

2007 VCE VET Multimedia GA 2: Computer-based examination

GENERAL COMMENTS

Overall, students continued to demonstrate a well-developed understanding of the following Units of Competence 'Apply principles of visual design and communication to the development of a multimedia product', 'Create 2D digital animation' and 'Create web pages with multimedia'. Student responses to questions based on 'Write content and/or copy for the web' continue to improve as both teachers and students gain a clearer understanding of the need to write for a specific purpose and audience.

A significant proportion of students continued to encounter difficulties with questions pertaining to 'Develop a multimedia script'. Teachers should be aware from the Revised Examination Advice 2005–2006 (available on the VCAA website) that this Unit of Competence is only examined in the multiple-choice and short answer sections of the examination paper and prepare their students accordingly. Students' responses to questions based on this area demonstrated the significant variation that exists in their level of understanding of flowcharts, the role of pseudocode, the use of variables and the logic of scripting. Teachers must continue to address these concepts.

The better students drew on specific details from the question when answering, rather than simply providing prepared answers. Students who had studied all the required areas were able to provide detailed and relevant answers as required.

It was pleasing to note that the number of students who attempted only one of the practical components had reduced from previous years. Students completed most of the elements relating to the web page, but parts of the animation remained a challenge for many. Responses that scored highly demonstrated a facility to use a range of features of the software to complete the required animation.

It is important that the teaching process continues to emphasise the importance of completing and saving work in the required or most appropriate file format. Students should not assume that components of questions saved in inappropriate file formats will be opened and assessed.

SPECIFIC INFORMATION

Section A – Multiple-choice questions

The table below indicates the percentage of students who chose each option. The correct answer is indicated by shading.

| Question | % A | % B | % C | % D | Comments |
|----------|-----|-----|-----|-----|---|
| 1 | 22 | 69 | 1 | 8 | |
| 2 | 1 | 39 | 38 | 22 | This question should have been straightforward; however, many students did not appear to have an adequate understanding of copyright. |
| 3 | 26 | 8 | 55 | 11 | |
| 4 | 56 | 16 | 21 | 7 | |
| 5 | 74 | 19 | 2 | 5 | |
| 6 | 18 | 69 | 9 | 4 | |
| 7 | 12 | 35 | 51 | 3 | |
| 8 | 45 | 22 | 23 | 9 | |
| 9 | 36 | 14 | 14 | 36 | Questions 9, 10 and 11 dealt with the area of scripting. The level of student knowledge of this area remains a concern. |
| 10 | 22 | 19 | 27 | 32 | |
| 11 | 15 | 18 | 19 | 48 | |
| 12 | 13 | 67 | 11 | 10 | |
| 13 | 5 | 9 | 85 | 1 | |
| 14 | 2 | 92 | 5 | 1 | |
| 15 | 91 | 2 | 3 | 4 | |
| 16 | 16 | 3 | 57 | 24 | |
| 17 | 17 | 52 | 24 | 6 | |
| 18 | 13 | 52 | 19 | 16 | |

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| Question | % A | % B | % C | % D | Comments |
|----------|-----|-----|-----|-----|---|
| 19 | 9 | 57 | 16 | 18 | |
| 20 | 9 | 38 | 7 | 46 | This question should have been relatively straightforward; however, many students did not display knowledge of appropriate forms of writing for advertising copy. |

Section B – Short answer questions

For each question, an outline answer (or answers) is provided. In some cases the answer given is not the only answer that could have been awarded marks.

Ouestion 1

| C | | | | |
|-------|----|----|----|---------|
| Marks | 0 | 1 | 2 | Average |
| % | 53 | 27 | 21 | 0.7 |

Students were awarded two marks for either:

- providing two suggestions as to how they would improve the layout using balance
- identifying how the layout was unbalanced and providing one suggestion as to how they would improve it.

The question clearly asked for students to apply the principle of balance to the layout as a whole. However, many students' answers were limited to the actual photograph, which was just one element in the layout. This reinforced the need for students to read the questions carefully to ensure they address the areas required.

Following are some examples of the types of responses assessors were looking for.

- I would use asymmetrical balance by positioning the heading to the left and a smaller image aligned to the right. This would balance the page and add visual interest.
- The layout appears unbalanced as the image is too large for the rest of the page. I would use balance to improve the layout by making the image smaller.

Ouestion 2

| Marks | 0 | 1 | 2 | Average |
|-------|----|----|----|---------|
| % | 26 | 35 | 39 | 1.2 |

Students were awarded one mark for providing an appropriate characteristic and colour type, and one mark for linking the two. Many students were able to successfully identify a characteristic of a potential audience but then struggled to obtain the second mark by not clearly stating why this aspect should be taken into account.

