Level 3 - Unit 17 - Video Software (4 credits)

Platinum - Unit 17 - Video Software

Relevant LINKS

BACK TO ITQ UNITS **[1]**

Handbook home page **[2]**

Overview

The candidate can use video software effectively by using the appropriate hardware and software to capture sequences of video. This work will address issues of licensing and copyright and how this effects what they are able to do. They also need to have a good understanding of the impact of file types on this process so that video sequences are fit for purpose. Candidates will also use video software with a high degree of competence and accuracy and be able to use advanced features. The material created will ned to be properly presented in the right manner on the correct equipment.

A work activity will typically be 'non-routine or unfamiliar' because the task or context is likely to require some preparation, clarification or research to separate the components and to identify what factors need to be considered. For example, time available, audience needs, accessibility of source, types of content, message and meaning, before an approach can be planned; and the techniques required will involve a number of steps and at times be non-routine or unfamiliar.

Example of context – an example might be to create a series of high quality video sequences for learning materials for other subjects or adverts for local companies.

Example of work at this level **[3] (to follow)**

Assessor's guide to interpreting the criteria

General Information

QCF general description for Level 3 qualifications

- Achievement at QCF level 3 (EQF Level 4) reflects the ability to identify and use relevant understanding, methods and skills to complete tasks and address problems that, while well defined, have a measure of complexity. It includes taking responsibility for initiating and completing tasks and procedures as well as exercising autonomy and judgment within limited parameters. It also reflects awareness of different perspectives or approaches within an area of study or work.
- Use factual, procedural and theoretical understanding to complete tasks and address problems that, while well defined, may be complex and non-routine.
- Address problems that, while well defined, may be complex and non-routine. Identify, select and use appropriate skills, methods and procedures. Use appropriate investigation to inform

actions. Review how effective methods and actions have been.

- Take responsibility for initiating and completing tasks and procedures, including, where relevant, responsibility for supervising or guiding others. Exercise autonomy and judgement within limited parameters information and ideas

Requirements

- Standards must be confirmed by a trained Platinum Level Assessor or higher
- Assessors must at a minimum record assessment judgements as entries in the on-line mark book on the INGOTs.org certification site.
- Routine evidence of work used for judging assessment outcomes in the candidates' records of their day to day work will be available from their e-portfolios and on-line work. Assessors should ensure that relevant web pages and files are available to their Account Manager on request by supply of the URL.
- When the candidate provides evidence of matching all the criteria to the specification subject to the guidance below, the assessor can request the award using the link on the certification site. The Account Manager will request a random sample of evidence from candidates' work that verifies the assessor's judgement.
- When the Account Manager is satisfied that the evidence is sufficient to safely make an award, the candidate's success will be confirmed and the unit certificate will be printable from the web site.
- This unit should take an average level 3 learner 50 hours of work to complete.

Assessment Method

Assessors can score each of the criteria N, L, S or H. N indicates no evidence. L indicates some capability but some help still required. S indicates that the candidate can match the criterion to its required specification. H indicates performance that goes beyond the expected in at least some aspects. Candidates are required to achieve at least a S on all the criteria to achieve the full award.

Expansion of the assessment criteria

1. Candidates will use video hardware and software to capture sequences

1.1 I can determine the content needed for sequences, and when to originate it
Candidates should be able to plan effectively to gather the materials they need.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
Candidates should determine what materials they can use that are free from licensing and what materials they will need to generate. Some materials will require a great deal of planning as it will entail working out the equipment, the personnel and the location as well as peripheral concerns such

as scripts and props. This would all be greatly helped by being able to work with a real client who will be able to express what they need as a guide. This will also facilitate some reflective material and feedback responses for candidates to act upon. It would be useful to make a start with royalty free videos [4] and build from these. Using a remix techniques saves a lot of time and effort in creating their own material.

