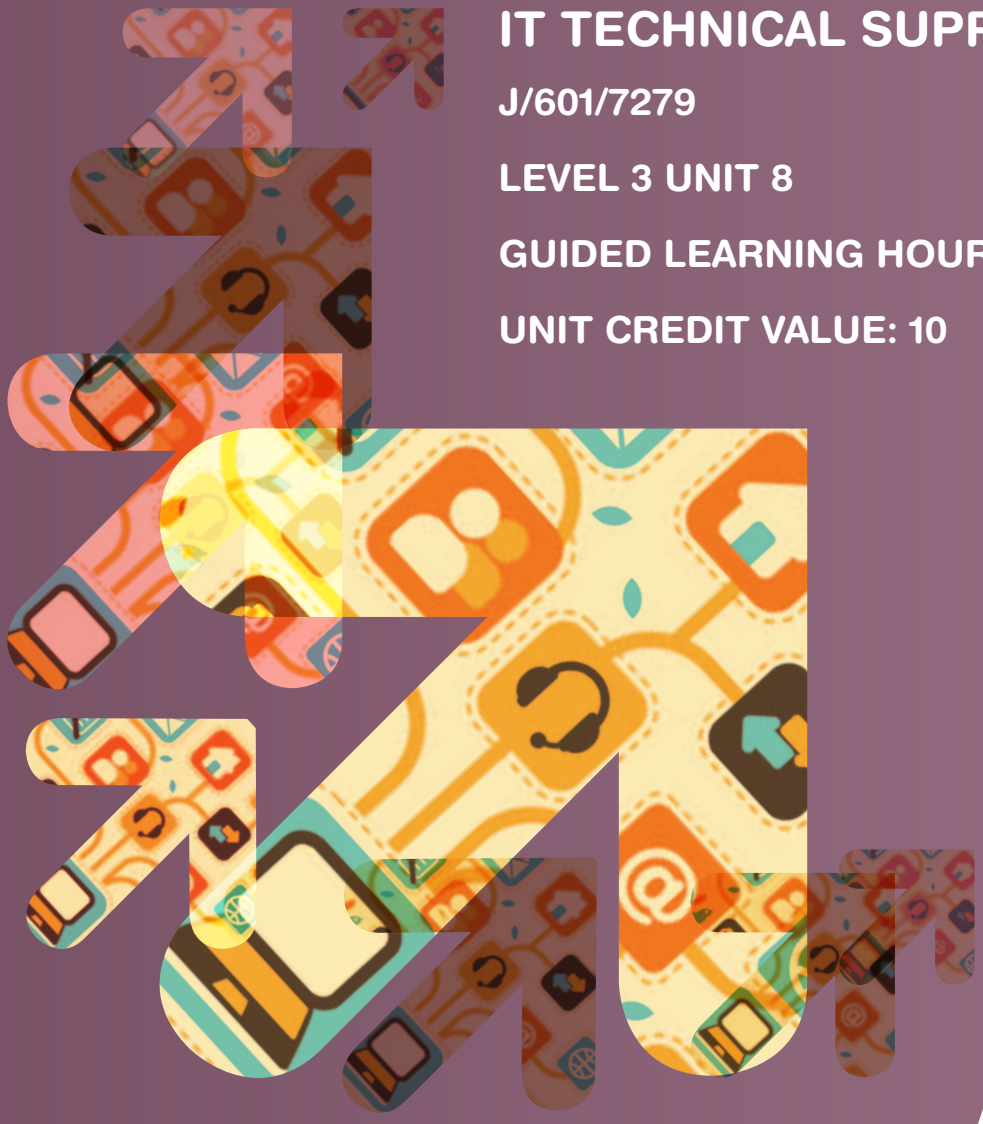
Cambridge TECHNICALS

Accredited

OCR LEVEL 3 CAMBRIDGE TECHNICAL

CERTIFICATE/DIPLOMA IN

IT



IT TECHNICAL SUPPORT

J/601/7279

LEVEL 3 UNIT 8

GUIDED LEARNING HOURS: 60

UNIT CREDIT VALUE: 10

OCR

IT TECHNICAL SUPPORT

J/601/7279

LEVEL 3 UNIT 8

AIM OF THE UNIT

This unit allows the learner to explore the nature of problems that are likely to be encountered by a person working as an IT Professional in a technical support role and identify any trends which may lead to proactive responses. The learner will develop a clear understanding of how the IT support role sits within the organisation and the impact of organisational polices on IT support.

