

Cambridge Technicals (2012)

Level 2 / Level 3

IT

05340, 05342, 05345 05347, 05349, 05352, 05355, 05358

Moderators' report 2019 series

About this Moderators' report

This report on the 2019 series assessments aims to highlight:

- areas where students were more successful
- main areas where students may need extra support and some reflection
- points of advice for future assessment/moderation

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.

The report also includes links and brief information on:

- A reminder of our **post-results services** including **reviews of moderation**
- Further support that you can expect from OCR, such as our CPD programme

Reviews of results

If any of your students' results are not as expected you may wish to consider one of our reviews of results services. For full information about the options available visit the <u>OCR website</u>. If University places are at stake you may wish to consider priority service 2 reviews of marking which have an earlier deadline to ensure your reviews are processed in time for university applications: <u>http://www.ocr.org.uk/administration/stage-5-post-results-services/enquiries-about-results/service-2-priority-service-2-2a-2b/</u>

Grade boundaries

Grade boundaries for this, and all other assessments, can be found on the OCR website .

Further support from OCR

CPD Training

Attend one of our popular CPD courses to hear exam feedback directly from a senior assessor or drop in to an online Q&A session.

Please find details for all our courses on the relevant subject page on our website.

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Overview

Most centres continuing with the 2012 specification are based in Northern Ireland and Wales where the funding rules are different to England. Centres in England who are not under so much pressure due to league tables, are enjoying the extended 2012 specifications. These tend to be specialist sixth form centres who continue to achieve good student outcomes partly due to their proficiency in delivery of the course.

Some centres in Northern Ireland are using the certificate sized qualifications for enrichment for their Year 13 cohort. Within Wales, the 2012 specification sits well with the Welsh Baccalaureate.

Centres are increasingly adopting a project based approach to the units instead of evidencing assessment criteria from isolated tasks. This has led to many centres adopting a multi-unit project approach which has worked very well and provided candidates with extra motivation to work towards higher grades for each unit. Where the project approach is adopted, especially for multiple units, there are still some issues with the referencing of the evidence. Centres should present the evidence for the multiple units as one large project. The Unit Recording Sheets for each associated unit should be completed in detail with the assessor justifying their assessment decisions. The referencing should indicate to the OCR Moderator where the evidence for each of the assessment criteria for each of the units can be found,

Some centres have moved to the 2012 specification where the candidates struggle with the mandatory examinations for the 2016 specification.

General comments

OCR Level 2 Cambridge Technicals in IT (2012)

The overall standard of evidence being presented by candidates continues to improve, with centres taking the opportunity to incorporate assignments which reflect the types of activities carried out in a work environment using a more holistic approach. These activities have provided candidates with a better understanding as to the overall theme of each unit as well as how the units are mutually supportive of each other.

A wider variety of assessment methods have been adopted by centres to include video presentations. It has been noted that candidates are becoming more confident with their presentation skills, demonstrating that they are more confident with the information they are presenting.

Centres are using the video presentations for a variety of units with the most popular being Unit 3, Business IT Skills and Unit 12, Presenting Information Using IT. The video evidence is then used to support P2, P3 and P4 of Unit 1, Communicating in the IT Industry, which is a mandatory unit. This is good practice and provides centres with extra time to focus on other aspects of the qualification.

Some of the higher-level command verbs are still causing issues with assessment and there are still centres who are being over generous with their assessment of the merit and distinction grades. Evaluate is one such command verb where candidates struggle to provide appropriate evidence. An evaluation should critically examine something. It involves the collection and

analysis of information about activities, characteristics and outcomes. The purpose of an evaluation is to make judgements in order to improve effectiveness, and/or to inform decisions.

It is also important that assessors when considering the assessment criteria within units identify whether the wording implies a plural (more than one), example, design, solution to be presented.

OCR Level 3 Cambridge Technicals in IT (2012)

The overall standard of evidence continues to improve in a similar way to the Level 2 qualifications. Centre confidence has increased, and a wider variety of units are being selected such as: Unit 37, Developing Programming Solutions and Unit 40, Cloud Computing in Business. For Unit 37, centres are delivering this in parallel with other courses where candidates are studying programming, especially in the area of software development. As the Cloud has become more popular with businesses with regard to storage solutions, centres have taken the initiative to produce assignments with a business focus which enhances the delivery and vocational relevance.

Centres are continuing to consider a more holistic approach to units including the development of project style assignments which incorporate multiple units. The projects are working well and provides centres with greater delivery time to help them to focus on the key concepts of the individual units.

