

Cambridge Nationals

ICT

Level 1/2 Cambridge National Award in ICT **J800**

Level 1/2 Cambridge National Certificate in ICT **J810**

Level 1/2 Cambridge National Diploma in ICT **J820**

OCR Report to Centres January 2017

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

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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CONTENTS

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OCR REPORT TO CENTRES

| Content | Page |
|-------------------------------|-------------|
| External Examination (R001) | 4 |
| Moderated Units (R002 – R011) | 6 |
| Unit R002 | 8 |
| Unit R003 | 12 |
| Unit R004 | 14 |
| Unit R005 | 16 |
| Unit R006 | 20 |
| Unit R007 | 22 |

External Examination (R001)

General comments

The cohort for this January's paper was again reduced compared to previous years. However, across the candidates who did take the paper there was some pleasing engagement with the vocational scenarios contained in the pre-release. Many candidates were able to deal with the banded response question and clearly focused on the two strands of the question, giving answers that were well balanced and appropriate. There was a fair level of technical understanding displayed, although this was lacking in a few key areas.

The major issue that arose from this paper was the use of context and command words. This has been discussed before in previous reports, but it remains the case that candidates will provide answers that do not fit the context and are therefore not acceptable, or are failing to address the command word.

For example, when asked to explain a feature, many candidates did not address a feature at all, but gave a more functional answer based on how good the device was, whilst others then described the feature. When asked to explain a feature, for example, candidates need to be explaining why a certain feature makes the device suitable. Similarly, when asked to describe a process, candidates need to give a description of a method that achieves the desired outcome. Within the context here, this should have been a description of how an alternative method of communication was used. As many candidates chose to justify the choice, candidates actually made the question they answered more challenging than the question that had been set.

Comments on Individual Questions

Question 1 provided candidates with the opportunity to settle into the exam. The first two questions proved little challenge to the majority of candidates, as was the intention. Question 1c was intended to be more taxing and this came through in candidate responses. As is often the case, many candidates reverted to matters of opinion in order to answer this question. For example, it is debatable whether colour images are more aesthetically pleasing than black and white. They are definitely not 'just better' as a number of candidates suggested.

Question 2 focussed on the restaurant's ordering system. Context was vital to this question as was an ability by candidates to notice the demands of the question. For example, question 2b focussed on the benefits to the restaurant, whilst question 2c focussed on disadvantages to anyone. Many candidates ignored both the context and the focus of these questions, especially question 2b. For question 2dii, candidates needed to be able to explain a suitable feature. Many candidates gave good first marks - identifying a feature - but could not explain why it was suitable and then went on to describe that feature further. However, a significant proportion gave no feature and instead described the device in general terms, without any mention of a feature.

Question 3 concentrated on the user form. The input question proved to be only a slight challenge. However, some candidates are still giving 'computer' as an answer. This is unlikely to ever be a suitable answer on this paper. Q3b was well dealt with by many candidates, as was Q3c. However, those candidates who felt that the issue was that the information was personal were not awarded. Q3d was also answered well by most candidates. However, context was important for this question and there was a range of unsuitable answers given that did not fit the scenario.

Question 4 focussed on the efficacy of the ordering system. The question had two distinct foci. In the majority of cases, candidates noticed the two themes of the question and gave weight to

both. With such a question, candidates from across the ability range are expected to be able to achieve marks and this was the case here. However, in order to improve, candidates should be encouraged to think of quality rather than quantity. In many cases, candidates described lots of examples but did not offer an explanation. Some candidates also missed that the question was about the factors affecting a decision and gave more general answers.

Section B started with a question about software. Many candidates got this one right, but there is still a significant minority who are unable to suggest suitable software for a context. For example, many candidates suggested Office as suitable software. Question 5b, however, was well answered by the majority of candidates, although a few answered as if they were talking about design considerations. The answers to 5c and, to a lesser extent, 5d were really pleasing. Few candidates ignored the question and many were able to achieve at least one mark, with many more than expected achieving two.

Question 6 focussed on the use of validation. Many candidates were able to correctly identify an item of data that could be validated, although some thought that 'booking reference' was suitable. However, very few were able to describe the validation process. As with Q5c, most candidates attempted the question, but the vast majority gave answers that showed little technical understanding beyond that there would be an expected structure. More candidates were able to identify a further validation method of which 'presence check' was the most popular.

Question 7 was based around the working of the restaurant and managing staff. Q7a was a compare question which was dealt with very well. Many candidates gave clear comparisons with matching points given for each side. However, it is worth noting that email is not necessarily quicker, although it could be in context! Q7b proved to be far more challenging than had been anticipated. As with question 2dii, candidates missed the command word and gave answers that did not match what was required. In this case, candidates were asked to describe a method. In reality, most candidates attempted to justify a method. In doing so, some gave a description as well as a justification, although this was not always the case.

Question 8 focussed on the counterfeit theme from the scenario. Again, with question 8a, many candidates missed the point of the question and described how a counterfeit ticket would be identified. Few candidates attempted to give a technical answer about how bar codes are read and interpreted with even fewer achieving anything more than a few marks. Question 8b extended this focus further and asked for other methods whereby counterfeit tickets could be identified. Whilst some answers were wildly fanciful and did not fit the context of the question, many candidates were able to identify practical and relevant answers.

Moderated Units (R002 – R011)

General Comments

Most of the issues identified by moderators were similar to those seen in previous series although basic administration by centres was improved over earlier sessions, with fewer clerical errors and more appropriate presentation of paper portfolios by most centres. However, there remained some centres where some marks had been incorrectly totalled and/or submitted, also some samples where portfolios were not tagged appropriately. It is requested that centres tag paper portfolios using treasury tags, to avoid any possibility of pages becoming misplaced whilst still allowing pages to be laid flat, which was not the case with some presentation folders used.

Most centres chose to submit their evidence by post or through the OCR repository but those centres that chose visiting moderation appreciated the opportunity to meet the moderator and to ensure electronic files were seen on the centre's equipment. Centres are reminded that postal and visiting options allow a mixture of paper-based and electronic evidence, so there is no need to scan hand-drawn designs, so long as any hard-copy materials are clearly labelled to show which candidate they belong to and what evidence they include.

Some centres presented wholly printed evidence which, whilst acceptable, may not be the most effective way of presenting evidence of the products created by candidates. In some cases candidates presented weighty portfolios full of annotated screenshots which could have been effectively replaced by the electronic file of the product. Where filing structures are assessed (R002 and R006) these were generally poorly evidenced in paper-only portfolios, as candidates rarely showed the contents of every folder.

Where electronic portfolios are submitted these should conform to the standards outlined in Appendix C of the specification document. In particular, attention is drawn to the list of acceptable file formats. Many moderators encountered problems this session because evidence was submitted for postal/repository moderation in file formats that they were unable to open, most notably MS Publisher, Adobe Photoshop and Serif software. Where visiting moderation has been chosen it is essential that a computer system that includes access to all necessary software and fonts is provided for the moderator. Where postal/repository moderation has been chosen it is advised that centres inform moderators of the version of software their candidates have used. Some newer versions of software, eg, MS PowerPoint, Excel and Access, contain features that might not view correctly on earlier versions.

Some printed evidence, most particularly where this was contained within screenshots, PowerPoint slides and/or spreadsheets, could not be read by the moderator because it was too small or because of insufficient colour contrast and/or draft printing. Centres should ensure all evidence sent to the moderator can be easily and clearly read. In some cases this can be achieved by supplementing printed evidence with electronic files. Some centres submitting electronic evidence included scans of hand-drawn designs which were of insufficient quality for details to be read and the original paper versions would have been clearer for the moderator as well as easier for centre staff. Centres are reminded that they must send to the moderator the same evidence that has been used within the centre for assessment purposes. In some cases the fact that evidence submitted was unreadable suggested that this was not the case.

