

The specification for:

Level 1 Certificate in IT User Skills in Open Systems and Enterprise (ITQ)





This is version 3.0 of the TLM handbook for school's IT qualifications Further printed copies can be obtained from Lulu.com or the pdf freely downloaded from <u>www.tlm.org.uk</u>.

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The Qualifications and Credit Framework (QCF) was designed by the UK government's Qualifications and Curriculum Development Agency now replaced by Ofqual. The QCF is referenced to the European Qualifications Framework devised by the European Union. ITQ is the qualification framework based on the UK National Occupational Standards for IT Users developed by eskills and the Awarding Organisation Forum that is made up of all the Ofqual accredited organisations that offer IT User qualifications.

The assessment model for the qualifications presented in this publication was designed by TLM in consultation with all other awarding organisations that offer the ITQ. It was agreed that for delivery in schools, all awarding organisations will use the same structural model although each will set its own tests and use its own methods for assessing any coursework components.

The Learning Machine Ltd, Unit 4D Gagarin, Lichfield Road Industrial Estate, Tamworth, Staffordshire, B79 7GN (www.theingots.org)

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1. For those in a hurry!

Please read the rest of the book later as the details are important!

- 1.1 TLM's assessment model is common to most of its qualifications. It is based on competencebased assessment of coursework using a portfolio of evidence and supported by a free optional cloud-based evidence management system.
- 1.2 Learners must demonstrate competence against the assessment criteria from their day to day work and the teacher assessor must verify that they are competent in relation to the general level descriptor using indicative assessment criteria. TLM's external moderator will check the judgements and the quality of the evidence and provide feedback. This process is not graded, the intention is that it is a flexible way of checking basic practical competence in the subject at the qualification's framework level.

Procedures

- 1.3 The first thing to do is to arrange assessor training with TLM. TLM trains at least one assessor as Principal Assessor who must accept responsibility for standards within the Centre. The Principal Assessor can train and appoint assessors within the Centre as long as they are competent to take on the work and are willing to sign an agreement on the web site to uphold standards.
- 1.4 TLM will provide initial training in the pedagogical model and using the supporting technologies to provide the evidence needed. The purpose is to get you started and then we provide on-going support to ensure you are confident and we can work as a professional partnership. We advise new Centres to do some coursework assessment early so that they can receive feedback and quickly become confident in doing routine coursework assessment. Our aim is to make this no more onerous than normal routine assessment that anyone would do as a normal part of the teaching job. This gives more time to focus on teaching and therefore to support raising attainment.

2. Introduction

The Level 1 IT qualifications are designed for a wide range of abilities and for people who require skills and competence in IT. They range from 1 unit with 6 Guided Learning Hours, to many units and 85 Guided Learning Hours. There is a wide range of units available for all skill levels and interests.

2.1 Level 1 Certificate

The Level 1 Certificate is a qualification designed for people who require skills and competence in IT. The qualification consists of a mandatory unit and optional units to make up the 13 credits required:

Mandatory

Unit 1 - Improving Productivity Using IT (3 credits).

Optional

Centres can choose a range of set optional units for their cohort or can work on a wider set of options so that learners can specialise in something that interests them.

3. Summary of Qualification Specification

3.1 Level 1 Certificate (Annexe A)

The Level 1 Certificate is a qualification designed for people who require a wide range of skills in IT. The qualification consists of a mandatory unit Unit 1 - Improving Productivity Using IT (3 credits). The qualification consists of 13 credits so learners can make up the credits with optional units.

Qualification Title: TLM Level 1 Certificate in IT User Skills in Open Systems and Enterprise (ITQ)

Qualification Number: 500/8080/5 Qualification Level: Level 1 Total Credits: 13 Guided Learning Hours: 100 Total Qualification Time: 130 Assessment Methods: Coursework, E-assessment, Portfolio of Evidence

Assessment

Learners must demonstrate competence against the assessment criteria from their day to day work and the teacher assessor must verify that they are competent in relation to the general level descriptor using indicative assessment criteria. TLM's external moderator will check the judgements and the quality of the evidence and provide feedback. This process is not graded, the intention is that it is a flexible way of checking basic practical competence in the subject at the qualification's framework level.

Mandatory Unit - Unit 1 - Improving Productivity Using IT (3 credits)

3.5 Assessment

The internally assessed, externally moderated coursework for all qualifications is pass/fail but by submitting the evidence for external moderation, feedback can be given to the teacher on areas to improve for resubmission.

Evidence must be provided against the unit assessment criteria from practical tasks related to the learners' everyday work supported by IT. This could be from specialist ICT lessons, from use of ICT in other subjects or a combination.

The way evidence is gathered is up to the assessor, the only requirement is that it clearly supports the judgements against the assessment criteria and the relevant learning outcomes.

