

Exemplar candidate work

Introduction

OCR has produced these simulated candidate style answers to support teachers in interpreting the assessment criteria for the new Creative iMedia specifications and to bridge the gap between new specification release and availability of exemplar candidate work.

This content has been produced by senior OCR examiners, with the input of Chairs of Examiners, to illustrate how the sample assessment questions might be answered and provide some commentary on what factors contribute to an overall pass. The candidate style answers are not written in a way that is intended to replicate student work but to demonstrate what a “good” or “excellent” response might include, supported by examiner commentary and conclusions.

As these responses have not been through full moderation and do not replicate student work, they have not been graded and are instead, banded “good” or “excellent” to give an indication of the level of each response.

Please note that this resource is provided for advice and guidance only and does not in any way constitute an indication of the pass/fail boundary or endorsed answers.

Learning outcome and related assessment criteria	Comments
1 Exploration	Good/excellent
2 Planning	Good (but with excellent work plan)
3 Creating the final work	Good (some flaws in the video but demonstrates the techniques)
4 Review/evaluation	Good/excellent

**OCR LEVEL 2 AWARD/CERTIFICATE/DIPLOMA FOR CREATIVE iMEDIA USERS
04307/04308/04309**

UNIT 203: COMPOSITE VIDEO EFFECTS

PLANNING AND REVIEW FORM

Candidate name:

Date:

Assignment Brief:

You are a junior special effects video engineer. You have been asked to produce a short piece of film on the theme of science fiction. The storyline and planning may be linked to your work in unit 201, which has already been completed.

You must now complete your planning and create the video which includes special effects and the use of green/blue screen techniques.

Assessment criteria:

1.1 Investigate the techniques of composite visual special effects creation

1.2 Research a range of applications within the visual industries for special video effects identifying their uses

Techniques of visual special effects

Many special effects require the camera to be used on a steady tripod. This is to ensure the final composite can be arranged without unnatural movement or jumping between the different video streams.

Green/blue screen techniques

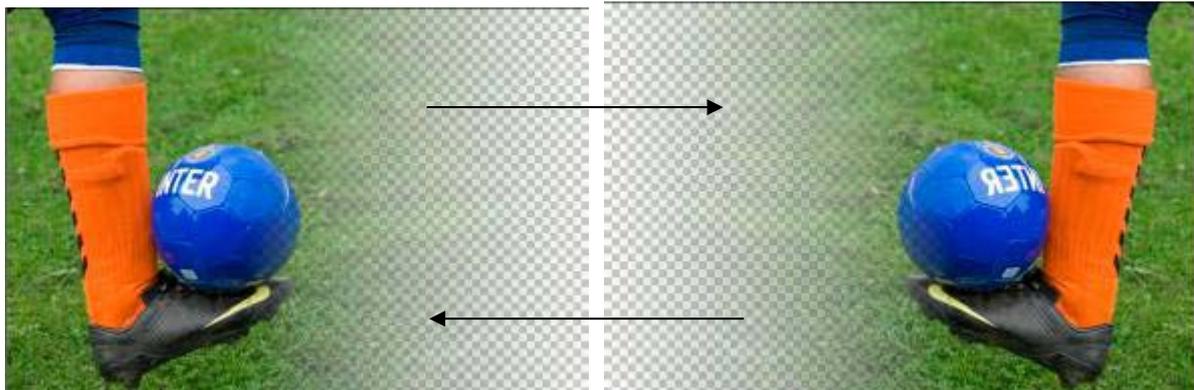
This is a basic technique to change the background for a piece of recorded video. The action is filmed against a solid colour (either green or blue typically). Using the chroma key filter effect in the video editing software, this solid colour is made to be transparent. By inserting a second video layer behind this, a composite effect is created whereby the action is now seen on the new background. For this technique, the background can be either a static image or another piece of video.

The background must be a consistent and solid colour with its own lighting. The subject is best lit separately if the chroma keying is to be effective. The subject cannot have any colours similar to the background or else they too will be made "invisible". This can affect the choice of whether a green or blue background is chosen.



