

Examiners' Report

June 2016

GCSE ICT 3 5IT03 01

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Introduction

This unit was first examined in January 2012 and forms part of the double award GCSE ICT qualification.

As with the Unit 1 examination, this paper follows an untiered structure which allows all candidates to access all grades. To this end, the paper is designed to gradually increase in difficulty with a greater percentage of higher grade components in the later questions.

The examination is designed to test the candidates' ability to apply knowledge of digital design within a given context. The scenario is provided at the start of the paper which runs throughout the examination, with additional information provided with individual questions as required.

Many questions are supported by a range of stimulus materials related to a particular assessment focus and aspect of the scenario. In this examination the scenario focused on an outdoor pursuits centre and some of the related digital products a business like this would need. It is vital that candidates make appropriate use of these when demonstrating knowledge and understanding. More successful candidates applied their understanding to the provided context rather than producing generic, unfocused answers.

On the whole the candidates' performance showed a slight improvement compared with performance in the June 2016 assessment window – with the average mark rising slightly. However, many candidates had significant gaps in their knowledge which was often compounded by responses that did not make appropriate use of the given scenario, or suitable explanation/expansion was not provided in a question worth more than 1 mark.

Centres are encouraged to look at previous papers with candidates and ensure they are familiar with the design and expectation of the paper. Ensuring that candidates are aware of the requirements of particular command verbs; understanding, for example, that an explain question should contain two linked points, would greatly improve candidate performance.

This is a 'digital design' paper and as such addresses a range of practical, applicable skills. Candidate preparation should be as realistic as possible, creating links with Unit 2 and 4 and highlighting the methods of gathering, preparing, designing and creating digital content within a variety of contexts, would all help candidates to understand the practical applications of the content of this unit and enable them to more readily apply their understanding to the given context within the exam.

Question 1 (a)(i)

This question was answered quite well with the majority of candidates able to gain at least two out of the four marks available. Answers typically focused on the improvement of readability of the text on the page, with answers focusing on increasing the fonts size of the title/text and changing the font used.

Some candidates identified the need to improve the layout but often their responses were not clear in what way the layout could be improved. Suggestions to move the navigation bar and/or picture were popular responses but many of these responses were not clear enough.

1 Nell wants Ashton to redesign the centre's website.

Figure 1 shows the homepage from the current website.

(a) (i) Identify **four** ways that the design of the homepage could be improved.

(4)

- 1 ~~The~~ The Logo could be included on the page.
- 2 The text size should be enlarged so it is readable.
- 3 The title should be big and bold.
- 4 The text could be in bullet points.



ResultsPlus Examiner Comments

This response gains three of the four marks available.

1. Mark awarded (MKPT 6).
2. Mark awarded (MKPT 9) – 'text size' is enough to imply the main 'welcome text'.
3. Mark awarded (MKPT 3).
4. No mark – The text is in short sentences and is not appropriate for the use of bullets, therefore this is not a sensible suggestion.

1 Better/higher quality image

2 Colours

3 logo in one corner

4 Font could be better.



ResultsPlus
Examiner Comments

In this response we see that the candidate only gains one of the four available marks.

1. No mark – The candidate does not show understanding of what would make the image better/more suitable i.e. style/content of image.
2. No mark.
3. 'logo in the corner' – just enough for 'Add logo'.
4. No mark – the candidate does not show an understanding of why, e.g. 'to make it easier to read'.



ResultsPlus
Examiner Tip

Be specific. When making suggestions for improvements be clear as to what the improvement will be and not just an action you will carry out. For example 'Change the font' would not be credited as it is clearly not an improvement but 'Use a more readable font' would be credited.

Question 1 (b)

Most candidates were able to gain at least one mark here but only a surprisingly small number were able to gain two or three marks. Many candidates did not meet the demands of the question and focused on making an app or testing rather than how to ensure a website can function/be more usable when being accessed on a smartphone. As with other times during the examination, candidates were often hampered by providing generalised responses that did not demonstrate enough understanding.

(b) Websites designed to be used on a computer are not as easy to use on a smartphone.

Give **three** ways of making a website more usable on smartphones.

(3)

- 1 The size of the webpage could be reduced so it can be viewed without the need to scroll down.
- 2 The dimensions could be changed to suit the screen dimensions of the phone.
- 3 Drop down lists could be used rather than buttons to make it easier to navigate.



ResultsPlus Examiner Comments

In this response we see that two marks have been awarded.

1. Mark awarded (MKPT 6) – descriptions that showed an understanding of how a 'mobile version' of a site would be realised on a phone were acceptable.
2. No mark – Although there is enough to award against MKPT 6, as the candidate is identifying how the site could be changed to scale/fit a smaller screen, a mark has already been awarded against this marking point.
3. Mark awarded (MKPT 10).



ResultsPlus Examiner Tip

Ensure that responses are suitably different and do not address the same basic point. Here the candidate focuses on the same point in two of their responses.

Question 1 (c)

This was typically answered very well with the majority of candidates able to gain both marks for identifying 'streaming' and 'downloading' as the two methods of accessing the online video.

Question 1 (d)

Here candidates showed a good understanding of the use of file/image formats with the majority of candidates gaining at least one of the available two marks, with a pleasing number able to gain both. Typically, many candidates were able to identify that the file would support animation, or that it would be a relatively small file size and so make it suitable for use on a webpage.

(d) Ashton creates a banner for the website. He saves the banner as a GIF file.