1.2 I can explain any compatibility issues between combinations of input device and video software
Candidates should be able to explain the range of devices available and ascertain if they work with each other or not.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
There are a great number of hardware and software products on the market and no fixed standard in terms of the files they create or use. Candidates need to research carefully the devices they use to make sure they are not stuck with material that can't be used. This will be more relevant if they use separate audio and video equipment with the idea of splicing them together in the final edit. The more expensive the equipment, the more compatible it will be with a range of devices. Digital camcorders have a wide range or resolutions, apertures, frame rates and resolutions as well as different file formats (compressed and uncompressed) as well as audio codecs. All of these need to be considered to make sure work if effective and efficient. A number of camcorders will come with their own basic software and in most cases this will be enough for editing, but if a third party software is used, candidates will need to check to make sure it will be able to use their audio and video material. Candidates can write a detailed summary of all of these features and explain what impact they have in terms of using different hardware and software.

1.3 I can select and use an appropriate combination of input device and video software to optimise the recording of information
Candidates should be able to use the equipment analysed in 1.2 effectively.

Evidence: will be provided by their final videos.

Additional information and guidance

If candidates can produce sequences of video using the selected equipment they meet this criterion.

1.4 I can select and use an appropriate combination of hardware and software to originate and develop new content for sequences
Candidates should be able to demonstrate professional levels of competence with their equipment.

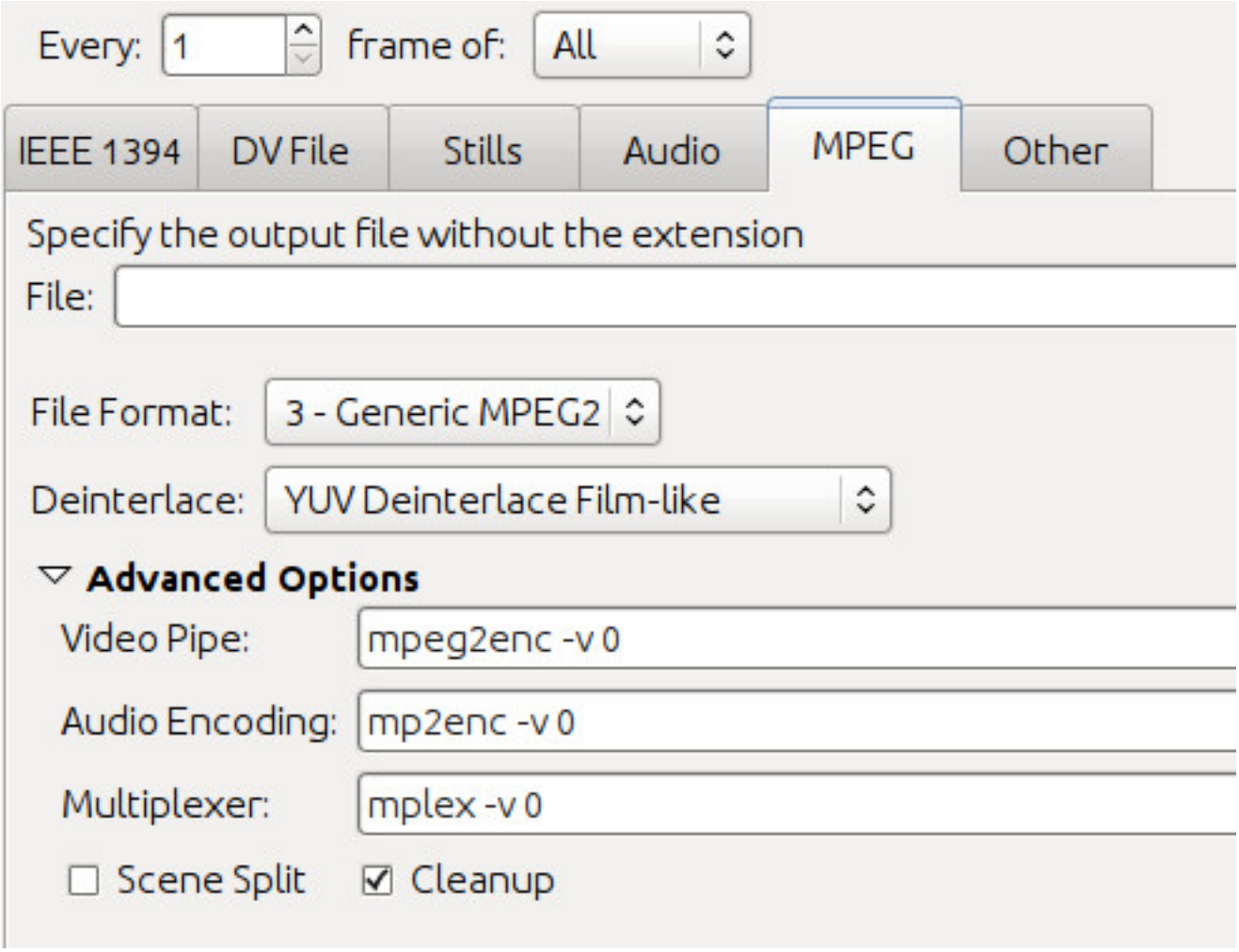
Evidence: will be provided by final project and assessor feedback.

