

Principal Moderator Feedback

Summer 2012

GCSE ICT (5IT04)
Creating Digital Products

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5IT04 – Creating Digital Products

Unit 4, Creating Digital Products, is a practical unit. Candidates apply the knowledge and understanding of digital design they acquire in unit 3 to produce an interactive digital product for others to use. Candidates can choose what sort of product to design and make, but it must include an appropriate user interface and user input must determine the outputs that are produced.

June 2012 was the first moderation session for this unit, and all candidates sat the only Controlled Assessment Brief (CAB) available in this session, 'People and Places'.

A significant number of candidates have tackled the controlled assessment well, designing and producing good quality digital products in response to the Controlled Assessment Brief (CAB). Whilst a few candidates did not apply the necessary skills in the context of reviewing and design, most had produced good evidence of their ability to apply their ICT knowledge and skills of ICT across all activities and at all levels.

Candidates had to create one of the following four types of interactive digital products, related to this theme:

- a game
- an interactive multimedia product
- a database system with a customised user interface
- a web-based interactive product.

The quality of candidate work was very encouraging overall. The majority of candidates chose to create a multimedia or web based product rather than a game or database system, but some very good databases and games were seen. In comparison to Unit 2, the CAB offers less direction and requires more independent decision-making by candidates. It was clear that many candidates relished the opportunity to work independently on a self-defined project; designing and creating some very interesting and well-executed products.

For each different type of product, as stated in the assessment guidance for the unit, we would expect candidates to produce products that meet these minimum requirements:

Game: scoring system (i.e. rules to progress/win), single player at a time (or alternate plays for multiplayer), sprite interaction (with other sprites and/or environment), some original assets.

Interactive multimedia product: have a clear pathway(s) through the product; include accessibility features, different types of interaction, animation, range of different assets (animations, sounds, images etc), user input (form, request for information, search feature, interactive quiz or questionnaire).

Database with customised user interface: minimum of 2 related tables, minimum of 1 input form, searches of related tables (using multiple search criteria where relevant), use of a switchboard or menu system, outputs (eg auto-report functionality, mail merge), should contain enough data to demonstrate full functionality (approx 25 records, but could be fewer), functioning user interface (front end).

Web-based interactive product: interactivity, working navigations (5 screens is sufficient), accessibility features, different types of links (hotspots, hyperlinks etc), animation, range of different assets (animations, sounds, images etc), user-input (form, request for info, search feature, interactive quiz or questionnaire), viewable in a web browser.

In most cases candidates met these minimum requirements, however in some cases, simpler products were seen which had an effect on the marks available for Activity 2.

There were a number of centres that had not really grasped the topic of 'People and Places' and they produced products that were only very loosely linked to this theme. For example multimedia maths or history revision guides do not meet the requirements of the brief. Future briefs will be built around themes, such as the upcoming 'Sea and Sky' CAB, and these will be more clear cut. Failure to meet the brief will have an impact on the number of marks it is possible to award candidates for.

Activity 1 involved an investigation into different types of product, a product review and a product proposal; Activity 2 was focussed on the design, gathering and preparation of assets and the development of the interactive digital product; Activity 3 involved repurposing content from the digital product to showcase and promote it to a specified target audience; and, in Activity 4, candidates evaluated their products and performance.

Where centres have done well

The best outcomes were seen in centres where the candidates were well prepared, had developed a range of transferable skills and where they were given the choice of the type of product they could create. Where possible, candidates should be able to choose from at least two of product types listed in the CAB and the products created must fit within the theme of People and Places.

Constructive feedback from teachers and test buddies generated improved outcomes. Candidates who responded positively to feedback generally accessed the higher mark bands because their work demonstrated a better understanding of the CAB and its requirements.

Where the Candidate Assessment Records (CARs) were completed in detail this aided the moderation process considerably and provided moderators with an insight into the rationale behind the marks awarded. It was clear that these centres had thought carefully about their assessment of the work and were committed to supporting their students by providing such a level of detail. It is much easier to trust in the professional judgment of assessors when this level of documentation is present. Unfortunately, some centre assessors made no comments on the CARs and did not check the totalling of marks, which impedes the moderation process and can make it difficult for moderators to understand how the marks were arrived at.

