VCE VET: Arts (Interactive Multimedia) GA 2: Computer-based examination

GENERAL COMMENTS

There was a noticeable improvement in students' scripts across both the short-answer and practical components of the examination from previous years.

In terms of underpinning knowledge, students were able to answer questions relating to the use of the Internet, web design, occupational health and safety, project management and communication issues. Based on the modules descriptions covered by this program, improvement is needed in demonstrating knowledge relating to the technical elements of computers and their use in multimedia development/internet product development and delivery. Some teachers need to give more attention to the underpinning knowledge of their students.

Specific areas to be improved include:

- elements of good and bad design
- consistency of interface design
- levels of interactivity for multimedia authoring
- understanding of audience and audience needs as a multimedia designer/developer.

SPECIFIC INFORMATION

Part 1

This table indicates the approximate percentage of students choosing each distractor. The correct answer is the shaded alternative.

Question	A	B	C	D
	%			
1	33	11	26	30
2	57	2	34	7
3	34	42	17	7
4	17	61	11	11
5	18	11	64	7
6	1	1	80	18
7	36	54	9	1
8	70	14	4	12
9	50	28	20	2
10	17	70	10	3

Part 2 – Short answer

Introduction to the Internet and multimedia interface design

Question 1 (Average mark 1.00/Available marks 2)

a.

Only one point was required. Acceptable examples included:

- speed of access to websites
- speed of email service (and/or other services)
- reliability of connections
- range of resources which can be downloaded (e.g. multimedia).

b.

Any point which is technically consistent with 1a, for example:

- **larger ISPs have their own high-speed leased lines** so that they are less dependent on the telecommunication providers
- **better quality connections can be achieved via peering** – peering is the arrangement of traffic exchange between Internet service providers (ISPs). Larger ISPs with their own backbone networks agree to allow traffic from other large ISPs in exchange for traffic on their backbones. They also exchange traffic with smaller ISPs so that they can reach regional end points
- **the quality of the routing equipment used by the ISP** – on the Internet, a router is a device or, in some cases, software in a computer, that determines the next network point to which a packet should be forwarded toward its destination. The router is connected to at least two networks and decides which way to send each information packet based on its current understanding of the state of the networks it is connected to. A router is located at any gateway (where one network meets another), including each Internet point-of-presence

The response needed to be of a technical nature. For example, ratio of users to modems was not accepted.

Question 2 (2.12/3)

a.

The **best choice** to answer this question was newsgroups (arguments for other applications were accepted if they clearly answered the question).

Description of application (1 mark): To earn the mark the description must specify what is unique about that application compared with other applications used for Internet communication. For example, **newsgroups** are discussions about particular subjects. They consist of notes written to a central Internet site and redistributed through Usenet, a worldwide network of news discussion groups. Usenet uses the Network News Transfer Protocol (NNTP).

b.

Students needed to provide a justification which related to which technology is best to 'keep up with developments in subjects' and to 'share knowledge and solve problems'. To earn full marks **two separate attributes** of the selected application which contribute toward one or both of those objectives had to be clearly stated. For example, n**ewsgroups** are specifically designed to enable multiple members to send and receive information efficiently. They are focused on particular subjects and are organised into subject hierarchies, with the first few letters of the newsgroup name indicating the major subject category and sub-categories represented by a subtopic name. Many subjects have multiple levels of subtopics. Some major subject categories are news, rec (recreation), soc (society), sci (science), comp (computers) etc. Users can post to existing newsgroups, respond to previous posts, and create new newsgroups.

Newsgroups enable access to many more people than can be achieved through video conferencing (or real-time chatting). It enables more structured communication of subject information than email (newsgroups are much more structured than email). Information can be obtained from (and provided to) many more people with a particular interest than is possible through video conferencing or real-time chatting. Video conferencing is more equipment intensive, e.g. more expensive/costly than the other options.

Question 3 (3.34/4)

Design features related to legibility and ease of navigation, details could include: clear letterform/font, large fonts, clear buttons for easy navigation, uncluttered design, contrast in colour, ease of use for the non-computer literate (click here etc.), ease of use for the visually impaired (e.g. bright obvious screen).

Question 4 (3.91/5)

Client brief: Meeting with the client to determine client wants and needs, purpose of product and usage, the target audience etc. Also provides an opportunity to let the client know what you can deliver.

Brainstorming: The design team meet to explore all possibilities (even silly ones), looking at innovative ideas and solutions, listing all the possibilities for a project. This process may include the client.

Concept development: Selecting ideas that the design team will use, developing navigation of screens, deciding what will be included.

Develop storyboard: Draw or sketch individual screens with arrows to show the navigation flow, use PowerPoint to demonstrate navigation flow, program 'dummy' screens to demonstrate navigation.

Client sign off: Client signs the storyboard, indicating approval of the concept. Allows the developers to begin work on the proposed development.