Give **two** reasons why he would use a GIF file for a website banner.

(2)

1. GIF files can be compressed into smaller files with the same quality
2. The user won't need a specific software to open the gif file



ResultsPlus Examiner Comments

Here we see a response that gains both marks

1. Mark awarded.

2. Mark awarded – 'won't need specific software to open' was considered enough to award against 'supported by most browsers'.

(d) Ashton creates a banner for the website. He saves the banner as a GIF file.

Give **two** reasons why he would use a GIF file for a website banner.

(2)

1. A Gif file allows for both moving and still images.
2. ~~It does not~~ It's compatible with images.



ResultsPlus Examiner Comments

1. Mark awarded – 'it allows moving images' – enough for 'supports animation' (MKPT 2).

2. No mark – 'compatible with images' does not show enough understanding of OS/Browser support.



ResultsPlus Examiner Tip

Make sure that you make use of the information you are provided. In this question the focus was use of Gif for a website banner and this should shape the responses. The second response in this example does not address that and so does not gain the mark.

Question 2 (a)

Candidate performance on this question was generally quite good with most achieving four or five marks out of the available six. Most candidates successfully included the correct title and expected information elements but many lost marks for poor layout or not appropriately identifying the animation that would be included.

2 Nell wants Ashton to create multimedia and printed adverts.

(a) Nell gives Ashton this specification for a multimedia advert.

Multimedia Advert Specification

Title/Caption:
'School Adventure Holidays'

Information:

- Small or large group holidays
- Term time or school holiday times available
- Fully qualified instructors
- Email us at info@woodparkoutdoors.co.uk

Additional Features:

- Must contain centre logo
- Must contain an image
- Must use some form of animation

Use the space provided to draw a design for a multimedia advert that meets the specification.

(6)

SCHOOL ADVENTURE HOLIDAYS

- Small or large group holidays
- Term time or school holiday times available.
- Fully Qualified instructors
- Email us at info@woodparkoutdoors.co.uk

Image of
School enjoying
the holiday

LARGE BANNER SAYING
'COME JOIN US' which
changes colours subtly as
an animation.

Centre
Logo.



ResultsPlus

Examiner Comments

In this example we see a response that gains all six marks.

School Adventure Holidays' – Included – mark awarded. At least 3 of 4 information points – Included – mark awarded. Both images (logo and other image) – Included – mark awarded. Annotation shows some form of animation to be applied – Included – mark awarded. All items suitably sized – Mark awarded – Size of title text can be inferred from the use of the box outline so can be assumed that it is larger than body text. Quality of design – Mark awarded.



ResultsPlus

Examiner Tip

Make sure your designs always contain sufficient detail. Ask yourself if somebody else could easily make what you have in mind using only your design document

School Adventure Holidays

Small or large group?
Holidays

Image

Term time of school
and holiday times -
available

Centre
Logo

Our fully qualified
instructors

Animation

Email - @woodparkoutdoors.co.uk



ResultsPlus Examiner Comments

Here we see a response that gains only three of the available marks.

School Adventure Holidays' – Included – mark awarded. At least 3 of 4 information points – Included – mark awarded. Both images (logo and other image) – Included – mark awarded. Annotation shows some form of animation to be applied – Not enough – as it does not give a clear indication of how animation will be used. All items suitably sized – Mark not awarded as all items are the same size. Quality of design – Mark not awarded – there are multiple issues with layout, sizing etc.

Question 2 (b)(i)

Candidate performance on this question was quite good with most able to gain at least one of the three marks available, with a large number also able to gain a second mark. Typically answers focused on achieving consistency through use of design features such as fonts and colour schemes.

Where candidates were less successful this was typically due to focus on internal consistency (i.e. consistency within a single product) rather than creating consistency between different products. Answers such as 'use a template' were not credited as these generate consistency between pages/screen in a single product and not across different products.

(b) (i) Ashton creates a printed advert.

He repurposes text and images from the multimedia advert to make the products consistent.

Give **three other** ways Ashton could make sure the products are consistent.

(3)

- 1 He could use the same layout as the multimedia advert
- 2 He could use the same colours as the multimedia advert
- 3 He could keep the logo in the same place on the page as the multimedia advert



ResultsPlus Examiner Comments

In this response we can see the candidate has achieved 2 marks.

1. No mark – The question focused on consistency between different products and not within a product, therefore using the same layout would not be appropriate as different products would have variation in their layout.
 2. Mark awarded – consistent use of colours across products helps to create consistency and brand recognition. (MKPT 2).
 3. Mark awarded – credit was given here for the 'company logo' being used in all products. The comment regarding the logo's location was not relevant to this situation.
- 2 marks total.

Question 2 (b)(ii)

Candidate performance on this question was very disappointing with many candidates not achieving any marks. Here the focus was to compare repurposing content with sourcing new content; candidates were then expected to provide a reason why repurposing may save time. Typically, responses repeated part of the stem rather than providing a suitable reason as to why repurposing may save a digital designer time.

- (ii) Repurposing text, sounds and images may save time compared to producing or sourcing new content.

Give **one** reason why repurposing content may save time.

It would save time because you are only making (1)
minor changes.



ResultsPlus Examiner Comments

Here we see a response that gains the mark. The response clearly states a difference between the two methods of sourcing content and how that would save them time i.e. that only minor changes would be needed.

Many incorrect responses followed a similar pattern in that they provided variations on part of the stem e.g. 'You do not need to source new content'. As the question asked to compare sourcing new content and repurposing, these types of response were not valid.