Additional information and guidance
This criterion is linked to the above criterion and part of an ongoing selection process to make sure that all of the material they gather can be used to good affect. Some of the software they use may be specifically for pre-generated material and may not work well in creating new material with their own transitions and other effects. The original material might have other features such as voice overs and captioning or audio and video filters.

1.5 I can analyse and explain the impact file size and file format will have, including when to use information coding and compression
Candidates should be able to explain file fundamentals in relation to video sequences as well as coding and compression technologies.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
Most video is either raw or compressed. Bearing in mind that a Full HD video uncompressed would be 1920x1080 and 30 frames per second, so 62MB of data per second. This would soon add up and require management. If a compression algorithm is used, such as the inter frame compression used by something like mpeg, then a lot more material can be stored, though quality would obviously be reduced. In video, as with any medium, the higher the starting quality, the more that can be done. If you work on a video sequence a great deal, each process will reduce the quality a little bit. This tradeoff between quality and manageability needs to be referenced and understood. Depending on the software being used, there will be a number of options to consider for output purposes.



1.6 I can store and retrieve sequences using appropriate file formats and compression, in line with local guidelines and conventions where available
Candidates should be able to effectively manage the materials they produce.

Evidence: will be provided by short guides and client feedback.

Additional information and guidance
Candidates should work with clients to give themselves a better range of experiences and options and they will then need to produce and manage several draft versions of their material and final productions for approval. If making an advert for a local company, it is likely that they have a house style that needs to be followed as well as legal guidelines about product placement and people who appear in the sequences. Candidates need to document and show their awareness of these aspects.

2. Candidates will use video software tools and techniques to edit sequences

2.1 I can select and use appropriate video software tools and techniques to mark-up and edit sequences to achieve required effects

Candidates should be able to demonstrate a professional level of skill and competence with their chosen video software.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance

Candidates should be able to use all of the facilities of their software to create professional level material. They should be comfortable with timelines and editing techniques in order to complete their work. This may require them to splice several pieces together as well as include overdubs and other editing features. In some cases they may need to incorporate musical material so will need to merge these effectively and not have any issues of sound quality or drop-outs. Any overlays or titling will need to be correct in terms of spelling and grammar. At this level, it will not be appropriate to use basic video software as it will need to be fully non-linear that a professional studio would use.

2.2 I can provide guidance on how copyright constraints affect use of own and others' information

Candidates should be able to explain to others the impact and affects of legal constraints.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance

Candidates should be fully aware of the legal implications of any material they have and should provide a detailed guide explaining the impact of these legal constraints on their material and more generally. It would be useful if they use examples from their own work about how it was affected and what they did as a consequence.

