studio) is a very robust open-source solution for broadcasting live on YouTube, Facebook or Twitch, you can also set it up to record computer applications, as well as for including several cameras, graphics and audio sources. When at different places, StreamYard and Zoom are good options for recording podcasts or interviews.
- Recording resolution and framerate: film at HD video 720p (minimum) or 1080p (ideal), you may also shoot at 4K (3840p x 2160p) if you have a very powerful computer for editing; work within the possibilities of your equipment (recording and editing). You may see the option to film or edit at 720i or 1080i, which is the interlaced specification, never use it! Always use the progressive (p) option. Movies are usually recorded at 23.9 frames per second (fps) (although some are shot at other speeds to give them different looks), but software and videogames are usually recorded at 60fps; fps must be set to constant, as well as the quality. When choosing resolution and framerate, use the same specifications throughout all the footage, otherwise, you must downsample everything to the lowest specification within the group of files.
- Video compression: especially when using dedicated video cameras, because of the size of their raw files and also when using iPads and iPhones (and some others), because they film at variable speeds, use the open-source software Handbrake. This will let you normalize resolutions and framerates, synchronize audio and video, while keeping file sizes as small as possible. For instance, it is possible to film at 4K resolution and 60 fps and, by using Handbrake, you can convert that to 1080p 23.9 fps, and you will get better results than by filming at the latter specifications. Keep in mind that you can always downsample, but upscaling is not a good idea (e.g., you

cannot upscale a 1080p video to 4k or try converting it from 23.9 fps to 60 fps, the original files will not have the information to do that!).

- Video editing: fortunately, there are currently free versions of good software for editing, including Davinci Resolve and Filmora. On the commercial side you can choose between Adobe Premiere (professional option) Adobe Spark (amateur option). Non-linear digital video editing software is easier to use than ever, although the learning curve is quite steep, as they have many options and effects.
- Other sources of footage: there are many places on the Internet where you can get audio, video, images, memes and fragments of cultural works. Be sure to use royalty-free or Creative Commons sources, or work within the boundaries of fair use when using copyrighted works.
- Where to upload our videos: YouTube is not the only platform, but it is the largest, also consider Facebook pages, Instagram and TikTok; choices which are not mutually exclusive.
- Optional special equipment: a green screen (chroma) for filming under controlled conditions while replacing the background (e.g., filming at home, but replacing the green screen with video from the beach), additional microphones and cameras. If choosing to work with scripts, a teleprompter is a very good addition. These are normally seen on television studios, but there are some very affordable options which consist on a piece of plastic with mirrors inside that attach to most cameras, they are used to reproduce the script in front of the person so they can read it instead of memorizing it, and because the text is reproduced in front of the camera lens, reading from it does not look too artificial (provide it that you test the equipment, see the results and adjust eye/face movements accordingly).
- Other relevant ingredients include working with well-defined topics, play with some creativity and good taste, review some materials about audiovisual language and oratory. Regarding audiovisual language, it is important to vertically centre the subjects on frame (approximately, it does not have to be perfect) and most importantly, set the camera parallel to the person, do not set the camera at an angle below or above them, as this means that the person filmed is superior or inferior to the audience, respectively. Finally, record in a quiet environment without fatigue or any rush; it would be ideal to have a soundproof studio, but this will rarely be our case.

Editing and postproduction

Start by compressing and normalizing files with Handbrake, get any images and additional footage under the same resolution and framerates (when possible). If audio is noisy or has some minor defects you can add music⁶, keeping in mind that the music must have a significant lower volume than the main audio. When using different sources, audio can be normalized in the editing software, so nothing sounds much louder or quieter. In editing and postproduction, practice is key, there are always more effects that you can try out and there

⁶ Some Youtubers offer their music for adding it to their videos if we support them on their crowdfunding pages and/or provide credit. There are also dedicated channels and websites with royalty-free music.

are many tutorials online on how to use this type of software and effects; so, I will not include further recommendations for the sake of space. However, it is important to identify weaknesses and develop an efficient workflow to take advantage of our limited time. As with scripts, editing should be also fast and dynamic.

