

Examiners' Report/
Lead Examiner Feedback

Spring 2015

BTEC Level 1/Level 2 Firsts in Information and Creative Technology

Unit 1: The Online World (20560\_E06)

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#### Introduction

This report has been written by the Lead Examiner of Unit 1: The Online World. It is designed to help you understand how learners performed on this test. The report provides an analysis of learner responses for each question. You will also find example learner responses, with commentary.

The external assessment for this unit is an onscreen, on-demand test. A number of tests are live within the 'test bank' at any one time and learners are allocated tests randomly. It should be noted that this report refers to the third test retired from the live 'test bank'. Whilst not all learners will have sat this particular test, the Lead Examiner's comments provide valuable feedback, relevant across different tests for this unit.

We hope this will help you to prepare learners for the external assessment for this unit.

### **Grade Boundaries**

### **Introducing external assessment**

The new suite of 'next generation' NQF BTECs now include an element of external assessment. This external assessment may be a timetabled paper-based examination, an onscreen, on-demand test or a set task conducted under controlled conditions.

### What is a grade boundary?

A grade boundary is where we 'set' the level of achievement required to obtain a certain grade for the externally assessed unit. We set grade boundaries for each grade (Distinction, Merit, Pass and Level 1 fallback).

### **Setting grade boundaries**

When we set grade boundaries, we look at the performance of every learner who took the assessment. When we can see the full picture of performance, our experts are then able to decide where best to place the grade boundaries – this means that they decide what the lowest possible mark should be for a particular grade.

When our experts set the grade boundaries, they make sure that learners receive grades which reflect their ability. We have awarded grade boundaries for the first time for our new next generation BTECs, so this means that a learner who receives a 'Distinction' grade on a particular test will have similar ability to a learner who has received a 'Distinction' grade on another onscreen test. Awarding grade boundaries is conducted to ensure learners achieve the grade they deserve to achieve, irrespective of variation in the external assessment.

### Variations in externally assessments

Each test we set asks different questions and may asses different parts of the unit content outlined in the specification. It would be unfair to learners if we set the same grade boundaries for each test, because then it wouldn't take into account that a test might be slightly easier or more difficult than any other.

The grade boundaries for the Third onscreen, on-demand test to be retired from the test bank are shown below.

Grade	Unclassified	Level 1	Level 2		
		Pass	Pass	Merit	Distinction
Boundary Mark	0	15	24	33	43

#### **General comments**

This test is the third external assessment to be retired from the live 'test bank'. Following a pilot opportunity for learners in March 2013, onscreen assessment for this unit has been available on-demand since June 2013.

Most learners were able to respond effectively to the questions early on in this test. However, some of the later questions were designed to be more challenging and as such, fewer correct responses were evident.

The most successful learners scored highly across the whole test including the differential questions where they could demonstrate a depth of knowledge.

The less successful learners tended to give minimal responses and often only answered multiple choice questions. It appeared many learners were not confident in understanding the requirements of the command verbs in open response questions, but were able to use the different mechanisms available to answer multiple choice questions.

One such example was the way in which learners responded to questions which used 'explain' as a command word (explain one advantage/disadvantage etc). Centres are encouraged to refer to the Mark Scheme for this onscreen test for guidance in terms of mark allocation for questions of this type. The first mark is awarded for identification of the advantage/disadvantage, with the second mark awarded for the expansion as to why it is an advantage/disadvantage.

When responding to such questions, learners tended to either include one advantage without the expansion or two advantages instead of expanding on one – only one mark could be awarded where this occurred.

It was encouraging to see, for this test, that learners used their own experiences to provide responses. As is encouraged in the Delivery Guide for this unit, learners' reflection on their 'online life' can be beneficial.

It is important to stress that learners need to not only understand what technologies do, but also how they work by providing examples, where appropriate, to explain.

From having practical experience of these aspects of the unit, learners will be better placed to apply their knowledge and understanding to the applied situations in the assessment and gain credit for their responses.

The responses to open response questions were on occasion rather minimal and it was clear that a number of learners did not make full use of the stimulus material provided in the question. The emphasis in this assessment is on learners' application of their knowledge to a variety of practical ICT-related situations. Stronger responses to extended response questions should demonstrate application along with theory. It is important for learners to have practice in doing this in their preparation for the assessment. Learners that were able to access higher marks for these questions were able to apply their knowledge and understanding to the stimulus and provide realistic and appropriate suggestions.