Duplicating a person or other object in a scene

This requires two separate recordings that are made against the same background without moving the camera. In the first recording, the person or other object is positioned at one side of the frame – possibly talking to the other ‘virtual’ side. In the second recording, the person has moved across to the other side so that they are in a different position. When the two recordings are merged in the video editing software, a transparency filter is used on each blank side so that the viewable person is now seen twice in the same frame.



Transparent areas (cross hatched) are merged together.

An object can also be made to slowly disappear by recording a static background and then the same scene with a person or object in the frame. These two video recordings are placed one after the other on the timeline and a cross dissolve transition applied. This makes the person (or object) slowly dissolve in or out of the background which stays the same all the time.

Moving objects using different speeds/timing

Recordings can also be made by asking the actor to walk or move very slowly in a scene where everything else is moving. In the video editing, the frame speed is increased so that the person that was moving slowly appears to move normally. This makes everything else speed up, as if the person is in their own time bubble. Additional special effects of a similar nature can also be made by reversing the video footage that was recorded.

The knowledge of how to create some of these effects was sourced from:

<http://www.mediacollege.com/home/>

Applications and uses for special video effects

Green/blue screen effects are widely used in film and television. For example:

- News bulletins
- Interviews
- Weather forecasts
- Science fiction films
- Fantasy films
- Action and adventure films such as those featuring superheroes

I have researched some specific examples of these using the internet [note: screen captures removed for reasons of copyright by the respective website owner]

Television programmes:

- Dr Who – tardis disappearing
- BBC weather – presenter with UK map behind
- Heroes series – various super powers such as moving objects, flying, stopping time

Films:

- Star Wars – light sabre battles and spaceships flying through space
- Terminator – cyborg (half man half machine)
- Blade Runner – futuristic film sets and hovering cars

- **PLANNING (TASK 2)**

(If more space is required, please continue on a separate sheet and attach)

Assessment criteria:

- 2.1 Identify client requirements for an original split screen sequence with blue/green screen footage with consideration for the target audience*
- 2.2 Create a storyboard showing backgrounds, special effects and the blue/green screen content*
- 2.3 Create a work plan to produce the video sequence to include assets, resources and timescales*
- 2.4 Identify appropriate file types and formats*
- 2.5 Identify any legal issues regarding any assets to be sourced*

Client requirements

My video has been developed from the pre production planning in unit 201, which is for a science fiction short film. My client wants this film to be less than 3 minutes and be in a suitable format for distribution on the web (rather than broadcast quality). Having checked, I think I will most likely create my work in an mpeg-4 .mov format which can be viewed using a QuickTime player.

The film must have a title to start and follow a storyline. The film must end with closing credits as normal with short films and movies. Special effects must be included in the video and I will be using a green/blue screen to record most of the scenes. Most of my work will be completed in the studio with the green screen background although I will take some static photos in the park outside. The film must also be legal and ethical, without causing any offence or infringement of other people's rights.

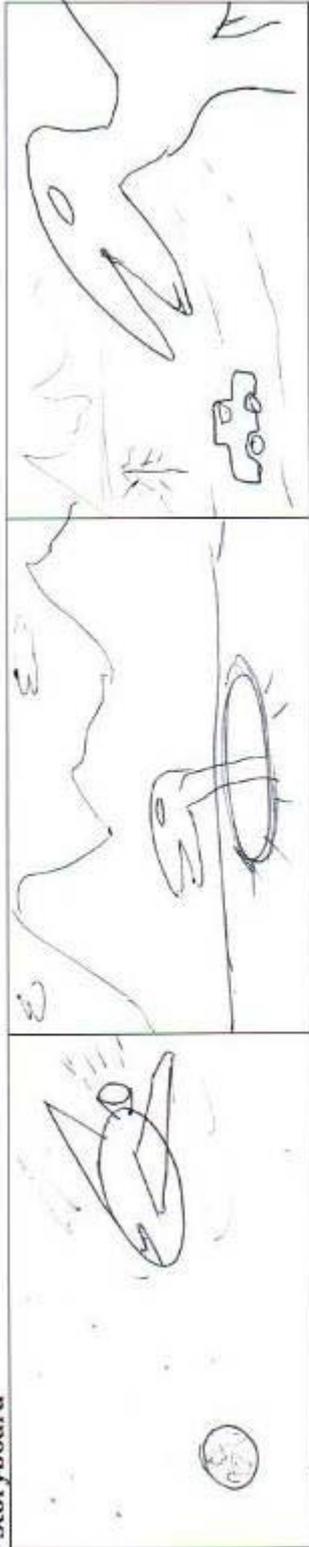
Target audience

This will be quite broad and anybody from the age of 6 upwards should be able to watch this. If it had an age rating applied then it would most likely be a PG. There will not be any significant violence in the battling robots. The short film should appeal to those interested in science fiction although with a slightly funny side to it.

