

**Unit 502 Customer Support Provision Level 3 (Core)****Rationale**

This unit will enable the candidate to provide technical customer support and understand the processes involved in improving the way in which customers use networked ICT systems.

There are 5 outcomes for this unit. The candidate will be able to

1. provide technical support to customers
2. gather and evaluate feedback from customers regarding the improvement of the technical support provided
3. improve customer use of ICT by analysing trends
4. provide remote technical customer support
5. provide coaching in technical skills for customers.

**Guided learning hours**

The recommended guided learning hours for this unit are 60

**Connections with other awards****NVQ links**

Outcome	This award contributes to the knowledge and understanding of the following elements of NVQ(s)
1	<i>C&amp;G 4300 Installing and Supporting IT Systems Level 3</i> 317.1 Provide customers with agreed levels of support
2,3	317.3 Evaluate the effectiveness of customer support
2,3	332.1 Make recommendations for improving customer use of information technology
3	332.2 Implement agreed recommendations for improvement
	<i>C&amp;G 4348 IT Services (Customer Systems Support) Level 3</i>
1,4	22.1 Collect information on technical problems with IT system
1,4	22.2 Evaluate information on technical problems with IT systems
1,2,3,4	22.3 Identify potential causes of technical problems with IT systems
1,4	23.1 Supply solutions for technical problems with IT systems
1,4	23.2 Implement technical solutions for IT systems
1,4	23.3 Assist the recovery of the operation of IT systems
1,2	27.1 Assess the requirements of customers for technical expertise
2	27.2 Obtain technical information to support customers
1,4	27.3 Provide technical expertise to support customers
1,3,4	28.1 Deliver technical advice to customers
5	28.2 Provide coaching in technical skills for customers
5	103.1 Coach individual learners

**Key Skills links**

Communication	C2.1, C3.2, C3.3
Application of number	
IT	IT 2
Working with others	
Improving own learning	LP 2
Problem solving	PS 3

**Assessment**

Assessment will be by means of a **set assignment** covering practical activities, and a **multiple choice test** covering underpinning knowledge

*Outcome 1: Provide technical support to customers*

	Candidate's signature	Date
<p><b>Practical activities</b>  <b>The candidate will be able to:</b></p> <ol style="list-style-type: none"> <li>1. determine customer requirements for ICT systems and services support</li> <li>2. respond to individual customer requests to provide technical support using different communication techniques                             <ul style="list-style-type: none"> <li>• verbal</li> <li>• written</li> <li>• practical methods</li> </ul> </li> <li>3. prepare record/log details of the customer requirement and the outcome using manual/written or electronic methods, e.g                             <ul style="list-style-type: none"> <li>• call logging</li> <li>• support log</li> <li>• customer</li> <li>• problem</li> <li>• date</li> <li>• time resolution</li> </ul> </li> <li>4. obtain information to provide technical support from other sources, e.g. manufacturer's help desk, website</li> <li>5. record and escalate unresolved requests for technical support in accordance with agreed processes.</li> </ol>		

**Underpinning knowledge**

**The candidate will be able to:**

1. explain the reasons for providing a prompt and professional response to customer requests for technical support
2. describe the purpose of using a structured approach when questioning customers in response to requests for support e.g. to
  - reach a conclusion as soon as possible
  - ascertain all symptoms and events leading up to them
  - identify additional problems
3. describe when to use different methods of technical support provision
4. explain the reasons for maintaining accurate records of
  - requests for technical support
  - the nature of the problem
  - the type of response given
  - the method of resolution and outcome
5. describe the reasons for recording/logging customer requests for technical support, and their outcomes
6. describe typical procedures for referral to others of technical support problems which cannot be resolved immediately
7. describe the relevant legislation and regulations concerning confidentiality and health and safety in the provision of support
8. state when to invoke the escalation procedure.

*Outcome 2: Gather and evaluate feedback from customers regarding the improvement of the technical support provided*

	<b>Candidate's signature</b>	<b>Date</b>
<p><b>Practical activities</b>  <b>The candidate will be able to:</b></p> <ol style="list-style-type: none"> <li>1. design suitable tools (e.g. questionnaires, log sheets, etc.)for gathering effective feedback from customers to improve technical support provision</li> <li>2. obtain feedback from customers using the designed tools</li> <li>3. analyse feedback gathered and prepare a report detailing the results of the analysis and recommendations on improvements</li> </ol>		
<p><b>Underpinning knowledge</b>  <b>The candidate will be able to:</b></p> <ol style="list-style-type: none"> <li>1. describe the factors which affect the design of tools used to gather information from customers e.g. questionnaires, satisfaction forms, response rates, level of detail, telephone calls</li> <li>2. identify standard data preparation techniques e.g. ordering, sorting, collating, grouping, transcribing</li> <li>3. describe the importance of extracting and organising the relevant information from the prepared data e.g. faults, problems, grievances, complaints, delays, level of understanding, standard or level of service</li> <li>4. explain why conclusions should be drawn from analysed data, identifying <ul style="list-style-type: none"> <li>• recommendations for action</li> <li>• suggestions for improvement</li> <li>• areas of responsibility.</li> </ul> </li> </ol>		