Dissemination and sharing

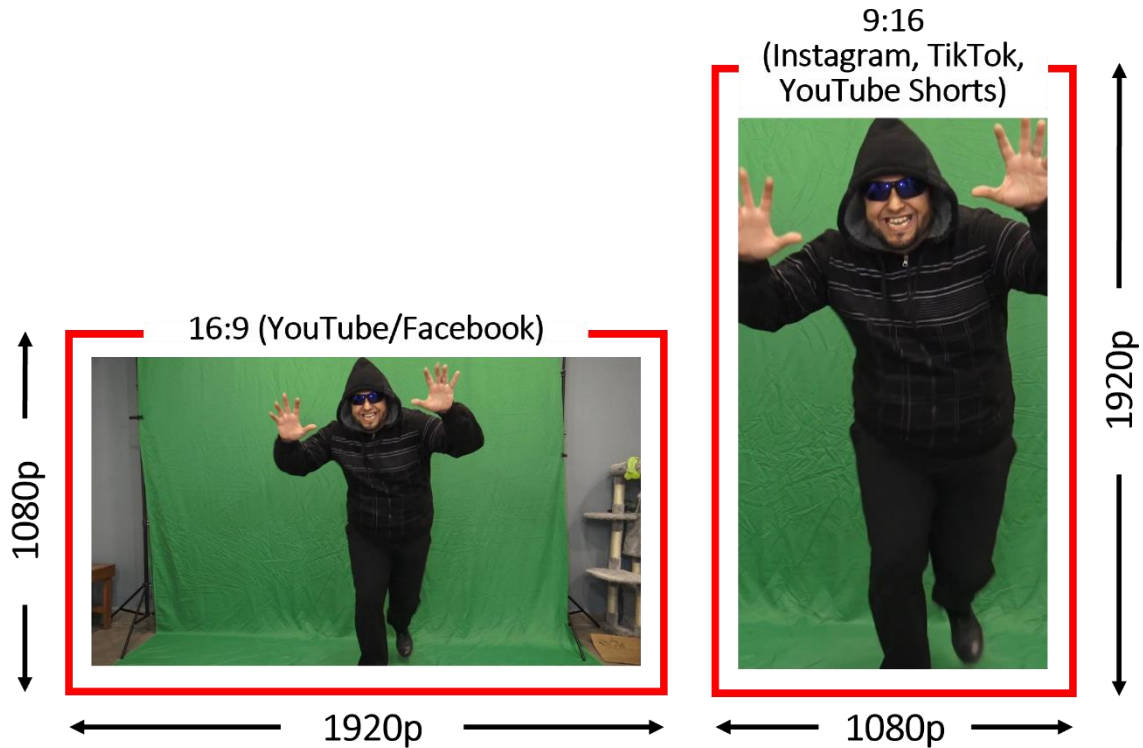
We need four main products on this stage, and it is good to think about them from the preproduction stage: a) videos; b) covers; c) metadata and description; and d) memes.

1. Videos (in two aspects): to save time and effort, I recommend filming and editing the main full-length videos on 16:9 (typical movie aspect ratio, classic television was filmed on 4:3) 1080p (which is 1920p x 1080p) that can be published on YouTube or Facebook; while also extracting attractive, interesting, or amusing fragments from the full-length videos, to publish them as teasers in YouTube Shorts, Instagram and TikTok. These videos must be presented on a 9:16 aspect ratio (the inverse of 16:9, meaning, 1080p x 1920p) and they must be under one minute long. There are at least two ways of making them: a) in the same file you are editing the main video, create another sequence with the 9:16 aspect ratio and paste the footage that will be reused for the teaser fragment, there might be the need for adapting it to the new aspect ratio (e.g. important things are not always centred and may also occupy the full frame, so moving the position of the footage, reducing its size, and redrawing some elements such as text box might be needed); and b) if there is no need for adapting the footage and it might be resized to the new aspect ratio without issues, it is possible to use Handbrake to cut out the fragment from the full-length video file using timecodes (i.e. cut from a particular minute and second, to another specific moment of the complete video, for making a new file with the contents present on that particular range of time), and then use an online conversion tool⁷ for changing the aspect ratio. I also recommend creating an ending sequence for the teasers (in 9:16), inviting to watch the full video on the channel and/or to visit other social media sites⁸. Figure 1 shows the difference between aspect ratios and where they should be used.

