

## GCSE

ICT

General Certificate of Secondary Education J461

General Certificate of Secondary Education (Short Course) J061

## **OCR Report to Centres June 2015**

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This report on the examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the specification content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the examination.

OCR will not enter into any discussion or correspondence in connection with this report.

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# **B061 ICT in Today's World**

#### **General comments**

The degree of difficulty was appropriate for GCSE students.

All the students had the opportunity to express their knowledge in all styles of questions. A wide range of marks was achieved. It is pleasing to see that candidates appear to be better prepared for questions from the whole range of topics in this specification.

Centres should note that, when candidates answer questions that specifically ask for e.g. TWO responses, only the first two responses to the question will be marked.

Questions that are allotted two marks and require candidates to 'describe' or 'explain' require candidates to make a point and expand on that point in order to score the two marks. Candidates that give a list of points will not score the full marks. Further, questions such as question 3 b iii, that ask for 'descriptions' require candidates to expand on the points in order to score the higher marks.

When answering LOR questions, such as 1e and 5, the language, structure and handwriting of the candidate responses were generally poor. Too many incoherent, unstructured answers were seen; these responses did not score many marks. Marks are awarded in these LOR questions for the quality of written communication so to achieve full marks, not only must the content be good but the expression of the content must also be good.

Overall, the standard of hand-writing demonstrated by many candidates appears to have markedly deteriorated since last year; this made the marking of some scripts quite difficult for markers. Centres are advised to note that Section 3.6, Quality of Written Communication, page 25 of the current specification states that candidates are expected to write legibly and accurately.

#### **Comments on the questions**

- 1 Candidates were expected to choose devices that would be found in the system shown in Fig. 1. While many candidates did this well and referred to the figure, a small but significant number of candidates did not appear to know the difference between input, output and storage devices and muddled up their answers to parts i, ii, and iii. This is quite disappointing as this topic is fundamental knowledge and questions about such devices have been regularly asked in previous series.
  - a i While most candidates answered this question well, scoring 2 marks, a significant number of candidates gave output or storage devices. Correct answers included keyboard, mouse and webcam.
  - a ii While most candidates answered this question well a significant number of candidates gave output, storage devices, a device that was already present in the system and also clearly shown in the figure, or one that would not really aid the playing of games. Good answers included games controller, joystick etc. Any input device that could conceivably be used to aid gaming was given credit so a wide range of devices was acceptable. It was somewhat disappointing to see that a number of candidates gave the same answers for (i) and (ii) e.g. webcam.

- a iii While most candidates answered this question well, scoring 2 marks, a number of candidates gave input or storage devices. Further, some candidates gave communications devices. Correct answers included speakers, monitor and printer.
- Most candidates answered this question well and scored the mark. The obvious correct answer was network interface card but variants on this were acceptable e.g. wireless network card, USB wireless adapter as all such could be used.
  'Router' was also allowed as it could be considered part of the whole 'system' although it is strictly not part of the 'desktop' computer system.
- c i This question was about the use of instant messaging during a game playing session. While many candidates answered the question in this context, many candidates gave generic reasons for using instant messaging. Poor answers included 'instant messaging is instant', 'messages can be sent quickly' while better answer referred to the almost instantaneous *arrival with recipient/delivery to recipient* of the message as being an important factor.
- c ii This question was about the dangers of contact with strangers and most candidates answered this question well. Good answers included references to the other person pretending to be other than whom they really are, and the dangers of further contact.
- d Most candidates could score 1 mark for this question but failed to score the second. A 'describe' question requires an expansion of the first point given so candidates who gave two separate points failed to score the full 2 marks. Many candidates gave generic answers that could be applicable to any external storage device so did not score the marks as the question was referring to the network storage device.
- e This question was marked as Level of Response/Banded Response. For most candidates, this question was an opportunity to score good marks as it was about keeping personal and financial details protected which is a topic that continues to receive much publicity. Good answers included reference to the use of user ID/user name and passwords on files, on devices such as the networked storage device and the use of data encryption to scramble the data while stored/in transmission, the use of anti-malware software to prevent theft of details and the use of firewall to control access by devices/users from the internet. Other topics such the use of VPNs and IP filtering were seen. Good answers explained these topics and how they would help keep data secure but weaker answers were descriptions of what these entailed or lists of points. When answering Level of Response questions, candidates will not score marks in the upper levels unless they expand their points.
- 2 Most candidates answered this question well, scoring the marks. This question demanded little more than a list of features to score the marks – candidates were simply to 'state'. Many candidates incorrectly stated 'pictures' or 'images' or referred to changes in colour or font all of which are available in hard copy versions.
- 3 a i Candidates are expected to know how to write a formula that is the 'most suitable' for the task and many could produce an appropriate formula. However, the accurate writing of a formula to add up the contents of a range of cells seemed beyond many candidates. Marks were lost for the omission of brackets, the incorrect placing of an = sign (a leading = was not required) that made the formula unworkable, or for an incorrect range of cells.

