BEST PRACTICES FOR CREATING EDUCATIONAL VIDEOS

Video for all

CONTENTS

INTRODUCTION

A warm welcome to the world of creative and educational video production. When I started with first video projects in schools in North London in 1991 little did I know what a big, popular phenomenon it would become over the years. Connecting video production with education is creative, expressive and helps collaboration. It is a wonderful tool for communication and feedback and at the same time can help students to understand more about the power of media messages. It is a useful addition to explore the connection of visual language and oral language and also how language connects with culture.

I hope that you find this guide inspiring and useful. Ten pages are not enough to include every detail of a video production process. Please connect with us if questions arise but also if you want to share your video work.

Good luck with your first production!

Armin
armin.hottmann@mediaeducation.net

GETTING STARTED

FOCUSING ON YOUR GOAL

You have decided to use video for your language lesson. Congratulations! This is a good decision and we hope that we can help with you with this guide (and Video as a Learning Resource) to get started and develop your skills in the months and years to come. You are also quite likely reading this booklet because you teach languages. The VIDEOforALL project will inspire you to discover many different ways of incorporating video in your teaching.

You don't need to be a video production expert before you get started. Young people have often a lot of media skills already. There might also other colleagues who are happy to help - maybe you can collaborate with your Art or ICT colleagues. For you as the language teacher it is most important that you keep the concept of the production in your hand, not get bogged down in the technical detail.

If you have limited classroom time you can outsource some of the production. Students can for example record the material after school or do the editing as a free time activity. You can also consider that part of the production is done as a graded homework including tasks such as the writing of a script.

CHOOSING THE RIGHT ENTRY TASK

Video production offers a wide range of formats starting from very simple one shot recordings which can be uploaded straight away up to "proper" video productions. There is a range of technologies which you can use to record and edit material and there are more and more web tools where you produce video directly online. Video can include all sorts of media: still images, moving images, screen recordings, music and sound.

But first of all: keep things simple. Especially if this is your first project it is a good idea to use one of the entry tasks to get started. Once you feel confident with what you are doing you can take it a step up. Also consider what technology is available. As far as the technical development is concerned, you are quite likely to have enough technology to make a start. We don't advise teachers to buy a camera first before they start with the projects. Use what you have and then you can see if you want to add more technology in the long run.

What do the different productions look like? Here are the three basic categories:

SIMPLE VIDEO EXERCISES. Simple tasks would include recordings with a mobile phone or a webcam, screen recordings or any other one shot videos which are uploaded directly with no video editing. This also includes video activities which can be done online such as animations where image, text and sound are combined. Simple exercises are useful warm up activities if bigger productions are planned.

BASIC VIDEO PRODUCTION. Basic productions include a bigger focus on camera work and video editing. All media material can be used such as still images, graphics, moving images or screen recordings. Productions would include photo stories, simple news programmes or puppet shows. For video editing you could use software such as Movie Maker or iMovie.

ADVANCED VIDEO PRODUCTION. With this we mean longer video productions were a video camera or better still a camera with video function is used. It also includes more developed video editing partly with the packages mentioned above but also more developed software such as Final Cut, Premiere or Vegas. Productions would need considerably more time and would include documentaries, drama productions or studio work.

CONSIDERING THE "PEDAGOGY OF VIDEO PRODUCTION"

For us, video production is not just about the technical skills of using a camera and editing equipment. It is a creative and reflective process which helps the students to move forward with the media and analytical skills. It is important not to forget this part of the task.

Students can be encouraged to take ownership of the process, gaining agency in their learning process. The teacher's role is then that of a facilitator. Encourage your students to share ideas, discuss detail and agree on how to proceed. For instance you can help students work with mind maps.

Teamwork is essential for every media production. We don't find it a good idea if students work alone on their video. Not only because professional productions are always done in teams - mainly because teamwork offers a lot more space to reflect on and discuss each step of the production: ideas, acting, camera work and editing.

When we approach any production, even the most simple ones, we want to make sure that the students have taken time for preparation. This includes scripts, descriptions or storyboards. Storyboards are sketches of notes of what the video will look like. This helps the imagination but also the joint discussion so that every team member is clear about what is planned.

Make sure that there is enough time left in the end for evaluation. This can be done in the form of questionnaires, class discussion or a written or recorded report. In general it is important that students get feedback from their peers. They need to find out if their intended message is coming across to a wider audience.

Make sure that privacy is observed. Get written permission from parents if the students are young before you start the project. And only use image, video or sound material where copyright is clear. You cannot generally use commercial footage such as clips from Film and Television and popular music.

Creative Commons licences are internationally recognised ways of ensuring content that you create and share openly attributes your work, helping you to ensure that it is used according to your wishes. Consider applying a CC BY licence.

There are some tips:

Start out your scenario with a broad theme and let students focus on narrowing it down.