It is essential that candidates hand in a portfolio of work for marking, whether this is wholly printed, wholly electronic or a mixture of the two. This portfolio, regardless of format, must be stored securely by the centre until after the entries have been made and results received. When the moderation sample request is received it should then be straightforward to ensure the moderator is sent exactly the same evidence, in the same format, as was assessed within the centre. In some cases the moderator was unable to agree with centre assessment because

evidence for some criteria was missing, suggesting that centre assessors had used additional evidence not provided for the moderator. It is not appropriate for centres to mark electronic files directly from candidate user areas, as these are not secure and there is no way of guaranteeing that all files will be the same when viewed later by an external moderator.

Most centres correctly completed an OCR Unit Recording Sheet (URS) for each candidate to show the marks allocated. Where evidence is submitted electronically these should be presented within candidate folders rather than separately. Some centres submitting evidence by post or visit also provided printed copies of the URS, which were greatly appreciated by moderators, allowing easy reference throughout the scrutiny of portfolios. It is pleasing to report that the number of centres submitting URS with no tutor comments was reduced this session and centres are reminded again that *all* sections of the URS must be completed. Where centre staff added comments to show *why* each mark had been awarded and *where* specific evidence could be found, this helped the moderator agree with centre marking and provide more detailed and relevant feedback. Regrettably, many centre comments were less helpful as they tended to restate or reword the assessment criteria rather than explaining why it was felt that these criteria had been met. Moderators again reported many problems locating evidence where centres submitted electronic files with no referencing to indicate which files need to be opened, in which order, to evidence each assessment criterion. Moderators cannot be expected to search for evidence and may not always find everything. Some centres this session had to be asked to provide additional information to help the moderator locate the evidence for each criterion before moderation could proceed.

It was disappointing to note that many candidates, even those achieving at the higher levels, documented their work using slide-show software, which is inappropriate for the task, when considered within a vocational context. When studying R002 it is expected that candidates will learn to choose the most appropriate software for different tasks and outcomes and that they will transfer this knowledge to other units. Many readability problems were exacerbated where candidates had used inappropriate software for documentation.

Some centres' marking was found to be over-generous at the higher levels because key words such as 'some', 'most', 'thorough' and 'detailed' had been misinterpreted. The glossary in Appendix D of the specification document provides useful guidelines in the interpretation of key words used in the assessment criteria for the units.

Some centres' marks were found to be inconsistent, leading to an invalid order of merit, as a result of which work had to be returned to the centre for remarking before it was possible to complete the moderation process. In some cases this was clearly a result of insufficient internal moderation, resulting in different standards being applied by different assessors. It is essential that a robust system of internal moderation is in place to ensure consistency of standards across all assessors. In other cases inconsistencies appeared to be a result of centre staff applying criteria other than those in the specification grids, for example by assessing documentation and explanations where these formed no part of the assessment criteria.

Some centres appeared confused about the purpose of witness statements. These can be used to describe specific actions/outcomes that have been witnessed, for which no other evidence is available. They are not needed if other evidence is clear and must **not** be used where coursework has been lost, for which the OCR lost coursework procedure must be followed. Some centres included witness statements that did not describe what had been seen for each individual candidate but merely stated that specific assessment criteria had been met. These statements had no value and centres are directed to Appendix A of the specification. There are three units (R002: Learning Outcome 4, R007: Learning Outcome 1 and R011: Learning Outcome 1) where it is possible to provide some direct support to a candidate, which forms part of the assessment. In these cases a witness statement would be appropriate to detail the support that was given or to confirm that no support was required.

There was concern that candidates from some centres had been provided with additional materials and guidance, over and above that which is permitted. Whilst formative assessment should be an integral part of any teaching programme, formal assessment for this qualification must be summative, ie it must take place once the candidates have completed their learning and been assessed as ready to undertake the assignment independently. Candidates should be provided with the OCR-set assignment and a copy of the marking criteria for the unit when completing the assessment and teachers may explain the marking criteria to them. Centre staff may give candidates support and guidance that focuses on checking that they understand what is expected of them and giving general feedback that enables them to take the initiative in making improvements, rather than detailing what amendments should be made. Writing frames and specific design guidance must not be provided. Centres are referred to the recent document, 'Guide to generating evidence', which has been sent to them and can be downloaded from the 'Key documents' section of this qualification's area of the OCR website. The JCQ Instructions for Conducting Coursework dictate that credit cannot be given to a candidate for any work produced with assistance that goes beyond this level. The exceptions are those units/Learning Outcomes mentioned above, where support forms part of the assessment.

It was disappointing to note that again some candidates' portfolios contained text that had been copied and pasted from websites without acknowledgement, which is plagiarism and therefore malpractice. The most common occurrences were when writing about email etiquette in R002 and file types in R007. Where this is found it is reported and is likely to result in marks being reduced or disallowed completely. Centres are recommended to ensure candidates are fully aware of the issue of plagiarism and its consequences, also to be vigilant to identify it within centre if and when it occurs. The JCQ Instructions for Conducting Coursework define the procedure that should be followed in such circumstances. Centres are particularly reminded that sources should be acknowledged even if candidates have reworded the text. It is recommended that centres advise candidates that copying text, even if acknowledged, has no benefit as it is only their own explanations that are taken into account when marking.

It should be noted that updated versions of the OCR Model Assignments, now retitled 'OCR Set Assignments' have been produced and these should be used for all future cohorts. The scenarios and requirements have not been altered in any way but tasks have been reworded and additional guidance provided to clarify the requirements. Marking criteria have now been integrated into the assignment documents.

Specific comments on the units submitted.

Comments below relate to those units for which the entry was sufficient to enable generalised comments to be made. For those units where there is no comment, centres are advised to consult reports from the June session of previous years.

Unit R002

As the only mandatory unit for both Award and Certificate, this unit represented the majority of entries this session, as in previous sessions.

The two OCR assignments - 'JB Clothing Emporium' ('Tailored Tops') and 'MStreamIT' continue to be used by centres in equal numbers. Both assignments provide a vocational scenario within which the work should be carried out. Where candidates remained aware of this throughout their work they generally produced more appropriate outcomes.

Candidates' file structures were often over-generously assessed in the highest mark band, sometimes because evidence was not provided to show all (or any) file names and locations, sometimes because the systems evidenced were not suitable for the vocational setting of the assignment and sometimes simply because errors within the system did not appear to have been taken into consideration within centre assessment. Assessors might benefit from asking

how easy it would be for colleagues in the future to locate particular files, also to file future documents etc within the system. It would not be easy, for example, to locate a document on email if it were filed under 'company image' or a quarterly report (of which it is assumed there will be more in the future) under 'business solutions'. Letters to customers would not be easily found if they were filed under 'database'. Default filenames and generic names such as 'MStreamIT' and 'Tailored Tops' cannot be considered appropriate within the context of the scenario. Where filing is clear and logical but based around assignment tasks, this can be considered to fit Mark Band 2 requirements, as the candidate is demonstrating a sound understanding of the purpose of a folder structure but not applying it with any consideration of the vocational context of the assignment. There is no single 'correct' filing structure for either assignment and it is not expected that candidates from a centre will all use the same structure – this must be their own, individual decision.

The two assignments have different requirements for evidence of email understanding – MstreamIT asks candidates to set up their email system for their work in the business and to produce a document to explain to staff the importance of email etiquette and the tools and features of email software they will need to use, whilst JB Clothing asks candidates to write about the tools they have used to set up their email and to explain how email etiquette and email tools and features help them communicate in a business environment. Few candidates fully met the requirements of either assignment, which affected the extent to which they could be considered to have met stated requirements in Learning Outcome 3. Many candidates using MStreamIT failed to evidence any setting up of their email system and often produced separate documents for email tools and etiquette. Many candidates' evidence for JB Clothing resembled an email guide or simply evidenced a few uses of email without explaining how the tools and features would aid communication in a business environment. It is not expected that email etiquette will be taught in isolation, rather that email tools will be taught in the context of appropriate use within business. The updated assignments remind candidates of the danger of plagiarism in this task and centre staff might emphasise this with future cohorts.