- (ii) Repurposing text, sounds and images may save time compared to producing or sourcing new content.

Give **one** reason why repurposing content may save time.

Because you already have the entity (1)
already



ResultsPlus Examiner Comments

In this example we see a response that does not gain a mark – a repurposed asset is unlikely to be able to be dropped in – some editing/alteration is usually required but the process is shortened.

Question 2 (c)(i)

Performance on this question was varied. While many candidates gained a mark, typically for identifying that higher colour depth in an image would result in more detail in terms of representation of colour, a large number of candidates were unable to provide a suitable reason and often confused colour depth with resolution and focused on the quality of the overall image.

Ashton wants to use one of the versions of the image in a printed advert.

- (i) Explain why the higher colour depth of version 1 would make it a better choice than version 2.

The higher colour depth⁽²⁾ means more colours and shades can be used, making the image more vibrant and detailed.



ResultsPlus Examiner Comments

Here we see a response that was awarded two marks.

The candidate identifies a valid point 'The higher colour depth means more colours and shades can be used' (1) and provides a suitable linked explanation 'making the images more vibrant and detailed' (1).



ResultsPlus Examiner Tip

The command word explain requires an initial point followed by expansion. The number of marks will guide you as to how much expansion is needed. In this question two marks were available which means an identified point followed by a single expansion was needed.

Question 2 (c)(ii)

Most candidates were able to gain at least one mark here by correctly identifying that the higher resolution of the identified image would have an impact on the quality. Very few candidates were unable to provide a suitable linked answer or a reason as to why the higher resolution would lead to better quality.

Question 3 (a)(ii)

Many candidates performed well in this question and were able to provide a suitable reason as to why a designer would make use of a timeline storyboard when designing an audio product. Typically, answers focused on identifying the timing of individual assets.

Question 3 (c)(i)

Performance on this question was very good with the vast majority of candidates gaining both marks, by providing a suitable, linked description of what the designer must do to legally use a sound file that they have found on the internet.

Question 3 (c)(ii)

Most candidates were able to gain one mark here for correctly identifying that an appropriate way to achieve material that is not restricted by copyright would be to create the assets themselves. Many candidates provided responses that focused on the use of sites offering 'royalty free sounds' which were not valid, as although royalty free sounds would not require the designer to pay for them, many of the sites that provide these do so under certain usage conditions which linked to copyright and intellectual property.

(ii) Give **two** ways Ashton could source sounds that are not restricted by copyright.

(2)

1 Make his own sound-files

2 look for content which have a creative commons.



ResultsPlus Examiner Comments

Here we see a response that gains two marks.

1. 'make his own sounds' – Mark awarded MKPT 1.
- 2 'creative commons' – although creative commons is a form of licensing (as with copyright) the permissions are usually stated at the point of sharing, and are often shared with very few restrictions on their use. Therefore 'creative commons' was allowed.



ResultsPlus Examiner Tip

Explore copyright and 'creative commons' these are important factors that can have a major impact when creating digital products.

Question 3 (c)(iii)

The majority of candidates were able to gain at least one mark here, typically for identifying that compressing the sound would impact on the sound quality of the audio file. Broader knowledge of this area was limited however with fewer candidates able to gain two or three marks.

It is recommended to centres that some misconceptions and generalisations are challenged. Many of the responses seen made reference to compression causing corruption. It should be noted that any processing in digital format can cause corruption and therefore this is not a drawback specific to compression.

(iii) Ashton uses a sound that has been compressed using a codec.

Give **three** drawbacks of using compressed sound files.

(3)

- 1 User will have to install a type of file software to listen to audio
- 2 the sound may lose quality if it is not decompressed properly.
- 3 The sound could be ~~corrupted~~ ^{corrupted} when it is being decompressed.



ResultsPlus Examiner Comments

Here we see a response that gains two marks.

1. Mark awarded – MKPT 1.
2. Mark awarded – MKPT 3.
3. No mark – sound/file corruption can occur even with uncompressed files.

Question 3 (d)

Performance on this question was quite disappointing with many candidates not able to provide a way that the naming conventions of the example files could be improved. Many candidates repeated the example they were given, instead of providing another reason as directed in the question.

Question 3 (e)

Performance on this question was very disappointing with many candidates incorrectly focussing on the content and audience of the podcast rather than how the podcast could be implemented to ensure good user experience on different devices. It is recommended that centres spend time with candidates in developing exam techniques including decoding and interpreting the demands and requirements of a question.

Where candidates did gain marks, the responses often focused on file size and compatibility. Very few candidates were able to provide more than 2 correct responses.

(e) The podcast will be accessed and listened to on many different types of digital devices.

Give **four** ways Ashton could ensure a good user experience on a range of devices.

(4)

- 1 He could make the podcast a lower file size to make it quicker to load on all devices.
- 2 He could make the file a common file type so it ^{can} ~~would~~ be accessed on most, if not all devices.
- 3 He could make the podcast interactive in order to engage the user.
- 4 He could losslessly compress the audio so it reduces the file size but retains quality.



ResultsPlus Examiner Comments

Here we see a response that gains two marks.

1. Mark awarded – MKPT 2.
2. Mark awarded – MKPT 1.
3. No mark – interaction is not relevant to the focus of the question.
4. No mark – while ensuring that the sound quality is good is an important factor for user experience this is too general as the focus of the question is for 'a range of devices'.