As Unit 1 is a vocational ICT-related unit, the external assessment seeks to put the learners in applied situations and ask them to respond to these. It is essential that Centres stress to learners the need to read the stimulus information carefully before they answer questions, and be prepared to use that information within their responses.

Learners appeared to manage their time effectively and appeared to be able to complete the assessment in the time available.

## Targeted Specification Area: Learning Aim A.3 Online communication

The majority of learners understood that fibre optic was not a method of online communication.

### **Question 2**

## Targeted Specification Area: Learning Aim A.2 Online documents

Most learners selected the two correct reasons why files would be compressed from the options offered.

### **Question 3**

## Targeted Specification Area: Learning Aim C.1 Possible threats to data

3a

Most learners achieved the mark for providing one way data stored on a network can be protected from external threats. Firewall and anti-virus were the most popular responses.

3b

Most learners achieved the mark for this question. Password was identified, in the stem, as one way a school can control how much of students' personal data is viewed my different members of staff. Learners were required to provide one other way of controlling how much of this data can be viewed. Most learners identified that file permissions or levels of access were methods of controlling how much data can be viewed by a receptionist.

### **Question 4**

# Targeted Specification Area: Learning Aim A.1 Online services

4a

Most learners understood that business would use video conferencing.

4b

Most learners identified that one benefit of collaborative working was that documents could be shared.

## Targeted Specification Area: Learning Aim B.2 Worldwide web

Most learners correctly identified and as being the two HTML tags used when creating tables.

### **Question 6**

## Targeted Specification Area: Learning Aim A.3 Online communication

Most learners were aware of the two correct benefits of using instant messaging when communicating with friends. This question may have been answered correctly by most learners due their own experiences.

### **Question 7**

## Targeted Specification Area: Learning Aim C.1 Possible threats to data

This question was made up of part (a) and part (b). Both required learners to provide two responses for each part to gain the total of four marks.

#### 7a

Most learners identified two reasons why it is important that payment details are kept secure. The most popular responses were to stop people getting hold of the details and using the card to buy things without her knowledge and to prevent identify theft.

7b

Learners were required to identify two ways of knowing a site is secure when entering payment details. Most were aware of HTTPs but fewer learners were understood that the location of the padlock was important ie, on the address bar rather than on the web page itself.

### **Question 8**

## Targeted Specification Area: Learning Aim B.4 Data exchange

Some learners were able to correctly identify senders IP address as being one component of a packet header.

## Targeted Specification Area: Learning Aim C.1 Possible threats to data

This question asked learners to describe one method of accessing without damage when using the internet. Where learners provided a correct response it was for identifying either phishing or pharming as the method but there was nothing further on how phishing or pharming works.

### **Question 10**

## Targeted Specification Area: Learning Aim B.2 Worldwide web

Most learners achieved two marks for correctly identifying hotspot and hyperlink as the two navigation tools used within websites. This question may have been answered correctly by most learners due their own experiences.

### **Question 11**

## Targeted Specification Area: Learning Aim C.1 Possible threats to data

Most learners correctly identified the two correct pieces of advice to follow when using passwords. This question was possibly answered correctly by most learners due their own experiences.

### **Question 12**

## Targeted Specification Area: Learning Aim C1 Possible threats to data

Four marks were available for this question. Two methods needed to be explained to gain full marks. Each method could be awarded two marks; one for the method, the second for the expansion of that method.

This question was generally not well answered.

The stem of the question stated that Robin had accidentally deleted files from his computer and emptied the recycle bin. Learners were required to identify how Robin could retrieve his files.

Most learners provided a response where Robin either looked in the recycle bin or accessed the backup. The stem of the question already ruled out these two options. Learners were required to understand how to recover data if lost.

# Targeted Specification Area: Learning Aim B.4 Data exhange

Learners were required to identify two reasons why CODECs were used. The stem provided learners with a description of what a CODEC was.

Few learners correctly identified the correct reasons.