The learner will develop a detailed understanding of the tools and techniques that are available to people working in an IT support role. Examples include: standard operational procedures (SOPs) that will identify the role of IT support within the organisation and service level agreements (SLAs) will identify the level of IT support that an organisation expects to be delivered by external providers.

Learners will develop the knowledge and skills which will enable them to analyse faults by considering all the factors that may be contributing to the fault. To achieve this, consideration will be given to the importance and methods of logging of problems and the documentation that is necessary to perform an audit trail of any particular problems. Learners will become familiar with such logging systems whether paper-based or electronic. It will enable the learner to understand the importance of operational procedures and service level agreements, for example, to consider the response times to dealing with problems. Learners will also understand the importance of feedback to the user in a variety of format appropriate to the feedback.

It will also provide learners with the ability to analyse requests for support, in order to ascertain the approach that needs to be taken to support the end user. The learner will also recognise the importance of being able to source technical information to aid the provision of a satisfactory solution to the problem.

ASSESSMENT AND GRADING CRITERIA

Learning Outcome (LO) The learner will:	**Pass** The assessment criteria are the pass requirements for this unit. The learner can:	**Merit** To achieve a merit the evidence must show that, in addition to the pass criteria, the learner is able to:	**Distinction** To achieve a distinction the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
1 Understand the tools and techniques used for technical support	P1 explain the tools and techniques used for technical support	M1 investigate the use of diagnostic software applications for technical support	D1 analyse software reports to identify trends reported by users
2 Understand how organisational policies and procedures influence technical support	P2 explain the impact of organisational policies and procedures on the provision of technical support	M2 describe the role of service level agreements (SLAs) in technical support	
3 Be able to gather information to provide advice and guidance	P3 identify the types of fault that can occur		
	P4 source technical information to provide advice and guidance for a variety of faults		
4 Be able to communicate advice and guidance	P5 use different communication routes to provide advice and guidance	M3 explain the strengths and weaknesses of different communication routes when providing advice and guidance	
	P6 respond appropriately to end users		D2 provide management reports to indicate the nature of support requests resolved and the time taken to resolve the issues
	P7 check solutions and record actions		

TEACHING CONTENT

The unit content describes what has to be taught to ensure that learners are able to access the highest grade.

Anything which follows an i.e. details what must be taught as part of that area of content.

Anything which follows an e.g. is illustrative, it should be noted that where e.g. is used , learners must know and be able to apply relevant examples to their work though these do not need to be the same ones specified in the unit content.

LO1 Understand the tools and techniques used for technical support

- IT support scenarios
- previous trends (e.g. types of fault reports, support request documentation, analysis, reporting)
- support (e.g. staffing, availability, training, emerging technologies)
- software tools (e.g. diagnostic software functions and sources)
- reporting and analysis.

LO2 Understand how organisational policies and procedures influence technical support

- standard operational procedures (e.g. SOPs)
- service level agreements (e.g. SLAs)
- helpdesk activities (e.g. role, point of contact, personnel, fault logging)
- staffing levels
- tools available
- fault reporting systems
- IT support requests.

LO3 Be able to gather information to provide advice and guidance

Sources

- users (e.g. inexperienced, experienced, infrequent or frequent user, IT or System Specialist)
- common faults reported (e.g. power loss, speed, virus, software errors)
- issues for IT Support personnel (e.g. base unit, monitor, keyboard, mouse, network connection including wireless, mobile devices including synchronization, peripheral device (e.g. printer, camera, scanner, modem, software installation, software update, uninstalling software, logon issues, software not working properly, lost/deleted files))
- help desk (e.g. role, point of contact, personnel, fault logging, escalation)
- verifying information e.g. replication, user clarification
- manufacturer support (e.g. manuals, web pages, historical data).

LO4 Be able to communicate advice and guidance

- methods of communication (e.g. face-to-face, email, telephone, instant messaging, information sheets)
- inter-personal skills
- sources of support (e.g. supplier, websites, technical documentation, fault logs)
- time management (e.g. prioritising requests, tracking progress of problems)
- recording (e.g. the fault diagnosis, fault resolution, advice given)
- testing of any possible solution.