Centre assessment of candidates' search criteria was often over-generous. In many cases it appeared that any attempt to use Boolean operators, quotes or Advanced Search pages was credited at the highest level, regardless of the appropriateness of their use and information found, whilst other candidates provided no evidence of search criteria. It should be noted that Boolean expressions are not listed in the teaching content of this unit, in recognition of their limited appropriateness with modern search engines. Candidates from a significant number of centres tried to put Boolean operators within the sections of an Advanced Search page, thereby demonstrating a lack of understanding. Where it is not clear what candidates are looking for it is difficult to credit search criteria at the highest level. In some cases for the JB Clothing assignment, which provides clear ideas for appropriate search criteria, candidates appeared already to have been told or found a possible website to use or products to find and used these as criteria within an Advanced Search page, which was neither necessary nor appropriate.

Many candidates chose to use standard source tables to show their sources of information and were often disadvantaged by this choice, as the headings on a standard table are unlikely to fully match the specific requirements of an assignment. In most cases candidates using such generic tables identified the URL and whether or not the item was copyrighted but did not identify any details of the copyright holder, which is what the assignment and marking criteria require. Since it is not permissible for a centre to provide specific writing frames for an assignment and a standard source table is unlikely to fully meet requirements, centres are recommended to advise candidates for this, and any other unit where sources need to be acknowledged, not to use standard source tables but to create their own documents from scratch – this would have the added advantage that if they chose to create a table they would be demonstrating additional capability within Learning Outcome 3. Some candidates were over-generously credited with understanding copyright when they provided details from third-party websites rather than copyright holders. Others wrote about copyright in general terms, sometimes demonstrating

some understanding, but this did not meet the requirements of either assignment task or assessment criteria at any level.

The most significant differentiator within Learning Outcome 2 is the extent to which candidates edit and manipulate the data provided with accuracy to provide relevant information to meet the specified requirements. Some centres awarded marks over-generously when candidates had completed all the data handling tasks but not obtained accurate results or where they had completed only some of the tasks. Centres are advised to work through the tasks themselves, to enable them to check the accuracy of candidates' results. Where candidates showed their results in spreadsheet printouts but did not provide any evidence that these had been obtained by appropriate data handling using spreadsheet tools, or where electronic files showed that results had simply been calculated and entered manually, they did not demonstrate achievement of the assessment criteria. The set of tasks within each OCR-set Assignment is complete and must not be changed or added to in any way. Candidates from some centres appeared to have been disadvantaged by being given additional data handling tasks to complete. The extent to which candidates' solutions from some centres had the same structure is a cause for concern – if candidates are allowed to decide for themselves how to tackle the assignment tasks, as is required, then there are a number of different ways that solutions can be structured. Where moderators considered that similarities in candidate work extended beyond that which could be explained by teaching content and/or acceptable practice work then this was reported and some candidates' marks for the unit were reduced or disallowed. Centres are reminded that any practice assignments must not simply imitate the tasks from any live assignment with slightly different contexts and/or data – they must be sufficiently different to allow candidates to practice solving problems and producing evidence whilst not providing specific guidance for the live tasks. OCR has provided a practice assignment – 'The Little Theatre Company', which exemplifies this point.

Learning Outcome 3 focuses on the use of software to communicate information; this is expected to be largely that specified in the learning content for this learning outcome, ie word processing, desktop publishing, presentation, web authoring and graphics but where candidates choose other software to create their advertising solutions then these should also be considered. Data handling software is assessed within Learning Outcome 2 and is not relevant in Learning Outcome 3. When assessing the range of tools and features used it is necessary to refer to the list in the specification content. Centre marking was sometimes over-generous in the first section of this learning outcome because centres credited candidates with the use of a range of software by including data handling software whilst software relevant to this learning outcome was limited to, for example, word-processing and/or DTP. The most significant differentiators in this first section are the range and appropriateness of software used and file types produced, also the extent to which tasks have been completed to meet stated requirements. Centre assessment was sometimes over-generous where, for example, email documentation, whilst demonstrating understanding of email, did not meet the requirements of the task, ie a single guide for other staff (MStreamIT) or explanations of how the tools and features are used to make communication in a business setting more efficient and effective (JB Clothing). Some centres failed to take into consideration tasks that had not been completed. At the highest level it would be expected that a range of skills would be demonstrated across different software, eg, creation of tables, creation of screen layouts, appropriate combining of text and graphics and of data/graphics from other software and the integration of data from different software through mailmerge, including the final merge to create the required documents, rather than simply previewing the results. Whilst it is understood that many candidates are taught in earlier years to document work using presentation software, because of the ease with which screenshots can be imported and annotated, this cannot be considered an appropriate file format for documents in a vocational context unless they are specifically designed to be interactive. Candidates working at the highest level in this section were able to demonstrate the ability to create appropriate multi-page documents incorporating text and graphics/screenshots.

Where centres were following the MStreamIT assignment the range of types of product for the item of publicity required in Task 2 was broader than in previous sessions but most submissions were again limited to a simple page of text and graphics, sometimes with no obvious function. This demonstrated little creative thought on the part of the candidates and often limited the range of file types produced. A significant number created a top-up card, which did not meet the stated requirements. Some centres appeared to have learned that in order to include content that fully meets the requirements of launching the card and promoting the company a more significant item is likely to be needed and these centres appeared to have steered their candidates towards the creation of PowerPoint presentations, which were of varying quality and appropriateness. Where candidates had made their own choice of product type, as is required, the quality was usually better, with some candidates producing simpler items such as posters and simple flyers and others producing more complex items such as folded leaflets, videos and appropriately set up presentations. A few candidates came up with more creative non-document solutions, which were assessed on their own merits against the requirements. It is expected that candidates will have been taught the range of software tools listed in the specification, allowing them to select the type of promotional item they think will be most effective. Centres are recommended to remind candidates to consider the purpose of the product they are being asked to create and where it will be used but then to make their own decisions about what to produce and what content to include. It is not permitted for centres to direct candidates towards any particular type of product, nor to provide ideas for content.

Candidates using the JB Clothing Emporium assignment generally created some creative PowerPoint slideshows for Task 5, although some merely copied the instructions rather than creating their own text that met the client's requirements. The best submissions came from candidates who had applied appropriate transitions and animations, appropriately timed for automatic progression. Some candidates created static advertisements which, where they were appropriately sized and oriented to fit a screen, gained some credit although they did not generally manage to include all required content. Again, it must be emphasised that it is not permitted for centres to direct candidates towards any particular type of product, nor to provide ideas for content; rather candidates should be encouraged to consider the purpose and audience of the product, where it will be used and to ensure all company requirements are met.

The content of the documents is assessed in the second section of Learning Outcome 3. Common errors of content that were not sufficiently considered within some centres' marking included the content of the magazine advertisement and additional item of publicity (MStreamIT), the exhibition resource (JB Clothing), the letter, the company report (MStreamIT) and the report on research into giveaways (JB Clothing). As this assignment is set within a vocational scenario, content must be assessed within this context. In some cases centres were over-generous in their assessment of spelling, punctuation and grammar.

There are some generally agreed standards for a business letter and many candidates were over-generously assessed when their letters would not have been acceptable in a business environment. Common problems included an inappropriate font face and/or size, inconsistent line/paragraph spacing, lack of or wrongly positioned company and/or recipient addresses and/or date, also incorrect salutations and/or valedictions.

