

CAMBRIDGE TECHNICALS LEVEL 2 (2016)

Moderators' report

IT

05882, 05883, 05884

Summer 2023 series

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Introduction

Our Lead Moderators' reports are produced to offer constructive feedback on centres' assessment of moderated work, based on what has been observed by the moderation team. These reports include a general commentary of accuracy of internal assessment judgements; identify good practice in relation to evidence collation and presentation and comments on the quality of centre assessment decisions against individual Learning Objectives. This report also highlights areas where requirements have been misinterpreted and provides guidance to centre assessors on requirements for accessing higher mark bands. Where appropriate, the report will also signpost to other sources of information that centre assessors will find helpful.

OCR completes moderation of centre-assessed work in order to quality assure the internal assessment judgements made by assessors within a centre. Where OCR cannot confirm the centre's marks, we may adjust them in order to align them to the national standard. Any adjustments to centre marks are detailed on the Moderation Adjustments report, which can be downloaded from Interchange when results are issued. Centres should also refer to their individual centre report provided after moderation has been completed. In combination, these centre-specific documents and this overall report should help to support centres' internal assessment and moderation practice for future series.

Online courses

We have created online courses to build your confidence in delivering, marking and administering internal assessment for our qualifications. Courses are available for Cambridge Nationals, GCSE, A Level and Cambridge Technicals (2016).

Cambridge Nationals

All teachers delivering our redeveloped Cambridge Nationals suite from September 2022 are asked to complete the Essentials for the NEA course, which describes how to guide and support your students. You'll receive a certificate which you should retain.

Following this you can also complete a subject-specific Focus on Internal Assessment course for your individual Cambridge Nationals qualification, covering marking and delivery.

GCSE, A Level and Cambridge Technicals (2016)

We recommend all teachers complete the introductory module Building your Confidence in Internal Assessment, which covers key internal assessment and standardisation principles.

Following this you will find a subject-specific course for your individual qualification, covering marking criteria with examples and commentary, along with interactive marking practice.

Accessing our online courses

You can access all our online courses from our teacher support website [Teach Cambridge](#).

You will find links relevant to your subject under Assessment, NEA/Coursework and then Online Courses from the left hand menu on your Subject page.

If you have any queries, please contact our Customer Support Centre on 01223 553998 or email support@ocr.org.uk.

General overview

The Cambridge Technical Level 2 in Information Technology is for candidates in the 16-19 age range and supports the development of their understanding of the IT sector. The qualification provides them with a useful insight into the pace of technological change and IT infrastructure on a global scale. They are provided with the opportunity to develop their understanding and skills across a broad range of centre-assessed units across job role specific pathways. Many centres use the Cambridge Technical Level 2 in IT as a progression route onto the Cambridge Technical Level 3.

OCR support – Meaningful Employer Involvement (MEI)



Centres are reminded that meaningful employer requirement is a mandatory requirement for the Level 2 2016 qualifications for the certificate and the diploma. The OCR moderator will request a copy of the Meaningful Employer Plan to review. Details about the requirements for MEI and what constitutes MEI can be found on pages 30-32 of the Centre Handbook which can be found at [Teach Cambridge](#). The MEI plan is an interactive word document and can be found at [Teach Cambridge](#).

Misconception - The use of 'i.e.' and 'e.g.' in the teaching content



The teaching content in every unit tells you what you have to teach to make sure candidates can access the higher grades. Anything which follows an 'i.e.' details what you must teach as part of that area of content. Anything which follows an 'e.g.' is illustrative. Where we use 'e.g.', candidates must know and be able to apply relevant examples in their work, although these do not need to be the same ones specified in the unit content. It is important that any assignments created, or any modifications to assignments do not require the candidates to do more than they have been taught but provides them with access to the full range of grades as described in the grading criteria. Centres are also reminded that candidates are not required to provide evidence relating to all the teaching content. They are required to select what is relevant from the teaching content and apply it to the assignment brief they are following.

OCR support - Digital submission of evidence



Centres must adhere to the guidance provided in the following documents:

- Digital submission acceptable file formats
- Guidance on uploading evidence and documentation to Cambridge Assessment Secure exchange.