A wider range of assessment methods are used with many centres using evidence from the optional units to provide evidence for P4, P5 and P6 of Unit 1 – Communication and Employability Skills for IT. As this is one of the mandatory units, this enables candidates to focus on their communication skills while carrying out activities associated with other IT tasks that would be carried out in a working environment.

Some of the higher-level command verbs are still causing issues with assessment and there are still centres who are being over generous with their assessment of the merit and distinction grades. As with the Level 2 qualification, candidates continue to struggle with carrying out appropriate evaluations. The guidance provided under Level 2 applies here. Another weakness in evidence applies to the requirement to compare and contrast. Many candidates provide tables where they look at the criteria that they are comparing but they consider them in isolation of each other. This is not a comparison. candidates are required to then make some form of judgement between the criteria that they have compared e.g. what software would be the most appropriate for different solutions and why, what programming languages would be the most suitable for creating a program for a specific business function and why.

Analysis is another command verb where candidate evidence can be weak. It is important that candidates understand what is required when analysing something. Analysis requires the candidate to initially understand the purpose of the analysis, candidates are then required to examine by breaking the activity, data, structure etc into parts. This will invariably involve collecting and analysing data.

Centres are reminded that the teaching content is the minimum of what candidates should be taught and that it is not a "tick list" for assessment purposes. Candidates should be presented with scenarios that requires them to use the relevant knowledge, skills and understanding that they have acquired and apply them to develop evidence for the unit.

Although centres encourage candidates to create presentation slides instead of writing reports, there are many candidates submitting PowerPoint slides with excessive text. Candidates should be taught how to create effective presentations by using bullet points to emphasis the key areas to be covered and then the detail is included in the speaker notes section. Slides full of text are not appropriate and do not help the development of the candidates.

While many candidates provide video evidence of their practical activities, centres are reminded that if witness testimonies are to be used instead, they must be individual for each candidate. It is important that the context is provided, what the candidate did and how they met the assessment criteria concerned.

Centres are reminded that the guidance on assessment section within each of the units is for guidance only and not a mandatory guidance. It is important that any evidence presented meets the wording of the individual assessment criteria.

Comments on individual units

OCR Level 2 Cambridge Technicals in IT (2012)

Unit 1 - Communicating in the IT Industry

LO1: Be able to communicate information to suit audience purpose and content

Some centres are already implementing opportunities for candidates to present evidence for P1, P2 and P3 by adopting activities that link to other units. P1 requires candidates to demonstrate effective interpersonal skills in face to face communication, while P2 and P3 requires candidates to communicate IT-related information to a non-technical and technical audience respectively. Moderators have noted that a small number of centres have incorrectly combined the non-technical and technical audiences, these cannot be the same people. If candidates are providing evidence of communicating via presentations, or during a discussion, then the effective communication skills could be evidence via a detailed and individual witness testimony for each candidate. An alternative would be to present video evidence of the candidate during their presentation. Candidates could provide evidence by demonstrating how to use a piece of software or hardware to a non-technical or technical audience. An audience could be just one person, there is no maximum limit. It is key that there is a clear identification within the evidence what type of audience is being presented to (technical or non-technical).

LO2: Be able to use IT tools to communicate and exchange information

The more autonomy the candidates are given for this learning outcome, the greater the opportunity they have to achieve the higher grades. Centres are reminded that the assessment criteria can be addressed in any order if it improves the flow of the evidence. An example could be that the candidate is given a scenario where they are required to select, setup and use a specialist communication channel to communicate and exchange information (P5). This specialist communication channel could include specialist software and candidates could be asked to explain why the software improves accessibility to IT communications (D1). While the accessibility could relate to others with a disability, it does not have to. It could relate to improving the accessibility of communications between a project team. If within the scenario they are then required to use the use IT tools safely to effectively communicate and exchange information (P4), they can follow this through with providing an explanation justifying the IT tools used in terms of safety and effectiveness (M1). A scenario which involves the candidates

working with others (this could be one other person or multiple people) on some form of project would work effectively for this learning outcome. Another alternative would be the development of podcasts. It must be remembered however, that all candidates must provide individual evidence (even if they work as a team on some form of project). Each candidate as an individual must address each of the assessment criteria in complete autonomy.