a ii Candidates are expected to know how to write a formula that is the 'most suitable' for the task. While many candidates could write this formula correctly, the accurate writing of a formula to calculate an average also seemed beyond many candidates. Marks were lost for the omission of brackets, the incorrect placing of an = sign (a leading = was not required) that made the formula unworkable, or for an incorrect calculation over the range of cells. Many candidates failed to accurately identify the cells required. Further, the use of the divide (÷) symbol rather than / was a common error.

=Average() was not the only 'suitable' formula that could score full marks but was the most common answer.

- a iii Many candidates could describe how the formula could be replicated rather than re-typed. All that was required was a description of how to copy and paste the formula from one cell to the required set of cells. Answers that referred to 'dragging the bottom right corner' were also acceptable. However, too many candidates muddled up the methods and did not score the full 3 marks.
- b i Most candidates answered this question well being able to describe cell merging, the emboldening and centring of the text.
- b ii The display of the averages as integers/whole numbers is for clarity or ease of understanding; it is not really about 'not being able to have a fraction of a person' as the value is the average, although this answer was accepted. Good answers included 'whole numbers are easier to comprehend (1) so information is conveyed better (1) or similar. Candidates did not seem to understand this and few scored the two marks.
- 4 Most candidates answered this question well being able to place the labels correctly. The question clearly spelt out the order in which the checks were done by this particular microwave oven so alternative labelling was not accepted.
- 5 This guestion was marked as Level of Response/Banded Response. For most candidates, this question was an opportunity to score good marks as it was about using the internet to research and book holidays. The topic should have allowed candidates to explain the benefits and drawbacks of the use of the internet for research and purchasing goods/services but many candidates gave generic answers about the internet and/or included references that would have been better placed in Q.1e and so did not score many marks. Good answers made reference to the vast amount of information available about other countries/destinations, the use of comparison web sites to find cheapest/best/most appropriate "deal"/price, booking and check in online from anywhere and the fact that there may be too much information about resorts or destinations to make easy choices or the published web information may be inaccurate, unreliable and/or out of date. Overall, most candidates did not score as many marks as would have been expected for this topic because they failed to 'explain' the points that they made. For many candidates, the main drawbacks appeared to be system failure (including failure of internet) and/or the existence of scamming. Many candidates restricted themselves to use of the WWW and ignored the wider use of the internet for email, IM etc.

When answering Level of Response questions, candidates will not score marks in the upper levels unless they expand their points.