Storyboard identifying backgrounds, special effects and green/blue screen content

The basic storyline was produced for Unit 201 (Pre production planning). This has been expanded to identify the individual scenes, camera angles and range of shots needed for the short feature (see separate storyboard document file).

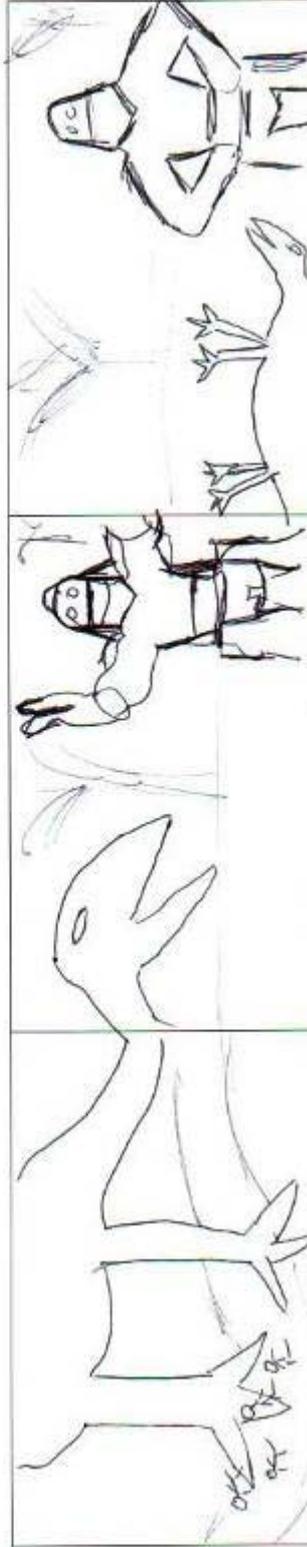
Storyboard



ALIEN SPACESHIP HURTTLES
TOWARDS EARTH

CRASHES AT THE LANDING
SITE, DINOSAUR ROBOT
COMES OUT OF THE CRASHER

"DINOBOB" ATTACKS A CAR
AND PEOPLE



"DINOBOB" RACES THE
PLANET AND THE PEOPLE
ON IT

THE DEFENDER ROBOT
(DEFENBOB) ARRIVES
TO BATTLE THE DINOBOB

"DEFENBOB" WINS
THE BATTLE FOR
PLANET EARTH.

Produce a work plan (identifying activities, resources and timescales)

Task	Description	Duration	Week 1	Week 2	Week 3	Week 4
1	1 Plan work, identify equipment and timescales	1 hour	1			
2	2 Produce storyboard	1 hour		1		
3	3 Obtain video equipment	30 mins		1		
4	4 Setup green/blue screen	1 hour		1		
5	5 Lighting checks	30 mins		1		
6	6 Setup shots and record video	2 hours		1		
7	7 Transfer video to computer	15 mins			1	
8	8 Check recorded video footage	1 hour			1	
9	9 Import background stills	15 mins			1	
10	10 Edit video and apply effects	4 hours			1	
11	11 Render/export final video	15 mins				1
12	12 Review work with client	15 mins				1
	Total	12 hours				

Identify equipment, props and software

Video camera: Sony VX1000E Mini DV

Accessories: Sony MiniDV tapes, batteries

Video tripod: Manfrotto carbon one

Green screen and background support

Video lighting

Props: Robosapien and Raptor for the characters. LEGO ® models of people, toy car

Video footage to be recorded: Characters against the green screen – using the storyboard

Still images: for the background scene showing an open field

File types and format

The raw footage will be stored as .avi files once transferred to the computer. The final work will be saved as a Quicktime .mov format because this provides good quality video at a reasonable file size. My static background photos will be stored as jpeg images.