Whilst Learning Outcome 2 assesses data handling and Learning Outcome 3 assesses the range of software, the combination of components and the content of documents, any formatting of documents, spreadsheets and database output is assessed solely in Learning Outcome 4. Some centre annotations suggested that candidates had been doubly credited or penalised for formatting by considering the same skills and outcome in more than one area. As a general principal it is not intended that the same skills/achievements will be credited in more than one area although different aspects of a particular task may be focused upon in different sections of the marking criteria. For example, if a spreadsheet is created then the data handling aspect will be assessed within Learning Outcome 2 whilst the formatting will be considered in Learning Outcome 4.

Marks in the highest mark band of Learning Outcome 4 were sometimes over-generously awarded by centres when candidates had used only a limited number of formatting tools and, whilst what they had done had enhanced the readability of the work, much more could have been done to make it more appropriate. The specification provides a list of formatting techniques that candidates should be taught and it is expected that a wide range of techniques will be evident in the work of candidates scoring highly in this area. Where candidates had used formatting to improve some, but not all, of their work, full marks in mark band 2 were sometimes over-generously awarded by the centre. However, some candidates who used a limited range of formatting tools but generally did enhance the appearance and readability of their documents were sometimes over-harshly assessed within Mark Band 1.

The level of independence when formatting work is assessed in Learning Outcome 4. Many centres provided no evidence for this. Where centres made a comment on the unit recording sheet that clarified any support given, this was helpful and appropriate.

Unit R003

Most centres appropriately provided the electronic spreadsheet file as part of the evidence for this unit. Where this was not provided it was not always possible to clearly ascertain the overall structure created by candidates, nor the consistency and appropriateness with which some tools, eg validation, comments and conditional formatting, had been used. The overall appropriateness of the final product is key to assessment, rather than simply evidence of using different tools. When sending electronic files, centres are requested to inform the moderator of the version of software used, as some features such as drop-down lists may not work on earlier versions than that used by the candidates.

Although it is expected that the majority of, though not all, solutions will share the same basic sheet structure and invoice layout there are many different areas where it would be expected to find a variety of ideas between candidates. For example, formatting, including use of conditional formatting; validation settings; use of macros and other features designed to improve user friendliness; method(s) to add new customers/products; whether to look up codes or names, methods of calculating VAT; and discount and delivery charge. In some cases the similarity of candidates' solutions within a centre was so clear that it was investigated as possible over-direction by centre staff, which is malpractice. Centres are reminded that they must not provide any guidance to candidates regarding the structure of their solution or how to create it – the solutions must be the candidates' own, unaided work. Centre staff should remind candidates of the user requirements and should clarify the requirements of the assessment criteria but they must not provide step-by-step guidance or model solutions.

Many candidates produced effective solutions that met many of the requirements in the model assignment, although consideration of the need to enable new customers and new products to be added was generally weak or absent. Where consideration had been given this was generally limited to providing space for them, without thinking of validation or the implications of new entries on invoice requirements. Where macros were included these were largely for fairly generic purposes such as navigation between sheets and simple routines such as saving and printing. Some created macros for routines such as printing for which there is already a software button, in which case they added little if any functionality to the solution.

A few candidates had given a lot of thought to ways in which their solutions could be made user friendly, using a variety of methods including comments, formatting, text boxes and macros but most solutions could have been significantly improved in this area. The best solutions ensured that the invoice would fit onto a sheet of paper when printed, with some candidates adding appropriate headers/footers. Marks in band 3 of Learning Outcome 1 were often over-generously awarded by centres where it could not be considered that the solutions were 'very user friendly', ie extremely easy to use by an inexperienced person. Most candidates were able to apply formatting to emphasise headings etc in their spreadsheets but only a few used it well to

help users understand how to use the spreadsheet, eg to identify clearly those cells where data needed to be entered and those which contained formulae and so would be automatically updated. Use of comments and input/error messages was often limited and few candidates added any instructions/explanations for the user.

Marks in the highest band of the second part of Learning Outcome 1 were sometimes over-generously given where validation was limited to one section only of the solution and was limited to one or maybe two different types, usually a list. At the highest level it would be expected that validation would be applied wherever it could help reduce data-entry errors and that this would include more than one type of validation, with appropriate error and input messages throughout.

Learning Outcome 2 is separated into two parts – the first assesses the appropriateness and efficiency of formulae used whilst the second assesses candidates' reasons for choosing them. Some centres failed to distinguish adequately between these, in some cases being over-harsh in the first section, where formulae were appropriate, and in others awarding marks in the second section where no explanations were given and therefore criteria were not met at any level. It is clarified here that the understanding credited in the second section is that which is demonstrated by the explanation provided by the candidate. Centres also often over-generously awarded marks in the higher mark bands of this section where candidates had *described what* their formulae did rather than *explaining why* these methods/tools had been used. An efficient solution is one where the user is not expected to enter any more data than is necessary and is not required ever to edit formulae, also where functions are used correctly and where future changes, eg VAT rate, discount policies and delivery policies, can be made easily by the user. Candidates who had used LOOKUP functions in their invoice but had no method of avoiding errors if lines were blank were sometimes over-generously assessed by centres – although the use of LOOKUP includes an element of efficiency the solution would not work except in the rare case of having data entered in every line of the invoice, which cannot be considered to fully satisfy even **some** of the user requirements. Candidates whose solutions made use of efficient formulae had the opportunity to explain why these were more appropriate than simpler solutions, thereby allowing their explanations to be considered 'justification', as required at the highest level. Very few candidates achieved the second section of this learning outcome at this level.

The first part of Learning Outcome 3 – sorting, filtering and creating graphs – was generally completed very well by candidates and assessed accurately by centres, although some candidates did not provide clear evidence of the outcome of their sorting and filtering. This was especially the case where evidence relied on the electronic spreadsheet file. As sorting, filtering and modelling involve temporary changes to this file either multiple versions/sheets are required for evidence, which can be confusing and does not demonstrate good understanding of the purpose of a model, or some documentary evidence is needed. The weakest area of this first section was the chart, which was often not well labelled and/or not the most appropriate chart type for the data being presented. Pie charts are intended to show proportions, line graphs should be used to present continuous data whilst bar/column charts are most appropriate to show absolute values of discrete data sets.

Most candidates attempted some of the modelling scenarios, although few provided a range of solutions where these were required. Where candidates did provide a range of solutions they rarely considered how to present this information to the customer, although some did use the scenario manager tool, which summarised the results, albeit usually requiring a little additional explanation/labelling to enable them to be fully understood. Marks in this last section of Learning Outcome 3 were often limited by a lack of explanation of the results and of the tools used. Many candidates appropriately used the goal-seek tool, but candidates from some centres were over-generously assessed when they had not made any use of advanced modelling tools such as this. At the higher levels some reasons for the methods used are expected.

Unit R004

Where candidates submitted their final databases in electronic format this provided the clearest evidence of the structure of their solution, including all field names, types, lengths and validation/input masks used, which is difficult to achieve in a purely paper-based portfolio without extensive use of screen shots. Centres are requested to provide moderators with the name and version of any database software used. Where candidates relied on screenshot evidence this rarely covered all properties of all fields in all tables and often appeared to be trying to evidence the range of features used rather than the appropriateness of all settings within the candidate's solution. It must be emphasised that this assessment focuses on the extent to which the candidate has produced an appropriate solution for the client, not just on the range of different tools evidenced.

As for R003, although the data files provided make it likely that successful candidates' solutions will have many basic similarities there are many different areas where it would be expected to find a variety of ideas between candidates. For example, field lengths; validation settings; layout and format of reports and forms; structure of user interface; charts; and testing. In some cases the similarity of candidates' solutions within a centre was so remarkable that it was investigated as possible over-direction by centre staff, which is malpractice. Centres are reminded that they must not provide any guidance to candidates regarding the structure of their solution or how to create it – the solutions must be the candidates' own, unaided work. Centre staff should remind candidates of the user requirements and should clarify the requirements of the assessment criteria but they must not provide step-by-step guidance or model solutions.