Question 5 (2.31/3)

a.

Answer: C

b.

Web images are a compromise of detail and file size (and hence download speed). Selection C – The image quality is satisfactory/significant detail is retained. The file size and download time is minimised.

Complete either Section A: Introduction to Multimedia Authoring or Section B: Introduction to Multimedia Scripting.

Section A – Introduction to multimedia authoring

Question 1 (0.54/2)

Features the product would have if it was developed as a **passive** multimedia product:

- the material would be displayed as a sequential presentation to the student
- the material would be displayed as a 'slide show'
- the product might also allow the user to advance sequentially through the material
- the user would not be able to enter any information or respond to the product.

Question 2 (1.16/2)

Features the product would have if it was developed as an **interactive** multimedia product:

- the material would allow the student to navigate in various paths through the lessons
- the material would allow the student to repeat parts of the lessons or look up relevant information whilst doing the lessons

- the product might also allow the user to do quizzes or play games that relate to the material
- the user might be able to enter information and view a response
- the user might be able to receive a score.

Question 3 (0.32/2)
Features the product would have if it was developed as an **adaptive** multimedia product:

- the material would allow the student to navigate various paths but present information in response to the student's choices
- the product would 'change' based on user responses
- the product would allow the user to interact with the product as above but would learn from the student's responses
- the product would remember user choices and preferences and present material and make suggestions based on these preferences.

Section B – Introduction to multimedia scripting

Question 1 (1.65/2)
One mark was awarded for a correct description and 1 mark for an appropriate example.

Event based scripting is where actions are triggered by events that can happen at any time. Events will not necessarily occur in any order. Often these events will be generated by the user, for example the mouse moving or a key being pressed.

Suitable examples included:

- when a user moves their mouse over a picture of an object a script is activated displaying a description of that object
- when the page closes a sound plays
- when the user presses a specific key an event script is run that displays an alert message.

Time was not an acceptable answer.

Question 2 (1.16/2)
Good documentation techniques could include:

- code can be easily maintained in the future as anyone can understand it
- code can be developed as a team, each person can understand each other's code
- code can be re-used in other projects
- other developers can understand the construction of the code quickly in future development.

Question 3 (1.11/2)
One point was awarded for each of the following answers:
A. Beeps twice

B. Nothing

Part 4
Complete either Section A: Introduction to 2D animation OR Section B: Multimedia in the music/visual arts/performing arts industry.

Section A – Introduction to 2D animation

Question 1 (1.48/2)
Responses could include: Fade, dissolve, checkboard etc.

Answers which described the use of video layers and transition filters were also accepted.

Question 2 (1.21/2)

a.
A tool used to create animation elements is the drawing tool (or equivalent).

b.
Techniques used to create a piece of the animation included frame-by-frame, film/movie loop, onion skin or tweening.

Question 3 (0.89/2)
Two essential elements to sync audio with mouth movements were: insert sync points into the soundtrack and ensure the frame rate allows the vision to play at the same rate as the audio.

Section B – Multimedia in the music/visual arts/performing arts industry

Question 1 (1.55/2)

Situations where multimedia is used in the relevant industry could include:

- performance piece – creating interaction between small audience and the medium
- performance artists, e.g. Stellarc
- presentations in galleries
- promotional clips on websites.

Question 2 (1.24/2)

Multimedia development skills required to produce a product for this industry related to:

- skill to organise information
- ability to create a consistent look and feel in the product
- knowledge of what is legally feasible (e.g. copyright, branding logos).

Question 3 (0.81/2)

Examples of how this skill would be used, included:

- information design – categorise and group information into the navigation areas
- ability to create … create an interface for areas that may be quite different in character and subject matter, but need to be consistent in navigation.

Significant sources of funding could include:

- ACMI/Cinemedia, FilmVictoria
  Government: Federal, State or Local programs
- quangos
- private investors, philanthropic trusts and foundations.

Part 5 – Students were required to complete both Question 1 and Question 2

Question 1 (14.28/28)

The most common mistake made by students in the website development exercise, was not to create relative links as part of the development of their site navigation. Their absolute links did not properly transport to the CD – a critical skill where transportable web development is concerned. This resulted in the site failing to operate as designed when being assessed. Many students successfully linked to the department pages but did not provide a link back to the home page. Bi-directional linking is fundamental to site development.

Question 2 (12.58/25)

Teachers and students will have noted the change in structure that required students to save at a location and in a file format described in the examination. This resulted in most students saving in an appropriate file format. It is still necessary to highlight that students have disadvantaged themselves by saving incorrectly – including some cases of saving Director files as renamed .html. When using Director many students seemed to prefer frame by frame animation for the flying bird, rather than making a film loop. Consequently the time constraints of placing individual frames meant that students put only a few on the score thereby making their animation jerky and short. Teachers need to emphasise the construction techniques for film loops for actions that are repetitive and continuous.