

**Raspberry Pi**

Year 5 – Video production

Unit introduction

Learners will learn how to create short videos by working in pairs or groups. As they progress through this unit, they will be exposed to topic-based language and develop the skills of capturing, editing, and manipulating video. Learners are guided with step-by-step support to take their idea from conception to completion. At the conclusion of the unit, learners have the opportunity to reflect on and assess their progress in creating a video.

To teach this unit, you will need video recording equipment such as video cameras or tablets with video capabilities. The recommended editing software is Microsoft Video Editor, which is included for free with Windows 10.

Overview of lessons

Lesson	Brief overview	Learning objectives
1 What is video?	Learners will be introduced to video as a media format. They will see examples of videos featuring production and editing techniques that they will work towards using their own videos. Learners will begin by explaining what the medium of video is before analysing and comparing examples of videos.	To explain what makes a video effective <ul style="list-style-type: none">• I can explain that video is a visual media format• I can identify features of videos• I can compare features in different videos

2 Filming techniques	Learners will explore the capabilities of a digital device that can be used to record video. Once they are familiar with their device, learners will experiment with different camera angles, considering how different camera angles can be used for different purposes.	<p>To use a digital device to record video</p> <ul style="list-style-type: none"> • I can identify and find features on a digital video recording device • I can experiment with different camera angles • I can make use of a microphone
3 Using a storyboard	Learners will use a storyboard to explore a variety of filming techniques, some of which they will use in their own video project later in the unit. They will evaluate the effectiveness of these techniques before offering feedback on others' work.	<p>To capture video using a range of techniques</p> <ul style="list-style-type: none"> • I can suggest filming techniques for a given purpose • I can capture video using a range of filming techniques • I can review how effective my video is
4 Planning a video	Learners will plan a video by creating a storyboard. Their storyboard will describe each scene, and will include a script, camera angles, and filming techniques. Learners will use their storyboards to film the first scene of their videos.	<p>To create a storyboard</p> <ul style="list-style-type: none"> • I can outline the scenes of my video • I can decide which filming techniques I will use • I can create and save video content
5 Importing and editing video	Learners will film the remaining scenes of their video, and then import their content to video editing software. They will then explore key editing techniques and decide whether sections of their video can be edited or need to be shot again.	To identify that video can be improved through reshooting and editing

		<ul style="list-style-type: none"> • I can store, retrieve, and export my recording to a computer • I can explain how to improve a video by reshooting and editing • I can select the correct tools to make edits to my video
6 Video evaluation	Learners will complete their video by removing unwanted content and reordering their clips. They will then export their finished video and evaluate the effectiveness of their edits. Finally, they will consider how they could share their video with others.	<p>To consider the impact of the choices made when making and sharing a video</p> <ul style="list-style-type: none"> • I can make edits to my video and improve the final outcome • I can recognise that my choices when making a video will impact the quality of the final outcome • I can evaluate my video and share my opinions

Progression

This unit progresses learners' knowledge and understanding of creating media by guiding them systematically through the process involved in creating a video. The unit builds on the Year 4 unit 'Photo editing' where composition is introduced and the Year 3 unit 'Stop-frame animation' where learners explored some of the features of video production. By the end of this unit, learners will have developed the skills required to plan, record, edit, and share a video.

Please see the learning graph for this unit for more information about progression.

Curriculum links

[National curriculum links](#)

Computing

- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information
- Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Internet safety

- Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour

Assessment

Formative assessment

Assessment opportunities are detailed in each lesson plan. The learning objectives and success criteria are introduced in the slide decks at the beginning of each lesson and then reviewed at the end. Learners are invited to assess how well they feel they have met the learning objective using thumbs up, thumbs sideways, or thumbs down.

Summative assessment

Please see the assessment rubric document for this unit. The rubric can be used to assess student's work from lessons 4 to 6.

Subject knowledge

This unit focuses on the skills associated with planning, recording, editing, and creating a video. You will need to be able to explain that video is the recording, reproducing, or broadcasting of moving visual images. You will also need to be familiar with a number of shot types and filming techniques, which are introduced in Lessons 2 and 3. A storyboard is used as a planning tool. It will be useful if you are familiar with the format of the storyboard.

Once learners begin filming, you will need to be familiar with the device they are using, including how to start and stop recording, how to zoom in and out, and how to download content from the device to a computer for editing.

It is important that you are familiar with the devices and apps or programs that you will use to import and edit video content. Windows 10 Video Editor is demonstrated in this unit, but there are many other free and paid-for apps available that can be used, either on a computer or on a device. Another option with limited function is to use the Microsoft Photos app.

You need to know where to locate the video files and where to save them for easy retrieval.

Once recording has been completed, learners will need to import their video files to the video editing software, so you will need to be familiar with this process, including where videos will be stored.

You will need to have a clear understanding of how to edit and complete the video creation process, deleting or reordering clips. Finally, you should be able to demonstrate how to export the video project into an *.mp4 format for viewing.

Enhance your subject knowledge to teach this unit through the following training opportunities:

Online training courses

- [Raspberry Pi Foundation online training courses](#)

Face-to-face courses

- [National Centre for Computing Education face-to-face training courses](#)

Resources are updated regularly — the latest version is available at: ncce.io/tcc.

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