### **Question 14**

## Targeted Specification Area: Learning Aim A.3 Online communication

Four marks were available for this question. Two ways of sharing video files were needed and described to gain full marks. One mark for the 'way', the second for the expansion of that same 'way'.

Most learners tended to achieve two marks for their responses to this question. These marks were generally awarded for providing two ways of sharing video files but learners tended not to provide a description of how this was done.

Some learners did, however, achieve 3 or 4 marks by describing one or both of the ways identified.

The most popular responses were uploading to online storage facilities and uploading to video sharing websites. However, learners were not always aware of how to notify others that the videos had been uploaded.

This question may have been answered correctly by most learners due their own experiences.

### **Question 15**

## Targeted Specification Area: Learning Aim B.4 Data exchange

This question required learners to understand why server-side processing was used for online auction sites.

Most learners did not provide responses relating to server-side processing.

Where marks were awarded marks they tended to be for understanding that the auction website needed to have live updating so all bidders see the updated items at the same time.

One response from a learner was awarded two marks:

"The auction has to be done in real time because there can be more than one person bidding on an item and everyone who is bidding on the item needs to see if anyone else has bid on the same item."

# Targeted Specification Area: Learning Aim B.5 Data storage

This question required learners to understand how relational databases worked.

16a

Some learners identified the use of primary and foreign keys but didn't go on to explain how they are used to link data within tables.

Some learners identified that the tables shown were 'one to many' but didn't go on to explain the statement.

A mark could be achieved for identifying that files could be 'zipped'. Most learners achieved this mark.

16b

Some learners understood that relational databases could reduce the occurrence of data duplication and some learners also provided an appropriate expansion.

Marks were also awarded to learners who understood that there was less likelihood of errors as data needed to be only entered once.

### **Question 17**

## Targeted Specification Area: Learning Aim A.3 Online communication

This question required learners to describe one way students could use social networking to help them with their studies.

Most learners were able to provide information on using social networking sites to communicate with friends but were not always able to link its use to learning.

Where marks were awarded they tended to be for uploading materials/resources and working in groups. However, few learners achieved the expansion marks as they had not provided any further information on the 'way' identified.

## Targeted Specification Area: Learning Aim B.2 Worldwide web

Most learners achieved marks for this question and very few gained no marks. Extended writing questions are designed to assess learners' ability to analyse, evaluate, make reasoned judgments and present conclusions.

Many learners made a good number of individual points without expansion and so restricted themselves to Mark Band 1.

Overall, quality of written communication was better than previous tests. There was some evidence from some learners of the use of connectives to help achieve a logical flow to their discussion, retaining focus and supporting better organisation of their response. This is a useful writing skill and should be practiced.

This question required learners to discuss the use of smart phones in school to carry out research.

There are three mark bands for this question up to a maximum mark of eight marks. Learner responses generally tended to be in the lower two mark bands with some achieving marks in Mark Band 3.

The response shown was awarded marks at the top of Mark Band 3, as the learner had described a range of points which were relevant with a clear link the situation in the question.

Using smartphones as a research tool have benefits and cons. Firstly, smartphones provide portable access to the internet. If a student needs use their smartphone for research, but at the same time complete work at their desk, they can take their smartphone with them to their desk and still complete their work. It also allows resources to be accessed in different parts of the school, because there is a wireless connection. Another benefit is that by using smartphones, they are able to download applications off Play store and iTunes that have the sole aim of providing resources to use for educational purposes. This provides students with resources that may be specific to their research. However, there are disadvantages to the use of smartphones also. In order for a student to carry out research that is efficient and provides maximum productivity time, they would need to have a middle range smartphone as the speed is reasonably fast and many things can be done at once. However these typically cost between £150 - £250 and not everyone can afford this, so some students may be disadvantaged. Also, students who can not afford smartphones may feel left out as other students have access to them. This may mean some students will feel excluded and can even be bullied. Finally, theft in school may be more frequent as more people have expensive devices on them.

Overall, I think the using smartphones in a school environment is a negative. I believe the disadvantages mentioned outweight the benefits, and too many problems will occur if smartphones are encouraged in schools. Computers in school are probably the best answer, as everyone is equal and no student is disadvantages because they cannot access an application that has great content on a smartphone.

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