If on moderation the account manager finds gaps in evidence relating to a particular candidate, they will request more evidence before approving the award or the unit certificate. Assessors must then adjust their work to ensure all their learners are providing the appropriate level and breadth of evidence.

We encourage early submission of at least some evidence so that assessors are confident from the feedback that what they are providing is sufficient. In this way we can maintain standards while supporting improved efficiency.

4. Qualification Content



Mandatory	Optional (for reference)
3 CREDITS	10 CREDITS
Unit 1 Improving Productivity (3 credits)	Unit 2 Website Software (3 credits)
	Unit 3 Using Collaborative Technologies (3 credits)
	Unit 4 IT Security for Users (1 credits)
Unit 7 Word Processing Software (3 credits) Unit 10 Presentation Software (3 credits)	Unit 7 Word Processing Software (3 credits)
	Unit 10 Presentation Software (3 credits)
	Unit 19 IT User Fundamentals (2 credits)
	Additional units and guidance can be found here:
https://tlm.org.uk/getcriteria/?certid=85	

5. Transferable Skills

5.1 Key Subject Aims

The over-arching aim is to enable learners to support their learning in all subjects using IT tools that are freely and legally available from the internet. Subordinate aims include:

- Developing the skills needed for employment.
- Gaining practical experience and competence with contemporary technologies including programming where appropriate.
- Increasing the capacity to transfer knowledge and skills between contexts.
- Developing practical skills in creativity and problem solving.
- Developing an understanding of the social and commercial impact of IT.
- Developing an understanding of the legal, social, economic, ethical and environmental issues raised by IT.
- Developing safe, secure and responsible practice when using IT including reducing risk.
- Developing the skills to work collaboratively with IT.
- Developing skills in critical evaluation and feedback.

5.2 Knowledge and Understanding

The following knowledge and understanding will be required to support learning for the qualification.

- Demonstrate knowledge and understanding of audiences at which work is targeted.
- Understand the purpose in common applications and/or applications they have used.
- Demonstrate knowledge and understanding of strengths and weaknesses in the way information is presented.
- Demonstrate knowledge and understanding of intellectual property.
- Know common file types and the implications of open and proprietary standards.
- Understand information flow starting with input of information, to processing and output.
- Understand the costs associated with different applications including direct and indirect costs.
- Have the confidence to deal with the unfamiliar such as the code in a computer program and work out what to do.
- Understand the principles of ordered lists of instructions underpinning algorithms.
- Understand abstraction as picking out common features of objects in order to simplify. e.g. A common structure for a template to input information into different systems.
- Understand the benefits of target setting for IT projects.
- Know specific characteristics of software in order to make choices of tools.
- Demonstrate a practical understanding and respect for acceptable use policies.

5.3 Skills

Opportunities are provided to support the following skills, the great majority of which will be assessed directly.

- Select, use and integrate IT tools and techniques to meet needs.
- Find, select and evaluate information for its relevance, value, accuracy and plausibility.
- Manipulate and process data and other information, sequence instructions, model situations and explore ideas.
- Transfer competence in a familiar context to an unfamiliar context.
- Communicate data and information in a form fit for purpose and audience.
- Adopt safe, secure and responsible practice when using IT.
- Develop appropriate and effective IT-based solutions in a range of contexts including computer programming solutions.
- Self and peer assess to gauge the effectiveness of their own learning.
- Think creatively, logically and critically evaluate their own and others' use of digital technologies.

6. Support

Guidance and Assistance

- 6.1 There is further guidance for coursework assessment on the TLM web site. All centres have an assigned Account Manager who will be pleased to help at any time. Our aim is to give professional assessors, most of whom are qualified teachers, the confidence to make judgements with a minimum of bureaucracy so that they can focus their time on maintaining their professional knowledge, skills and supporting learning through effective teaching rather than "chasing paper". There is often a confusion between bureaucracy and rigour, since unnecessarily complex bureaucracy can actually detract from rigour by obscuring the importance of the outcomes.
- 6.2 **Web sites** TLM provides support through cloud-based systems. Providing assessment grades and the management of certification through the Markbook Site is mandatory and all assessors are provided with training in its use. It is simply a matter of recording learner competence against the unit criteria as the evidence is collected and claiming a certificate on behalf of the learner when a unit has been fully assessed.
- 6.3 The **community learning site** provides free optional facilities for learners to submit their evidence on-line, linking it to the assessment criteria across single or multiple units. The assessor can accept or reject this evidence and comment on it providing a full audit trail for evidence. Moderator/verifiers can get immediate access to this evidence and so it is potentially a lot more efficient than alternative methods. No paper, no e-mails with file attachments necessary. There are facilities for progress tracking that can be based on criteria and/or units. The system can be linked as an extension to any standards compliant VLE/e-portfolio system for centres that are already committed to a specific VLE product. Training can be provided, and free support is available from your Account Manager. The aim is to eliminate all paper-based bureaucracy, all screen-shots and referencing that draws time away from teaching.
- 6.4 **Telephone** and e-mail support are available to all Centres. There is a general convention of firstname.secondname@tlm.org.uk for e-mail addresses. It is usually best to e-mail your account manager in the first instance. Google hangouts can be arranged for video conferencing support.