Legal and ethical issues

There will not be any copyright issues on the video or static background shots because I will be recording everything myself. There will not be any real people in the video so I do not need to consider releases. The static background photos will be taken in a public place rather than private land so again this will be suitable for my video. The green screen footage will be recorded in a studio that I have permission to use. The science fiction film should not cause any offence or discrimination (although the dinobot may have a bit of grudge because it loses in the end). The short video will be suitable for all age groups.

CREATE THE COMPOSITE VIDEO EFFECTS (TASK 3)

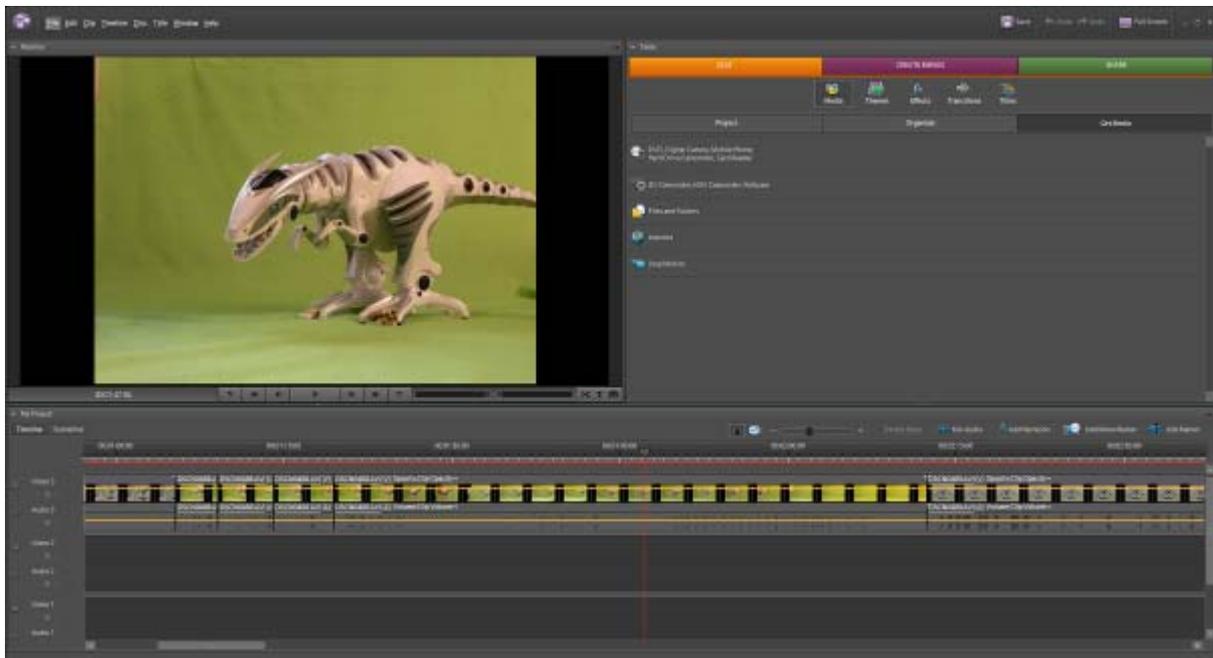
(include reference to the props, edits and tools used, as applicable)

