Cambridge Technicals

IT


OCR Report to Centres August 2017
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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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### OCR REPORT TO CENTRES

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1. Overview:

The revised specification was available for first teaching from September 2016. The revised specification includes examinable units as part of the DfE requirements for eligibility for the performance tables.

Most Centres have registered their learners for qualifications where the anticipated delivery is over a two-year period. Some Centres opted to concentrate on the externally assessed units in the first year of delivery and therefore did not submit any of the optional units for moderation. Centres who elected to deliver the optional units within the first year had the opportunity to submit units for moderation and gain valuable feedback from their moderator.

Within the diploma suite learners are required to follow identified pathways as follows:

- IT Infrastructure Technician
- Emerging Digital Technology Practitioner
- Application Developer
- Data Analyst

It is interesting to note that the most popular pathways are the Emerging Digital Technology Practitioner, Application Developer, and IT Infrastructure Technician with few Centres selecting the data analyst pathway. This is especially surprising when Centres were eager that the opportunity to produce spreadsheets and databases were still available within the overall specification.

A further requirement for the diploma suite is for Centres to secure Meaning Employer Involvement (MEI). This has raised many questions from Centres as to what is acceptable and what the actual requirements are. There is a Centres plan and further guidance available on the OCR website under Planning Resources [http://www.ocr.org.uk/qualifications/vocational-education-and-skills/cambridge-technicals-it-level-3-certificate-extended-certificate-introductory-diploma-foundation-diploma-diploma-05838-05842-2016-suite/](http://www.ocr.org.uk/qualifications/vocational-education-and-skills/cambridge-technicals-it-level-3-certificate-extended-certificate-introductory-diploma-foundation-diploma-diploma-05838-05842-2016-suite/) Centres are reminded that the plan must presented to the moderator at the first moderation visit for the 2016 specifications. Several Centres did not have an MEI plan in place at the first moderation visit despite the Moderator having emboldened the bullet point about this in the letter confirming the visit. Some of those that did have an MEI plan did not have one that provided sufficient employer involvement, and very few had identified how the mandatory units were addressed.

Centres who are delivering the 2012 specification as well as the 2016 specification are reminded that there are still only two free moderation visits. The OCR moderator will moderate both specifications at the same visit. When there are a large number of entries, this can result in the moderator arranging a two day visit with the Centres.

Some Centres who are part of a consortium did not understand that the number of free moderation visits do not increase. To clarify, it is two free visits for a consortium regardless of the number of Centres involved. It is therefore important that there is one identified co-ordinator who arranges the visit with the OCR moderator. The location of the visit is to be agreed within the consortium and all portfolios for that visit brought to the one location.
Some confusion has resulted from a change of rules with the 2016 specifications and Centres are reminded of the following:

- Moderators will no longer be able to withdraw claims based on learners' non-achievement or grades claimed. Moderators can only withdraw claims if there is a genuine administrative error. Where learners have not achieved the grade as claimed, the moderator will either award a lower grade e.g. Merit, Pass or Unclassified. Learners will be able to resubmit improved evidence without the Centres re-registering learners for the unit.
- Centres are reminded that examination rules apply with the examinable units and resits attract a re-sit fee.
- Centres are not at all clear about the ability to bank grades and resubmit units to achieve a higher grade at another moderation visit. They are not aware that learners potentially have 3 chances to improve their grades via moderation.
- Learners cannot undertake the role of client and/or stakeholders for learners to obtain feedback from their presentations etc.

Model assignments have been developed for each of the mandatory pathway units and can be found under assessment preparation followed by model assignments on the OCR website [http://www.ocr.org.uk/qualifications/vocational-education-and-skills/cambridge-technicals-it-level-3-certificate-extended-certificate-introductory-diploma-foundation-diploma-diploma-05838-05842-2016-suite/](http://www.ocr.org.uk/qualifications/vocational-education-and-skills/cambridge-technicals-it-level-3-certificate-extended-certificate-introductory-diploma-foundation-diploma-diploma-05838-05842-2016-suite/) Centres are reminded that they can use these assignments as they are but if adapting must only change the context (e.g. change the scenario) and leave the rest of the assignment as it is. This will ensure that learners still could aim for the higher grades. In addition, there is an assignment checking service available at a fee where a Centre’s assignment can be reviewed by a member of the team and constructive feedback provided.