7. Registration & Procedures

Registration

7.1 TLM's subscription model enables schools to enter learners at times convenient to them. There are no late entry fees and no additional fees should a learner fail to produce evidence at a level but can meet the criteria at a lower level. This can reduce costs to the school when compared to GCSEs and significantly more than this when compared to some GCSE alternatives.

There are no fees for replacement certificates or verification of certificates because all certificates can be directly authenticated against TLM's secure database. For details of current subscription costs please contact us or refer to the web site.

Internal standardisation

7.2 The Principal Assessor has the ultimate responsibility for consistency in assessment standards within a centre. All assessors have signed a contract agreeing to uphold standards and should therefore co-operate with the Principal Assessor and Account Manager at TLM to ensure that standards across the centre are consistent.

It is advisable to send work samples to TLM early to check that evidence is at the right standard so that there is time to make any adjustments necessary to the course and learner expectations.

TLM will generally check a higher quantity of work from new assessors and feedback to ensure that they are confident to make appropriate judgements over time. This reduces risk and improves efficiency in the longer term.

Authentication

- 7.3 All assessors must take reasonable steps to ensure that any coursework evidence submitted by candidates is a true reflection of the candidates' competence. This is in keeping with the assessor undertaking to uphold and maintain standards in the contract with TLM.
- 7.4 Certificates can be authenticated directly on-line using the certificate number or by scanning the QR code on the certificate. There is no charge and it makes it more likely that certificates will be checked and that in turn improves security. Certificate forgeries are a significant problem when authentication is not simple and straightforward because convincing forgeries are easy to achieve with recent technologies and will get easier as time goes on.

8. Other Considerations

Access arrangements and special requirements

8.1	All TLM's qualifications are intended to be accessible, as widely as possible. There is an extensive policy documented on the web site at https://tlm.org.uk/policy-download-centre/ Centres should contact TLM if they have any questions related to accessibility issues.
	Language
8.2	The language for provision of this qualification is English only. This will only change if we have a significant demand in another language that is sufficient to cover the additional costs involved.
	Malpractice
8.3	TLM has comprehensive policies and procedures for dealing with malpractice. These are documented with links on the web site at https://tlm.org.uk/policy-download-centre/ Assessors should be familiar with these policies and make them clear to candidates. Assessors should inform their account manager if they suspect any instance of malpractice that could have a material effect on the outcome of any assessments, either for themselves or colleagues. This is part of the upholding of standards that is part of the contract with TLM.
	Equality of opportunity
8.4	TLM promotes equality of opportunity through policies and procedures. These are again documented in detail on the web site at https://tlm.org.uk/policy-download-centre/
	Resources, Support and Training
8.5	A clear goal is to enable learners to support all their IT user needs using resources freely and legally available from the internet. This is related directly to national policies for inclusion and equality of opportunity. The reality is that there is so much user dependence on proprietary applications that we can only support the transition to free and open resources through education and common sense.
8.6	TLM does not require centres to use Free and Open Source applications but it certainly encourages them to do so. Most of the key software applications needed to support any of the assessed units are available freely from the web including office suites, graphics and sound editing. As a nation we could save hundreds of millions if not billions of pounds in software licensing fees by providing users with the skills, knowledge and confidence to migrate to free and open source applications. You Tube, OpenClipart.org, Wikipedia and many other sites provide free content that supports learning and the number and range of such sites is increasing.

Annexe A

Level 1 Certificate - Unit assessment - coursework guidance

The **Level 1 learner** has knowledge and understanding of facts, procedures and ideas in an area of study or field of work to complete well-defined tasks and address straightforward problems. Holder can interpret relevant information and ideas. Holder is aware of a range of information that is relevant to the area of study or work.

AND/OR

Holder can select and use relevant cognitive and practical skills to complete well-defined, generally routine tasks and address straightforward problems. Holder can identify how effective actions have been. Holder can identify, gather and use relevant information to inform actions.

Moderation/verification: The assessor should keep a record of assessment judgements made for each candidate and make notes of any significant issues for any candidate. They must be prepared to enter into dialogue with their Account Manager and provide their assessment records to the Account Manager through the on-line mark book. They should be prepared to provide evidence as a basis for their judgements should it be required by the Principal Assessor or their Account Manager/external moderator. Before authorising certification, the Account Manager must be satisfied that the assessor's judgements are sound.