Following are some examples of the types of responses assessors were looking for.

- State of health: Sick people may be anxious and require cool colours for a calming influence.
- Age: Older people may be conservative and require subdued colours for them to better comprehend the information.

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Ouestion 3a.

| Marks | 0 | 1 | Average |
|-------|----|----|---------|
| % | 53 | 47 | 0.5 |

Appropriate answers included:

- it is easy to publish from many programs
- it can be made secure
- it is platform independent documents look the same on any MAC or PC.

Question 3b.

| £ | | | | |
|-------|-----|----|---------|--|
| Marks | 0 1 | | Average | |
| % | 41 | 59 | 0.6 | |

Appropriate answers included:

- no plug-in is required
- it can provide navigation
- the developer/client/owner would be able to change the brochure at a later date.



Question 4

| Marks | 0 | 1 | 2 | Average |
|-------|----|----|----|---------|
| % | 59 | 18 | 22 | 0.7 |

Appropriate answers included both of:

- pseudocode **or** written form
- flowchart **or** diagram **or** Nassi-Schneiderman Diagram.

Ouestion 5a.

| Constitution of the | | | | | |
|---------------------|----|----|----|---------|--|
| Marks | 0 | 1 | 2 | Average | |
| % | 27 | 36 | 38 | 1.1 | |

Appropriate answers included any two of:

- format with indentations **or** format with line breaks
- add comments
- number each line
- use white space **or** use colour.

Ouestion 5b.

| Marks | 0 | 1 | Average |
|-------|----|----|---------|
| % | 21 | 79 | 0.8 |

Appropriate answers included any one of:

- so that others can understand the code easily
- so that the code is easier to debug
- so that a programmer can quickly and easily understand the code at a later date.

Students' responses indicated a better understanding of why code should be readable rather than how this could be achieved.

Ouestion 6

| | | | | | |
|-------|----|----|----|----|---------|
| Marks | 0 | 1 | 2 | 3 | Average |
| % | 39 | 12 | 17 | 32 | 1.4 |

- if distanceTravelled < distanceTotal **or** if distanceTotal > distanceTravelled
- message = "You have (distanceTotal distanceTravelled) more to travel"
- message = "Stop and turn back!!, you are (distanceTravelled distance Total) past your final destination"

Students' responses tended to fall into three categories: those that provided no meaningful response; those that recognised some of the changes required, and those that were proficient with the use of variables and scripting.

Ouestion 7

| Question 7 | | | | | | | |
|------------|----|----|---------|--|--|--|--|
| Marks | 0 | 1 | Average | | | | |
| % | 31 | 69 | 0.7 | | | | |

Different browsers interpret html in different ways, so the page may look different.

Ouestion 8

| Q 22 25 25 25 25 25 25 25 25 25 25 25 25 | | | | | |
|--|-------|----|----|---------|--|
| | Marks | 0 | 1 | Average | |
| | % | 66 | 34 | 0.4 | |

The correct order was:

- define the purpose of your site
- identify your target audience
- develop the site structure
- create a prototype showing the look and feel (this could also have been in fifth position)
- prepare content including text and images (this could also have been in fourth position)
- upload your site to your web server.

The most common mistake was to state that the first step was to identify the target audience rather than define the purpose of the web site.

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Question 9

| Marks | 0 | 1 | Average |
|-------|----|----|---------|
| % | 79 | 21 | 0.2 |

Either of:

- alt text **or** alternative text
- alt attribute.

Question 10

| Marks | 0 | 1 | 2 | Average |
|-------|----|----|----|---------|
| % | 12 | 52 | 36 | 1.3 |

Appropriate reasons included any two of:

- smaller file sizes for quicker downloading
- easier to demonstrate the perfect technique gives a clearer example of the action
- easy to change later
- easier and cheaper to create does not require a film crew
- no privacy or release forms for participants (as required for video).

Ouestion 11

| £ | C | | | | | |
|-------|----|----|----|----|---------|--|
| Marks | 0 | 1 | 2 | 3 | Average | |
| % | 33 | 30 | 25 | 12 | 1.2 | |

Three factors needed to be provided, and one mark was awarded for each. Answers had to be consistent with the graphic type selected.

Vector

- Responses could describe why the image is ideal for this type of graphic. For example, the image is composed of lines and gradients.
- Alternatively, responses could describe an advantage of using this type of graphic. For example:
 - o gradients can be applied and manipulated
 - o it is easier to edit and/or easier to manipulate the image
 - o file size vector graphic files are generally smaller
 - o scalability the image does not lose quality when resized.

