Platinum - Unit 1 - Improving Productivity Using IT

Relevant LINKS

BACK TO ITQ UNITS **[1]**

Handbook home page **[2]**

Overview (Under Development)

The candidate can plan and review their use of pre-defined or commonly used IT tools for work activities that are at times non-routine or unfamiliar. As a result of reviewing their work, they will be able to devise solutions using IT tools in order to improve work productivity. Any aspect that is unfamiliar will require support and advice from other people.

A work activity will typically be 'non-routine or unfamiliar' because the task or context is likely to require some preparation, clarification or research to separate the components and to identify what factors need to be considered. For example, time available, audience needs, accessibility of source, types of content, message and meaning, before an approach can be planned; and the techniques required will involve a number of steps and at times be non-routine or unfamiliar.

Example of context – an example might be to create a series of highly customised templates for a local company to improve aspects of their business work-flow: document templates with automated mail merges; spreadsheets with automatic tax calculation or databases with look-up fields for counties.

Activities supporting the assessment of this unit **[3]**

Example of work at this level **[4]**

Assessor's guide to interpreting the criteria

General Information

QCF general description for Level 3 qualifications

- Achievement at QCF level 3 (EQF Level 4) reflects the ability to identify and use relevant understanding, methods and skills to complete tasks and address problems that, while well defined, have a measure of complexity. It includes taking responsibility for initiating and completing tasks and procedures as well as exercising autonomy and judgment within limited parameters. It also reflects awareness of different perspectives or approaches within an area of study or work.
- Use factual, procedural and theoretical understanding to complete tasks and address problems that, while well defined, may be complex and non-routine.
- Address problems that, while well defined, may be complex and non-routine. Identify, select and use appropriate skills, methods and procedures. Use appropriate investigation to inform actions. Review how effective methods and actions have been.

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- Take responsibility for initiating and completing tasks and procedures, including, where relevant, responsibility for supervising or guiding others. Exercise autonomy and judgement within limited parameters information and ideas

Requirements

- Standards must be confirmed by a trained Platinum Level Assessor or higher
- Assessors must at a minimum record assessment judgements as entries in the on-line mark book on the INGOTs.org certification site.
- Routine evidence of work used for judging assessment outcomes in the candidates' records of their day to day work will be available from their e-portfolios and on-line work. Assessors should ensure that relevant web pages and files are available to their Account Manager on request by supply of the URL.
- When the candidate provides evidence of matching all the criteria to the specification subject to the guidance below, the assessor can request the award using the link on the certification site. The Account Manager will request a random sample of evidence from candidates' work that verifies the assessor's judgement.
- When the Account Manager is satisfied that the evidence is sufficient to safely make an award, the candidate's success will be confirmed and the unit certificate will be printable from the web site.
- This unit should take an average level 3 learner 50 hours of work to complete.

Assessment Method

Assessors can score each of the criteria N, L, S or H. N indicates no evidence. 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 a S on all the criteria to achieve the full award.

Expansion of the assessment criteria

1. Candidates will plan select and use appropriate IT systems and software for different purposes

1.1 I can explain the purpose of using IT

Candidates should be able to fully explain the purpose of their work and why using IT adds value to it in some way or ways.

Evidence: will be provided directly from the presentation of work in web pages that has clear purpose and describes the purpose of the work.

Additional information and guidance

Candidates might describe the audience at which they are targeting their work and any aspects of the work that makes it particularly suitable for the audience e.g. "I presented a science investigation

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using a web page with links to references so that a future employer can see the quality of my work simply by knowing the URL". "I used a public web page to collaborate with my friends in producing an information page about the local environment because it enabled us to work together effectively. It also made it easy for other people to contribute and made the results easy to link to other similar sites". They should be able to fully explain the key characteristics of writing formally on a web page to present part of an e-portfolio as opposed to the style used for chat and instant messaging of friends. The candidate will show evidence of understanding relevance in relation to purpose. Information that is irrelevant to a task will not support its purpose and inaccurate or biased information could be against the purpose. The main difference between Platinum and Gold is that in Platinum, the quality of explanation needs to be explicit and clarity of understanding, whereas in Gold it is enough to describe the purpose e.g. from a list of options or other supporting structures. Their documented web pages, blogs and/or files should contain detailed explanations in keeping with the guidance here.