ResultsPlus Examiner Tip

Spend time reading and decoding the question to ensure that all your responses are relevant to the scenario and question given.

Question 4 (a)(i)

Candidates performed very well on this question with most getting at least two marks, and a large number able to achieve all three marks, by correctly identifying interactive features on the given example screen.

Question 4 (a)(ii)

Most candidates were able to achieve one mark here by identifying that sans-serif fonts are generally easier to read. Very few candidates were able to provide a second reason for using this type of font. It is recommended that centres support candidates in developing their digital design skills by exploring the characteristics of different font types, styles etc and how these impact on a digital product and the intended audience.

(ii) Ashton uses a sans-serif font for the text in the e-learning package.

Give **two** reasons why he uses a sans-serif font.

- 1 This is not cursive so it is easy to read (2)
- 2 the letters are well spaced out and big to be read clearly



ResultsPlus Examiner Comments

In this example we see a one mark response.

1. Mark awarded – MKPT 1.
2. No mark – the answer is a valid response against MKPT 1 'clear to read' but is essentially a repeat of the first response which has already been credited.



ResultsPlus Examiner Tip

Always re-read your responses to ensure that they do not make the same point.

(ii) Ashton uses a sans-serif font for the text in the e-learning package.

Give **two** reasons why he uses a sans-serif font.

(2)

1. Sans serif fonts are easier for younger children to read because there aren't so many lines.
2. Sans serif fonts are better for lower resolution displays, as opposed to printing, because the screen may merge the serifs into a black blob, not a letter.



ResultsPlus

Examiner Comments

In this response the candidate achieves two marks.

1. Mark Awarded – MKPT 1.
2. Mark awarded – MKPT 2.

Question 4 (b)(i)

Overall candidates did quite well on this question with most able to provide descriptions of the process depicted in the flowchart that achieved at least two out of the three marks available.

Where candidates did not achieve marks, this typically fell in two broad camps. Candidates either missed key details (checking the progress of the user or 'entering the username' were often omitted) or the question was misinterpreted and responses given which led to responses that in essence repeated part of the question.

Users of the e-learning package need to register on the system with a username and password.

(b) Ashton uses flowcharts to plan the logic of sections of the e-learning package.

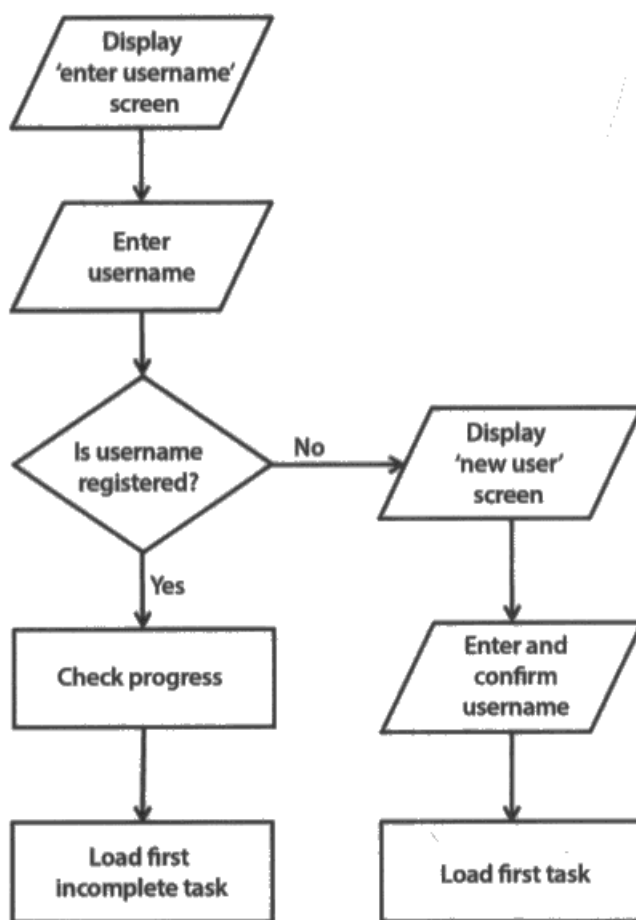


Figure 7

Figure 7 shows part of one of his flowcharts.

(i) Explain the process in the flowchart.

(3)

The user is displayed with a Username screen. If they are registered already they they will be directed to their 'incomplete task' as the e-learning 'checks their progress'. If they are not registered then they will be directed to a 'new user' screen in which they will have to create an account and 'confirm it'. Then they will be directed to their first task.



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Examiner Comments

A two mark example.

MKPT 1 – Not awarded – the candidate does not mention entering or checking a user name.

MKPT 2 – Mark awarded – a description of the full process for a registered username is given.

MKPT 3 – Mark awarded – a correct description is given of the 'not registered' route.