Assessment Criteria

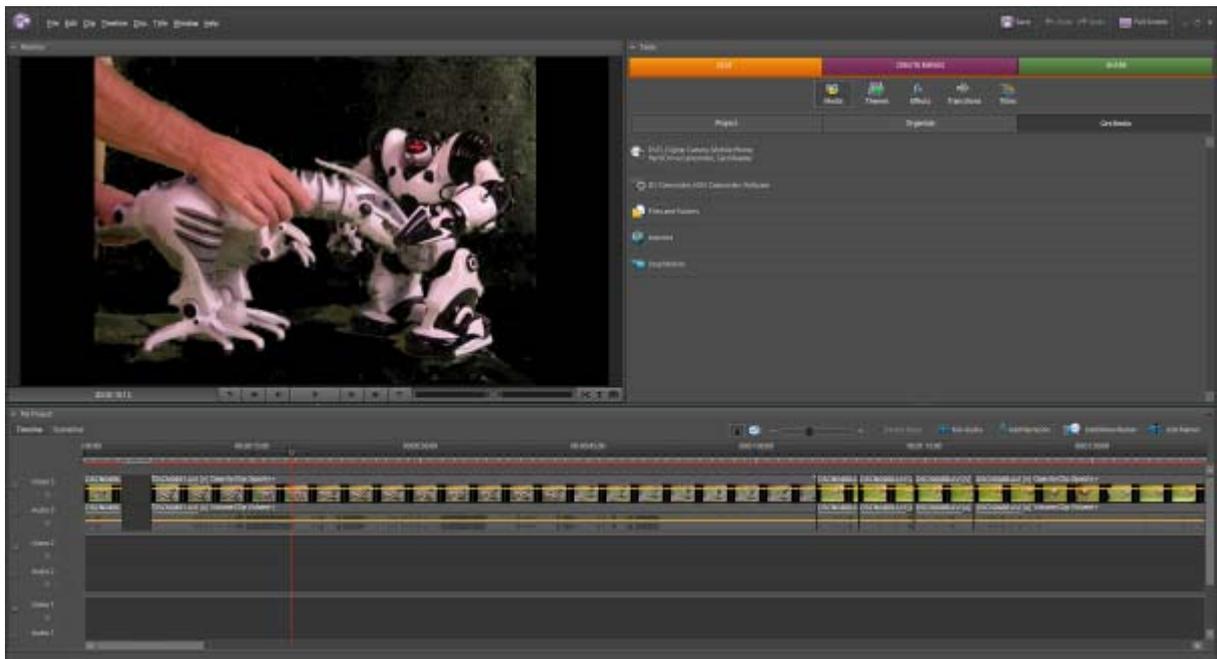
- 3.1 Record or source blue/green screen clips
- 3.2 Record or source background/foreground images
- 3.3 Combine the video clips and images to create the split screen sequence
- 3.4 Edit the sequence to the required length
- 3.5 Add visual special effects to further enhance the sequence
- 3.6 Develop and use a detailed test plan to test the sequences
- 3.7 Correct any identified faults based on the test plan.
- 3.8 Render and export, saving the sequence in appropriate format(s) for the client as agreed
- 3.9 Organise electronic files using appropriate naming conventions to facilitate access by others

Recording green/blue screen clips

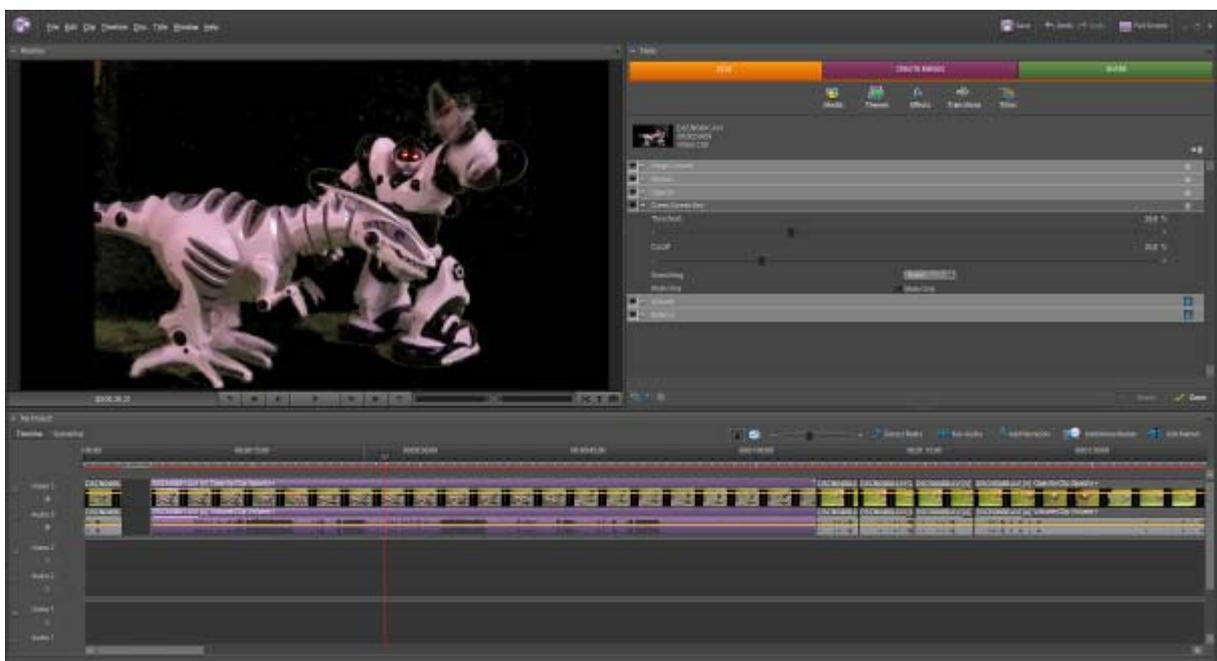
This is some of the raw footage that was recorded against the green screen:



This is my 'dinobot' against a green screen. The lighting wasn't quite right at this stage so I had to adjust it before recording the video and applying the green screen chroma effect. You can see that the green colour is different on the vertical and horizontal pieces.



Here I am placing the dinobot for the battle with the defendobot. The green chroma key effect has already been applied but the clip must be trimmed before exporting the final version to remove my hands and arms.



This shows the green screen key effect being applied in the software.

These are some of the photographs that I took for the static background. They were used behind the transparency of the green/blue screen.



Testing

Produce a test plan and record the results of tests.

Test	Pass/Fail Criteria	Result
Check transparency of chroma key effect	Visual appearance on background and around edges	Not bad but occasional breakthrough of the background
Check that foreground subject is solid and not faded out by the settings of the chroma key effect	Visual appearance of subject	Again not bad most of the time but a trade off with the appearance of the background
Colour rendition of foreground and background	Should appear natural and not have a different colour tint	Static background shot has natural lighting but green/blue screen clips use studio lighting. Not the best colour match but acceptable
Opening and closing titles and credits	Text should be readable within the time it is displayed	Adjusted since originally the text was not displayed long enough for the viewer to read it. Retest ✓
Total duration within original limitation	Max 3 minutes	✓
Transitions between scenes is suitable –especially before and after the green/blue screen clips	Does the transition effect allow any breakthrough of the green/blue screen or static background in a bad way	No – this is fine
Playback of final export in a media player	File format recognised and playback correctly	✓

Render and export the final work

Asset table for final video:

Filename	Format	Properties
" <i>Science fiction movie.mov</i> "	Quicktime .mov format	PAL 720x576 25fps

REVIEW (TASK 4)

Critically review the finished product

Overall the finished video is not bad although I can see a few problems with the chroma key effect. Otherwise the storyline follows the original storyboard and it flows quite well. The sound is not always at a constant volume and this is another area for improvement. The titles and credits were fairly easy to do and these work well in the finished piece.

The studio lighting also made it quite difficult to get a natural colour balance. So when looking at my video, the lighting on the robots has a slightly different colour tint to the outdoor static photo. This makes the scenes look unnatural but it doesn't really spoil the story. However, if I were to do this again I would adjust the white balance on the video camera so that the colours are recorded with a better colour tone.

Explain the areas you would improve and why

The lighting on the green screen was difficult to get right because I needed the whole subject (robots) placed on the chroma key material. This is because I needed to show the robot walking on a real piece of grass in the final film. This means that I had to use the same lighting system on both the green screen and subject. A better way to record green/blue screen footage is to have separate lighting on the background and subject (so that the subject is placed well in front of the green screen). This would make the green screen bright and even lit, so it is much easier to select as transparent in the video editing software.

Explain the fitness for purpose of the composite video sequence

By including the titles, credits and storyline I have created a basic short film on the required theme of science fiction. It follows some conventions and demonstrates video special effect techniques. The final work is saved in a standard format that can be played on any computer in QuickTime player (or anything else that supports .mov files)

Identify parameters and constraints that influenced decisions made

I had limited time with the green/blue screen studio backdrop because other people needed to use it as well. I would have liked more time to retake some of the footage. Because of the limitations I also had to restrict my video clips to the minimum even though I would like to have recorded more scenes. Time was the biggest problem that I had when recording my video. I could use a different video camera for some additional scenes but it was the special effect bits that I needed more time with. Because of this, I decided to shorten the story slightly so my final video is not as long as it could be (the maximum was 3 minutes).