DELIVERY GUIDANCE

This unit prepares the learner to work in an IT support role. It is necessary for the learner to experience and deal with common issues and those less straightforward that IT users may experience. They should be able to provide support to colleagues as well as contribute to the monitoring and management of the delivery of good support. Learners need to understand that IT support will be provided to people with a wide range of experience in the use of IT systems, and the approaches to support users will vary depending on the knowledge of those users.

Role play, work place experience or taking on IT Support Activity in workshops and practice network areas could be considered to experience requests for support. If at all possible, learners could shadow a technician or use work experience to understand the range of issues that may arise and the approaches that could be taken to dealing with such issues.

Understand the tools and techniques used for technical support

The learner needs to have a detailed knowledge of the tools and techniques that should be at their disposal when responding to support requests. This should be tutor led followed by group working to increase understanding and awareness. Learners should work as a group to research a variety of software tools available to support staff. These may be part of the operating systems, freeware packages or software that must be purchased. Software could include packages such as Kaseya (www.kaseya.co.uk) or Track-It! (www.numarasoftware.com).

Please note – it is not necessary for centres to purchase software solutions as the learning outcome requires learners to understand the tools and techniques that could be at their disposal; web demonstrations may be available as may trial/demonstration copies of software and the centre could generate some sample input and output from such packages. Research and presentation of comparisons of different tools could be used to support this learning. Learners with experience of this role in the work place should be encouraged to share their experiences with other learners.

Appropriate methods for research may include:

- Case histories for a range of IT support scenarios,
- Learner research in to previous trends, types of fault reports, essential content of support request documentation,
- Learner research in to software tools available, functions of diagnostic software, sources of diagnostic software.

Understand how organisational policies and procedures influence technical support

Some problems encountered in IT support occur on a more regular basis than other problems. Learners need to consider the significance of such occurrences. For example, a school/college technician may receive multiple requests per day because a user has forgotten their password and/or locked themselves out of their account. The level of experience of the user may be a contributing factor as may the frequency of the user accessing their account on a school/college network.

Learners need to appreciate that a support request may in fact be a number of requests or a request that needs to be broken down into several tasks. They should be given examples which they initially review as part of a larger group and then perhaps as smaller groups. They should then review policies and procedures of organisations either their workplace or training centre understanding that schools, colleges, training centres all apply normal business practices to their activities and they are as relevant to learner development as any external opportunities. They then need to consider how the policies and procedures affect the actions and decisions made when providing technical support.

The role of helpdesk facilities need to be explored through discussion and research. The methods used to contact a helpdesk should be investigated and the advantages and disadvantages of approaches/methods considered in relation to recording and dealing with support requirements. Staffing issues for helpdesks should be considered as a discussion as not all organisations can afford a dedicated helpdesk or personnel. Helpdesk software should be investigated to explore the nature of reports that can be generated and how these can be used by IT support personnel. Compliance with service level agreements needs to be understood and should be clarified by tutor lead discussion, identifying the fact that penalties may occur if issues are not resolved within the agreed timescales and the impacts of these on the organisation.

Be able to gather information to provide advice and guidance

Recording systems for requests for support need to be considered either paper-based or electronic and if appropriate, a combination of both. The learner needs to establish the data that needs to be collected and stored and how this will be updated as the problem(s) are dealt with. This could be through group discussion and practical experience where learners collect data over a period of time to build up a range of support requests.

The data collected should be considered in terms of appropriateness i.e. is all the necessary data captured. A role play activity could be used so that learners can experience collecting data from the user and the importance of ensuring that all the necessary data has been collected and a group discussion or comparison of documentation would identify gaps or information that would be useful for future analysis of data.

A consequence of analysing a user request may be that user training is required. Learners should discuss the requests and what they think the training needs are. They should then identify the frequency or likelihood of similar requests and the materials that would need to be developed to reduce requests. This identification of needs will then lead the learners to research and consider the sources of assistance and information when dealing with user problems. Learners should be aware of the strengths, weaknesses and reliability of various sources of information such as peers, manuals, magazines, diagnostic reports, websites etc. This is a good group exercise where small groups can consider and rate the sources and review against the findings of other groups.

Learners need to consider the currency of information they are providing and the level of language used in the various support materials they may need to produce. A discussion may also identify the best format for this.