General Information

The Level 1 qualification has the following characteristics for learners:

- Achievement at QCF level 1 (EQF Level 2) reflects the ability to select and use relevant knowledge, ideas, skills and procedures to complete well-defined tasks and address
 straightforward problems. It includes taking responsibility for completing tasks and procedures and exercising autonomy and judgement subject to overall direction or guidance.
- Use understanding of facts, procedures and ideas to complete well-defined tasks and address straightforward problems. Interpret relevant information and ideas. Be aware of the types of information that are relevant to the area of study or work.
- Complete well-defined, generally routine tasks and address straightforward problems. Select and use relevant skills and procedures. Identify, gather and use relevant information to inform actions. Identify how effective actions have been.
- Take responsibility for completing tasks and procedures subject to direction or guidance as needed.
- The criteria are designed to provide opportunities to promote numeracy, literacy and social skills as well as ICT capability and are compatible with the UK National Curriculum programmes of study as well as the regulated qualifications framework. This provides opportunities to satisfy both needs concurrently.
- The specification for the Level 1 extended certificate provides an outcome framework for assessment and is not intended to dictate any particular context for learning and so can be used with young children or adults and be applied to a wide range of existing courses.

Requirements

- Standards must be confirmed by a trained Level 1 Assessor
- Assessors must as a minimum record assessment judgement as entries in the on-line mark book on the TLM certification site.
- It is expected that there will be routine evidence of work used for judging assessment outcomes in the candidates' records of their day to day work. Samples, including related plans and schemes of work should be available at the annual visit and/or by video conference.
- Different approaches to learning will be required in order to match differing needs, for example, the needs of children will be different from the needs of adults with learning disabilities.
- When the candidate demonstrates secure capability against each of the criteria in the unit, they are entitled to a certificate for passing the unit and the overall award.
- We expect at least 170 hours of guided study to be under-taken for the certificate for complete beginners generally new to formal education, but discretion can be used to take account of prior learning where this is sensible in individual cases. In terms of making the certificate, what matters is outcomes. Can the candidate securely meet the criteria?

The Mandatory Unit - Level 1, Unit 1 - Improving Productivity Using IT (3 credits)

1. Plan the use of appropriate IT systems and software to meet needs	2. Use IT systems and software efficiently to complete planned tasks	3. Review the selection and use of IT tools to make sure tasks are successful
1.1 I can identify the purpose for using IT in my work.	2.1 I can identify automated routines to improve productivity.	3.1 I can check the outcomes of my work to make sure they are as intended.
1.2 I can identify the methods, skills and resources needed to complete my tasks successfully.	2.2 I can use automated routines to improve productivity.	3.2 I can decide whether the IT tools I chose were suitable for my tasks.
1.3 I can plan how to carry out the task using IT to achieve the required purpose and outcome.	2.3 I can complete planned tasks using IT.	3.3 I can identify some strengths and weaknesses in my work on completed tasks.
1.4 I can identify reasons for choosing particular IT systems and software applications for the task.		3.4 I can suggest some improvements to make my work more effective.
1.5 I can choose a particular technology to meet my needs.		
1.6 I can identify an acceptable use policy and legal requirements that affect my work.		

Assessment Method

Assessors can score each of the criteria L, S or H. N indicates no evidence and is the default starting point. L indicates some capability, but some help still required. S indicates that the candidate can match the criterion to its required specification. H indicates performance that goes beyond the expected in at least some aspects. Candidates are required to achieve at least S on all the criteria to achieve the full award.