Bitmap

- Responses could describe why the image is ideal for this type of graphic. For example, the image contains
 many very complex gradients.
- Alternatively, responses could describe an advantage of using this type of graphic. For example:
 - o bitmaps are better for very complex gradients they are more realistic
 - o software availability not all common imaging programs create vector graphics
 - o size and performance vector graphics, especially complex ones, can be both larger and slower in performance (take time to render) than the same visual element rendered in bitmap.

Most students thought that vector images would be most suitable and therefore identified that smaller file sizes were advantageous. However, many struggled to provide two additional advantages and often repeated their initial point.

Question 12a.

| Marks | 0 | 1 | Average |
|-------|----|----|---------|
| % | 56 | 44 | 0.5 |

Question 12b

| Question 126. | | | | | | |
|---------------|----|----|---------|--|--|--|
| Marks | 0 | 1 | Average | | | |
| % | 62 | 38 | 0.4 | | | |

Students were awarded one mark for naming the technique in part a. and one mark for providing an appropriate description in part b.

Acceptable answers included any one of:

- movie clips reusing objects keeps the animation small
- tweening don't need numerous drawings in between key frames, which keeps the animation small

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• scripting – manipulating a single object to create animation keeps the animation small.

Question 13a.

| Marks | 0 | 1 | Average |
|-------|----|----|---------|
| % | 53 | 47 | 0.5 |

Either of:

- use links to provide supporting information such as charts or graphics
- link to external resources that support the document.

Ouestion 13b.

| Marks | 0 | 1 | Average |
|-------|----|----|---------|
| % | 47 | 53 | 0.6 |

Either of:

- users can get lost or sidetracked by following links to other information or sites
- too many windows or pages open at once can clutter the screen and confuse the user.

Ouestion 14a.

| Marks | 0 | 1 | 2 | Average |
|-------|----|----|----|---------|
| % | 31 | 19 | 50 | 1.2 |

Appropriate answers included:

- the player served the ball with the racquet
- the player with the racquet served the ball.

Two marks were awarded for answers that were active and concise. One mark was given for partially correct answers that were active but used different or additional words.

Question 14b.

| Question 1 is: | | | | |
|----------------|----|----|----|---------|
| Marks | 0 | 1 | 2 | Average |
| % | 50 | 34 | 16 | 0.7 |

Active

- active voice engages the reader more effectively than passive voice
- active voice is shorter, more direct and more forceful and gets the reader more involved

Passive

- passive voice sounds more authoritative
- passive voice is often used to make writing appear more objective

Many students were able to provide advantages for the use of active voice but struggled to explain the benefits of passive voice.

Section C – Practical multimedia task

Many students continue to perform exceptionally well in the practical component of the examination. The web page creation remains the stronger of the two areas. Students' ability to create and insert a range of assets as directed by the design briefs supplied had improved noticeably. Some students still struggled with writing content in the appropriate style and for the intended audience.

Many students experienced some difficulties with the animation. Creating an animation in which the various parts move in synchronisation remains a challenge for many students. The use of paths, animation guides, grouping and changing fulcrum points should be well known to students at this level.

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Create the home page

Step 1

| Step 1 | | | | | | |
|--------|----|----|---------|--|--|--|
| Marks | 0 | 1 | Average | | | |
| % | 13 | 87 | 0.9 | | | |

One mark was awarded for creating and correctly naming the web page.

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Create the banner and add content

Step 2

| Marks | 0 | 1 | 2 | Average |
|-------|---|----|----|---------|
| % | 9 | 14 | 77 | 1.7 |

One mark each was awarded for:

- a banner of the correct size
- including the required elements in the banner (the picture **and** the wording 'Australian Junior Tennis Tournament 2007') and ensuring they were fully visible.

Step 3

| Step e | | | | |
|--------|----|----|----|---------|
| Marks | 0 | 1 | 2 | Average |
| % | 21 | 43 | 36 | 1.2 |

One mark each was awarded for:

- ensuring that the banner elements had not degraded in quality
- saving as a gif or png file.

Step 4

| Marks | 0 | 1 | Average |
|-------|----|----|---------|
| % | 12 | 88 | 0.9 |

One mark was awarded for adding the banner to the page.

Write content and add to pages

Step 5

| Marks | 0 | 1 | Average |
|-------|---|----|---------|
| % | 9 | 91 | 0.9 |

One mark was awarded for adding text in the page at the correct place (under the banner).

Step 6

| Marks | 0 | 1 | 2 | 3 | 4 | 5 | Average |
|-------|----|---|----|----|----|---|---------|
| % | 15 | 6 | 18 | 35 | 22 | 5 | 2.6 |

One mark each was awarded for:

- a single paragraph of more than one sentence
- mentioning four items from the text
- simple sentences that were appropriate to the audience
- using the active voice
- adding the content in the correct place on the page.