Let your learners **brainstorm** and create an open atmosphere for creative ideas, taking responsibility for what they know and what they don't know.

Avoid a prescribed and fixed scheme of activities for groups work at the beginning; instead the learning can be **scaffolded** using different assignments or outlining the phases of the group work.

Feel free to foster confusion by asking unexpected questions, to stimulate students to discuss different possibilities with one another, searching for opposites, for opponents of the particular idea to consider other perspectives. Pose questions that make students imagine and explore possibilities in their widest context. Questions such as: What would happen if this was not true? In which situations does this not apply?

To create a successful learning experience, it is important to let students reflect on the activities that they have undertaken, encouraging students to continuously articulate their ideas and understanding of the experience through follow up activities. Support **feedback** from the teams and encourage them to be explicit about encountered problems and unresolved questions. Let the learners summarise and reflect on their intellectual achievements and plan their future achievements.

These activities should help to produce some concrete outcomes with which the group can work later.

For further information on using and exploiting video, please refer to another VIDEOforALL project guide, **Video as a Learning Resource**.

RECORDING

The collection of video practices will rely on different tools for recording:

- Using a camera
- Using a screen recorder
- Working directly online

This chapter will concentrate on the use of a camera. If you want to do screen recordings you will need to have specific software. Check out the additional information in Video as a Learning Resource. If you work directly online you normally need no equipment, just your phone, tablet or computer with an online connection.

WHAT SORT OF VIDEO CAMERA DO I NEED?

Video cameras have changed dramatically in the last two decades and are very affordable as well as of high image and sound quality. Current mobile phones have better video quality then a generic video camera had ten years ago. For simple and basic production you can use any of the cameras listed below. If you want to work on advanced productions we suggest that you use a video camera or a still camera with video function since you might want to rely on the use of a lens.

MOBILE PHONES. The most available video cameras. These days many people have one in their pocket. The image quality is very good if it is a current model. Sound quality is limited and mobile phones have a fixed lens which can be often be rather wide angle which can distort faces slightly.

WEBCAMS. Most notebooks have a webcam built in. Webcams are ideal for recordings in the classroom or office, for work with feedback or communication. The quality is okay, normally of

lower quality than a mobile phone. As with mobile phones they normally have a fixed lens and they are not very mobile if you plan to work on different locations.

STANDARD VIDEO CAMERAS. Generic video cameras in the sub-professional market have become less popular. This has to do with the availability of smart phones but also DSLR (digital SLRs with interchangeable lenses) which offer better images. Video cameras are easy to use and handle well. They normally also have a strong zoom which can help with some recordings. Sound is normally good and some of the better cameras have the option to connect an external microphone (see below). Action cameras normally have fixed lenses and rather poor sound. They are less useful for language video projects.

STILL CAMERAS WITH VIDEO FUNCTION. Most current still cameras have a video function. You can use these cameras for still and moving images. Compact cameras are a good step up from phones. If you want to work more on advanced production you should consider the use of a DSLR camera. These cameras produce nice images and have become popular in the semi-professional market. The use of different lenses offer more potential for creative work. Look out for "prime" lenses, lenses with a fixed focal length (no zoom lens). They are favoured by professional filmmakers. The sound with DSLR is not so good however. Newer models offer a microphone input or you can use a separate sound recorder.

Tools for capture of interaction through and on a computer screen such as those used for screen capture and tele collaboration vary in their sophistication and capabilities and are changing rapidly as html5 tools start to proliferate. The capabilities of such tools to capture both audio and video vary in sophistication and system demands. In order to use such tools well it helps to understand:

- which hardware is being accessed by the programme to capture voice and video so that you can adjust the input if necessary;
- how to troubleshoot the audio and video settings on the hardware you are using;
- the factors which may affect performance (bandwidth, configuration of network, processing power on your computer or device).

OTHER USEFUL EQUIPMENT

Since we are dealing with language video projects the sound is very important. If one cannot clearly understand what is said then the big production effort might be in vain. It helps if you are close to the sound with your camera. If your camera has a separate input for a microphone then this is also a very good support. A headphone socket which is included with better cameras can help you check if the sound quality is good. You can also use sound recorders if you want very good sound but this will make your post-production more complicated. They can be a good idea for photo stories. Free or cheap software sound recorders are available for Android or iOS phones.

If you record static scenes such as drama, news or events then a tripod is useful. It reduces the shaking of the camera. Tripods work well with still or video cameras. Phones will need special adapters if you want to put them on a tripod.

Lights can help with inside recordings. You don't need to get professional lights. Modern cameras work well with less light and you can explore existing lights. Strong construction lights can be useful if you have a white ceiling. Just bounce them against the ceiling and you will get a soft and even light. Reflectors (such as whiteboards) can help outside if there is not enough light on the face of your key people.