Question 4 (b)(ii)

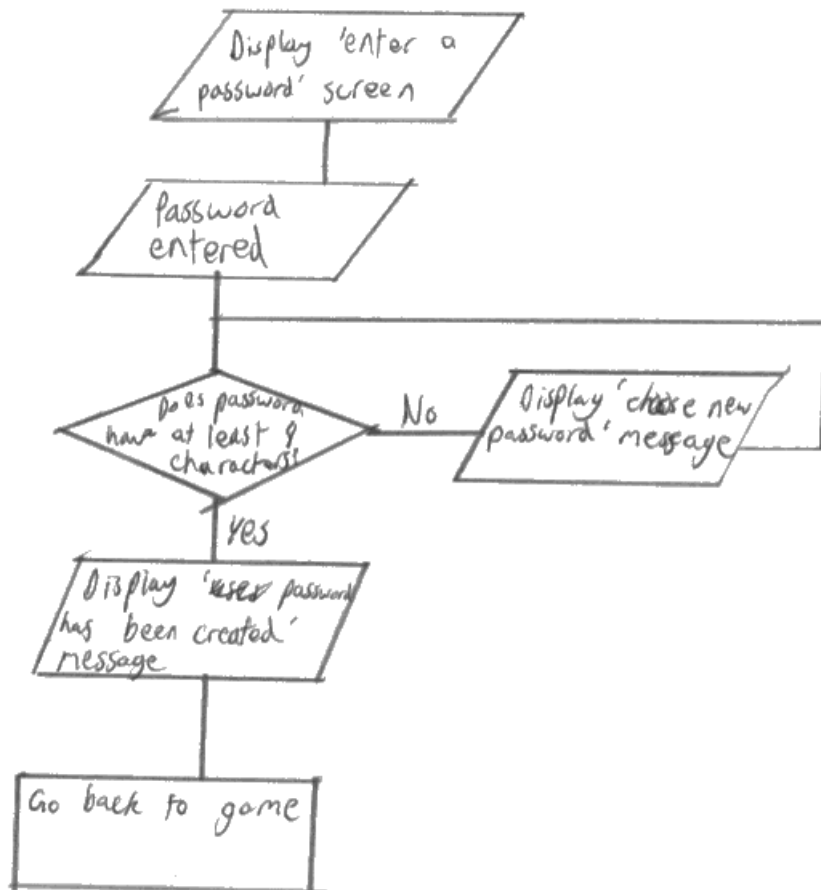
Performance on this question was very sporadic, with relatively few candidates producing a sufficiently correct flowchart to achieve all four marks available. Common mistakes included the logic for the password length test being incorrect (i.e. > 8 instead of ≥ 8) and the 'No' route not correctly looping back to allow another password to be entered.

While correct BCS symbols are not required to gain the marks, it was clear that candidates who had been formally taught how to construct correct flowcharts, had a better grasp of how to deconstruct and represent the logic of a problem and as such achieved much better marks on this question.

In the first example the candidate achieves three marks.

Although the flowchart could be improved (e.g. better alignment and arrows to show flow direction) the flowchart shows enough of an understanding of the construction of a flow of logic to gain the marks.

Please note formal BCS flowchart symbols are not required.



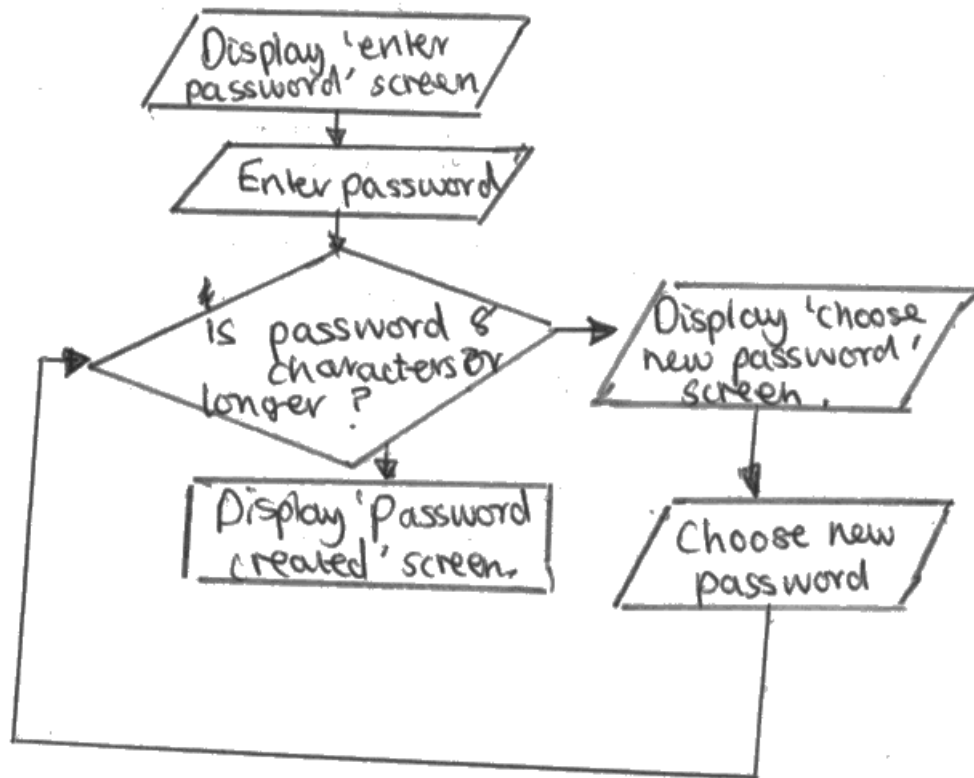
ResultsPlus Examiner Comments

Display a screen to enter password – Mark awarded.

Correct logic for decision box – mark awarded.

No route – No mark – The 'error message' is enough but the loop does not return to allow a new password to be entered which would create an infinite loop.

Yes route – Mark awarded.



ResultsPlus

Examiner Comments

In this example the learner gains two marks.