The documents can be accessed via [Teach Cambridge](#) under the heading 'Key Documents'.

Not following the guidance within the above document prevents OCR moderators from accessing the evidence which can delay the results for the candidates.

Misconception – Stakeholders/clients/businesses



Centres are reminded that other candidates within the class cannot undertake the role of stakeholders, clients, or businesses. Teachers, teaching/school/college staff, businesses (linked through meaningful employer involvement) are the only people who can undertake these roles.

OCR support - Command verbs



Centres must make sure that candidate evidence meets the demands of the command verbs within the assessment criteria. OCR has created a command verb document that can be issued to candidates to assist them in understanding the depth and breadth of what is created. The command verbs document can be found at [Teach Cambridge](#).

Comments on individual units

Unit 8 – Using emerging technologies.

This unit has increased in popularity in centres providing candidates with an opportunity to learn how businesses are using these technologies to support their business functions. Moderators have seen some very good evidence presented by candidates with respect to the benefits and drawbacks to businesses and the legal implications. Some candidates have however, struggled with the implications on internal users and the potential impact on external users.

Learning Outcome 1: Know about technologies that are currently emerging

Candidates are required to outline the technologies that are currently emerging. There is a list of points that could be considered within the teaching content. Centres are reminded, however, that candidates are not expected to select all the points identified but use this as a prompt for some well-considered examples of what technologies are emerging and how they are used within business to support its everyday functions. When outlining the uses, candidates should also consider how these are used by the internal and external users.

Candidates have used a variety of methods for presenting their evidence including reports, information booklets and presentation slides. Centres are reminded to encourage candidates to only use bullet points and images with the detail in the speaker notes when using presentation software.

Learning Outcome 2: Be able to explore how emerging technologies can support business needs

The key to success for this Learning Outcome is the assignment brief which is provided to the candidate. There must be a clear indication as to the current functionality of the business so that candidates can consider ways in which emerging technologies can be used to support a business need. This can be in relation to how the business could improve its processes and overall functionality to how it can adapt to future market trends.

Candidates are required to investigate the business need, state clearly what it is and then put forward ideas and how emerging technologies can be used. P2 could easily be combined with D1, with candidates providing a justification as to why their suggestions would be appropriate and support the identified business need.

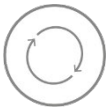
P3 requires the candidates to present their ideas as to what emerging technologies could be used and how they would be implemented. Many candidates have elected to develop presentations, but these have in many instances contained slides full of text. In these instances, candidates should have developed a formal report instead. The presentation of ideas could be to the stakeholders of the business as a formal business proposal document or as a presentation using PowerPoint. Some centres provided video footage of candidates delivering their ideas and answering questions posed by the stakeholders. M1 can easily be incorporated into the evidence for P3 with candidates providing an overview on the implications that the implementation of the emerging technologies would have on the internal users. The implications can revolve around internal users feeling threatened about the security of their jobs and therefore create a reluctance to embrace the ideas, the training that they require, a change to their work processes, etc.

Learning Outcome 3: Be able to reflect on impacts of emerging technologies

Businesses will use emerging technologies for a variety of reasons including to reduce long-term costs, increase the efficiency of the processes, increase interaction with their external customers and for developing/manufacturing new products. In addition, as with all technologies there is always the risk of data security and therefore there are a range of legal and ethical implications a business needs to consider.

Based on this, candidates are required to reflect on the potential impacts on the external users if the emerging technologies are implemented. Within this reflection candidates should be considering how the external user experience may change and how it may have an impact on their interaction with the business as well as the risks associated with any potential security breach.

Assessment for learning - P1: Outline the technologies currently emerging



When candidates provide evidence for this assessment criterion they must consider the main characteristics of the emerging technologies, providing an overview of its main features, what it does and a brief synopsis on how it works.

Assessment for learning - D4: Reflect on potential impacts on external users of identified emerging technologies



When considering the potential impacts on external users, consideration should be given to the legal and ethical implications as well as the external user experience.

Unit 10 – IT Software Installation and Upgrade

This unit is especially popular within centres for courses offering a technical support pathway. Centres are reminded, however, that any evidence presented for the technical units must still be for a 'client'. Therefore, the activities must reflect those that would be conducted in the workplace and not just a candidate demonstrating that they know how to install/upgrade software.