Expansion of the assessment criteria

Criteria	Additional Information and Guidance
 1.1 I can identify the purpose of using IT in my work At the simplest level this is knowing that IT can improve the quality and efficiency of work and builds on the requirements of the Entry Level 3 requirement through the candidate taking responsibility for identifying purpose and communicating it effectively in their own way in simple cases. Evidence: will be provided directly from the presentation of work in web pages that has clear purpose and describes the purpose of the work. 	• Presenting information in different styles to different audiences. For example, the writing style in a forum or informal chat will show different characteristics from writing formally on a web page to present part of an e-portfolio. The candidate can use writing style differences to provide evidence of identifying purpose implicitly. Further evidence might include some awareness of what information is relevant and what is irrelevant to a task and whether information is accurate or biased. Might they consider a disability such as colour blindness? Candidates should use logical and appropriate structures to organise and process data indicating the purpose to which their work is being put. At this level they are not required to describe purpose in any detail and they can be provided with structured support so that they can identify purpose from, for example, a list of possibilities.
 1.2 I can identify the methods, skills and resources needed to complete my tasks successfully Building on the requirements for Entry 3, demonstrate a basic ability to plan their work with structured solutions including layout of text and pictures. This will require them to combine simple tools and straightforward techniques. They should show some evidence of checking the accuracy of the information they use and some self-sufficiency in using relevant tools to process and present information. Evidence: Directly from their web pages, day to day files and dialogue with assessor 	• Candidates should know that information can be found from searching the internet, asking people and looking in books. They should be beginning to ask critical questions about the validity of information and its accuracy even if at only a very rudimentary level. They should be able to identify general IT tools and methods to construct and present information. They should be able to identify sequences of instructions as a standard way of automating processes leading to increased productivity. Note at this level it is identification rather than description or explanation.
 1.3 I can plan my tasks using IT to achieve the required purpose and outcome Candidates should be able to provide clear and structured plans for tasks and at least one project of 20 or more hours. Evidence: A documented plan that supports a project presented in a digital format e.g. a web page, document file or IT planning software. 	 Planning should, where possible, include reference to anything learnt from previous evaluations or reviews demonstrating that learning is informing the planning process. This can be at a very simple level at this stage. e.g. In my last project I found that the information I found on one web site was wrong so I will check more carefully this time. Simple plans can be presented in any reasonable way as long as there is evidence of the use of IT and the evidence can be accessed from a URL or e-mail attachment The main focus here is on the planning of the IT task or project, though obviously it also has to address the ending part here and achieve some outcomes or stated purposes. You could use some tool in order to aide their planning. This could be something basic like the Google Keep application:
1.4 I can give reasons for choosing a particular technology in my work Candidates should be able to describe a range of factors that could affect the way they carry out their tasks.	 This is a good time to raise awareness of the difference between open systems and proprietary technologies. (PLTS) With fully open systems anyone can participate freely, with proprietary technologies, licensing determines who can participate and at what cost. This is a simplification because in practice there are degrees of openness. A fundamental risk with proprietary systems is getting locked into a monopoly where the supplier can determine the price almost without reference to any competition. In the case of fundamental technologies this can lead to extension of the monopoly to other applications. A good example is the relationship between Windows and the Internet Explorer web browser. Since early versions of IE came with Windows and had its own way of

Evidence : Evidence from content of their web pages describing these factors and considerations in their planning	displaying web pages it meant that web sites were designed to fit this single proprietary technology killing off competition. This meant that there was little commercial pressure to improve the technology and for a time there were many security issues and problems for web site designers trying to work to published open standards. Now there is far more competition and a clear need to support internationally agreed open standards, development has accelerated, security is better, web site design and development is easier. Of course, there is a problem with open systems that are free of charge at the point of use. Development costs money and an alternative business model is needed in order to recover costs. Without getting into the details of the economics, it is obvious that alternative models do exist from the increasing importance of open systems and open-source software in the IT industry globally.
	• Openness is just one consideration but we are providing additional information about it because it is increasingly important and not generally well understood. We need to start somewhere if we are to have fully informed decision making later and there has been a tendency for established commercial systems to reinforce the impression that there is no real alternative. For truly digitally literate people there are alternatives demonstrating why education and learning are vitally important to providing true choice.
 1.5 I can choose a particular technology to meet my needs Candidates should have sufficient breadth of experience to make an informed choice about the IT systems and software to use. Evidence: Evidence from content of their web pages and day to day working files indicating effective results and appropriately selected supporting resources. 	• This implies that they should have some opportunities to compare technologies such as word processors, drawing packages or complete systems of software including combining technologies that help support structured solutions to problems. e.g. I chose to use Google's spreadsheet because it supports collaborative work. I work with OpenOffice.org at home because it is free. I use Moodle at school because it is the only software available to me to share my web pages. I chose Inkscape because it edits the internationally agreed standard .svg files and there are versions on the major computer platforms and it's free. I chose Audacity because it is free and I wanted to try it out.
 1.6 I can identify an acceptable use policy and legal requirements that affect my work Building on the requirements for Entry 3, we have Practical knowledge and participation with an Acceptable Use Policy (AUP) A basic understanding of copyright and licensing Key technical and security issues 	 Candidates should understand that an acceptable use policy is intended to support safe and responsible use of ICT in situations where there is participation by many people. Local policy for using the network and the AUP for the INGOT learning site are examples. (PLTS) They should have a basic understanding of copyright and show evidence that they respect copyright by using suitably licensed resources given guidance. (PLTS) Evidence from making an account on the INGOT learning site and agreeing to the AUP and observing it during the course. They should realise that there are technical constraints on tasks such as size and format of files, filters that make web sites inaccessible in some environments. They should be beginning to relate technical and security issues to staying safe on-line.
Evidence: Evidence from documented evaluations	