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- 6 a Some interesting answers were seen for this question. Credit was given for any valid use of holographic imaging. Candidates were not expected to describe or explain the use of holographic imaging, merely to give a possible use of the technology. Some candidates, however, failed to realise that the question was not about science fiction-type holosuites but was asking for real-life uses such as in microscopy, medicine, or security.
  - b 3D printing is now a mainstream technology so it was disappointing to see few answers that actually described how the technology has had an impact e.g. remote production of replacement parts, the manufacture of parts that were almost impossible to make using traditional methods, and so on. Many candidates provided the example of easier prototyping but many candidates gave valid, but generic answers making a point about the reduction in the workforce of manufacturers but did not describe this further. It was also disappointing to see a small, but significant, number of candidates referring to paper and ink issues such as increased costs of these.

# **B062 Practical Applications in ICT**

#### **General Comments:**

The entries covered all 8 tasks available for this session. There are no more tasks to be released and all 8 tasks will remain available for future sessions, unless OCR inform centre otherwise.

Yet again, there were many centres who have taken advantage of the INSET courses run in the Autumn term, to gain a greater understanding of the requirements of the unit and the assessment criteria. It is advised that centres new to the course, who have not yet attended an INSET course, try to attend one of the forthcoming courses. Teachers should also download from the OCR website the document 'Success in B062 teachers' Guide.'

Where centres had submitted the work electronically, either on CD/memory stick or via the OCR Repository, it was much easier at moderation to see the software features used in the final system and to use this and the diary to determine the understanding a candidate showed of software features used. When candidates submit their work on paper, more screenshot evidence of the software features is required, such as printing clear evidence of formulas and functions used.

Where candidates had used the marking criteria as guidance for headings within their work, they generally provided clear evidence of all that was required, as they were able to check that they had completed the necessary work. It is important that candidates are given the marking criteria at the outset, so that they know what evidence to provide.

The URS should include specific reference to where evidence can be found, including page numbers of documents. Many centres completed these forms in a detailed manner, which helped the moderation process. It is the responsibility of the centre to provide all passwords for password-protected documents; this should be done clearly on the URS for each candidate. The moderator should not be expected to spend time guessing the passwords and time was wasted this year when moderators had to contact centres to ask for passwords that had not been provided.

Controlled assessment must be done under controlled conditions and the teacher must be satisfied that the work of each candidate is their own. The use of templates is prohibited.

There were incidences this year of centres sending the B062 moderator the B064 controlled assessment, and the other way round – this held up the moderation process where moderators had to resolve this and obtain the correct sample of work.

#### **Comments on Individual Questions:**

#### **Investigating a Need**

As mentioned in previous reports, this section was often quite superficial, with candidates not doing enough research into software features that may or may not be useful in designing their own system. Candidates should do detailed research into features such as formulae and processing methods used in similar existing systems and they should also research suitable data and data formats to populate their finished systems with. Often, candidates do one or the other but not both. In some cases, candidates had been taught a few specific software features, which they then used to develop their system regardless of the research they had collected about existing systems. This is a shame, as where candidates are left to do their own research

they are much more able to produce a system that they can develop and show their understanding of different software features. Candidates need to know that this section is the start of the process of designing and developing their system and that their justification of their design and the development of the system should follow on from the research and analysis.

#### Practical use of software tools

There was some good use of a range of advanced software features, such as conditional formatting, lookup functions, validation, macros, hyperlinks, mail merge, relational databases, customised database forms, etc. Where a teacher tries to guide candidates too closely as to what software features to use and teaches them only 5 advanced software features, this often results in candidates scoring less well than they might have done if given the freedom to choose appropriate software features and say why they have chosen them. Many candidates provided good evidence of testing their systems, by use of screen shots; screen videos are another method of providing evidence of tests being carried out. Many candidates are now producing diaries to accompany electronic submissions of systems which is an excellent way for pupils to show their understanding of the software features chosen. However, sometimes the diaries lacked sufficient detail about why a candidate had chosen a software feature over another and how issues arising were dealt with.