LO3: Understand the impact of IT on individuals, communities and society

Candidates must address individuals, communities and society when presenting evidence for P6 and M2. While explaining the social impacts for P6, candidates should be encouraged to consider both the positive and the negative impacts. By doing this, they will achieve M2 as they would also be describing what the negative impacts are.

Unit 2 – Working in the IT Industry

This evidence presented for this unit is either done very well by centres or is very weak with respect to the evidence presented. There are opportunities to combine assessment criteria within this unit to help the candidates present strong evidence.

LO1: Know the characteristics that are valued by employers in the IT Industry

P1 requires candidates to describe the characteristics valued by employers in the IT Industry. While this can be presented as a piece of standalone evidence, it is more effective if it is combined with the evidence required for LO2 where candidates are required to describe common IT job roles, the skills required and the characteristics of a job role. Further guidance is given below.

LO2: Know the common job roles undertaken by people working in the IT Industry

P2 requires candidates to describe common IT Industry job roles. While they are describing these job roles, they could also include a description of the characteristics required for these job roles which are valued by employers (P1). It is important that the candidates understand why these characteristics are valued by employers. Furthermore, they could also explain the main job role categories that the IT job roles they have been provided with or selected themselves for P2 come under (M1). Continuing with this theme, they could research the skills required for each of the job roles and explain what these skills are, for this they will describe what they are and what the purpose of each skill is (D1). If they follow this format, they will have already met the requirements for P3, explain the characteristics required for a specific job role in the IT Industry because they will have addressed this by completing P1 and P2 in parallel.

Unit 11 – Multimedia Design

Effective planning by centres would help candidates to present the same evidence from this unit for Unit 1 – Communicating in the IT Industry.

LO1: Understand different types of digital media

Candidates are required to explain the purpose of different types of digital media (P1) and discuss the effectiveness of different types of digital media (M1). This could easily be presented as one piece of evidence whereby the candidates explain the purpose of the different types of digital media and include their discussions on the effectiveness. As this is theory based, a centre

could convert this into a more practical activity. candidates could be provided with a brief where they are required to prepare a presentation which they deliver to an audience. The suggestion here, that it would be to a technical audience as there are other opportunities within this unit for the non-technical audience. If the candidates prepared a presentation and then delivered it (evidence could be a video of the presentation and/or a copy of the presentation slides with speaker notes), they would be providing evidence for Unit 1 - P1. Depending on the audience type, it could also be used as evidence for P2 or P3.

LO2: Be able to design multimedia products

P2 and M2 could easily be combined as the candidates are required to design a multimedia product and for M2 produce the annotated designs and layout. The annotation and layout should be sufficiently detailed that a third party could create the multimedia product purely by using the design and layout documentation.

LO3: Be able to develop multimedia products

The best form of evidence for P3, P4, M3 and D1 is the actual multimedia product itself. It is not necessary for candidates to provide numerous screenshots with explanations as to what they have done. The OCR Moderators will be able to establish how they met the criteria by reviewing the actual products created. For D2, candidates are required to create guidance for the users. Many centres accept guidance where the candidates are basically stating what they did to create the product. This does not meet the assessment criteria. It is a user guide which explains to the user how to use the actual product. This should include appropriate images which enhances the written instructions. It is important that the images can be clearly seen. There have been instances where the images are difficult to view and therefore are of little use to an end user. This documentation could also be used to provide evidence for Unit 1, P2, where they are required to communicate IT information to a non-technical audience.

LO4: Be able to present and review multimedia products

For P5, candidates are required to present their multimedia products to a defined audience. Again, this could provide evidence for Unit 1, P1, where candidates are required to demonstrate effective interpersonal skills in face to face communication. The best form of evidence here would be a video of the candidates presenting their products to their audience. P6, requires the candidates to review the product. This is another assessment criterion where some centres accept the candidates review as a report on how they created the multimedia product. This is a misinterpretation, candidates are required to review the product against the original requirements. They should be considering how it meets the requirements, whether there could be further enhancements, could it be extended, could it be used on multiple platforms etc.

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Unit 1 – Communication and employability skills for IT

LO1: Understand the personal attributes valued by employers

P1 and M1 could easily be combined here as one activity. Candidates could be given (or select for themselves) some IT job roles and while they are explaining the different personal skills that employers may require, they could also include the personal attributes and most importantly include why these personal attributes are valued by employers. There are still some candidates

who are not emphasising why the personal attributes are valued by employers. Many candidates provide a definition of what each attribute means, but not why these attributes are important as far as employers are concerned. There have been some very good examples of evidence for P1 and M1, where centres have developed a scenario that requires candidates to create an information brochure or multipage leaflet to be used at a careers fair.