Centres should note that the assessment criteria allow for a wide variety of responses within this unit. It is possible to fully meet mark band 1 requirements throughout the unit by editing and adding to the single-table database; there is no need to produce a working multi-table relational database at this level. Some candidates who produced very little work for this unit may have been able to gain more marks had they not been attempting to produce a relational database that was beyond their capability.

Marks in the highest band of Learning Outcome 1 were sometimes over-generously awarded where the table structure was not efficient; for example, where additional fields had been added but to the wrong table, where field lengths had been left at their default values and/or where links between tables were incorrect. Where candidates enforced referential integrity within their solutions they were able to ensure the links were functional and some realised that this formed a key part of their testing process. Where referential integrity could not be enforced, this demonstrated a fundamental flaw in the structure. Centres are recommended to ensure candidates are taught to enforce referential integrity and to interpret any error messages that might be encountered at this point.

Most candidates demonstrated good understanding of validation, although sometimes the validation rules chosen were not consistent with the data provided and/or the scenario, demonstrating a lack of testing as well as poor choices of validation rules. Some candidates' testing of validation rules was limited to ensuring that erroneous data would not be accepted but they failed to test with normal or extreme data and so did not notice that the settings they had chosen would not allow some data to be entered. This was particularly common with input masks for post code and validation rules for telephone number. Some candidates provided only one or two examples of validation, concentrating on showing that they knew *how* to set rules rather than using validation to *minimise* data entry errors in the scenario provided. Similarly, some candidates changed other field properties effectively for only a few fields or in only one of several tables. Although candidates from most centres appeared to have been taught how to create a lookup from values typed in, few appeared to know how to create a lookup from values in a table, which would have allowed them to validate foreign fields and further improve their database.

Learning Outcome 1 requires candidates not only to set validation rules but also to explain/justify their choice and this was a weakness in most portfolios. Where candidates simply described the rules this met mark band 1 requirements – for higher mark bands some reasons for the rules need to be given. To be considered detailed justification it is expected that candidates will show that they have considered alternatives, where appropriate, and will explain why they have chosen one over the others. Some candidates explained the purpose of validation rather than of their own rules; this did not meet the assessment requirements.

Queries were generally carried out well by candidates and assessed well by centre staff, although some centres were over-generous where candidates had provided queries that generated results for the specific examples given in the tasks, without providing the more generic solutions that were needed by the client. Additionally, the quality of reports did not always meet the requirements when higher marks had been awarded. For mark band 3 they should require little or no amendment to the layout in order to make them fit for purpose. Common problems that were not recognised by centres were inappropriate/unhelpful titles; a failure to consider the fields that needed to be output to meet client needs; the use of inappropriate colours, impairing readability; reports that contained truncated data; and a failure to set up reports appropriately for printing.

Most candidates were able to create usable forms and a menu that provided access to some, if not all, forms and reports. For candidates' interfaces to be considered effective, it would be expected that the menu will load at start-up and that there will be a data entry form for every table for which this is appropriate. Although the assessment criteria for mark band 3 state that forms need to be created for **most** tables this is in recognition of the fact that some tables, for example lookup tables, do not require a data entry form, rather than allowing candidates to achieve full marks for a solution that is not fully usable. Although many candidates were able to add function buttons to their forms they did not always show that they had considered which would be the most appropriate. Some candidates added every button that could be easily added, in default format, whilst others just added buttons such as navigation that repeated functions already available without considering what a user might want to do, for example delete a record, that was not already easy to do. The best forms were clearly and consistently laid out with a logical tab order and clearly labelled buttons that would allow an inexperienced user to view and amend data easily. Most candidates demonstrated a good understanding of house style by maintaining the style used in the reports when they created their forms and user interface although some marks were over-generously awarded in the highest mark band where consistency was limited to colours/fonts, with buttons etc inconsistently placed, limiting the effectiveness and usability of the interface.

Candidates from some centres used macros to add tables and/or queries to the user interface. This should not be necessary, as forms should provide access to tables, and reports should provide access to queries. Providing users with direct access to tables and queries, where changes could be made and errors introduced, is not generally considered good practice. Where these additional items were added to menus candidates were not penalised but gained no benefit.

As in previous sessions the weakest section of most portfolios was Learning Outcome 4, where candidates often did not document well the testing they had carried out, did not explain the methods they had used and/or did not include any evidence of testing another person's user interface. The test methods candidates are expected to be taught are listed in the teaching content of the specification. Few candidates showed any appreciation of the need to test queries and validation with a range of data. Where a range of data was used, including normal, abnormal and extreme, it was easier for candidates to explain their testing methods, as they could explain the data they had chosen to test with. Some candidates attempted to do this but demonstrated a common misunderstanding of extreme data, thinking that this was 'extremely abnormal' rather than understanding that it is at the extreme limits of normality, ie where errors are most likely to occur.

Some candidates included evidence of other peoples' testing of their user interfaces, which is a valid part of their own testing and which could have been explained, but failed to include evidence of their own testing of someone else's user interface, on which they need to be assessed. If, when marking the portfolio, centre staff find that this is the case it should be possible to find the feedback that has been given by the candidate and ensure it is included in the portfolio.

Where candidates followed the instructions within the Model Assignment and tested each section of their solution as it was implemented they were more able to demonstrate modifications as a result of testing. Where testing was left to the end it was more likely that most errors had already been corrected, but not documented.

Unit R005

Candidates completed this unit using a range of approaches, including websites, mobile apps and stand-alone products created using MS PowerPoint and Matchware Mediator. Both OCR assignments – 'Out and Up' and 'Wind and Waves' were used successfully by centres. Some centres had amended the assignment to provide an alternative scenario which they thought would be more appropriate for their candidates. Where these were of an equivalent complexity to the original assignment this was appropriate, but centres are requested to ensure a copy of any amended assignment is provided for the moderator. In some cases the replacement scenario did not provide an equivalent level of complexity, restricting the extent to which candidates could analyse the brief and demonstrate a thorough understanding of it. In some cases the user requirements were too specific, stating, for example, the type of product to be created, the number of pages/slides to be included and/or the focus of each page. These scenarios prevented candidates gaining credit for determining these for themselves from a more open brief. Where scenarios asked candidates to choose a theme for themselves these lacked vocational realism and were not appropriate as there was no real client brief for them to analyse.

Centres are reminded that whilst it is acceptable to replace the scenario within the OCR-set assignment it is not permitted to reword or replace any of the tasks. The recent updates of all assignments clarify this requirement.

Most centres provided electronic evidence of the final products, which is appropriate. However, some problems were encountered when these products had not been checked on a standalone computer to ensure all features, including sound, video and hyperlinks, worked. If it is found that a product does not work fully on a standalone system then some means of providing more complete evidence to the moderator needs to be found. Sometimes this can be achieved by exporting the final product in another format (eg PowerPoint exported to CD) and sometimes additional evidence can be provided by, for example, video, screen capture software, screenshots and/or specific, individual witness statements confirming what particular features do when the product is viewed in the candidate's user area.

Many candidates produced very extensive products, beyond the expectations for this unit, perhaps limiting the amount of time they had to complete documentary evidence or add interactive features and effects. Whilst for the highest marks in Learning Outcome 2 there must be sufficient pages to allow candidates to demonstrate their ability to create a clear and coherent navigation structure, making use of drop-down/sub-menus according to the type of product being created, candidates should be discouraged from creating many more pages than they need. However, the assignments do not specify the number of pages needed and it is not permissible for centres to do so – the structure of their product must be each candidate's own decision.