1.2 I can analyse the methods, skills and resources required to complete the task successfully

Candidates should be able to systematically analyse a task and match needs to resources. They should be able to describe and explain the methods, skills and resources they need in some detail.

Evidence: will be provided directly from the presentation of work in web pages that has clear purpose and describes and explains the methods skills and resources relevant to successful completion.

Additional information and guidance

For example, as a method of presenting information to a general audience, using web pages is often a better choice than desktop presentation software. In a web page, the information is permanently and immediately available to the intended wide audience and this information can be linked to related information in other pages. They might need skills related to e.g. preparing images for use on-line so they are suitable sizes and load quickly on low bandwidth connections. They can describe and explain issues related to copyright (PLTS) and accessibility if they intend others to use the information they prepare. They should have a detailed analysis in each instance. The resources needed could include time, software, hardware or new learning and expertise. Again evidence of analysis and explanation will differentiate from Level 2.

1.3 I can analyse any factors that might affect the task

Candidates should be able to analyse and explain a range of factors that could affect the way they carry out their tasks.

Evidence: Evidence from content of their web pages describing these factors and considerations in their planning

Additional information and guidance

Have they have considered the time the task is likely to take, any copyright issues in obtaining suitable resources, cost of resources and any e-safety and/or relevant security considerations? This is not intended to be an exhaustive list. The factors considered simply have to be credible and useful in the planning process. Again, being able to critically analyse the factors and relate them to the task is a Level 3 characteristic.

1.4 I can critically compare alternative methods to produce the intended outcome

Candidates should be able to show a range of alternative plans and actions in order to complete the task.

Evidence: Evidence from content of their web pages describing these factors and considerations in their planning

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Additional information and guidance

A key skill in planning IT projects to consider is that something will almost always go wrong. At this level, candidates need to show that they have analysed and understood the nature of their IT project to such a degree that they can react in a timely manner to problems that occur. They need to analyse and compare the options available to them and rate them in terms of suitability and be ready to use the best options as required.

1.5 I can develop plans for using IT for different tasks and purposes, including contingencies

Candidates should be able to provide clear and structured plans for tasks and at least one project of 30 or more hours with built in contingencies.
Evidence: A documented plan that supports a project presented in a digital format e.g. a web page, document file or IT planning software.

Additional information and guidance
Candidates should have planned a project of some complexity scoping the information flow. For example, designing a structure for an e-portfolio with a title page linking to subjects of interest, listing the information sources needed for input, the software tools they will use for processing information to include in their portfolio and the intended audience for their finished product. They should provide evidence that they have considered costs and where relevant the file formats generated by the tools in order to make information widely accessible. Will their work force other people to have to buy software in order to access it? Planning should consider such issues to avoid problems later on when the project has been completed (PLTS)
Plans should typically be based on an aim, some specific objectives and/or SMART (Specific Measurable, Attainable, Relevant and Time-limited) targets. Candidates should realise the importance of objectives and targets that can be rationally evaluated rather than vague statements of aim. An example in the context of an e-portfolio might be to provide 3 screen sized pages for 3 subjects by 31st July. Resources required are 30 hours of time and access to the Drupal Content Management System. Plans should include concise descriptions of the methods and actions needed for success and these can relate directly to the range of assessment criteria in this section. Contingency plans should also be detailed and included as well as how and why they would come into play.

1.6 I can select and use appropriate IT systems and software applications to produce effective outcomes
Candidates should have sufficient breadth of experience to make an informed choice about the IT systems and software to use. An awareness of the suitability should be explicit.

Evidence: Evidence from content of their web pages and day to day working files indicating effective results and appropriately selected supporting resources.

Additional information and guidance
Candidates should show evidence of making appropriate choices between different applications or systems in order to complete a project of some complexity. For example they might choose a vector drawing program to originate diagrams rather than use a raster (bitmap) graphics program because of the greater flexibility in handling and scaling shapes. They might choose open source applications for lower cost or ethical reasons. They might choose web based systems for ease of linking to other information sources or sharing resources with others. A legitimate reason for choosing a particular system could be that it is the only one available but candidates should be encouraged to question why this is the case given the growing list of freely accessible tools and resources on-line.