LO2: Understand the principles of effective communication

P2, P3 and D1 could also be combined as one activity. Good examples from candidates for these criteria is the development of presentations where they explain the principles of effective communication (P2), what the associated barriers could be (P3), and how they could be overcome (D1). If the candidates were to then deliver their presentation to an audience with possibly a discussion or Q&A session at the end, they would be provided with the opportunity to demonstrate a range (three or more) effective interpersonal skills. A video recording would then provide evidence for P4.

LO3: Be able to use IT effectively to communicate information

There are more centres who have taken the advice of the OCR Moderators, by using evidence from other units when "Using IT to aid communications" (P5). With careful planning this same evidence could be used as evidence of "Communicating technical information to a specified audience" (P6). The use of IT to aid the communication could include how the candidate is presenting the information e.g. PowerPoint presentation, whiteboard, projector and/or in the written format e.g. handouts, leaflets, booklets, reports, design documentation, user guides, technical guides, test plans. The following points should be adhered to:

- P5 states "Uses IT to aid communications". This means that there must be more than one example. If the audiences and the technical information are different, then it is easier to identify appropriate evidence from other units.
- The style and language must be appropriate for the intended audience.
- Candidates must make their own decisions what form of IT to use otherwise they cannot link it to "Explain the choices of IT Used" (M3) or "Justify the use of the IT to aid communications" (D1).
- If PowerPoint presentations are used, candidates must be taught how to set out the slides with bullet points that contain a minimal amount of text. The OCR Moderators are still seeing presentation slides which are full of text, when most of the information should be part of the speaker notes.

LO4: Be able to address personal development needs

The Personal Development Plans (PDPs for P7) that have been submitted by candidates have improved in the last two years. The candidates should be considering long and short-term goals. The dates should be more specific and the activities to achieve a goal clearly defined. Support/resources should also be included as well as clear and sensible target dates. For P8, candidates must provide evidence of following their plans. The guidance at the end of the unit suggests a timescale of 3 months. This should provide the candidates with enough opportunity to gather evidence that they have followed their plans. Some goals may have been completed, while other goals may have been started and not completed, in some instances a goal and target date have to be reviewed.

Some centres have encouraged their candidates to provide a reflective account at the end of every month. This invariably strengthens the evidence presented.

M3 requires candidates to identify primary areas for improvement and how these will be achieved. This is usually addressed throughout a PDP and not just at the end but as long as there is evidence of candidates carrying out this type of review, the evidence is acceptable. candidates should be reviewing their progress and looking at areas where they need to concentrate the most and the impact these weak areas can have on their goals. They then need to document how they will address these weaknesses.

Unit 2 – Information Systems

Although improvements have been made over the years with respect to the delivery, evidence collection and centre assessment of this unit, it has still been noted that some centres are making this unit more difficult than necessary. Centres are reminded that the teaching content is not a tick list for assessment.

It is important that centres consider how to combine mutually supportive assessment criteria, rather than individual activities for each assessment criterion. It is further recommended that centres consider an appropriate organisation which is not too large and use this as a theme running through the unit. Many centres have elected to use their own school/centre as they are more familiar with it and so are the candidates.

LO1: Understand how organisations use business information

P1/P2 are a perfect combination to use for one activity. P1 requires candidates to "Explain how organisations use information". As the assessment criteria states organisations, this means more than one so at least two should be covered. One of these could be the main organisation that candidates will be taking into consideration when working through the remaining activities (e.g. the school or centre). For P2, they required to "Discuss the characteristics of good information". candidates could be asked to explain how the organisations use the information and discuss that characteristics the information would have to make sure it was good information. It is not necessary for the candidates to include every single characteristic in the teaching content. They should be selecting those that are relevant to the information and organisation.

M1 – requires the candidates to assess the improvements which can be made to an identified organisation's business information systems. This is where candidates would start to focus on one organisation such as the school/centre. They would research the business information systems used and carry out an assessment of these systems, coming up with potential improvements and assessing how these would improve the business information systems already in place.

LO2: Understand the issues related to use of information

This LO is all about the legal, ethical and operational issues associated with using information.