Resources covering multiple units to support a project approach have also been developed for each pathway and can be found under Teaching and Learning Resources. [http://www.ocr.org.uk/qualifications/vocational-education-and-skills/cambridge-technicals-it-level-3-certificate-extended-certificate-introductory-diploma-foundation-diploma-diploma-05838-05842-2016-suite/](http://www.ocr.org.uk/qualifications/vocational-education-and-skills/cambridge-technicals-it-level-3-certificate-extended-certificate-introductory-diploma-foundation-diploma-diploma-05838-05842-2016-suite/) These resources are not intended for summative assessment and if centres are going to use them for this purpose they cannot rely on the review activities necessarily providing sufficient coverage of the grading criteria – both in terms of breadth and depth but also in the way the evidence might be generated. A better approach might be to set up a valid context and then use the assignment checking process to ensure that the assignment and associated tasks are fit for purpose.

Overall, Centres are adopting a “right first time” approach and therefore using the OCR community, INSET events, advisory phone calls and questions through the OCR Customer Contact Centres to clarify aspects of the unit specifications and confirm their ideas for delivery and assessment. Many Centres have stated that they are enjoying delivering the new qualifications and have found the specification much easier to interpret and much clearer with respect to what is required.

Centres delivering the optional units have made effective use of the support material such as delivery guides to assist them with their planning of the units and research in the availability for up-to-date (preferably free), software.

There are still some weaknesses with respect to evidence meeting the demands of the command verbs at the higher grades e.g. evaluate. The Command Verbs Definition document made available for the 2012 specification can be access at the following link [http://www.ocr.org.uk/qualifications/cambridge-technicals-it-level-3-certificate-introductory-diploma-diploma-subsidiary-diploma-extended-diploma-05347-05349-05352-05355-05358/](http://www.ocr.org.uk/qualifications/cambridge-technicals-it-level-3-certificate-introductory-diploma-diploma-subsidiary-diploma-extended-diploma-05347-05349-05352-05355-05358/) under support materials. Many Centres have found this document useful to use with their learners to aid the understanding of the depth required when providing evidence.
2. **General Comments**

89% of learners entered for the full Certificate (05838) achieved with grades ranging from overall passes to distinction*.

81% of learners submitting units for the full Introductory Diploma (05840) achieved the qualification ranging from overall passes to distinctions. These learners achieved their qualification over a 12-month period. The achievements related to the Application Developer and IT Infrastructure Technician pathway.

As this is the first year of delivery the remaining qualifications have not had any full qualifications claimed.

3. **Comments on Individual Units**

Some Centres who have started the internally assessed units have elected to deliver the mandatory pathway units first.

**Unit 4 – Computer Networks (mandatory unit for IT Infrastructure Technician pathway)**

Centres that do not have the essential resources are trying to deliver this unit but learners do not have access to a private network that they can work on without restrictions. They cannot modify the infrastructure, install, update, and remove software and configure the components. The lack of access to resources and diagnostic tools does not permit the highest grades to be achieved. This is a Level 3 unit and sufficient teaching time needs to be allowed for learning and assessment. 60 glh is recommended for the teaching of the unit content. Some Centres have tried to deliver the content with 30 glh and use the remaining 30 for assessment. The textbook should not be used as the only resource for delivering and assessing the unit. The depth and breadth of evidence needs to be of Level 3 standard at Pass grade to meet the command verb definitions. A scenario must be provided for P3 so that learners can create a network specification. The lack of access to performance tools and information about benchmarking prevents learners achieving M3.