A significant number of centres awarded marks over-generously in the first part of Learning Outcome 1 where candidates' specifications were over-brief and/or general. To be considered 'sound' it would be expected that specifications will address all aspects of user requirements given in the assignment brief and that clear and measurable success criteria that are specific to

the user requirements will be clearly identified. Many candidates' success criteria resembled design ideas rather than criteria by which the final product could be assessed whilst others provided lists of criteria which were not inappropriate but were not specific and could equally well have applied to any other design brief. Such specifications were sometimes over-generously assessed by centres. Whilst generic success criteria can form an important part of teaching for this unit, candidates should be taught how to interpret these in the context of a specific design brief, thereby demonstrating their understanding of that brief, as required for the higher levels in this part of the marking criteria.

Candidates' choice of software was often over-generously assessed where their reasons focused on availability and/or familiarity. Candidates are assessed on their reasons for their choice of software to create the product, also on 'the presentation method for the design', which is clarified here to refer to the type of product to be created, which is linked to the software required by users to view/use it. In many cases it was clear that candidates had little, if any, genuine choice, with all candidates creating the same type of product and using the same software. Where candidates justified their choice of product type, showing consideration of alternatives, and then justified their choice of software by considering the needs of their designs, they were able to access the higher mark bands for this criterion. It should be noted that the assignment tasks require candidates to choose the type of product and create plans for that product before choosing software. In many cases it appeared that candidates had been advised to explain their choice of software before they considered what their product would look like, in which case they were disadvantaged as their reasons for software choice could not refer to any specific needs of their design ideas and were likely to be more general and simplistic. For example, some candidates chose a standalone multimedia product and MS PowerPoint and then included feedback forms within their designs, making their choice of software inappropriate. Where candidates stated that they were making a website and then chose slideshow presentation software this could not be considered wholly appropriate and where that software did not allow export as individual html pages it was clearly inappropriate. Centres are reminded that candidates must be allowed to work through the assignment tasks without any additional instructions/guidance.

Candidates from some centres made very effective use of planning techniques such as spider diagrams and mood boards but some candidates appeared to have created one or more of these items in isolation, rather as part of their planning, showing little or no understanding of the purpose of such techniques. Other candidates' planning was limited to a set of page plans and in these cases centre marks were often over-generous. Site plans are a key element in the planning of an interactive multimedia product and where these are missing it is difficult to agree that planning documentation is 'sound'. In some cases candidates had created both page plans and a site plan but where these did not correspond with each other the planning could not be considered to meet higher-band requirements. Sound plans should show some consideration of the multimedia components, interactive features and effects that will be needed to enhance the user experience and where these will be placed. It was surprising to note how many candidates' page plans had insufficient detail to identify the page, with elements such as 'Title' rather than the actual title of the planned page and 'information' rather than any indication of the information that is to be included. Such page plans do not fully meet the criteria even of the lowest mark band.

There was evidence that candidates from some centres had been taught about areas of legislation such as photo permissions and privacy but, as in previous sessions, in most cases simple comments about basic copyright were over-generously assessed. The task and assessment criteria expect candidates to explain the legislative constraints that apply to the use of the individual components listed, rather than to provide a general description of legislation in isolation.

As in R002, candidates from many centres chose to list their components using a generic source table and this may have discouraged them from providing clear explanations and justification for

their choices. In some cases centres over-generously assessed 'explanations' that did not go beyond simple identification of the subject of each image or a statement of where it would be used. There is no requirement in the task or the assessment criteria that a table will be used and some candidates who structured their documentation differently gave fuller explanations for their choices.

At the highest level it is expected that candidates will list *all* sources used in the final product. In some cases there was little correspondence between components listed and those actually used and in many cases these lists were over-generously assessed.

The structure of the specification is assessed within the second section of Learning Outcome 1. Whilst it is expected that candidates will have been taught how to structure a specification it is not permitted for centres to provide further guidance as candidates are working through the tasks. Writing frames are not permitted. Where candidates presented their specifications as a series of unconnected tasks, often starting a new file for each one, it could not be considered that these were logical and coherent. Candidates working at the higher levels are expected to be able to transfer skills of document creation from R002 and be able to produce coherent multi-page documents with appropriate headings and subheadings.

Some centres appear to have taught candidates that they needed to create their own components, eg video, animation, sound clips. This disadvantaged candidates, who spent time creating these components that did not contribute to marks for this unit except inasmuch as they might have contributed to the quality and appropriateness of the final product, which other existing components could equally have done. The specification for this unit states that '*learners are not being assessed on the creation of the components but on combining them to create the interactive product*'. Centres are reminded that the OCR-set assignment tasks are complete and that candidates need only to follow these tasks and check that they have evidence for all assessment criteria. It is neither necessary nor permitted for centres to add to, or break down these tasks.

Most candidates were able to produce a working interactive system with at least some choice of pathways. However, to fully meet the mark band 2 requirements of being a 'sound' navigation system it must be robust and allow a user to move easily between pages in whatever order is required. Where candidates have used MS PowerPoint and not removed the 'advance on click' option, a user could easily bypass any navigation system and click through and out of the presentation. Where candidates have produced applications which operate in full-screen mode with no obvious 'exit' these would cause an ordinary user problems. A website or other product with an inconsistent or inappropriately sized and/or labelled navigation bar would be considered to have poor usability. In none of these cases could the navigation system be considered fully 'sound'. Candidates who created an error-free navigation system using either a consistent navigation bar of appropriate size/location or a user-friendly menu system (non-website products) generally met Mark Band 2 requirements. Those candidates who had put more thought into their navigation systems, providing links in a logical and structured way, and making appropriate use of sub-menus/drop-down menus and/or considering instances where it would be appropriate to provide additional links from a particular page as well as providing all other options were able to access the highest mark band.

Although most candidates' products were well organised many had limited multimedia components and the page layouts were often very simple. Where candidates had used MS PowerPoint they had fewer options for interactive features. Although extremely effective interactive multimedia products can be created using this software this is only possible when its more advanced features, eg a range of trigger effects, are fully utilised. Some centres' marking in the second part of Learning Outcome 2 was over-generous in the absence of any interactive features other than the basic navigation system, which is assessed in the first part of this learning outcome. This learning outcome is an example of the basic principle that it is important not to assess the same aspect of work in two different areas of the marking criteria. The first

section assesses the layout of the pages and the internal navigation of the product, ie any internal hyperlinks, whilst the second section assesses other interactive features and multimedia effects. In some cases no additional interactive features could be found or no multimedia effects had been added, in which case it was not possible to agree that the requirements of any mark band had been fully met. Where there were neither additional interactive features nor multimedia effects, which was not uncommon, then credit in the second section could be given only for any consistency/house style and resemblance to designs.

Candidates from some centres, particularly those creating PowerPoint presentations, used hyperlinks to add a quiz to their product. Whilst this can be accepted as a way to add some very simple user interaction, to meet the requirements of the higher mark bands the techniques used must enhance the user experience. As neither scenario lends itself easily to this type of feature the questions included by most candidates were usually inappropriate and detracted from, rather than enhanced, the user experience and appropriateness of the product, thereby best fitting Mark Band 1. Centres are recommended to ensure candidates are taught how to add a range of different interactive features so that they are able to choose appropriately for their own product.

A number of candidates chose to use on-line web- and app-creation tools. Where these were used well they allowed candidates to design and create appropriate interactive multimedia products meeting unit requirements but where candidates did not start with a blank template they were sometimes over-generously credited with using advanced tools and techniques when all they had actually done was replaced page names and/or inserted content into ready-arranged places. As for any other unit, if the final product does not clearly show which tools/techniques have been used then candidates need to provide their own separate evidence. When assessing products it is important that centres take into consideration the tools that candidates have used and the extent to which the outcome is a result of their own design ideas and efforts rather than provided by the tool being used.