Display a screen to enter password – Mark awarded. Correct logic for decision box – mark awarded. No route – No mark – the routes are not labelled so it is unclear which is the yes/no route. Yes route – No mark – the routes are not labelled so it is unclear which is the yes/no route.



ResultsPlus

Examiner Tip

Although standard flowchart symbols are not required, you should understand the conventions of flowcharts. In this example the learner lost marks as the 'Yes' and 'No' routes of the flowchart were not labelled so their understanding of the logic was not clear.

Question 4 (c)

Nearly all candidates were able to gain at least one mark on this question, with most candidates achieving between two and four marks. It was noticeable that very few candidates this year produced a response that was considered suitable to be awarded a mark in the top mark band.

The focus of this question was to consider how adults and children could be used as test users for the e-learning package. Responses typically mentioned both adults and children as test users, but often points made were generic and were rarely expanded or supported with examples.

Candidates who performed better were able to justify or explain why a particular group was more suitable for testing a particular area or focus of the e-learning package. For example, candidates could have explored that adults (specifically teachers) may be employed to check that the e-learning package was at a suitable level of difficulty for their candidates and to check that the content in the e-learning package would fit with the lessons that they teach.

* (c) The e-learning package will be made available to schools.

Discuss how using adults and children as test users will help ensure that the e-learning package is fit for purpose.

(6)

By using both adults and children as test users, they ensure that teachers will be able to use the software and explain the e-learning package to their student without additional advise from someone who is trained in how to use the software or having to be shown how to use it.

It is important that some children are also able to use the programme as often children can work new technology better than adults, and therefore if a child can use it they can show each other how to use it. Also, children are more likely to find the bugs in a software because they are more likely to check on everything to find out what it does.



An example of a three mark response.

The response makes some reference to how adults and children might test the package. The first paragraph identifies the role of a specific adult who may have a role (teacher) and links their role to how and why they would test it i.e. ease of use for them and their candidates: 'they ensure that teachers will be able to use the software and explain the e-learning package'. 'therefore if a child can use it they can show each other...'. The section about children testing is not as good as the opening paragraph and does not make suitable links to users and roles. The point about children being more likely to find a bug in particular is not valid. The candidate makes some links between the differences in the characteristics of adults or children to their role(s) in ensuring a product is fit for purpose. The response is placed at the bottom of mark band 2. 3 marks awarded initially. Quality of Written Communication (QWC) is not considered when a mark is at the bottom of a mark band so a final mark of three is awarded.

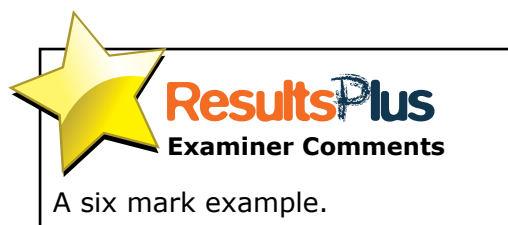
*(c) The e-learning package will be made available to schools.

Discuss how using adults and children as test users will help ensure that the e-learning package is fit for purpose.

(6)

Children are the primary users of the e-learning package so need to test the package for their requirements. Children have lower ICT and literacy skills than adults so their testing it will ~~also~~ show whether or not the product is sufficiently accessible and intuitive to be understood by children. It also provides information on the opinions of the target audience about the package and each different function of it so that improvements can be made.

Adults ~~may~~ are not the intended audience for the package, but do have superior ICT skills. This superior knowledge allows them to be more thorough in their testing of the functionality of each aspect and to be able to notice more of the package's problems. Adults may also want to ~~have~~ comment on what they do and don't want children to be able to do ~~be exposed~~ and how useful they find each feature for its purpose of educating, again helping inform future improvements.



Question 5 (a)(i)

Candidate performance on this question was generally quite disappointing with many candidates not achieving any marks. Where marks were achieved, this was typically for candidates identifying that a questionnaire can be used to gather large amounts of data. Some candidates provided answers that focused on 'different' or a 'range of' audience members but often marks were not awarded here as the 'range' comes from your chosen sample group not the method of collection. Responses in this case needed to show understanding of the benefits of using a questionnaire over other data collection methods.

5 (a) Nell asks Ashton to create a game. It will be available on the centre's website.

Ashton creates a questionnaire to collect information from the target audience.

(i) Give **two benefits** of using a questionnaire to collect information.

(2)

1. can create specific questions for targeted audience to answer.

2. can distribute and collect information from a large audience.



ResultsPlus Examiner Comments

Here we see a two mark example.

1. 'Creating specific questions for targeted audience' is not specific enough to a questionnaire and any effective data gathering method would do this.
2. Mark awarded – MKPT 1.



ResultsPlus Examiner Tip

Explore the use of different data/information gathering techniques. A digital designer would gather lots of data and information to ensure he can identify the key factors that will make the product a success.

5 (a) Nell asks Ashton to create a game. It will be available on the centre's website.

Ashton creates a questionnaire to collect information from the target audience.

(i) Give **two benefits** of using a questionnaire to collect information.

(2)

1 It's not open ended so the results are easy to interpret and analyse.

2 It requires no face to face discussion so it is more efficient in gathering a ^{large} quantity of results.



ResultsPlus
Examiner Comments

Here we see a two mark response.

1. 'Results are easy to interpret and analyse' – Mark awarded (MKPT 3) – 'Easier to get statistics'.
2. 'large quantity of results' – Mark awarded (MKPT 1).