#### Practical use of data structure

This section was generally the least well done by candidates. There should be a link back to the research stage, where candidates should have collected and analysed relevant examples of data and data formats. They should then use this data collected to populate their systems, in the correct formats, and justify this. There should also be some attempt at either designing an initial system or prototyping it in the software, as a proposal of their intended system. This design should contain information about data types and software features, rather than being about the aesthetics of the finished system. Candidates should provide evidence of changing rules in their system as well as data for the highest marks. There were very few candidates who changed rules in their system to see the effects, with modelling mostly being limited to a few data changes.

#### **Present the solution**

This is a separate section to the rest of the work and a presentation should be produced, in the form of a slide show, video, leaflet, etc. Most candidates chose to use slideshow software to produce this presentation, which is a straightforward way for candidates to pick up marks here, regardless of marks achieved in the other sections. Where candidates had produced a presentation in which they tried to 'sell' their system to the end user, the higher marks awarded were justified. However, some candidates used this section to say how they produced their system, rather than presenting the finished system and saying what it does. A few centres wrongly thought that the purpose of this section was producing a user guide. In these cases, the higher marks could not be awarded as the emphasis is on the presentation being appropriate for the audience and too much technical detail can mean it is not completely appropriate.

#### Evaluation

Candidates who had kept a detailed diary each week, of work carried out but also of issues arising and how they dealt with these issues, were able to gain higher marks in the evaluation. However, many of the diaries seen were brief and only a record of what was done or how it was done, when it is the reasons why that show the understanding and contribute to higher marks. It

is important that candidates leave time at the end of the controlled assessment task to evaluate the finished system and to look at its strengths and weaknesses; they should also have time to give constructive feedback on each other's systems – they should include both comments that they have made but also comments made about their work by others, to achieve this marking criterion. Some candidates made statements about their own strengths and weaknesses whilst carrying out the task, when what is required is a discussion about the strengths and weaknesses of the final system they have produced.

## **B063 ICT in Context**

#### **General Comments:**

As with previous years, some candidates were able to access the full range of marks from this examination. There still appears to be a lack of preparation of candidates for the paper, with some seemingly not undertaking the research tasks from the pre-release material. Without sufficient research, candidates will score poorly on this paper. It should again be stressed that this unit comprises 25% of the qualification. Sufficient time should be given to candidates to adequately prepare for the examination.

Candidates are reminded that the title of the unit is ICT in Context. Answers should be given in context throughout the question paper. Generic responses, lacking in context are unlikely to score highly.

#### **Comments on Individual Questions:**

#### **Question No.**

- 1 The majority of candidates scored full marks on this question.
- 2a Some candidates were able to identify a Web 2.0 feature and state how the feature could be used by the OCER Theatre. Others simply listed features of web pages, often not in context. Web 2.0 technologies was one of the research tasks on the pre-release materials.
- 2b Many candidates were unable to explain a drawback to OCER Theatre of using Web 2.0 technologies. Many gave generic answers related to hacking.
- 3a Many candidates had clearly researched multimedia kiosks. The majority of candidates gave answers why customers may prefer to use the kiosks. Some candidates gave "faster" as an answer which was not worthy of credit at this level. Candidates should ensure that responses are given in context to be considered for credit.
- 3b Candidates were able to give disadvantages to OCER Theatre of having multimedia ticketing kiosks. Poor examination technique let some candidates down, with many giving disadvantages to customers, rather than the theatre. As the kiosks were already purchased, cost to purchase, a frequent answer given, was not considered appropriate.
- 4 Few candidates were able to explain how OCER Theatre would use project management when planning a show. Many candidates confused project management software and the Integrated Box Office System. Those candidates that had studied project management software and its features (one of the pre-release tasks) were able to score well on this question.
- 5a Many candidates were able to correctly identify items of data that must be stored in the database. Some candidates gave responses such as "payment details" as a response. At this level, candidates should be expected to know that discrete items of data would be stored in the database and so payment details was considered too vague to award. Correct answers would include payment card number, expiry date etc.