 2.1 I can identify automated routines to improve productivity Candidates should be able to provide evidence of reviewing their work with specific focus on the IT tools and techniques they have used. They should describe at least three occasions where they have changed techniques, tools or approach as a result of evaluating their work in a project or projects. Evidence: Written recorded evidence in web pages or day to day document files describing their work 	• One way to approach this would be for the candidate to maintain a Blog as a diary supporting their work. They can use the TLM learner site for this purpose or their own resources as long as evidence is accessible to the Account Manager for moderation and verification. Putting together their portfolio or providing a digital resource or service to the community are suitable activities that can be reviewed and documented in a Blog.
 2.2 I can use automated routines to improve productivity Evaluation should include a description of the IT tools and their fitness for purpose. This can be organised as an analysis of strengths and weaknesses. Evidence: Evidence from documented description conforming to the criterion and guidance 	 For schools, this is an opportunity to teach some basic programming to reinforce understanding of how IT based automation works. Candidates can demonstrate that they can create precise and accurate sequences of instructions to automate a routine, for example drawing a shape or controlling a device. This could be in the logo programming language, Scratch, Green foot, a macro in a spreadsheet or a control programme in design and technology. For example, using a word processing tool the candidates could say that a clear strength of the application was that they could customise the interface so that only the icons they use most are visible. That way, it is easy to find the ones they want and not be confused and distracted by ones they never use. A weakness might be that the applications are generally made by American companies and the spelling default to US English. If the user is not aware of this and does not set this to UK English their autocorrection of spelling will be adding words that are incorrect. Similarly, a cloud-based word processor is good because it can be accessed anywhere, but a weakness is that it does not have all of the formatting tools of a desktop-based version and some of the formatting added by a desktop application are lost when uploaded to the cloud-based system.
 2.3 I can complete planned tasks using IT Candidates should provide evidence of planned tasks completed with the use of IT where the task is well-structured and clear direction and guidance has been provided in keeping with the requirements for Level 1 QCF qualifications. At least one small scale project to produce a service or information resource for other people in keeping with the description of the general requirements for Level 1 qualifications is required. This project should normally be presented in web pages but this can be varied subject to agreement with the Account Manager at The Learning Machine Ltd. Evidence: Evidence from documented descriptions conforming to the criterion and guidance 	 The candidate is advised to use work from across the other units to contribute to this project. This will reduce the administrative burden in sourcing evidence. Producing information in web pages supported by collaborative technologies - e.g. the preparation of a spreadsheet in Google Docs - with due regard for security will contribute evidence across all the units. While this is not mandatory, it is an allowable method. There is nothing to prevent the candidate providing all their evidence against the assessment criteria in this way.

 3.1 I can check the outcomes of my work to make sure they are as intended The candidate should be able to reflect critically on their work in order to make subsequent improvements. Where possible they should use the criteria to self-assess and peer assess their progress. They should gain feedback from the intended audience and take into account their initial plans or intentions. In keeping with the level of expectation for QCF level 1, guidance and direction can be used to support communication of their findings through structured templates and setting review criteria. Evidence: Evidence of review through documentation of evaluation in web pages and/or day to day files. 3.2 I can decide whether the IT tools I chose were suitable for my tasks The candidate should be able to state in simple terms strong features and weak features of the work in relation to layout, clarity of communication, intended outcomes or other similar criteria. Evidence: Evidence of descriptions through documentation in web pages and/or day to day files. 	 Overall, they should provide evidence in their work that they have used criteria to evaluate the quality of solutions and the effectiveness of their work. This might be a simple check of specified intentions matching them to outcomes. This is what I intended; this was what actually happened. (PLTS) As a specific example: Project to teach young children about dinosaurs. Planning intentions 1. Information is accessible to 7-year-olds 2. Information teaches about carnivores and herbivores Review criteria Was information accessible to 7-year-olds? - (check with a sample of 7-year-olds, could they access the web page(s) could they read the text, did they like the presentation?) What did the target audience learn about carnivores and herbivores? Was the information used legal? (e.g. pictures sourced from Wikipedia because they are licensed to be shared.) This can be tackled at the same time as 3.1 starting with the planned intentions, identifying strengths and weaknesses in relation to them and then reporting on the review outcomes overall. They should seek independent views from peers or other people where possible as an aid to improving and refining their work and respond positively to feedback even if they disagree
 3.3 I can develop solutions to improve my own productivity in using IT The candidate should have adopted some of their own practical solutions for personal productivity as a result of exploring the ways that ICT can be used to communicate, collaborate and share ideas. Evidence: Evidence through documentation in web pages and/or day to day files of them changing the way they work in response to feedback, evaluation and review. 	They should have some clearly improved ways of working from regular use of keyboard short cuts, bookmarking useful sites, greater use of web pages instead of word processors to present and organise information. This should be witnessed by the assessor and/or supported by portfolio evidence. Candidates should be encouraged to discuss productivity with peers and share ideas about the most effective techniques, favourite short-cuts and working methods.
3.4 I can suggest some improvements to make my work more effective	 Candidates should be encouraged to correct mistakes and adopt new and better ways of doing things as a natural part of on-going work. There should not be any obvious spelling errors or grammatical errors in finalised work since it should be picked up in the on-going evaluation process and corrected. Structured

The candidate should routinely check their work to make sure they actually produce the outcome intended as their work progresses.

