



Folios – Practical

Two hundred and twenty five candidates from 21 schools and colleges across Tasmania submitted folios for assessment in this subject.

The overall standard of work was quite good this year.

A key element of this year's folios was the diversity of work submitted. This diversity reflected the broader nature of the new syllabus with elements of video, graphic design, large format poster displays, books, booklets, websites and photography being included as part of the presentations. There were some particularly creative and unusual presentation methods employed by a range of candidates. Originality of presentation method was well received by the examiners and often resulted in high awards for criterion 4 (Generate and communicate ideas). 3 dimensional rendered animations were well represented as a presentation method.

Candidates gaining results in the higher end of the mark range typically displayed evidence of professional standards in the design and presentation of their work. In other words, 'A' ratings were typically awarded to candidates who presented work that was of a 'marketable' quality.

Several colleges used Microsoft Powerpoint as a presentation tool for folio work that backed up the main presentation such as a Video file (.avi) for example. Such powerpoint displays typically included the Research Essay, Research Essay Plan, sketches, storyboards and developmental screen prints.

Several concerns were raised during the marking process.

1. Some colleges presented candidate work as a significant number of individual computer files. It was often difficult to determine which of the files had relevance to the Major Project and which did not. Concern was expressed at the potential to miss a key file when searching through that work. This also significantly added to the time taken to assess folios when the above issues were evident. Teachers are strongly encouraged to, wherever possible, have candidates present their work as one easily accessed file with evidence of supporting work either printed and displayed in a hard copy folio and / or displayed in a Powerpoint type format.
2. Inadequate referencing was a common problem despite quite clear guidance being provided from TQA on this issue. Teachers and candidates are reminded that failing to cite the source of information included in folios constitutes plagiarism which can lead to quite serious consequences in assessment.
3. Many Research Essays were reflective statements or personal evaluations that contained little or no evidence of genuine research within the specialized area.

4. It became apparent that many candidates had not carefully studied the Assessment Guidelines. These guidelines were re-written this year to reflect the different content of the new syllabus. For example, the guidelines clearly specify the need for a Research Essay plan. However, only a minority of candidates submitted a Research Essay plan.
5. Design work was generally of a high standard but the lack of evidence in the evolution of a particular design through sketching was lacking or not evident. Some evidence led the examiners to the conclusion that design sketches were created post production.

Written Examination

Section A

Question 1

Well answered by those attempting the question. The full design process was mentioned as well as the need for prototyping. Considerations includes colour, safety, recyclability etc.

Question 2

Generally well answered by most candidates demonstrating knowledge of a variety of ways of creating textures for 3d graphics. Good answers explained how bitmap based textures could be used from a variety of sources and how procedurally generated textures could be used and the variety of ways than can be applied to map channels such as the diffuse, specular, bump, reflection etc. to create the texture. Quality answers also explained how greyscale based textures be they bitmap or procedurally based are specifiable used in maps channels for the generation of opacity, bump and secularity for example.

Question 3

This was well answered by most candidates demonstrating the wide variety of contexts that layers can be used in Computer Graphics. Some examples cited were in Photoshop style images where layers are used to control and build images, for animation in 2d situations where layers are used to separate animated elements for efficiently creating animation and in architectural contexts where a range of building information can be separated out onto layers for both dissemination of information and data organisation

Question 4

This was a very popular question that was attempted by the vast majority of candidates. Most answers showed a detailed understanding of the Design Process. Candidates that gained the best results were those who were able to show their knowledge of the Design Process while acknowledging the importance of ongoing attention to the needs and opinions of the client.

Question 5

This was a popular question that was generally well answered by the majority of candidates. Most answers defined the acronyms and commented on RGB being normally associated with emissive systems such as monitors, televisions etc. Most answers also identified CMYK systems as being more commonly associated with printed media. The higher end answers commented on issues of matching colours between the respective systems. Some better answers discussed the differences between additive and subtractive colour systems.

Question 6

Generally very poorly answered. Very few candidates mentioned virtual simulations or Finite Element Analysis in their answers. Most mentioned prototypes and research into other designs. Quite a few discussed testing that they would do, such as a car's breaking power, but failed to suggest any ways that such testing could be done.

Question 7

Best answers outlined the following:

Architects have the most in-depth knowledge of the design and the clients needs (through consultation). Problems occur during construction which may require alterations to the design. Builders or the clients may fail to see the design as a whole, so without the architect's input problems may remain unresolved.

Question 8

Copywriting was one method mentioned, as well as watermarking internet designs. Candidates also were aware that no matter what safeguards were in place that there would be no guarantee of absolute protection.