Figure 1. 16:9 vs. 9:16 video aspect ratios and where to use them

⁷ A good option is <https://www.freeconvert.com/crop-video>

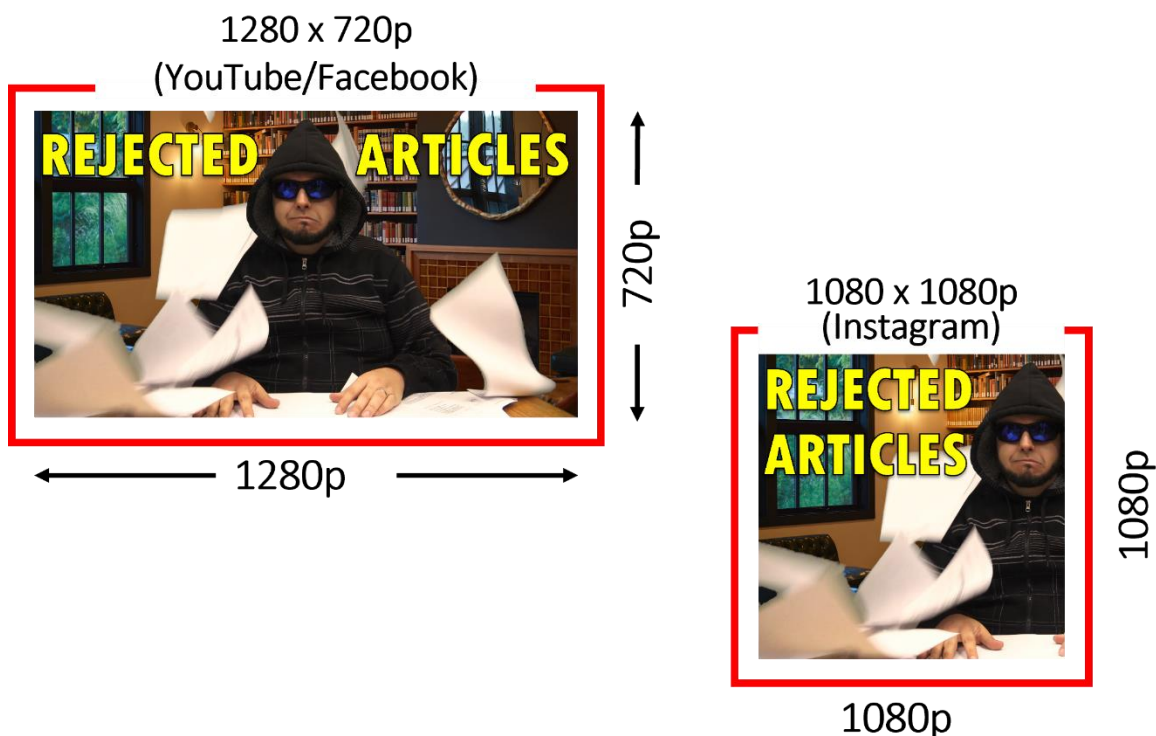
⁸ If using an online conversion tool for resizing the video, it is possible to append the ending sequence easily with <https://express.adobe.com/es-ES/tools/merge-videos> which also allows merging several video files in one video.



2. Cover (in two sizes): when posting videos, the systems will automatically draw from your video a cover for it (YouTube provides three random frames), but they are usually not appropriate. A best practice that the infamous algorithms ‘like’ and that these sites will tell you that draw attention to your videos is to create a custom cover (or promotional image, also referred to as thumbnail) that you can upload. Moreover, it is believed that YouTube and audiences prefer covers in an ‘United States’ style⁹, meaning that they must include very little text and feature faces prominently. You can extract the cover from your video or take pictures when filming it for this purpose, add few words, and edit it for best results with the image editing software you feel comfortable with; whenever possible, work with .PNG files instead of .JPEG. Two versions of the cover might be needed, depending on the social media sites you wish to publish it in (Figure 2 shows the recommended sizes and where to publish them). It is vital that you set up the cover before sharing the video on other sites. When sharing it, the cover that was set up will display automatically, but it is very difficult to change it.

Figure 2. Cover sizes and where to use them

⁹ Google search the posters or covers of your favourite movies, animation or videogames from different regions and in most cases, you will surely note that the ‘American’ poster features the faces (or shots from the waist up) of the main characters, while European and Asian covers tend to be more abstract and artistic.