Evidence: Evidence through documented evaluation.

support can be given and candidates should be encouraged to seek help in pointing out needs but the candidate should always take some responsibility for improving their own work and make changes and amendments themselves. (PLTS) On the INGOT learner site, assessors should take opportunities to use e.g. the Assessor comment facility and there is a history available of all changes made to web pages.

Annexe B

Optional Units

The TLM Level 1 Certificate has a requirement of 13 overall credits to pass. Unit 1 is a mandatory unit, but the following are a small sample of possible optional units to complete.

Centres can pick units themselves as long as they make a minimum of 13 credits overall.

The units can be chosen to have an overall focus, for example units that are about office productivity or more creative design, or they can be something to match local industry needs, for example focussing on managing data such as spreadsheets and databases.

More information and guidance on the different units available can be found on the TLM website Unit Bank. <u>https://tlm.org.uk/getcriteria/?certid=82</u>

An Optional Unit and its guidance are included below as reference to centres in relation to how much evidence is required from learners.

NOTE: We advise centres to use the web-based Unit Bank as the guidance here is regularly updated, whereas these specification documents are only updated once a year or if the qualification specification changes.

Sample Optional Unit - Level 1, Unit 4 – IT Security for Users (1 credits)

1. Select and use appropriate methods to minimise risk to IT systems and data		
1.1 I can identify security issues that might threaten system performance.		
1.2 I can take appropriate security precautions to protect IT systems and data.		
1.3 I can identify threats to information security associated with widespread use of technology.		
1.4 I can take appropriate precautions to keep information secure		
1.5 I can follow relevant guidelines and procedures for the secure use of IT.		
1.6 I can explain why it is important to backup data securely.		
1.7 I can ensure that my personal data is backed up to appropriate media.		

Assessment Method

Assessors can score each of the criteria L, S or H. N indicates no evidence and is the default starting point. L indicates some capability, but some help still required. S indicates that the candidate can match the criterion to its required specification. H indicates performance that goes beyond the expected in at least some aspects. Candidates are required to achieve at least S on all the criteria to achieve the full award.

Expansion of the assessment criteria

Criteria	Additional Information and Guidance
	• A simple risk assessment can be used to identify the issues, for example selecting and prioritising risks from a provided list, sorting and classifying security issues. Relate this work to safety and security issues in the other units.
	Examples of risks are:
1.1 I can identify security issues that might threaten system	• Using an operating system that is the target of most malware. Is it necessary?
	 Unsolicited e-mail (spam) and associated attachments that could be intended to damage the system or applications software.
	Running anti-virus and spyware programs slows down other operations
	Viruses and malware that consume resources without the user being aware
performance	Web browser pop ups and advertising
Candidates should be familiar with common security issues that could affect the way their computer performs. Evidence : Description in web pages, assessor observations.	• They should also realise that most information sources, web sites, USB keys and discs are potential sources of virus infection especially on computers running older versions of the Windows operating system that are not now supported with security patches. Physical security of hardware is also important. If a memory module is taken from inside a computer the computer might still work if it still has some memory but performance will be affected.
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	• Virus checkers significantly affect performance when running too. Early versions of Windows allowed programs to install themselves without reference to the user and there was a resulting explosion in the proliferation of viruses with internet connectivity making things worse. The vast majority of malware (viruses, spyware, etc) are targeted on Windows. Since a virus is a program, it will only run on a specific operating system (although in principal it is possible to devise cross-platform viruses in practice this does not seem to be a problem) Opening a file with a Windows virus on a Linux computer will not normally do damage. Virus checkers for Linux are targeted on servers that provide information to Windows client machines. The virus checker then strips out the virus on the server before it reaches the Windows client.