Section B**Question 9**

A well answered question by almost all candidates who attempted this question demonstrating understanding of storage devices. Better answers also discussed the use of network based storage systems with automatic back up routines, the of RAID arrays of drives to back up data onto multiple hard drives and the use of online storage systems in addition to the range of removable storage devices such as external drives and optical media.

Question 10

Many candidates answered this question with very few knowing what translation was.

Candidate that well rewarded for their answers discussed an understanding of why the three elements are critical in a 3D modelling environment.

Question 11

Candidates articulated the following:

What key framing and tweening are, what tweening is short for, how traditional animators use key frames, how modern software packages use key frames and the fact that tweening is now done by the software rather than the person.

Question 12

This question was attempted by the majority of candidates. Many answers touched on the 3 main Boolean operations: Intersection, Union and Subtraction and provided examples of where each could be applied. Many of the weaker answers conveyed an assumption that only one Boolean operation existed, that being Subtraction.

Question 13

The vast majority of candidates attempted this question. The answers were invariably predictable with references to avoidance of tangled cables; ability to move freely within a work space and potential for systems to be 'hacked'. The better answers discussed firewalls and encryption systems as a means of preventing unwelcome access to systems.

Question 14

The Random Access Memory (RAM) is the part of the system that requires optimisation so as to speed up rendering of high polygon count models. This optimisation along with fast processor speed dictates the rendering time and quality.

Question 15

Very good answers included the full process required to position a special effect into an animation. Including the possible need to consider placement, gravity, particles, wind, noise and the final look required. Candidates also noted that a lot of these effects could be downloaded positioned into the animation.

Question 16

This question was only attempted by a small number of candidates with most of those specifically citing the use of solid modelling applications with respect to rapid prototyping technologies. Many answers demonstrated a high level of understanding of the application and process of rapid prototyping in producing one off and short custom runs of physical objects and prototypes using solid modelling data derived from 3d geometry sources.

Section C**Question 17**

(a) Best answers included:

- Good thumbnail sketches
- Took the time to set out the storyboard into boxes and used a pencil for drawing
- Shot design using specific camera angles
- A defined sequence of sketches
- Use of explanatory notes, dialogue, music, time scales or frames.

(b) Marks were given to those who articulated the need for the elements described above. As well as to those who understood the critical role storyboarding plays in the production of even the most basic TV advertisements.

Many candidates identified what storyboards should include but failed to show this in their sketching.

Question 18

The majority of candidates who attempted this produced very good concept sketches with annotations to add emphasis and explanation to their design concepts. There were a number of excellent concept ideas from many candidates reflecting a sound understanding of the design context of the question. High level answers also explained in detail the function and purpose of visual design elements (line, shape, text, tone, texture) and principles (balance, emphasis, unity, contrast, rhythm) and the range of considerations required for design and market research in the development of branding design concepts.

Question 19

Marks for this question generally reflected the candidate's ability to create a practical, innovative and contemporary designs; present these designs as a series of detailed sketches; and to show an ability to adequately address the various elements of the written component of the question.

The most highly rated answers included rendered 3D sketches and efficient assembly systems. Some solutions incorporated clever hinging components that allowed quite rapid folding and unfolding capacity. Lower results often reflected basic 2 dimensional sketches and showed quite standard, square or rectangular designs and the absence of efficient assembly technologies.

Quite a few of the better solutions showed evidence of about 3 alternative design possibilities followed by a detailed development of the chosen concept.

Question 20

Answered by approximately 10% of candidates and generally quite successfully. Sketching was of a very high standard with design (two) sketches showing many annotations. Designs covered all aspects of the question, but some candidates only included one solution .

Section D**Question 21**

This question was only attempted by a few candidates. Those that did answer this question produced high level answers in the majority showing a keen understanding of the designer discussed in the context of ideas, influences and products. There were a diversity of designers discussed including architects, product designers, fashion designers, graphic designers and interactive designers in the responses.

Question 22

Less than 10% of candidates answered this question. Good answers included identification of risks and suggested solutions to secure the business. Most focused on internet risks along with copy write, but some went as far as to consider fire/emergency and threats to employee safety.

Question 23

This was a popular question that, on face value, appeared to be an easy one to answer. Many candidates reiterated the question without bringing significant new information to the problem. Quite a few candidates discussed issues surrounding banking security and general data security without addressing the question from a designer's perspective. Some of the better answers gave detailed definitions of the 3 stated concepts of intellectual property, security and privacy. These definitions were backed up with examples that had relevance to the design context of the question. Quite a few better quality answers explored the issues of Intellectual property ownership, copyright, patent and trademark issues.

Question 24

Answered by 70% of candidates. This type of question always tends to be popular as many candidates are interested in the latest computer graphic content in recent films and are able to express themselves well on the topic. The films 'Toy Story' and 'Lord of the Rings' were the landmark productions in the eyes of most candidates.

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