Question 5 (a)(ii)

Although performance in this question was slightly better than the previous related question, as with 5(a)ii candidates did not show sufficient understating of the use of different data collection methods with about half of candidates achieving at least one mark. In these questions, candidates were expected to focus on the particular method of data collection and consider why it was a benefit (in the case of 5(a)i) or a drawback (in 5(a)ii) therefore responses need to be specific to the use of questionnaires.

A common incorrect answer from candidates was the problem with respondents being untruthful. As already suggested, the focus was to consider the specific data collection method and respondents not telling the truth could potentially be a problem in any data collection method. In this case (a questionnaire) the problem would be that because you are unlikely to be interacting directly with a respondent you cannot pick up on the visual clues as to them being untruthful.

(ii) Give **two drawbacks** of using a questionnaire to collect information.

(2)

- 1 ~~Biased opinion~~ They might have a biased opinion.
- 2 They could lie.



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1. No mark awarded.
2. 'They could lie' – this is not enough for MKPT 5 'Difficult to tell if respondent is telling the truth' – The respondent could lie in any data collection process but if there is face to face/verbal contact it is easier to pick up on clues that they are lying.

(ii) Give **two drawbacks** of using a questionnaire to collect information.

(2)

- 1 There is no face to face contact with the person so ~~Here is no~~ ^{there may} be questions that can't be answered or they don't want to answer so they don't complete the questionnaire.
- 2 Users of the questionnaire may give false answers and purposefully may spoil it.



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1. Mark awarded – Just enough MKPT 2.
2. Mark awarded – 'May give false answers and purposely spoil it' – MKPT 3.

Question 5 (a)(iii)

This question was designed to discriminate between higher attaining candidates and in that respect performance was as expected with many lower attaining candidates unable to gain marks. The focus of the question was to consider how a designer might use outcomes from profiling to ensure that a game they are designing would be fit for purpose.

It may be beneficial for centres to make use of this question when preparing candidates for future examinations, by exploring the exam technique needed to deconstruct the demands of the question.

Firstly, the candidate must determine what the outcomes of profiling would be. This is where many candidates did not achieve the aims of the question. Profiling is typically used by designers to get a general impression of their likely audience (i.e. age range, education level) and once this has been identified then how this is to be used by the designer.

Next the candidate needs to identify how it could be used by the designer. In this style of question the uses given should be specific to the scenario – in this case the design of a game.

(iii) Ashton uses audience profiling to identify the platforms used by the target audience.

Identify **two other** outcomes of audience profiling and state how each can be used to ensure the game is fit for purpose.

(4)

Outcome 1 to identify what kind of games the target audience prefer.

How used to ensure the game is one to be enjoyed by lots of people.

Outcome 2 to identify preferred designs of the target audience (colours shapes etc)

How used to allow for user specific design of the product.



ResultsPlus Examiner Comments

Here we see a response that gained one mark.

Outcome 1: 'what kind of games the target audience prefer' – Mark awarded – Just enough for 'Have they played this type of game before'. Use: 'To ensure the game is one to be enjoyed...' – No mark – to gain credit the example used must specifically identify how the profile would affect the development/design of the game. 1 out of 2 marks.

Outcome 2: 'to identify preferred designs...' – No Mark – the response focuses on feedback/testing of design ideas rather than profiling 'typical' users. Use: No rewardable content – No Mark – to gain credit the example used must specifically identify how the profile would affect the development/design of the game. 0 out of 2 marks.

(iii) Ashton uses audience profiling to identify the platforms used by the target audience.

Identify **two other** outcomes of audience profiling and state how each can be used to ensure the game is fit for purpose.

(4)

Outcome 1 *Learn genders of users*

How used *Can affect future products / updates to make them more popular.*

Outcome 2 *Learn audience age*

How used *Find out what makes it appeal to that age group and remake / amplify it.*



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Here we see an example that gained 2 marks overall.

Outcome 1: 'Learn gender of users' – Mark awarded MKPT 1. Use: 'Can affect future products...' – No Mark – response is too vague. 1 out of 2 marks.

Outcome 2: 'Learn audience age' – This is a creditable response but a mark has already been awarded against this identification point. Use: 'find out what makes it appeal to that age group and remake/amplify it' – Mark awarded 'produce something that will appeal to the audience'. 1 out of 2 marks.



ResultsPlus Examiner Tip

When asked how something may be used, give specific examples that relate to the scenario of the question.

Question 5 (b)(i)

Candidates performed quite well here with most able to provide a reason that radio buttons are used on a data entry form, with the most popular responses focusing on the improvement of accuracy and validity of information. As with previous explain questions in the paper, many candidates were not able to provide a suitably linked explanation and as such were unable to achieve a second mark. Centres are encouraged to explore this skill with candidates when preparing for future examinations.

(i) Explain **one** benefit of using radio buttons on a form.

(2)

It reduces the chances of the user making a mistake which in turn makes them feel more relaxed and comfortable when they filling in the questionnaire.



ResultsPlus Examiner Comments

Here we see a one mark response.

'It reduces the chances of the user making a mistake' (1) – MKPT 1. The candidate attempts to expand their answer but they do not make a relevant point.

(i) Explain **one** benefit of using radio buttons on a form.

(2)

Radio buttons give a fixed options to pick, ~~and~~ this means that only, in this case 'male' and 'female', those options can be picked so no stupid responses are received.



ResultsPlus Examiner Comments

Here we see a two mark example.