**Unit 5 – Virtual and Augmented Reality (mandatory unit for Emerging Digital Technology Practitioner pathway)**

This is a popular unit because it is the mandatory unit on the Emerging Digital Technology Practitioner pathway which is a popular choice of pathway. However, some Centres are struggling to find suitable augmented or virtual reality software to use and to fund the purchase of additional tools to view the finished product, e.g. 360-degree cameras and virtual reality headsets. Access to the essential resources identified at the start of the unit specification is required to be able to deliver this unit. This has not deterred some Centres from offering this unit. Unfortunately, in some instances, the lack of suitable resources affects what learners can achieve at Pass level because it impacts on the design specifications for P2 and P3 as well as the resource developed for P4. P5 testing needs to be a thorough testing of the functionality of the product and conducted iteratively. Test plans must reflect the iterative testing of the product and be used before P4 has been completed. Similarly, M2 requires a record of adjustments made in the development stage as well as on completion of the developed resource. Adjustments should be based on the functionality of the product. D2 Assessors need to be familiar with the command verb definition and the example of an evaluation.

If Centres search the Internet, it is surprising how much free software is available for augmented reality which requires less resources than virtual reality.
Unit 6 – Application Design (mandatory unit for the Application Developer pathway)

This is a popular unit because it is the mandatory unit on the Application Developer pathway which is a popular choice of pathway. Most Centres have adapted the model assignment by inserting their own scenario relevant to a local business which they have used for their MEI. Links with local businesses has enabled some Centres to gain access to basic versions of the software used to develop applications in the IT industry and this has been sufficient to create a wire frame prototype.

Generally, the evidence has been strong with respect to the designs and final product but weak with respect to the documentation. Evidence was not always appropriate for the audience or fit for purpose. Centres had not always considered their learner as undertaking the role of IT practitioners working in the IT industry and therefore provided little evidence of them working with a client as it would be recorded in the industry. Appropriate evidence would be the provision of minutes or notes of meetings and signed agreements resulting from the negotiated adaptations to design solutions. P2 required evidence of gathering the client requirements where notes of a meeting with the client was needed rather than an analysis of the results of questionnaires. This does not follow industry practice as a questionnaire would not be sent to the client to gather their requirements. The term 'client' appears to be misunderstood by some Centres and in some cases confused with the term "stakeholders". M2 required learners to conduct feasibility studies of different solutions for their client requirements. Some feasibility studies only considered the option of doing everything or nothing at all which was not acceptable. The learners should have been considering what was feasible for them to do regarding the constraints such as time, budget, and technical skills available and suggesting a partial solution. LO3 was usually well documented and included good use of designs, diagrams and DFDs and the design choices were justified. P4 was weak with presentations that did not convey sufficient detail of the proposed design solution and relied on a witness statement as evidence of presenting the designs to the client. This was not fit for purpose and a witness statement is not one of the suggested forms of evidence and does not fit industry practice. Overall there was too little evidence of interaction with the client in the form of meeting notes, diary entries and agreed adaptations. Assessors need to be prepared to develop a more realistic, industry practice approach to tasks and evidence in line with a qualification that is preparing students for work in the IT industry.

The following units have also proved popular this year:

Unit 13 – Social Media and Digital Marketing
Unit 16 – Developing a Smarter Planet
Unit 17 – Internet of Everything

Moderators have seen some very good evidence for these units which has been particularly true for unit 17, where some innovative proposals have been presented. The requirement to present proposals/prototypes to clients/stakeholders has been taken on board by Centres and in most cases, suitable feedback was provided. Centres are reminded that learners’ peers must not be used for feedback for these qualifications.

It would also benefit learner if they used the bullet points from the teaching content to assist them with the structuring of their feasibility study/business proposal.

Unit 18 – Computer Systems – Hardware

For unit 18, this has been delivered by Centres who have ensured that they have sufficient, appropriate resources in place for their learners to provide strong evidence. It was clear that assessors had put a lot of time and effort into understanding the requirements of the unit and how it would be approached in industry.
4. **Sector Update**


Centres who are aware of the inclusion on the performance tables are planning to use these qualifications as a mechanism to develop the weaker learners prior to moving them on to the Level 3 qualification.