- 5b Some candidates were able to correctly describe, in context, the use of queries and reports by OCER Theatre. Many though, did not know the purpose of these database features. Database remains a topic that is poorly understood by candidates, despite it being a requirement for the both the B063 and B061 units.
- 5c Most candidates were able to correctly explain an advantage and disadvantage to customers of registering on the website. Not reading the questions let some candidates down as they often gave two advantages, or their response focussed on the theatre, rather than customers.
- 6 Most candidates scored highly on this question. This level of response question, required candidates to write clearly and legibly and produce a structured response, making good use of specialised terms. It was pleasing to see that many candidates were able to do this.
- 7a Most candidates were able to correctly answer this question.
- 7b Some candidates were able to describe two features of DTP software. Many though did not appear to understand what DTP software was, or even know what software features were. Some candidates suggested two different software packages that could be used by the theatre, whilst others described other marketing materials that could be produced by the Theatre.
- 7ci Many candidates were able to explain that the posters would be too large to print on an office printer and that the cost of a large format printer may not be justifiable for the theatre.
- 7cii Most candidates were able to describe how the electronic poster could be sent to the printing company.
- 8 Some candidates scored well on this question. They correctly discussed factors that should be considered by the theatre when deciding whether or not to purchase integrated box-office software. A significant number of candidates did not appear to understand what integrated box-office software was. Again, this was one of the research tasks on the pre-release materials.

# **B064 Creative Use of ICT**

#### **General Comments:**

B064 is a well-established unit and one which learners seem to enjoy completing. For the second year running there was a number of new centres entered for B064 this session, which was pleasing to see. Standards across the board this session were similar to those of the June 2014 session, as centres are getting used to the assessment criteria and expectations of the unit. There was, as last year, a tendency to be a little lenient, especially where marks had been awarded within the upper guartile of the mark range. As stated in previous reports, this specification aims to mark positively rewarding the work produced and not penalising omissions. however, full marks for each task should only be awarded for work which is the best one could possibly expect a learners to produce at GCSE level. Advice on the awarding marks for work can be found within the "Success in B064" booklet available on the OCR website. The OCR coursework consultancy service can also be used to ask assessment interpretation questions. It is recommended for unit B064 that evidence is submitted digitally on either optimal media or memory stick. Where centres choose to produce paper based evidence, the solutions made should be sent digitally along with the paper work. It was pleasing to see the majority of centres had opted to submit work in a digital format however there did seem to be this session an increase in paper only evidence. When solutions are not supplied digitally it can be difficult for the moderator to fully appreciate all the features used from screen shots alone. It is vital though, when submitting work digitally that evidence is well presented and structured. It is recommended that the written element of the unit is compiled into a single document so moderators don't have to open lots of different files to try and piece the evidence together. Parts of the design specification produced during the analysis task certainly should be compiled into one single document. Designs produced during the design stage can be scanned and combined into the final documentation - most modern photocopiers will scan to PDF. There are lots of free portable document creators available which can be used to turn word processed documents into a single file. When submitting digitally, the media needs to be checked carefully for viruses.

File formats this session caused a number of issues, which hindered the moderation process. Propriety file formats are not supported. Games should be complied into executable files (.exe) and web pages should be saved as HTML and image files only. A number of centres submitted Serif websites and scratch files in the proprietary format which is not appropriate. Instructions which illustrate how to compile scratch projects to an executable file can be found on the scratch website.

Unfortunately this session some of the products failed to function correctly when the moderator tried to use them. It would be helpful that before submission that centres check, that the products still function as intended. Websites will often work on learners' areas but sometimes in the transfer process graphics can become omitted as links are absolute rather than relative or the files are in folders outside the working folder. Setting up a root folder in the learners' work area and ensuring that all related files are saved to that folder is considered good practice. Multimedia presentations can have problems of missing media when videos and sounds are linked rather than embedded – care also needs to be taken when transferring these. Where learners choose one of the briefs which require a game to be produced, the file format which the game will be exported to needs to be considered.