1.7 I can explain why different software applications could be chosen to suit different tasks, purposes and outcomes

Candidates should explain in detail and show a deep understanding of the tools they choose and their suitability to the end goal.

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Evidence: Evidence from documented evaluations

Additional information and guidance
They can also point out weaknesses in the tools and alternatives that they might have adopted with hindsight taking account of feedback from their peers and others. The evidence must show a strength and depth in their understanding across the range of tools they use and not just superficial understanding.

1.8 I can explain any legal or local guidelines or constraints which apply to the task or activity

Candidates should demonstrate that they can describe and explain the legal and local guidelines and constraints that apply to the activity. These should be reasonably detailed summaries of say the acceptable use policy and copyright as a minimum.
Evidence: Evidence from documented descriptions

Additional information and guidance
Candidates should demonstrate that they abide by any local acceptable use policy and that they can describe and explain the main aspects of the policy. They should make a declaration that they license their work for free use and that it is their own work and any sources of information are referenced to their owner. They should not use copyright tools or information without first gaining permission (or have it provided directly in the license). Any further local constraints can be included in this work but some description of the AUP and copyright should be present. They should demonstrate a good working knowledge of laws that apply to their projects. A video or verbal explanation to show this would be acceptable here.

2. Candidates will evaluate the selection and use of IT tools to make sure that activities are successful

2.1 I can critically compare the strengths and weaknesses of own and other people's final work

Candidates should be able to provide evidence of reviewing their own work and focusing on areas for improvement where weakness is perceived, as well as appreciating the strengths. They should also be able to critically cross-reference their work to other people's work.
Evidence: Written recorded evidence in web pages or day to day document files describing their work and the work of others

Additional information and guidance
One way to approach this would be for the candidate to maintain a Blog as a diary supporting their work. They can use the INGOT 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 e-portfolio or providing a digital resource or service to the community are suitable activities that can be reviewed and documented in a Blog. As they work their way through their project, they should have milestones where they stop and reflect on the quality achieved and address any areas that could be improved. If working as part of a collaborative team, this process can be shared to make it more effective for all concerned. If learners are using some project management ot tracking tool, this will assist with the process and give them reminders.

2.2 I can review ongoing use of IT tools and techniques and change the approach needed

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

Additional information and guidance
Candidates should be able sufficiently competent and comfortable with the applications they are using to be able to modify their techniques in order to perform more effectively and efficiently as

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they progress through their work. For example, they might use feedback mechanisms to see if people understand outputs such as graph choice. If these choices do not work, then they should be able to change the output in order to make the material more accessible. If they are collecting data, such as a survey, but it is clear thorough an initial test that the input mechanism is clumsy, this can be quickly rectified through their understanding of the application that created it.

2.3 I can evaluate and test solutions to make sure they match requirements and are fit for purpose
Candidates should provide evidence that they have tested their solutions against pre-assessed targets.

Evidence: Evidence from documented test procedures and feedback

Additional information and guidance
Candidates should have developed a specification of their project based on the needs of their clients or customers. These requirements can act as a testing framework to make sure that the system is fit for purpose and achieves the objectives they set out to solve. They can evaluate the performance against these and see if any improvements can be made for the next iterations, whether they do this work, or someone else. In some cases, end-users can be used in the testing process to get valuable feedback to act upon.

2.4 I **can be prepared to give feedback on other people's selection of IT tools**
Candidates should be able to work collaboratively to receive and give feedback on projects where multiple participants are working together

Evidence: Evidence from feedback forms or discussion forums

Additional information and guidance
Candidates should be introduced to the notion that many IT projects work on team based approaches. Modern design models, such as Agile Development [5] or similar. Candidates may be dependent on other developers for part of their final project, as will other members of the team be on their work. They should be comfortable acting on colleague's comments and criticisms of their work for improvement, as well as being able to return their own comments. At all stages, they should be looking at their choice of tools and be prepared to change these should they be not meeting the quality levels they were expecting.