Most students wrote a short paragraph that included the required four items and were able to place it correctly in the web page. However, many students failed to score the additional marks for using the active voice and short sentences. These were appropriate due to the young age of the intended audience. All of these factors must be taken into account if students are to score full marks.

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Add the ranking table to the home page

Step 7

| Marks | 0 | 1 | 2 | 3 | 4 | Average |
|-------|---|---|---|----|----|---------|
| % | 9 | 7 | 6 | 10 | 68 | 3.2 |

One mark each was awarded for:

- creating a table
- creating seven rows and two columns
- using the correct headings, in a different format to the body of the text
- presenting all information and in the correct order.



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Link number one player to the player profile page

Step 8

| Marks | 0 | 1 | Average |
|-------|----|----|---------|
| % | 18 | 82 | 0.8 |

One mark was awarded for creating a link that worked correctly.

Format the home page according to the style and design guides

Step 9

| Marks | 0 | 1 | 2 | Average |
|-------|----|----|----|---------|
| % | 16 | 11 | 73 | 1.6 |

One mark each was awarded for:

- attempting to set the background (that is, in the code)
- setting the background so that it displayed correctly.

Step 10

| Marks | 0 | 1 | 2 | Average |
|-------|----|----|----|---------|
| % | 18 | 33 | 49 | 1.3 |

One mark each was awarded for:

- correctly matching the font on the home page to the style guide
- correctly matching the font in the heading to the style guide.

Step 11

| Marks | 0 | 1 | Average |
|-------|----|----|---------|
| % | 76 | 24 | 0.3 |

One mark was awarded for correctly laying out the page according to the design guide. Items needed to be lined up correctly, but could be either centred or left aligned.

The majority of students did not gain the mark available for this step, perhaps due to time constraints or inattention to detail. Students must refer to the guides and use them appropriately.

Animation

Step 12

| Marks | 0 | 1 | 2 | Average |
|-------|----|----|----|---------|
| % | 14 | 12 | 74 | 1.6 |

One mark each was awarded for:

- setting the size of the movie to 300 by 400 pixels
- changing the background colour to hexadecimal #006666.

Step 13

| Marks | 0 | 1 | 2 | 3 | 4 | Average |
|-------|---|---|----|----|----|---------|
| % | 7 | 8 | 33 | 36 | 16 | 2.5 |

One mark each was awarded for:

- importing all of the body parts
- constructing the player correctly (in the starting position as per the demonstration)
- layering the assets correctly
- positioning the player correctly within the frame, as per the demonstration.

Most students imported all the required body parts and then put them together as per the demonstration. However, many of them then failed to use appropriate layering to achieve this or did not frame the figure in the viewing area as per the demonstration and so did not achieve the available marks.

Step 14

| | otep I. | | | | | | | | |
|---|---------|----|---|----|----|----|----|---|---------|
| Ī | Marks | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Average |
| ĺ | % | 12 | 6 | 11 | 22 | 23 | 18 | 8 | 3.2 |



One mark each was awarded for:

- the left arm moving through the ball toss motion
- the right arm moving through the hitting motion
- the body moving through the serving positions
- the racquet moving through the serving action (the student needed to manipulate the rotation of the racquet from the hand)
- the body and limbs staying together throughout the motion
- the racquet staying in the hand throughout the action.

The more common errors were not rotating the racquet in the various stages of the serve, the player's body and limbs coming apart through the serve and the racquet leaving the hand.

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Step 15

| Marks | 0 | 1 | 2 | Average |
|-------|----|----|----|---------|
| % | 14 | 17 | 69 | 1.6 |

One mark each was awarded for:

- the ball being tossed up
- the ball correctly following the hand movement throughout the action.

Step 16

| Marks | 0 | 1 | 2 | Average |
|-------|----|----|----|---------|
| % | 15 | 45 | 40 | 1.3 |

One mark each was awarded for:

- the racquet connecting with the ball
- the ball flying off the screen, to the right, staying in front of the racquet head.

Step 17

| Marks | 0 | 1 | Average |
|-------|----|----|---------|
| % | 30 | 70 | 0.7 |

One mark was awarded if the sound occurred in the correct place.

Add animation to the web page

| rida ammadon to the web page | | | | | | |
|------------------------------|-------|----|----|---------|--|--|
| | Marks | 0 | 1 | Average | | |
| | % | 27 | 73 | 0.8 | | |

One mark was awarded if the animation was in the page and it ran.