Evidence of testing was not always clear. Whilst extensive screenshot evidence of testing is not required there must be clear evidence of what the candidates have actually done. Vague claims such as 'test all hyperlinks' do not show what has been done. Some candidates added dates to suggest that some testing had been carried out as the product was being created, but these did not always match the type of test being carried out, which in some cases could only be done on a completed product. Where tests are only documented after the product is completed it is likely that most, if not all, of the genuine testing that takes place as components and features are added, and all error correction, has already been completed. Where candidates provided documentation to show what they had done at different stages of the creation of their product, including testing features as they were added and making amendments as necessary, however minor, this evidence was much clearer and met the criteria. Some candidates were over-generously assessed as having tested during the creation of their products when all they had done was document the development, with no evidence that anything had been tested.

To be considered 'thorough', tests must be clearly identified for all areas of the product, identifying specific areas of the product that need to be tested. Test tables that included only generic areas to be testing cannot be considered to demonstrate a high level of achievement. Although teaching is likely to identify general areas that need to be tested it is important to teach candidates to interpret these general principles in the context of the particular product to be tested. Where products had only very limited interactivity then the range of appropriate tests was more limited. Few candidates showed that they were able to use their success criteria to generate appropriate tests; this was often as much a result of the weakness of success criteria

Centre assessment for the final section of Learning Outcome 3 was often over-generous. Some candidates carried out their own evaluation against their success criteria rather than analysing the results of their feedback, which did not meet the assessment criteria. Where candidates' initial success criteria were not clear, it was more difficult for them to achieve high marks. The appropriateness of the feedback obtained is an important element of the criteria, with factors to

be considered including the questions to be asked and the people to ask, including consideration of how many people to ask. In some cases it appeared that centre staff had given additional guidance to candidates about how to gather feedback and this disadvantaged candidates by preventing any assessment of the appropriateness of the feedback obtained.

Unit R006

Candidates submitted work using both OCR assignments - 'The Camera Never Lies', and 'Keep Pets', with a few centres providing their own scenario. 'The Camera Never Lies' requires candidates to create a competition entry that matches the title 'the camera never lies' and which promotes their local area. Although some candidates included both aspects of this scenario within their specifications many concentrated on only one or the other and so did not demonstrate a sound understanding of the client brief. Where candidates had used 'Keep Pets', many interpreted the brief as requiring only the production of a logo, ignoring the more open, supplementary requirement for 'artwork... .. to be used in the shop and on the company's website', resulting in simple outcomes that generally did not demonstrate a good range of techniques. Where centres had replaced the brief with their own scenario they did not always provide the moderator with a copy and in some cases this was not of equivalent complexity, which disadvantaged candidates, as in R005 above.

In recognition of the fact that many candidates using the Keep Pets scenario did not understand that their task was more than the simple creation of a logo, the requirement to create additional artwork has been clarified in the new versions of the assignment recently published.

Marks from some centres were found to be over-generous in this unit where no evidence could be found for some of the criteria credited by the centre. Most commonly this was for setting image size and resolution (first section of Learning Outcome 2), storage of digital files (first part of Learning Outcome 3) and/or the presentation of the image to the client, including size, resolution, output medium and colour (last part of Learning Outcome 3). Even when digital files were provided for moderation, often the working files were not included, so there was no evidence of the appropriate storage of both working files and final output. Although the working files are unlikely to be in a format that a moderator can be expected to open, if they evidence storage and filing then they must be submitted unless screenshot evidence is provided. Centres are reminded that moderation is a check that centre marks are appropriate for the evidence submitted so it is essential that all evidence seen by centre assessors is made available to the moderator.

Consistent with R005 and R007, many candidates did not demonstrate a good understanding of what success criteria are, with some providing lists of design ideas rather than clear, measurable criteria that would allow them to assess the success of their work whilst others listed vague, general criteria that could equally well apply to any brief and therefore demonstrated little, if any, understanding of the client brief they had been given.

Candidates from some centres made good use of a range of research methods, including spider diagrams, interviews/questionnaires and 'competitor' research but in some cases marks were awarded over-generously where candidates had included examples of some or all of the above, without any coherent thread or evidence that this was part of the planning of their solution. It is expected that candidates will be taught the range of research methods listed in the specification and that they will make their own decisions about the research they need to carry out for the specific task they have been given. It is not expected that all candidates from a centre will carry out the same type of research. In some cases centre marks were over-generous because they considered researching a number of different images from the internet, for example, as a 'range' of research methods when in fact it was simply one method, which happened to involve looking at a range of different images.

To be considered 'clear and detailed', candidates' design plans must be sufficient for a third party to implement with little or no additional instruction. Many candidates' designs were limited to a few written ideas rather than a design plan. It is expected that a clear design plan will lead logically to a search for appropriate components. Some candidates did not include evidence of a design/plan for their graphic(s), thereby not fully meeting the requirements of the second part of Learning Outcome 1 at any level. Conversely, other candidates provided two or three alternative (sets of) designs, which were not required by either assignment task or assessment criteria, and where there was no indication of the final design that was to be used it could not be considered that planning had produced *clear* designs.

To meet the assessment criteria at the higher levels there must be at least some originality and creativity within the candidates' designs. This is a subjective judgement and, like all other criteria, it is expected that some comment will be made on the Unit Recording Sheet to say why it is felt that this requirement has been met. In this case it would be a comment to identify what it is about a candidate's plan that demonstrates originality and/or creativity. If most or all candidates in a cohort have used the same idea it cannot be considered original.

Comments in R005 above relating to lists of components, reasons for choice and legislation constraints also apply to this unit, as do comments on the structure of the specification. In some cases candidates chose components that were not appropriate because of their size/resolution and this affected the quality of their final image.

In the first part of Learning Outcome 2, candidates are expected to set both image size and resolution if this is appropriate and possible within the software being used. The 'and/or' in the specification is intended to provide flexibility in the type of image and software chosen. For example, resolution would be irrelevant for a purely vector-based image. Where it is possible/appropriate (which is most likely when the scenario is based around photographs) it is expected that both will be set. The marking criteria assess candidates' reasons for their choices and many centres were over-generous in their marking where candidates had stated what they had done but not provided any reasons. In some cases candidates demonstrated a lack of understanding by setting canvas size and then opening an image for the background that was a different size, resulting in a final image that was not the size/resolution that had originally been set.

Some candidates provided good evidence of the use of a range of techniques to produce complex images but in some cases the final product was assessed over-generously when it did not communicate the intended message. The final image alone often does not effectively evidence all the techniques that have been used and candidates should be advised to ensure assessors and moderators can clearly see the range of tools and techniques that have been used.

The second part of Learning Outcome 2 also includes criteria to assess candidates' evaluations of their own products and feedback on digital images produced by others. In many cases one or other of these was missing from candidate portfolios. This was particularly the case where candidates had followed 'The Camera Never Lies' assignment, where the requirement to provide feedback on other people's digital images was often misunderstood. In recognition of this fact, this requirement has been clarified in the new version of this assignment.

Where candidates provided evidence of their folder structures these were often weaker than those seen in R002. Centres are recommended to ensure that candidates are taught the benefit of saving intermediary versions of their final product, in editable form, and of the use of folders to clearly separate source files, working files and final products. Some candidates provided extensive screenshots of all their files and folders for this unit rather than simply for the image/graphics files used. Centre marks were sometimes over-generous in this section and it is important to remember to interpret assessment criteria in the context of the teaching content for the unit.