2.5 I can explain different ways to make further improvements to work

Based on describing strengths and weaknesses of outcomes in relation to their planned intentions, candidates should comment on how they might exceed the requirements defined in their plans.
Evidence: Evidence from third party feedback, analysis of strengths and weaknesses and any other relevant documented descriptions conforming to the criterion and guidance

Additional information and guidance
Candidates should show evidence that they are sufficiently comfortable with the full extent of their projects such that they can make improvements at all stages. This may be specific to the IT, but might also be in processes and work rates, if necessary. It may not be their particular area of development, but they might have some design based ideas for the graphics team, or think of a better way to display web based scripting elements. It does not need to be detailed, but show that they understand the complete nature of the projects they are working on.

3. Candidates will devise solutions to improve the use of IT tools and systems for self and others

3.1 I can evaluate the productivity and efficiency of IT systems and procedures used by self and others
The candidate should be able to identify how IT tools might make achieving ICT based solutions more efficient to increase productivity for themselves and others.

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Evidence: Evidence of review through documentation of evaluation in web pages and/or day to day files.

Additional information and guidance
For example, sending e-mail can be more efficient than talking to someone when all that is required is a specific piece of information. Discussing the details of how to use a new software tool by e-mail or text messaging is likely to be a lot less efficient than a spoken conversation and so review should include discriminating use of ICT. Other factors such as the lack of expression and remoteness of technology can lead to "flame wars" that would reduce efficiency.

Information entered directly into a web page can be much more efficient than making a word processed file and attaching it to the page. Firstly there is no need for word processing software, secondly the information is immediately available to users without having to download a file and having software for opening and viewing it. Social networking can be very powerful, but it can also be a major distraction to the focus required for efficient working.

They might have discussed this in forums or verbally to form their views and so assessors might provide a witness statement or video to acknowledge this.

3.2 I can research and advise ways to improve productivity and efficiency

The candidate should provide evidence that they have researched and found examples of working methods that improve efficiency.
Evidence: Evidence of descriptions through documentation in web pages and/or day to day files.

Additional information and guidance
Examples might be to use a typing tutor to improve keyboard efficiency, use of keyboard short cuts, recording a macro to automate a process or getting a web browser to save often used details like name and addresses. They might describe how they organise their folders so the most often needed files are most readily available or change user interface characteristics. They might use bookmarking for files - note for machines with multiple users, bookmarking web sites are a clear advantage. They might use on-line collaborative tools instead of desktop tools or they might use shared resources such as open clip art and Wikipedia on the "Give a brick get a house" principle.

3.3 I can develop solutions that make a demonstrable improvement to the use of IT tools and systems
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. They should be able to show the level of improvement as a result.

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.

Additional information and guidance
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 test solutions to make sure that they work as intended
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.

Additional information and guidance
There should be few instances of bad formatting, spelling errors, or other obvious errors that could

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be eliminated by simple checks. Encourage groups to check and assess each others' work and to receive feedback graciously when others find errors. Fix errors directly or find out how to.
The candidate should routinely check their work to make sure they actually produce the outcome intended as their work progresses.

3.5 I can recommend improvements to IT systems and procedures that increase productivity

The candidate should be competent in all aspects of IT such that they can spot inefficiencies in most instances and recommend improvements based on their knowledge and experience.

Evidence: Evidence through documented evaluation and blogs

Additional information and guidance
Candidates at this level should be reasonably well experienced users of IT and will have worked on complex projects and applications. All of this skill and experience, as well as their confidence, should allow them to see weaknesses in systems, including theirs and others, and recommend ways to improve them. They should see where procedures are creating issues and slowing down projects and be able to see all areas of a project from the perspective of an IT manager to see how to improve things.

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 dialog 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 and through signed witness statements associated with the criteria matching marks in the on-line markbook. Before authorizing certification, the Account Manager must be satisfied that the assessors judgements are sound.

Source URL: https://theingots.org/community/sil3u1x

Links
[1] http://theingots.org/community/ITQ_unit_development
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