2.3 I can organise, combine and link information for sequences in line with any copyright constraints, including across different software

Candidates should be able to effectively manage a range of materials from different sources.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance

Candidates will be collecting a range of media materials from video to audio and need to be able to manage these with different applications in a seamless way. As with some criteria above, different software might affect the way files are output for use in other applications so an adherence ot open standards, where possible, would be preferred.

3. Candidates will play and present video sequences

3.1 I can explain the features and constraints of playback software and display devices as appropriate for different purposes

Candidates should be able to explain their chosen display choices and highlight the features that make them suitable.

Evidence: will be provided by reports and client feedback.

Additional information and guidance
Candidates will have a wide range of choices for this and meeting this element will depend on their specific local case. The video produced may be required for a web site, in which case it would need to be tested on all available browsers across all operating systems and devices. If the material is being delivered locally on a display system, such as a projector, they need to ensure that the quality is fit for purpose and the environment for the sequence is suitable. If the video is required for a TV broadcast or at a local cinema as an advert, there will be strict requirements about the content and quality. candidates should produce a report to show that they understand all of the potential issues that might arise for them when displaying their material across as wide a range of display scenarios as is possible.

3.2 I can select and use an appropriate combination of video playback software and display device to suit the file format
Candidates should be able to ruin their material effectively so be aware of file format issues and the presentation medium used.

Evidence: will be provided by short guides and assessor feedback.

Additional information and guidance
The final video might be played through a laptop or PC straight to a presentation device, but there will be many other combinations depending on who the client is. An indication needs to be evidenced here of this general understanding of their presentation options in some detail. What limitations, if any, might the particular file format have in relation to how it is going to be displayed. The most important issue here is to use appropriate formats for the media. If playback is on the web, HTML5 supported formats would be a good choice. If it is for a specific environment e.g. YouTube, the format needs to be something that YouTube can cope with. If it is a one off for a particular local presentation the format probably won't matter but using one of the HTML5 compatible formats is likely to provide more flexible options just in case. In the end it is in general consumer interest to use an open format because then there is less chance of establishing a monopoly and reducing competition in the market. Reduced competition in these contexts nearly always results in higher prices and reduced functionality and quality.

3.3 I can present sequences effectively by exploiting the features and settings of the playback software and display device to maximise quality and meet needs
Candidates should be able to adjust their presentation equipment and environment to maximise the viewing experience and impact.

Evidence: will be provided by reports and client feedback.

Additional information and guidance
Candidates should show how their final piece matches the design objectives and requirements set out in the beginning of the project. having a real client will make this easier as they will have had specific demands and outcome objectives that needed to be worked towards and achieved. Candidates need to be comfortable and expert enough with their display equipment to be able to make any necessary adjustments to improve the output, be this adjusting lenses or audio settings or the display device settings via software. In some cases a presentation environment will have dedicated systems for audio and video and candidates will need to be competent at working and manipulating these.

3.4 I can evaluate the quality of sequences and explain how to respond to quality issues and problems
Candidates should be able to fully evaluate their overall work.

Evidence: will be provided by a detailed evaluation report.

Additional information and guidance
Candidates should write a detailed report covering all aspects of their prject process and show what difficulties arose and how they resolved these. The report should include their evaluation of the strengths and weaknesses of different equipment and tools they used as well as the overall process of video production from a technical viewpoint. The report could also include a short how-to guide on how to tackle the most common and obvious problems in video development.

Moderation/verification

The assessor should keep a record of assessment judgements made for each candidate and make notes of any significant issues for any candidate. They must be prepared to enter into dialog with their Account Manager and provide their assessment records to the Account Manager through the on-line mark book. They should be prepared to provide evidence as a basis for their judgements through reference to candidate e-portfolios and through signed witness statements associated with the criteria matching marks in the on-line markbook. Before authorizing certification, the Account Manager must be satisfied that the assessors judgements are sound.

Links
[1] http://theingots.org/community/ITQ_unit_development
[2] http://theingots.org/community/handbook2
[3] https://theingots.org/community/sites/default/files/uploads/user4/PupilFNC7.pdf
[4] http://www.gettyimages.co.uk/footage