Learners need to consider the timescales within which the problems and requests for support need to be resolved; this may entail prioritising work tasks and a group exercise with a range of support requests will allow the learners to consider all business impacts and priorities and enable them to develop the skills to assess and prioritise.

Be able to communicate advice and guidance

The role of IT support is continually changing as new technologies come on board and the network setups evolve. Support staff need to be kept up to date with developments in hardware and software to enable them to be most effective in supporting users. As work patterns change and many organisations operating 24/7 via remote working, virtual learning environments and similar technologies need to be considered in terms of ensuring that an organisation can operate to meet needs of its customers.

Learners should investigate the methods of communication that are most appropriate for particular types of support activity and the range of methods available. This could be through group discussion and brainstorming where the learners consider the limitations of such approaches e.g. lack of non-verbal cues when not face-to-face, misunderstanding of verbal cues. It is also important that learners discuss a range of inter-personal skills to feedback to the user and these include considerate and polite behaviour, patience, etc.

SUGGESTED ASSESSMENT SCENARIOS AND TASK PLUS GUIDANCE ON ASSESSING THE SUGGESTED TASKS

Assessment Criteria P1, M1, D1

P1 – Learners could prepare a presentation/handbook that could be given to a technician starting to work in a school/college. This could include examples of software tools that could be used to support the technician in their job role as well as detailed information on typical requests and requests that are less common. The presentation of evidence must include an explanation of the tools and techniques used to provide technical support.

For merit criterion M1, learners should investigate reports from at least two diagnostic software applications, identifying strengths and weaknesses of the reports and their usefulness. This could be an addition to the presentation/handbook for P1 or a separate report document.

For distinction criterion D1 learners should analyse software reports to identify trends in support requests. This could be presented as a report but should include a list of the identified faults that are included in the software reports and an explanation of trends identified.

Assessment Criteria P2, M2

P2 the learner could prepare a presentation/report that explains the impact of standard operational policies and procedures (SOPs) on IT support in a given scenario, such as a school/college and how it may affect the provision of that support. Alternatively, they could annotate existing documentation/procedures explaining the impact on IT support.

For merit criterion M2 which may be an extension of P2, the learners should also describe the role of service level agreements, when carrying out a technical support role.

Assessment Criteria P3, P4

P3 – To achieve this, the learner must identify a wide range of different types of faults, including hardware and software that can occur that lead to requests for support. This could be evidenced as a report or presentation or a table where the learner has categorised the fault types and details of the faults.

P4 this could be an extension of P3. The learner is required to source technical information that would provide advice and guidance for a variety of faults. The faults should be clearly identified along with the technical information that would be used.

Assessment Criteria P5, P6, P7, M3, D2

P5 the learner should identify a range of different communication routes they have used to feedback to the user to provide advice and guidance. They should identify the method of communication and information being supplied. This could be evidenced in a report or presentation. Alternatively, the learner could provide copies of the communications they used such as email or leaflet and make notes of any conversations they may have had. A witness statement will also support this evidence.

P6 – the learner must identify how they have responded to end users for a range of support requests and how they feel the response was appropriate, what approach they needed to take. This could be in the form of a report or table, and witness statements or user feedback could be used to support this.

P7 – the learner should review the solutions they have provided to the users to ensure that they were accurate and appropriate and update the log identifying these solutions and actions. This may be an extension of the work completed for P5 and P6.

For merit criterion M3, learners will explain the strengths and weaknesses of communication routes and their choices when communicating the information identified in P5 using different routes for different purposes. They could present this as a report.

For distinction criterion D2 the learner must generate reports for management indicating faults that have been resolved and the steps taken to resolve them. This will be in the form of a management report showing the faults logged and resolved, steps taken and time implications. An analysis to summarise the nature of the requests and time implications should also be included. They could also include the logs as supporting evidence.

MAPPING WITHIN THE QUALIFICATION TO THE OTHER UNITS

Unit 4: Managing networks

Unit 11: Maintaining computer systems

LINKS TO NOS

7.2 IT/Technology Service Help Desk and Incident Management

7.3 Problem Management

CONTACT US

Staff at the OCR Customer Contact Centre are available to take your call between 8am and 5.30pm, Monday to Friday.

We're always delighted to answer questions and give advice.

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