The assignment asks candidates to present their image for the competition. It is important that they make their own decision about the method they wish to use and that their choice is made clear within their portfolio. In some cases where centres had made repository entries it appeared that candidates had limited themselves to electronic submission of their competition entries. Had they chosen other methods, this could have been evidenced using an electronic format. Centre marks in the higher mark bands were often over-generous where there was no evidence that the candidate had considered how to present their image to the client, with no evidence of size, resolution, output medium and/or colour. Where the only evidence was the final file and/or printout produced for Learning Outcome 2 it was difficult to agree any marks above the lowest mark band.

Unit R007

Although this unit allows candidates to create solutions using audio, video or animation the majority of products presented for this unit were video clips. Most centres provided evidence of the final products electronically, which is the most effective method of demonstrating the quality and effectiveness of the products, although additional evidence of the range of techniques used is generally needed. OCR do not recommend particular software but centres must ensure that any software taught as part of this unit is capable of offering the range of tools and techniques listed in the specification. It is expected that this unit will be taught in the context of software that is intended for the production of dynamic products, ie sound, animation and/or video.

Evidence was submitted from both OCR Assignments – promoting the local area and the ‘Shoulderpads’, which worked equally well. Both of these assignments are deliberately left open for candidates to decide on the type of product to create and the software to use to create it – these choices are part of the assessment and must not be made by the centre. As for R005 and R006 it is possible for centres to replace the scenario of the Shoulderpads assignment but it is important that any replacement scenario is of an equivalent complexity to the existing context, offering candidates an equivalent range of client requirements and a choice of type of product to create. Where candidates thought that their task was to create a video clip this demonstrated a lack of understanding of the client brief (first part of Learning Outcome 1) and limited their ability to meet the higher-level requirements within software choice (second part of Learning Outcome 1) where they are expected to explain their choice of software for the ‘presentation method of the design’, which is clarified here as referring to the type of product to be created and the software users would need to view it.

Some well-designed, creative solutions were seen this session but in many cases relatively simple slide-shows of images or collections of clips with no real coherence or logical progression were over-generously assessed by centres.

The level of independence when defining the specification is assessed in Learning Outcome 1, which means that, unlike other units, candidates can be offered some support to analyse the client brief and come up with a specification, perhaps enabling some candidates to produce a better quality final product. This might be particularly appropriate for candidates working at Level 1. However, it is important to provide evidence for the level of support provided and many centres did not do this. Where centres made a comment on the unit recording sheet that clarified any support given, this was helpful and appropriate.

In order to assess the level of complexity, originality and creativity of the proposed solution within the first part of Learning Outcome 1 it is necessary to assess the candidates’ design plans, ie timeline storyboards. These need to be detailed before the required aspects can be clearly assessed. Some candidates did not provide any documentary evidence of their designs. Screenshots/printouts from completed or partially-completed products cannot be credited as designs. Many storyboards consisted of vague ideas for a series of images and/or video clips but it was difficult for moderators to agree that there was anything original or creative about them. As for R006 it is important that, where this criterion is considered to be met, centres

provide some explanation of what it was that was considered original and/or creative in a candidate's design.

Where candidates planned their product against a timeline and thought about how to deliver a coherent message within this time it was more likely that the plan, and therefore the final product, met the requirements of the brief and showed originality and creativity. Where plans were clear it was easier for candidates to explain their choices of components and to identify where these would need editing in order for them to be used within their final product. There is a Mark Band 3 requirement within Learning Outcome 2 to include **some** original components but it is not expected that all components will be created by the candidates individually and candidates from some centres appear to have been disadvantaged by being guided towards filming/recording all of their own components, regardless of the level at which they were working.

Comments in R005 above relating to success criteria, lists of components, reasons for choice and legislation constraints also apply to this unit, as do comments relating to the structure of the specification. It is important that candidates are provided with access to a wide range of components from which they can choose what they feel are the most appropriate to match their design ideas. This is most likely to be realised through access to the internet but where centres choose to provide their own resource bank, perhaps because they have provided a locally-based scenario, it is important that there is sufficient range of resources, in type and content, to allow genuine choice, also to ensure that any video clips and/or sound clips are long enough to require some editing before being imported into candidates' final products. Where centres provided a more limited range of resources it was generally not possible for candidates to access the higher levels within the second section of Learning Outcome 1 as they were unable to give anything other than the most basic reasons for choosing what they did.

In some cases no evidence of storing components was provided, whilst in others there were screenshots showing files and names but not file types. Where electronic files were submitted and this included all the source files the evidence was very clear.

As for R005, candidates' choice of software was often over-generously assessed where their reasons focused on availability and/or familiarity. Candidates are assessed on their reasons for their choice of software to create the product, and at the higher levels also on 'the presentation method for the design', which is clarified here to refer to the type of product to be created, which is linked to the software required by users to view/use it. In many cases it was clear that candidates had little, if any, genuine choice, with all candidates creating the same type of product and using the same software. Where candidates justified their choice of product type, showing consideration of alternatives, and then justified their choice of software by considering the needs of their designs, they were able to access the higher mark bands for this criterion. It should be noted that the assignment tasks require candidates to choose the type of product and create a script and/or timeline storyboard for that product before choosing software. In many cases it appeared that candidates had been advised to explain their choice of software before they planned their product, in which case they were disadvantaged as their reasons for software choice could not refer to any specific needs of their design ideas. Centres are reminded that candidates must be allowed to work through the assignment tasks without any additional instructions/guidance.

In many cases candidates provided evidence of their final product but not of the techniques they had used to edit or enhance the components in the creation of that product. The specification lists a range of techniques that provides the context for assessment of editing and enhancing techniques and where there was no evidence of these it was not always possible to agree centre marks in the first part of Learning Outcome 2. Whilst the use of some tools might be evident from the final product itself, this is not the case for all tools, especially where these have been used well to create subtle effects and/or where components might already include some editing. In some cases it appeared that the inclusion of a single original component had been over-generously considered by centres sufficient to award a mark in the highest mark band. When

considering the mark band of best fit it is also important to assess the range of editing and enhancing techniques used and the extent to which the final product resembles planning and meets user requirements. Where there was no discernible timeline storyboard plan it was not possible to agree that the product resembled planning.

In some cases there was little or no evidence for the second part of Learning Outcome 2. Although many centres provided the final exported files for moderation, evidence of how the product had been saved in raw editable file format was not always provided. To demonstrate understanding of advantages and disadvantages of different file types some documentary evidence, either from the candidate or in the form of a detailed witness statement documenting verbal explanations, is needed. Centre assessors are asked to be vigilant when marking this section to ensure that only candidates' own work is credited. Where plagiarism is detected the procedures outlined in sections 6.2 and 6.3 of the JCQ Instructions for the Conduct of Coursework should be followed. In some cases centre assessment of candidates' understanding of file formats was over-generous where it appeared that the quantity rather than accuracy of the explanation had been assessed. Where candidates, for example, wrote about some file formats not supporting interactivity, where there was no interactivity within their own product, this could not be considered a reason for not choosing that particular format for their products. Some candidates wrote about choosing one file format and then exported using a different format, thereby demonstrating lack of understanding. In some cases candidates used software that did not offer a choice of file formats for output, in which case the only valid explanation for the format chosen would be that it was the only one available, which fits into Mark Band 1.

Many candidates provided detailed test plans, showing both functionality and qualitative tests carried out, although some test plans were assessed over-generously where they simply stated *what* was to be tested without clearly identifying the actual tests to be carried out (ie *how* the item was to be tested) and/or where expected outcomes were not identified.

To be credited, there must be some clear evidence of testing during completion, not simply a teacher or candidate statement saying that this had been done or a date implying this. In many cases tests that were claimed to have been carried out during completion would not have been appropriate or possible until the product was completed, eg testing the length of the final clip or qualitative assessments of the product. If candidates were encouraged to complete an implementation log, this would more easily and effectively demonstrate the genuine tests that are carried out as pages and features are completed/added.

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