'Radio buttons give fixed options' (1) – as data entry options are already provided.' Those options can be picked so no stupid responses are received (1) – reduces chance of error /collected data is more valid.

Although the points are reversed from how they are written in the mark scheme this is acceptable as the response is correct and makes sense.

Question 5 (b)(ii)

Performance on this question was again quite good with the majority of candidates able to gain at least one mark, with many able to successfully expand the point they made to achieve a second mark.

(ii) Explain why a drop-down list may not be appropriate for an age field.

(2)

~~There~~ There are so many values that it could take time for a person to find their age in the list, when it is much faster to just type it. Also, what would the limit be? ~~some~~ If the limit is too then there could be someone over ^{100 years old} ~~a too~~ filling in the questionnaire.



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Examiner Comments

In this example the candidate provides a suitably expanded response to gain two marks.

'There are so many values' (1) that it could take time for the person to find their age (1).

The rest of their response reiterates their point and taken separately would also be valid.

(ii) Explain why a drop-down list may not be appropriate for an age field.

(2)

This may not be appropriate because they could just simply type it in rather than search for their correct age which could contain a lot of options.



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In this response the candidate gains one mark.

'They could simply type it in rather than search for their correct age' is not enough for MKPT 3 and it does not answer the question, as an alternative was not requested.

'Could contain a lot of options' (1) is awarded a mark.

Question 5 (c)

Performance on this extended question was very disappointing with many candidates not providing a suitable response to gain marks. In many cases candidates did not have sufficient understanding of terminology to access the marks. Specifically, many candidates seemed unaware of the term 'platform' in relation to digital design and responses focused on designing for specific audiences instead. Where candidates did access marks, responses tended to be restricted to mark bands 1 and 2 – with very few candidates able to provide suitably expanded responses that were supported by examples.

When marking extended writing questions the following procedures are followed:

The level of content and quality of argument are used to place it in a suitable marking band.

The descriptor describes the top or bottom of that band if it fully meets the descriptor it will be initially be given the higher of the two marks in that band.

If it is at the top of the marking band, Quality of Written Communication (QWC) is considered.

The QWC descriptor is used to decide if quality is sufficient to remain at the top of the band or if it should be moved down to the bottom. If the response is at the bottom of the mark band QWC is not considered.

***(c) Discuss how the platform of a game will influence its design.**

(6)

This will massively influence the design of the game as control schemes are different - and if they are handheld or not will also influence the design choices.

A game will have to be made differently if it was made for a console, a PC, a handheld device or smartphone and a motion sensing controller. You would need to program different controls as you couldn't use the same control scheme for the motion sensing controller as a handheld controller or a keyboard and mouse.

If the system is handheld with a screen on the device, the size will need to be taken into consideration to make sure the text isn't too big and this will need to be changed again if the game is played on a monitor or a ~~the~~ TV.



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Examiner Comments

Here, we see a four mark example.

The response makes some valid comments relating to the difference between mobile and more traditional desktop platforms. The response considers the differences between the control systems (i.e. motion controllers/sensors in a hand held device vs. keyboard and mouse). This is the main focus of the response. The response makes some reference to the screen sizes but the expansion of this point is not clear. Although a few features have been explored, the main focus (control systems) is well explained and a holistic view should be taken. The response best fits the descriptor for mark band 2. 4 marks awarded initially. QWC is considered as the response is at the top of the mark band. The response meets the QWC descriptor for this band. A final mark of 4 is awarded.

* (c) Discuss how the platform of a game will influence its design.

(6)

The platform of a game will influence its design in many ways. For example if it is a game on a smartphone you will have to make sure there is not too much typing or text or typing may be difficult on a phone and boring. Also if there is too much information it may not be fit on the screen. Also the game must have a good user interface so the game is easy to use. Also you will have to make sure to use common file types for example JPEG for images as some browsers or devices will not be compatible with some file types. This is so a greater range of people can play the game. Also you will have to make sure the size and dimensions of the image are not too big as some devices have small screens or ~~other~~ ^{different} size screens. Also some devices are touch screen so the game must be touch screen on some devices. ~~At good data~~ In addition, the user must be able to use all the accessibility features.



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The response uses one specific example (smartphone) to discuss ways in which the platform can affect the design of a game. The response makes a number of well supported points relating to considerations of the platform: 'a smartphone you will have to make sure there is not too much typing or text as typing may be difficult on a phone'. 'make sure you have a common file types'. The response also considers dimensions and sizes of screen. The points made are appropriate and most are expanded/justified. The response meets the descriptor for mark point 3. 6 marks is awarded initially. QWC must be considered when at the top of a mark band. The response is well organised and spelling and grammar are generally quite accurate, so the response meets the descriptor for this level. 6 marks awarded.



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Examiner Tip

A top band response in extended writing takes several points and expands them, using examples that are suitable for the given scenario.

Paper Summary

Based on their performance on this paper, candidates are offered the following advice:

- Improve the range of knowledge of key terminology and common practices in digital design to ensure the requirements of the paper are understood, questions can be accessed and to enable clearer, more accurate responses.
- Ensure responses are contextual and appropriate to the given situation and stimulus material.
- Develop exam technique to fully address questions, understanding the requirements of particular command verbs will allow for a greater accuracy in responses.
- In extended writing questions, ensure that when a point is made that it is expanded and where appropriate, supported by an example.
- Explore the purpose and use of a range of different documents used when designing digital products and practice using these in response to given scenarios.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

<http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx>

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