Candidates should be provided with an assignment brief that clearly stipulates the client and their requirements which help the candidates to meet the requirements of the assessment criteria. Centres must be able to provide sufficient resources to allow candidates to provide evidence against all levels of assessment criteria within the unit.

Learning Outcome 1: Describe the reasons for installing and upgrading IT software

The evidence for this learning outcome is purely knowledge based and candidates could complete this as a standalone exercise or link it to the practical assignment that they will be undertaking. This of course will depend on how detailed the assignment brief is that they have been presented with. Many candidates are allowed to submit evidence as PowerPoint presentations and while this is an acceptable form of evidence, the presentations are not well laid out. Candidates should be encouraged to only include well-considered bullet points on the slides, with the detail within the speaker notes. If candidates are allowed to fill the presentation slides with text, then they could have easily produced a report as an alternative.

Learning Outcome 2: Be able to prepare for IT software installation and upgrade

This evidence was not always clearly presented by candidates. It is important that the evidence presented helps candidates show how they would prepare a system for the installation/upgrade and what they have considered. Within Section 2 of the teaching content, there are a list of points that candidates should be considering, for example if it is a system that is still in use and fully functioning, they should provide evidence of creating a backup and system restore point. The teaching content provides a very good guide as to the types of activities that are expected based on the context of the assignment brief. When presenting evidence for M1 and the recommendations for precautions to be taken, candidates could strongly link the evidence for the criterion with P2 and the preparation activities. They can make the recommendations as to what they are going to do to prepare the system ready for installation/upgrade and then provide evidence, e.g. in the form of video where appropriate for carrying these activities out.

Learning Outcome 3: Be able to install and upgrade IT software

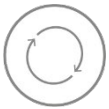
The best form of evidence for candidates performing the installation/upgrade was through the use of video or annotated photographs (with clear indication that it is the candidate). Some centres used video evidence with candidates providing an audio commentary as to what they were doing and why. This proved to be a very effective form of evidence. If witness statements are to be used, then they must be detailed and be individual to each candidate. The witness testimony must provide the context and then an account of what the candidate has done and how they did it.

The test plan should have been prepared for Learning Outcome 2 as part of the preparation activities. There must be evidence of the candidates carrying out the tests, documenting the results, identifying any issues, correcting any issues and re-testing. The evidence should include the test plan and if appropriate include photographic evidence or video evidence if available.

Any video/photographic evidence must clearly show the screen so that it can be viewed by the moderator. Blurred screen images that cannot be viewed clearly will not be accepted as evidence.

Assessment for learning - P1: Describe the reasons for installing and upgrading of IT software

Candidates must describe the reasons for installing and upgrading the IT software. This is why a detailed client brief can be so useful here. Candidates can then describe what software should be installed/upgraded and why. If this is not linked to the assignment brief, then candidates must provide a description as to what the reasons are. If presentation slides are used, they should be well laid out and not full of text.

Assessment for learning - D1: Evaluate the effectiveness of the installation and upgrading of IT software

Candidates' evidence for this criterion is often just a description of what they have done. This is not an evaluation. They are required to judge the quality, value/relevance of what they have done. They should be thinking about whether the way that they have carried out the installation/upgrade is the best way of achieving the results required (to meet the client requirements) and what improvements they could make.

Unit 11 – IT hardware installation and upgrade

As with Unit 10, this unit is most commonly delivered by centres. Similarly, it is important that the assignment brief provides the candidates with the context of a client and what they require a particular system to be able to do for them. It is not simply a case of demonstrating how to install/upgrade random hardware without any reasoning behind it. All Cambridge Technical units must reflect industry practice in all areas.

Learning Outcome 1: Know the reasons for installing and upgrading IT hardware

The evidence for this Learning Outcome is purely knowledge based and candidates could complete this as a standalone exercise or link it to the practical assignment that they will be undertaking. This of course would depend on how detailed the assignment brief is that they have been presented with. Many candidates are allowed to submit evidence as PowerPoint presentations and while this is an acceptable form of evidence, the presentations were not well laid out. Candidate should be encouraged to only include well-considered bullet points and supporting images on the slides with the detail within the speaker notes. If candidates are allowed to fill the presentation slides with text, then they could have easily produced a report as an alternative.