3. Metadata and description: YouTube has the most robust options to add a description and hence the metadata for videos¹⁰, so I centre exclusively on them; the most important are the following: a) title (keep it short, so it displays properly on smartphones); b) a general description (for which I suggest using or adapting the template on Figure 3); c) under thumbnail add the cover image (1280 x 720p, PNG, under two megabytes); d) use the playlists function to establish series of videos; e) unless creating family-friendly content, choose that the content is not made for kids; f) in tags use the same hashtags as in the description without the ‘#’ sign, separated by comma; g) use the Creative Commons – Attribution licence, so other people can embed the video elsewhere; h) under category, you may use the education category and subcategory ‘edutainment’, you may also choose the specific educational levels at which the video is intended; i) correct the automated subtitles or add your own for hearing-impaired audiences and it would be great if you can add subtitles in other languages; j) use the end screen feature to add buttons over the last seconds of the video, which may be links to other videos, playlists and/or to the subscribe function; and k) use cards to include, at any point of the video, links to other related videos.

Table 1. Template for description/metadata for a video

¹⁰ The recommendations reflect the features available at the moment of writing (May 2022), please note that these sites may make changes.

[Title of the video]
[Short description of what the video is about]
[If the video deals with any publications, include their references and Digital Object Identifier (DOI), for altmetrics purposes]
Watch more videos like this at [link to the YouTube channel and/or Facebook page]
[Name of the series, if applicable]
[Credits]
Contains fragments from [any additional footage from TV series, movies, videogames, together with their creators, directors or publishers, and year of publication]
[Fair use notice example: All audiovisual material from third parties included in this video is the property of their respective artists and producers; they have been limitedly used under the purposes of analysis, review, criticism and/or parody (Fair Use)]
[Music credits, if applicable]
If you enjoyed this video, give it a like, share it, comment, and follow us at [social media links, crowdfunding links, organizational links]
[Hashtags, locate them always at the end, so YouTube puts the first three under the video title automatically]

Apart from posting the video, it is extremely useful to post links to it on other social media sites for broadening the audience. I suggest posting the links together with some text and hashtags. Figure 4 contains a template for this and also for posting the teaser fragments.

Table 2. Template for sharing the video and its fragments on social media sites

For promoting the full-length video on social media and crowdsourcing sites (e.g., Facebook, Twitter, LinkedIn, Wordpress, Patreon, etc.)	New video! [Title of the video] [link to the full video] [hashtags]
For publishing fragments (teasers) extracted from the full videos (YouTube Shorts, Instagram, Twitter, TikTok)	[Title of the video] Watch the full video at: [link to the full video] [hashtags, use the hashtag #shorts by default on YouTube Shorts, both in the video title and the description]

4. Memes: these will be optional, to aid promotion. The recommendation is to take known memes and add text related to our videos' contents, while also inviting the

audience to watch them and subscribe to our channels, to visit the library, or to follow our social media sites. Square images (1080 x 1080p) work best throughout all sites.

Conclusion

After presenting all these recommendations, you may realize that this represents a lot of work, but it might be worth it, as it can be a very effective and powerful vehicle to engage with users, to improve the image of our information services and to promote them, to better build community around our service, and to provide helpful and more dynamic training options for our users; while also granting our libraries more visibility online. Audiovisual projects can also break the routine and represent fun activities for engaging the team (and even users!) to make something different and more creative. If our audiovisual initiative is very successful, it might open some funding alternatives for our operations if we surpass the monetization requirements on the platforms, or by using crowdsourcing alternatives, such as Patreon, a micro-funding website where you set membership schemes at certain monthly costs and provide users with early access, behind the scenes, and exclusive contents as a reward for their funding.

For academic libraries, this may represent an area of opportunity to support researchers to promote their projects and publications, something that very few universities are doing, but that is very important to show society what is going on within its walls, as such, it will provide researchers with more visibility and hence it may open new opportunities for them, and videos are also sources of altmetrics if they are posted together with the digital object identifier (DOI) of the publication they are based upon.

Some might argue: why bother, when most of the audiovisual contents on social media is frivolous (to say the least)? If we do not attempt to create educational contents with good production values, which you will no doubt reach with the recommendations provided in this text, there will not be other kinds of contents; we should at least try. If it turns out well, we might be producing contents that can be useful for users, teachers, and other colleagues, regardless of their geographical location. If we teach ourselves or are trainers within information literacy initiatives, we can bring the best of our ‘on-camera style’ to the classroom and hence provide more dynamic and enjoyable sessions.