Care needs to be taken when choosing a submission component code for this unit. Entry code B064/01 is for repository submission whilst B064/02 is for postal submission. Although we encourage electronic evidence rather than paper based for this unit.

Whilst using the electronic unit recording sheets eliminates the possibility of arithmetic errors, as marks are automatically summed, care still needs to be taken to avoid errors when transferring marks to the mark sheets which are submitted to OCR. There were also a number of instances where partially completed work was submitted by accident.

When conducting this unit teachers need to familiarise themselves with the rules associated with controlled assessment.

#### **Comments on Individual Questions:**

Most of the analysis task of this unit should be completed at a low level of control and learners can share ideas with one another whilst researching existing solutions to a similar problem to the one which they are trying to solve. Learners should then enter controlled conditions to write up the research and propose their own solution. In a few instances research work from other learners was included within a particular learners' work. The final piece of work needs to be solely a learners' own work and even though research is collaborative, work produced by another person should not be included. To show that group work has taken place learners should surmise the feelings of the group and quote / paraphrase within their research notes what others had to say. Photographs of collaborative working and thought showers would make excellent evidence. When completing the research it is important that the research links to the proposed solution for higher marks within the analysis task. Too often learners would present their research, then a solution but there was no link between the two. When presenting the proposed solution learners should state how their decisions have been influenced by their research

The design specifications produced are part of the analysis task and need to include a clear explanation of the solution and how it solves the problem, a list of tasks which need to be carried out to develop the solution with appropriate timings, consideration of hardware and software required to develop and run the solution and detailed user requirements including measureable (both quantitative and qualitative) success criteria. In some cases parts of the design specification was missing or not detailed enough for the award of a mark within mark band 3. In other cases the design specifications became interspersed with content from the design section which made it hard to agree centres marks.

The design task should be conducted under controlled conditions and requires learners to produce designs for their proposed solution and comment on how the designs meet the user requirements defined within the analysis task. It should be noted that both elements and screen layouts for the products should be designed in detail. Designs can be completed on paper or using vector drawing tools on a computer. The quality and detail of the designs will partly determine the mark awarded for this task along with the level of explanation of how the designs meet the user requirements. For the award of lower marks for this task brief designs will be included which another ICT competent person may struggle to follow. For the award of a mark within mark band 3 learners need to fully design all elements of their solution in enough detail so another ICT literate person could create their solution. The design task was in general not evidenced very well this session. Many of the plans were not annotated in enough detail and frequently content was not identified. Plans with boxes labelled "text" or "image" and no indication of what the content actually is going to be was common. Plans don't need to be works of art but should provide an overview which would allow a third party to implement them. Mark band 3 for this criterion also requires learners to explain how the proposed solution meets the user requirements; this was frequently missing from the work seen. A simple way to demonstrate this is to list each of the user requirements after the designs and underneath each, explain how the designed solution meets the requirement. How the solution is going to be tested is also an essential part of the design process and learners should produce a test strategy as part of the design task. The inclusion of a test plan is good practice and is part of the test strategy, however there needs to be some explanation of how this test plan is actually going to be used.

Statements such as "I will use this test plan to test my website upon completion within 2 different browsers and on a smart phone" and "I will make a questionnaire and ask 3 teenagers to comment upon my interactive bus shelter" turns a test plan into a testing strategy.

The development of elements task should be carried out under controlled conditions and requires learners to show how the various components which make up the final product have been made. Elements refer to text objects, sounds, different types of graphic, video clips and animation. There needs to be evidence of making at least three different types of element for the award of mark band 3 for this task. It is likely that alternative software applications will be used to create the elements from the one used to produce the actual product. This specification was not designed to be a test of how competent learners are at producing write ups and the focus needs to be on the skills used, however these skills need to be overt. A straightforward way for learners to produce evidence for this task would be for them to produce a diary noting down how things have been made – with a few selected screen shots to explain things which they may be having trouble describing with words. In some cases further evidence of developing elements for the solution would have helped to confirm the marks awarded. Too frequently, again this session learners documented how the actual products had been made, it needs to be reiterated that this is not suitable evidence for this task – this task requires learners to show how elements had been made.