Where centres could improve

Administration was a problem for some centres. Centres are advised to refer to the ['Centre guidance for submission of moderation samples'](#) document available on the website when they prepare the work to send to the moderator.

Some centres have narrowed the choice of digital products available to candidates too much by instructing all candidates to create the same product type. It was also evident that some centres had tried to write a "sub brief" for the CAB which resulted in candidates producing unnecessary content that was not assessed within any of the mark bands. Both of these practices are not encouraged as they often resulted in candidates producing very similar work and overall they limited candidate achievement.

Several centres did not apply the mark bands accurately within each activity, which led to lenient assessment. In particular there was awarding of high marks for 2c functionality where a product did not work, and the awarding of full marks for 2b gathering and preparing content; where there was no evidence of how the content had been prepared and where there was a limited variety of appropriate content used/recorded.

Centres need to be aware that there is no need to submit a candidate's whole folder of evidence. The guidance provided states that only the evidence listed on the checklist is required. Centres must be more aware of the contents of the Moderator's Toolkit, which lists the acceptable software for evidence. Some candidates lost marks because they failed to convert or submit the correct documents (eg those products created in Missionmaker not including the file playable in Missonplayer and showcase products produced in Moviemaker where file had not been correctly exported) into an accepted format. Centres are also reminded that this is a digital qualification and that all evidence is required in that format. Hand-drawn designs must be scanned and cannot be moderated if submitted in hardcopy only. Centres are advised to refer to the 'Centre guidance for submission of moderation samples' document available on the website when they prepare the work to send to the moderator. Centres should also be wary of including web-embedded content from the internet in products. All evidence should be stored locally in the candidate's folder on the submitted CD/DVD.

Activity 1

Candidates were tasked with investigating a range of different interactive digital products and then choosing one to review. Most candidates were successful in creating a detailed product review that provided some evaluation of the product's strengths and weaknesses, user interface and its functionality. In order to access the higher marks, candidates have to have also evaluated the usability and accessibility of the product. Many candidates included screenshot extracts from the product but few of these were referred to in the text or effectively supported the comments made. Some candidates had spent unnecessary time creating and submitting more than one product review. Where they choose to do this they should only submit what they consider their best review for assessment.

Candidates were required to complete a proposal for their chosen product that outlined the purpose of the product, details the characteristics of the target audience and summarises the proposed content and features. This task was generally well done with most candidates producing an informed proposal. A proposal is considered to be "informed" when the content is backed up with evidence gathered from research (eg questionnaire results). Although not a requirements of the CAB, it was good to see the research evidence referred to in the proposal being submitted alongside the proposal.

In quite a few cases proposals were not fully completed. Some candidates failed to fully assess the users' capabilities and needs within the proposal and therefore it was difficult for them to assess whether or not the user interface of their product (assessed in Activity 2d) demonstrated good awareness of the users' capabilities. The proposal templates include a space for teacher feedback. Where this was used by the teacher, it made a significant difference to the candidates' decisions and, often, improved the overall product outcomes. Teachers are expected to complete this section of the proposal to make sure that the proposed product is achievable in the time available.

Activity 2

This activity is all about the design and development of the product.

The design process varies considerably depending on the type of product being developed. However, in all cases the product being developed must include interaction with a user and therefore candidates must provide designs of the user interface. The design documentation should also provide an indication of the products functionality and interaction with the user. Most candidates produced design documentation that was appropriate for the product type being developed. However, several candidates failed to provide any reasoning or justification for their design decisions and this restricted them from achieving the higher marks. Where possible candidates should incorporate their justifications into their designs but where this is not possible, candidate should be encouraged to document these reasons within the development log. The development log should also be used to document the feedback received and any changes that have been made as a result of this feedback.

Most candidates successfully gathered and prepared content for use in their digital products. However, too many candidates failed to record the source of the content they have gathered within their assets table and many also failed to document the editing or optimising of the content. In order to achieve the higher marks, candidates need to have gathered and prepared a variety of appropriate content for use in the product. The assets table should contain all of the content prepared and gathered and should not be restricted to just images; candidates should also be encouraged to source text, video and sound. It is important that the candidates who choose to create an interactive database product provide the source of the data that will be stored and also show how the data has been prepared for use in the proposed database structure.