For P3, candidates are required to "Explain the issues related to the use of information". candidates could consider the information used by the chosen organisation (e.g. school/centre) and explain what these issues are and why they are issues. For D1, candidates should then research a further organisation (not of the same type as the one they used for P3 e.g. private,

public, not-for-profit) and look at the legal, ethical and operational issues that affect that organisation. They then continue to compare the issues for each organisation and develop a summary of their findings.

This has continued to improve over the years as more centres have taken on board the best way to approach the assessment criteria and how best to evidence it.

LO3: Know the features and functions of information systems

Where centres have continued to use the same organisation throughout the unit, the evidence has been easier for the candidates to produce. Because they are focusing on one organisation, they gain a better understanding of how the organisation works and the processes and procedures it adheres to when processing data to create information.

P4 requires candidates to describe the features and functions of information systems and P5 requires the candidates to identify the information systems used in a specified organisation. The assessment criteria do not have to be followed in order if centres think that it would be easier for the candidates to follow through if the order was changed. An example of this would be to address P5 first so that the candidates identify the information systems used by the organisation they have been studying. Once they have identified the information systems, they can then address P4. They would take each system and describe the features and functions for each one. Where centres have adopted this approach, they have confirmed that this has encouraged candidates to produce stronger evidence.

M2 requires candidates to illustrate the input and output of information within a specified functional area of an organisation. Again, looking at the organisation that the candidates have been researching, they then select one functional area. If it is a school or a centre it could be the examinations department. The illustration would be in the form of a DVD, but it is a low level DFD, there is no expectation that it would be any higher than a Level 0. The issues that have been highlighted by the OCR Moderators is where candidates have not presented DFDs but flow charts. In addition, some candidates are not providing DFDs which follow conventional rules. Centres are reminded that as long as they present the OCR Moderator with the format of the symbols used for the DFD which are acceptable within industry, no specific DFD style has been laid down.

D2 requires candidates to analyse the legal and ethical implications of the illustrated input and outputs. The easiest way for a candidate to address this criterion is to refer to their DFD and analyse the legal and ethical implications associated with the inputs and outputs. There has been an improvement in the evidence submitted by candidates where centres have adopted this approach.

LO4: Be able to use IT tools to produce management information

This learning outcome could easily be linked to evidence from Unit 19, Spreadsheet Modelling or Unit 23 Database Design. The key to combining the evidence from one of these units to this unit, is to make sure that the scenario requires the candidates to create a spreadsheet or a database which requires them to select appropriate information to present to a business. The purpose of the information is to help the business to make a business decision. If this is achieved within the context of the assignment brief, then P6 and P7 for Unit 2 is easily achievable. For M3, the candidates will provide an explanation of the value of the management information system they

have created. This could include what further information it could supply and/or how it could be adapted for future considerations.

There are some centres that only submit candidates as a pass and do not attempt the higher grades. The numbers who do this have decreased as centres have become more confident in attempting the merit and distinction criteria.

Many centres are staying with the "safer" optional units e.g. website production, digital graphics, computer animation, games design, interactive media authoring, spreadsheet modelling and database design. Where centres have appropriate facilities and resources in place, units such as computer systems, computer networks, IT technical support, maintaining computer systems, installing and upgrading software and IT systems troubleshooting and repair. These technical units can be very easily combined into much larger projects as they are mutually supportive of each other in the role of a computer technician.

Sector update

In March 2019, the Department for Education (DfE) announced funding in England, for most of the Level 3 Cambridge Technicals 2012 suite, will be withdrawn from **1 August 2020**. This includes the Level 3 Cambridge Technicals in IT 2012 Specification. candidates enrolled on the Level 3 IT 202 qualifications before 1 August 2020 will continue to be funded through to completion. The 2016 Cambridge Technicals suite is **not** affected by this announcement.

The funding announcement, which is part of a larger review of post-16 vocational qualifications in England, affects qualifications offered by all exam boards.

The Level 2 Cambridge Technicals 2012 suite final registration and certification dates are as follows:

| Qualification | Final Reg Date | Final Cert Date |
|--|----------------|-----------------|
| OCR Level 2 Cambridge Technicals Certificate in IT | 31/12/2024 | 31/12/2026 |
| OCR Level 2 Cambridge Technical Extended Certificate in IT | 31/12/2024 | 31/12/2026 |
| OCR Level 2 Cambridge Technical Diploma in IT | 31/12/2024 | 31/12/2026 |

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As a not-for-profit organisation, OCR's core purpose is to develop and deliver general and vocational qualifications which equip candidates with the knowledge and skills they need for their future, helping them achieve their full potential.

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