The teaching content provides guidance on the types of reasons that candidates can consider for installing/upgrading IT hardware. If this is linked to a detailed assignment brief, e.g. if the client has a current system and the specification of it, what they want the system to be able to do etc, then candidates can easily state what installation/upgrading is required and why.

Learning Outcome 2: Be able to prepare for IT hardware installation and upgrade

This evidence was not always clearly presented by candidates. It is important that the evidence presented helps candidates to show how they would prepare a system for the installation/upgrade and what they have considered. Within Section 2 of the teaching content, there are a list of points that candidates should be considering, for example if it is a system that is still in use and fully functioning, they should provide evidence of creating a backup and system restore point, identifying what tools/resources they require and preparing the initial test plan. The teaching content provides a very good guide as to the types of activities that are expected based on the context of the assignment brief. When presenting evidence for M1 and the recommendations for precautions to be taken, candidates could strongly link the evidence for the criterion with P2 and the preparation activities. They can make the recommendations as to what they are going to do to prepare the system ready for installation/upgrade and then provide evidence, e.g. in the form of video where appropriate of carrying these activities out.

Learning Outcome 3: Be able to install and upgrade IT hardware.

Some moderators reported that the evidence for this unit did not show any consideration for the health and safety preparation required, the careful handling of the components or rationale as to why the installation/upgrade was required. One or more of these points could result in a candidate not being given the grade for the unit. It is important that candidates demonstrate a good knowledge of health and safety considerations along with the careful handling of the IT hardware components. Candidates should have access to anti-static mats and wrist straps and provide evidence of ensuring that there is no risk of power being applied to the system while they are working on it.

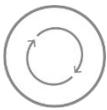
Where this unit was done well by centres, there was video footage of candidates carrying out the preparation of the workbench, components and resources, the precautions they took, and then the installation/upgrading of the hardware. Candidates also provided an audio commentary while they were carrying out the activities. Photographs are an alternative but must clearly show the candidate and what is being carried out in a safe and secure manner. There must be explanations stipulating

what the photographs are providing evidence of. Witness testimonies if used, must be detailed and be individual to each candidate. The witness testimony must provide the context and then an account of what the candidate has done and how they did it.

The test plan should have been prepared for Learning Outcome 2 as part of the preparation activities. There must be evidence of the candidates carrying out the tests, documenting the results, identifying any issues, correcting any issues and re-testing. The evidence should include the test plan and if appropriate include photographic evidence or video evidence if available.

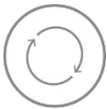
Any video/photographic evidence must clearly show the screen so that it can be viewed by the moderator. Blurred screen images that cannot be viewed clearly will not be accepted as evidence.

Assessment for learning - P1: Describe the reasons for installing and upgrading of IT hardware



Candidates must describe the reasons for installing and upgrading the IT hardware. This is why a detailed client brief can be so useful here. Candidates can then describe what hardware should be installed/upgraded and why. If this is not linked to the assignment brief, then candidates must provide a description as to what the reasons are. If presentation slides are used, they should be well laid out and not full of text.

Assessment for learning - D1: Evaluate the effectiveness of the installation and upgrading of IT hardware



Candidates' evidence for this criterion is often just a description of what they have done. This is not an evaluation. They are required to judge the quality, value/relevance of what they have done. They should be thinking about whether the way that they have carried out the installation/upgrade is the best way of achieving the results required (to meet the client requirements) and what improvements they could make.

Unit 13 – Creating websites

This is a popular unit with centres as it has a creative aspect to it that suits many different types of candidates. This unit provides candidates with the knowledge and skills required to review and update existing websites and their components. Candidates are not required to actually create a website, only update a website and associated components. However, many centres provide candidates with the opportunity to develop websites based on a set scenario for a client. As with all Cambridge Technical 2016 units, candidates are required to carry out activities for a client. The role of the client can be undertaken by the teacher, an external organisation or as part of MEI.