THE RECORDING PROCESS

Recording is straightforward. With cheap storage on hardware such as memory cards or in the cloud, it is tempting to record as much as possible. Be aware that this makes your post-production longer since you will need to look through everything you have recorded. Here are three common recording steps.

PREPARATION. Make sure that your technology is working, that you have enough space on one or more memory cards and that the battery or batteries are charged. Check up on lights and the sound, especially if you use an external microphone or a sound recorder. Also double check that the recording location is reasonably quiet.

RECORDING. Go through the different shots you have planned. Check up on the sound quality during the recording. Make sure that you start early enough and stop late enough to not lose any important material.

CHECKING YOUR MATERIAL. The beauty of modern equipment is that you can check your recording straight afterwards. If you are not happy with the result go back to step two.

MOVING TOWARDS CINEMATOGRAPHY

It is common to record material from the place where the camera person stands, with the camera held on the same level as the eyes, without moving around too much to look for good camera locations. This is fast and convenient but you will miss out a lot of creative potential of the camera. Especially if you work on advanced productions we suggest that you take time considering where you place your camera and how you use it. A better quality production will also strengthen the content you create. Here are starting points for exploration.

DIFFERENT FRAMINGS. Wide shots, medium shots, close ups.

DIFFERENT COMPOSITIONS. Work with foreground and background; explore skewed camera angles.

DIFFERENT CAMERA POSITIONS. Experiment with very low camera positions or high camera positions.

DIFFERENT CAMERA MOVEMENTS. Pan (from left to right or vice versa), tilt (from bottom up or vice versa), zoom in, tracking shot (walk along with handheld camera).

POST-PRODUCTION

Once you have completed your recordings and have collected all your additional source material such as images and sounds you are ready for editing. Most people think that the camera work is the most creative part of the production. We think that video editing can be even more creative. It is really in the editing process where you create your story. Depending on your production editing can be a time-consuming process. For advanced productions it is definitely advisable to keep editing outside the classroom time.

WHAT YOU WILL NEED FOR EDITING

Video editing will need editing software. There is range of basic software for Android and iOS. If you work with computers then Microsoft Movie Maker or Apple iMovie are good options. iMovie is more advanced but both packages are good for basic productions and some of the advanced work.

Advanced video editing software such as Adobe Premiere Pro, Apple Final Cut or Sony Vegas offer more video and sound tracks so it is easier to combine more sounds and images at the same time. This can be useful for news programmes where images are superimposed but also for drama productions where more sound tracks are needed. We have seen very good language video projects which were done with Movie Maker.

For bigger projects you will need enough storage on your hard disc and also an adequate processing speed. Video editing is quite demanding since image and sound need to be processed at the same time.

THE EDITING PROCESS

Whatever you produce you will go through the same three steps.

CAPTURING. You will need to copy all still images, video material, sounds and music on your computer. It is a good idea to organise everything in one folder. Plan in time for this step, especially if you work on advanced productions.

EDITING. This is the main process for organising your material. You will need to go through what you have and decide on the order of your material, the length of the clips, image effects, image transitions, sounds and music and titles. All material is arranged in a timeline.

EXPORTING. Once you are happy with your video you can export your video. This means that you will create a new separate video file. This is the file you will need for the sharing process.

Video effects can be added to every individual video clip. You can also add video transitions between the video clips. This can add more flavour and interest to your video. However, just adding many effects and transitions doesn't make your video necessarily better. It is good to concentrate on the content and only use effects and transitions if they improve the content further.

THE SOUND TRACK

Sound post-production offers more possibilities to improve the quality of your video. Usually, you will have the original soundtrack which is part of your video clip. That can be the main sound. For some productions like photo stories you might want to create a voice-over afterwards. Movie Maker offers a simple solution for this but you can also record sound with your mobile phone, a sound recorder or directly into the computer. Make sure that you record in a quiet and dry room with no echo (carpets and curtains can help there). In this way can you also add sound effects (traffic, people, nature etc.).

Adding music can be fun and can improve the quality of your video. Make sure that you don't overwhelm your language content. Jamendo and Free music archive are good resources for music where copyright is cleared through a creative commons license. Never include commercial music. YouTube will detect this straight away and you might violate the standing of your channel.

DIFFERENT EXPORTING FORMATS

Exporting a video has become a rather technical and complicated process. Over the years manufacturers introduced more and more compression formats ("codecs"). It can be overwhelming to choose between the different formats, resolution and compression rates. The higher the compression, the smaller your file size but the lower your quality. If you upload your video afterwards and have got slower internet then aim for a file size of 200 MB. For faster internet this can go up to 2 GB.

What compression and resolution should you choose? If you work on Movie Maker you are normally safe to use the "recommended" setting. If you use advanced software you have to specify what compression format, resolution and bit rate you want to use.