The development of the overall solution task should be carried out under controlled conditions and marks should be awarded for the functionality and quality of the product which the learners have produced. The best way to showcase these to the moderator is to submit the work either via the repository or on CD. For mark band 3 a wide range of features need to be included and the products should be fully functional - missing graphics and hyperlinks within websites are not acceptable for the award of marks within band 3. The products need to be of a high quality for mark band 3 showing a wide range of features has been used. They should be aesthetically pleasing with a suitable colour scheme being chosen and graphics will be of excellent quality, well placed and scaled in proportion - pixelated graphics are not appropriate within products being award mark band 3. The range of features depends on the product being developed for example if a multimedia product is being produced it is expected that learners include graphics. text, sound, video and other media, self-created templates, styles, timings and triggers, animation effects, navigational bars / buttons to create a non-linear route through the product, drag and drop / popups / other interactive features. Whilst, for a website, the use of graphics, text, hyperlinks, styles, self-created templates, rollovers, hotspots, drop down menus, web forms, animation and sound should be amongst other elements. For the award of high marks, for a game learners should have a functioning scoring system with lives if appropriate, multiple levels and the ability to interact with the game by answering questions, picking up items / treats or destroying enemies. Another requirement of this task is to comment upon the success in following the plans and any changes made. "Success in following plans" refers to how the learners followed their time plan, although many also state how they followed their designs as well which is not a bad thing. A good place to include these notes is within the evaluation section although to prevent it being omitted learners could complete it once the product has been completed. Some wonderful games were produced this session which was pleasing to see. Websites and PowerPoint are still a favourite and did vary in quality.

The testing task should be carried out under controlled conditions and requires learners to follow the test strategy which they developed in the design task to check that their product works the way in which they intended. All of the mark bands within the testing task require some form of user testing and unfortunately some learners had not carried this out, which should lead to lower marks being awarded. User testing should be restricted to peers within the group as the work needs to remain in the centre, although arranging outside visitors (for example primary school children or adults) to come into the classroom during the controlled time to test products is acceptable. Higher marks for testing should only be awarded where there is clear evidence that testing in different situations has been considered. Testing websites, games and multimedia products on different devices, hardware, operating systems, browsers, input devices and screen

resolutions should be considered and carried out as far as possible. A few old machines at the back of the class room loaded with different software provide an excellent opportunity for learners to test under different situations. If due to network restrictions learners are not able to test their products in different scenarios a detailed written statement describing how they would carry out such testing if the resources were available is acceptable.

The evaluation task should be carried out under controlled conditions and should critique the product made and the learners' performance when working within groups. For the award of mark band 3 learners are expected to produce a high quality evaluation which reflects upon what the solution does, its strengths and weaknesses, areas for improvement, how limitations found during testing have been dealt with and an evaluation of their and others contribution to group work. Learners should refer back to the original user requirements and success criteria and state how each has been met. Listing the requirements again within the evaluation and commenting on how it's been achieve (or not) is good practice. Some of the evaluations seen, failed to include enough sufficient detail and a lower mark would have been more appropriate.

## **B065 Programming project**

There were very few candidates from very few centres for this session. There was little evidence of well researched, well designed coded solutions with many simply producing simplistic programs that failed to provide any usable solution for the scenario.

Teachers delivering this unit should refer to the Guide to success in B065 document readily available on the OCR website for detailed guidance on what is required for this unit. It is also important that candidates complete one of the set tasks for this unit and tasks must be selected from those published on OCR Interchange. Tasks published for B064 or for GCSE computing are not allowed, nor is it acceptable for centres or candidates to create their own tasks.

It is also important teachers note the requirements in the specification section 4 where the use of templates and plagiarism are discussed, the work must be the candidate's own unaided work and produced without additional guidance.

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