Learning Outcome 1: Know how websites are used by organisations

Candidates are required to describe how websites are used by a variety of organisations. Within the teaching content in Section 1, there is a list of the uses of websites and candidates can extract some examples from the list. It is to be noted that not all the examples in the list must be covered.

Some candidates present the evidence as presentation slides and as with many other units, these are inappropriate as the candidate has not used well-considered bullet points but merely written full slides of text as if writing a report. Candidate skills are required to be developed in many ways and this includes the presentation of evidence using presentation slides as most units requires candidates to present the solutions or products, etc. to the stakeholders.

Learning Outcome 2: Be able to review existing websites in relation to business needs

P2 and M1 can easily be linked together here as candidates are required to review a website and suggest potential improvements. It has been noted that some centres are asking candidates to review more than one website. For P2 it clearly stipulates that only a review on one existing website is required.

P3 follows on from P2 and M1 by the candidate preparing a plan of how the improvements or enhancements can be achieved. P3 evidence should include the use of a range of planning and design tools, e.g. storyboards, mind maps, visualisation diagrams. These should be documented to a standard that would allow a third person to use these plans and designs to develop the intended improvements or enhancements. Some centres are not ensuring that candidates provide sufficient evidence of planning and design, but most centres have ensured that candidate evidence is robust and fit for purpose.

Learning Outcome 3: Be able to create or modify components of websites to meet business needs

Candidates are required to create new website components (based on their plans from P3) or make changes to already existing website components for the website reviewed. Moderators do not require candidates to provide numerous screenshots of the process they went through but merely make the actual website components available for moderation.

Within this Learning Outcome, candidates are required to present their website components to the stakeholders for approval. The candidates can use a presentation (using bullet points and speaker notes) displaying the components as part of their evidence. Many centres provide video footage of the candidates presenting to the stakeholders and securing feedback. If video footage is not available, then candidates must provide the presentation slides and an account of the feedback provided by the stakeholders. This can be further supported by a witness statement from the teacher which is individual to each candidate.

For D1, candidates are required to make recommendations to the components that they have developed based on the feedback from the client. Some candidates use copies of the components and annotate them stating what they would change, how they would change it and why. This form of evidence works very well for the achievement of D1.

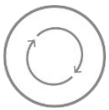
Learning Outcome 4: Be able to update websites to meet business needs

If candidates have reviewed an existing website that they have not created, they must be able to be update it using the components that they have developed. As this is not always feasible, many centres have had their candidates review an existing website and then develop a new website for the business. This then allows them to update the website with the components they have adapted from the stakeholder feedback. It is important that candidates provide evidence of testing the functionality of the website and the components/enhancements they have developed through a documented test plan. This test plan can be supported by video or photographic images.

Once the website has been completed with the changes addressed, the website is again presented to the stakeholders. As with the previous presentation, the evidence can be of a similar format.

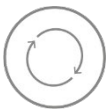
For the evaluation, it was important that candidates compare the website with how it looked before. They are required to judge the quality, value/relevance of what they have done. They should be thinking about whether the way that they have carried out the installation/upgrade is the best way of achieving the results required (to meet the client requirements) and what further improvements they could make. This can be a difficult area for candidates. If they are merely describing what they did, then this is not an evaluation.

Assessment for learning - P1: Describe the uses of websites in organisations



Candidates must describe how and why organisations use websites. If presentation slides are used, they should be well laid out and not full of text. Candidates should consider a range of different organisations and not just focus on one organisation or one sector.

Assessment for learning - D2: Evaluate the updated website against the needs of the business



Candidates' evidence for this criterion is often just a description of what they have done. This is not an evaluation. They are required to judge the quality, value or relevance of what they have done. They should be thinking about whether the way that they have updated the website is the best way of achieving the results required (to meet the client requirements) and what improvements they could make.

Documentation

Centres must make sure that a Unit Recording Sheet is completed for every candidate for every unit. These must be individual for every candidate and there must be clear justification of how the presented evidence met the assessment criteria and the exact location of the evidence. This is a mandatory requirement. The Unit Recording Sheets and a Candidate Authentication Record (which must also be completed by every candidate indicating the units being claimed) can be found at [Teach Cambridge](#).

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