Common solutions would be:

- AVI compression, 720*576 pixels resolution (bit rate is normally done automatically for this format) for SD (standard definition) video

- h.264 compression, 1920*1080 pixels resolution, 6 mbps bit rate for HD (high definition) video

The h.264 format is normally done within an mp4 "container". You can see that with the file extension mp4. Mp4s work well with most online platforms.

And one final piece of technical information - in Europe we use the colour format "PAL", whereas North America uses "NTSC". This has become less of an issue with modern digital videos but if you can choose this option when you export your video make sure you go for PAL.

TITLING AND SUBTITLING FOR LANGUAGE PROJECTS

Additional titles and subtitles can add to the learning potential of your video. Titles would fill most of the screen whereas **subtitles** cover the content on the bottom of the screen. It is often a good idea to subtitle your video to make it clearer and help the learners to understand the words better. Subtitles can also be used to add other languages on top of the original language.

There are different ways of adding subtitles:

- Create subtitles directly in your editing software (such as Movie Maker);

- Create subtitles on special subtitle platforms (such as Divxland Media Subtitler);

- Create subtitles on YouTube or Vimeo directly.

Creating subtitles in your editing software means that the subtitles are "burnt in" and you can't take them off or change them afterwards. YouTube subtitles can be added directly online and they have the option of automatic translation into many languages (although they are not too good). You can also create different language versions yourself. However the subtitles will only work if the video stays on YouTube and there is no possibility to export the video with YouTube subtitles burnt in.

SHARING

Once you have exported your video file you are ready to share it. Sharing basically means that you upload your video and tell your friends, family or colleagues about it.

SHARING ON YOUTUBE / VIMEO

YouTube and Vimeo are the two biggest video streaming platforms. YouTube is owned by Google and is clearly number one. It offers a very robust interface, is good with uploads and well fitted with subtitles features, direct camera uploads, basic online editing and playlists. If you make your videos public you will have guaranteed good search indexing - this is good if you want to reach a bigger audience. On the downside - you will also get suggestions with similar videos. This is not always useful in a classroom context.

Uploading is straightforward. You will need to have an account first. If you have a Google mail or other Google account you don't need to register again, just open your Google account, type in youtube.com and sign in. All should be automatic. Click on the "upload" button, select your video file and wait until the upload is finished. Select if you want to make the video public (everybody can see it and it is indexed in the search engines), unlisted (people with a link can see it) or private (only through email invite). Add a description and tags if you want that people find it and all is done.

Vimeo has developed more into a platform for the enthusiastic video maker. It has a cleaner interface with no video adverts like YouTube but is also less known and might show less in search results. Uploading is very similar. Recently Vimeo has added subtitling through an additional module.

Both platforms offer full high-definition uploads in high quality. If you are keen to have the maximum quality possible, check out their guidelines. And both platforms are free but you will need to be aware that your data is tracked.

SHARING ON A WEBSITE OR BLOG

Video sharing on a website, social network or blog offers three different possibilities.

UPLOAD YOUR VIDEO DIRECTLY. This can be done on more and more websites (for example with Facebook). Uploading is straightforward and doesn't need any technical knowledge.

INCLUDE A LINK FROM YOUR VIDEO PORTAL. This works especially well with social networks. You will need to copy and paste the URL (the web address you can see on the top of your browser) and paste it into the post space of for example Facebook, twitter, WhatsApp or other spaces. You can also use this URL to send via email.

EMBED YOUR VIDEO ON A WEBSITE. Embedding is similar process but with the linking you will be able to see the video on your website. Both YouTube and Vimeo offer an embed code (a line of html code) which you will again copy and paste. With YouTube you can just right-click on the video to get the code.

Congratulations! You should have a first overview of video production. Take a moment to reflect on the ideas you have

LINKS AND SUPPORT

VIDEO TUTORIALS

This project has a collection of "how to" video tutorials.

You will find a lot of material on the web, especially on YouTube. You can find a series of video tutorials to get you into production on our mediaeducation.net channel. This was produced for vocational training but the core ideas are the same.

FURTHER READING

More about the idea of video education: viducate book.

More about the use of video and language learning: DIVIS booklet in many languages.

STORY BOARDS

Pixton

Vide○·🖵for all

Partner Organisations:

The Mosaic Art and Sound Ltd., UK
University of Warwick, UK
Kulturring in Berlin e.V., DE
PELICAN, CZ
Perugia Municipality, IT
The Balkan Society for Pedagogy and Education-Bulgaria BASOPED, BG
Universidad de Valladolid, ES

Lifelong
Learning
Programme

VIDEOforALL – Digital Video as a Basic Tool for Language Learning
Project Nr: 543561-LLP-1-2013-1-UK-KA2-KA2MP
www.videoforall.eu