	• With most up to date operating systems, in order to install a program, you have to enter the system password so unless you actually go ahead and install something you are not sure about you won't accidentally install a virus. For this reason, viruses are much less likely to proliferate and so there is little incentive for virus writers. Some people say the reason there is no practical virus issue with Unix based computers (Linux, Mac, BSD) is that there are fewer of them so virus writers target the big numbers. It is also true that on average the IT literacy of Unix users is probably a good bit higher than for the average Windows user. Overall, Windows users are currently much more at risk from viruses than Unix users.
	• The latest versions of Windows have better security but there are still masses of viruses that will infect them if inexperienced users do silly things! There are massive commercial interests at stake so be careful about sources of information. A vendor of a particular system is going to talk up the benefits and talk down the risks related to security for their system and currently too few people are technically capable enough to give reliable advice even though many think they are. Improving the general technical knowledge of the population will reduce the risk to that population as a whole.though many think they are. Improving the general technical knowledge of the population will reduce the risk to that population will reduce the risk to that population as a whole.
	• They should not be awarded this criterion if they do any of the following.
1.2 I can take appropriate security precautions to protect IT systems and data	 Swap passwords with others Fail to keep their passwords secure
Candidates should show practical capability and a responsible attitude	• Use ineffective passwords (eg the word "password" or a single key stroke)
in relation to basic security in their everyday work. Evidence : Assessor observations.	• Download or attempt to download information that is either against local policies or is not known to be secure.
	• They should know that on Windows Systems up to date anti-virus software and regular checks are essential. If connected to the internet check there is a firewall between the client machine and the wider internet. Back up data and ensure backups are in a physically separate place from the source. (PLTS)
1.3 I can identify threats to information security associated with widespread use of technology	• Technologies with very widespread take up that are directly related to communications are very likely targets for people that want to breach security. A good example is Outlook address books which can use e-mail addresses in a sort of pyramid spam. Particular care needs to be taken when using such
Candidates should be able to identify some specific key threats	applications.
relevant to their circumstances. Relate this to safety and security in other units.	• The use of insecure passwords, sharing of passwords, storing user name and passwords in public web browsers
Evidence : Description in web pages, assessor observations.	Leaving computers logged in while unattended especially in public places

	 People who pretend to be trusted entities in order to get personal information from users. (Phishing). Providing personal information on public networks that could enable criminals to access individuals' personal data. Note that a lot of the technological solutions are in place and the human factor of inexperienced and under-educated users is probably more important than flaws in any particular technology. In general, the better the technology is understood the less likely the individual is to be a victim of technologically expert criminals. (PLTS)
 1.4 I can take appropriate precautions to keep information secure Since information is organised data, keeping data secure will keep any associated information secure. (See 1.2 above) Evidence: Assessor observation and secure user accounts in practice Evidence: Assessor observations 	 Since information can make immediate sense to a candidate whereas data need some sort of processing, greater care is needed to keep information secure. Candidates should also take particular care if entrusted to carrying sensitive information on discs, laptops and memory sticks. Such physical devices can be lost or misplaced. If sensitive information exists on a secure network, it will increase the security risk every time that information is copied to another device or server so making backup copies has a downside as well as a benefit. Candidates can use security as a focus for identifying the benefits and limitations of using ICT. Being able to copy information quickly and easily is useful but also a potential security risk.
 1.5 I can follow relevant guidelines and procedures for the secure use of IT Evidence: From their web page descriptions. 	 Candidates should demonstrate that they conform to any local acceptable use policies and procedures related to security. This can be related to other units and criteria related to safety and security.
 1.6 I can explain why it is important to backup data securely Candidates should be able to explain that digital data is easy to corrupt and delete and that hardware on which the data is stored can be stolen or fail. For this reason, backups should be taken and stored on a physically separate device from the original. Evidence: Assessor observations 	Since data can be come corrupt without the user knowing it is possible to inadvertently destroy a good backup by overwriting it with corrupt data. For this reason, especially with important data, relying on a single backup is risky. There can also be a penalty in the time taken to get work restored from a backup. Even on systems that centrally backup your work on a server, you are then dependent on other people to get it back. It is worth considering taking a separate backup e.g. to a USB key of important and often used work simply because it makes it quick and convenient to restore. This has to take into account how sensitive the information might be. One change that is taking place globally is the shift from desktop systems to the internet. Cloud computing, where all important files are stored remotely on the internet, offers the possibility of centrally backups and restoring files because the service provider will take care of this administration for them. They still might want to back up important and often used files personally. Systems like Dropbox provide a system for synchronising files on a local computer to an internet-based file store. This is useful if you have several computing devices but it also provides an effective backup. Typically, 2Gb or more of free storage is provided. Dropbox is also a collaborative technology because it can be used for sharing files with other people.
1.7 I can ensure that my personal data is backed up to appropriate mediaThe candidate should be able to show that the backup(s) applied to their work are effective e.g. it might be that the local network is backed up with tapes on a regular basis with the tapes taken off site. They	• The assessor should keep a record of assessment judgements made for each candidate and make notes of any significant issues for any candidate. They must be prepared to enter into dialogue with their Account Manager and provide their assessment records to the Account Manager through the on-line mark book. They should be prepared to provide evidence as a basis for their judgements through reference to candidate e-portfolios. Before authorizing certification, the Account Manager must be satisfied that the assessors' judgements are sound.

should show that they are aware that their work is included and that they backup important files to USB or similar media on a personal basis.
Evidence: From descriptions in web pages.