Functionality involves the demonstration of whether a product works as designed and whether it show awareness of audience and purpose. The functionality of the products created by candidates varied considerably but the majority of centres assessed the functionality of the products fairly. However, the assessment of this strand was considered generous where a small number of centres failed to recognise that the quality of the products user instructions formed part of this assessment. Centres need to note that there is no requirement for candidates to produce a paper based user guide for their product. The most effective products incorporated the user instructions, electronically, as part of the product. It is important that centre assessors use the product and assess how effectively it works. A product cannot be awarded high marks if it does not work as the user would expect. For example, if a multimedia product has a menu to navigate the product and the product advances on clicking anywhere on screen and not just on the menu, it would not operate as the user would expect.

The assessment of the functionality has to be of the product in its current state and not how it could be.

Most candidates produced products with user interfaces that demonstrated some awareness of the users' capabilities and needs. Some candidates, who failed to correctly assess the abilities and needs of the user within the activity 1 proposal, struggled to demonstrate the effectiveness of their products user interface in meeting the users' needs. In order to access the higher marks candidates need to provide evidence of effective usability and accessibility testing. Accessibility was misunderstood by several candidates.

Finally, as part of Activity 2, candidates reviewed the design and development of their product and their own performance. Several candidates answered all of the questions outlining their decisions, feedback and responses to feedback they have received and this helped them when completing their evaluation in activity 4. Overall, the majority of candidates designed, developed and tested a functional interactive product that met most of specified user needs. However, it is important to stress the need to document feedback and actions taken throughout the design, development and testing process within the development log.

Activity 3

The digital showcase provides an opportunity for candidates to demonstrate the quality of their product. Candidates are expected to repurpose appropriate content and features from their product to promote it to a target audience of their choice. The audience of the showcase does not have to be same as that of the product. For example the product may be a game targeted at children and the showcase may be targeted at their parents. It was important that candidates completed details of the specified audience within the activity 3 review as without this information it was difficult to assess the effectiveness of the showcase. Most students understood the showcase concept with many producing very effective digital showcase products. However, a small number of candidates did not grasp the concept and produced products that simply presented the story of the product to the moderator and some candidates created paper based documents that were not suitable. The most effective showcase products included repurposed images, sound and text from the digital product, attracted attention and promoted the products features. Centres need to note that there are no requirements to provide the designs for the showcase.

Activity 4

Candidates were asked to evaluate the design and development of their digital product, their digital showcase and their own performance. Several candidates evaluated the development of their product and their own performance but failed to evaluate the digital showcase and this limited some candidates from achieving high marks as they had not evaluated all of the project outcomes. Other candidates failed to mention the feedback given and received and others included limited suggestions for improvement.

Preparing the Evidence

Centres should submit only the final products and publications as listed on the evidence checklist. These should be organised into the Activity folders as directed in the CAB. Some candidates submitted a single folder containing all their evidence or indeed multiple copies of the outcomes of some or all activities and this should be avoided in future series. Evidence must be checked to ensure it is accessible using the Moderator's Toolkit.

Once the evidence is copied onto the moderation CD, it must be thoroughly checked again. All the evidence for the required sample should be on one CD or DVD if possible. CDs and/or DVDs should be appropriately packaged so as to survive the journey to the moderator intact. There were some instances of discs being sent with no case in a plain paper envelope in this series, which inevitably resulted in the disc arriving broken.

Each candidate folder should be named according to the following naming convention:

[centre #]_[candidate #]_[first two letters of surname]_[first letter of first name].

For example, John Smith with candidate number 9876 at centre 12345 would have a controlled assessment project in a folder titled: "12345_9876_SM_J".

The Candidate Assessment Record (CAR) should be completed and provided electronically as part of the submission. Comments should be directed to the moderator and should explain where the internal assessor has awarded marks and provide details of any professional judgment applied.

The Assessor Witness Statement (AWS), which is the final page of the CAR, should be scanned or provided as a hardcopy to authenticate the work submitted.

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