*Outcome 3: Improve customer use of ICT by analysing trends*

	Candidate's signature	Date
<p><b>Practical activities</b>  <b>The candidate will be able to:</b></p> <ol style="list-style-type: none"> <li>1. obtain support records or logs (provided by trainer to reflect local situations), e.g. unit logs, call records, site logs</li> <li>2. analyse the support records or logs identifying patterns of customer support request</li> <li>3. write a report recording analysis and make recommendations for improvement</li> <li>4. prepare an action plan for recommendations.</li> </ol>		
<p><b>Underpinning knowledge</b>  <b>The candidate will be able to:</b></p> <ol style="list-style-type: none"> <li>1. identify types of support records or logs which may be used to determine trends in customer support requests e.g. unit logs, call records, site logs</li> <li>2. describe trends that may occur in support requests <ul style="list-style-type: none"> <li>• recurring requests from individuals</li> <li>• recurring requests about particular problems</li> <li>• requests about specific products or services.</li> </ul> </li> <li>3. explain common causes for recurring requests, e.g. <ul style="list-style-type: none"> <li>• poor user skills</li> <li>• poor media</li> <li>• intermittent fault</li> <li>• other external influences (poor environment, inadequate system for workload)</li> </ul> </li> <li>4. describe the process for resolving recurring requests by identifying, e.g. <ul style="list-style-type: none"> <li>• the causes of the pattern(s)</li> <li>• possible resolutions</li> <li>• responsibilities</li> <li>• further information required and from whom, and by when</li> <li>• agreeing the resolution with the customer</li> <li>• implementing the resolution .</li> </ul> </li> <li>5. describe the main points which should be included in an action plan.</li> </ol>		

*Outcome4: Provide remote technical customer support*

	<b>Candidate's signature</b>	<b>Date</b>
<p><b>Practical activities</b>  <b>The candidate will be able to</b></p> <ol style="list-style-type: none"> <li>1. determine customer's requirements for technical support e.g. <ul style="list-style-type: none"> <li>• advice and guidance</li> <li>• fault diagnosis</li> <li>• remote fault rectification</li> </ul> </li> <li>2. use available diagnostic tools to investigate and inspect a system or system components as part of a fault-finding process, e.g. <ul style="list-style-type: none"> <li>• diagnostic modes</li> <li>• third-party utilities</li> <li>• boot disks</li> <li>• start-up disks</li> <li>• system tools</li> </ul> </li> <li>3. guide a remote user through a fault-finding process by suggesting checks or tests on a system to <ul style="list-style-type: none"> <li>• confirm a problem has been accurately reported</li> <li>• identify the cause of an unspecified problem</li> </ul> </li> <li>4. record the fault-finding process and any tests or checks reported by the customer</li> <li>5. advise on the corrective action to be taken to restore a system to working order and confirm this is the case.</li> </ol>		

**Underpinning knowledge**

**The candidate will be able to:**

1. describe and give examples of the characteristics caused by hardware failure and a fault caused by software failure, e.g.
  - possible hardware problem – symptoms displayed by one hardware device with different software control and/or independent of software control
  - possible software problem – symptoms affecting more than one hardware device
2. explain the purpose of structured testing during troubleshooting processes
3. describe and give examples of the use of diagnostic tools and when they might be used (e.g. diagnostic modes, third-party utilities, boot disks, start-up disks or system tools)
4. describe the steps taken in fault-finding and correction when communicating with a user by telephone e.g.
  - identify themselves
  - ensure correct identification of faulty element
  - advise user of appropriate steps to carry out
  - obtain feedback on results
  - analyse the results
  - recommend corrective action
  - establish successful resolution
5. explain why structured fault-finding techniques should be applied to any fault situation on the system
6. describe a routine and a non-routine problem , e.g.
  - routine – one that occurs on a regular and frequent basis, is simple to resolve using standard procedures
  - non-routine – occurs less frequently, requires deeper knowledge and more troubleshooting methods to resolve

*Outcome 5: Provide coaching in technical skills for customers*

	Candidate's signature	Date
<p><b>Practical activities</b>  <b>The candidate will be able to:</b></p> <ol style="list-style-type: none"> <li>1. identify types of customer and their knowledge requirements e.g.:                             <ul style="list-style-type: none"> <li>• data input operator</li> <li>• document producer</li> <li>• CAD technician</li> <li>• software designer</li> <li>• sales/marketing</li> <li>• financial dealer</li> <li>• telephone help-line</li> <li>• demonstration</li> <li>• writing instruction handouts</li> <li>• formal training sessions</li> <li>• peer-to-peer support</li> </ul> </li> <li>2. identify technical skills required by customer and prepare a coaching plan</li> <li>3. provide coaching to customer in technical skills</li> <li>4. obtain feedback regarding the effectiveness of the coaching</li> <li>5. evaluate coaching delivered and make recommendations (e.g. by observation of the customer using new skills in an operational situation)</li> </ol>		
<p><b>Underpinning knowledge</b>  <b>The candidate will be able to</b></p> <ol style="list-style-type: none"> <li>1. describe different coaching methods, giving examples of when each is suitable e.g.                             <ul style="list-style-type: none"> <li>• telephone help-line</li> <li>• demonstration</li> <li>• writing instruction handouts</li> <li>• formal training sessions</li> <li>• peer-to-peer support</li> </ul> </li> <li>2. describe why obtaining feedback and evaluation is important for improving the effectiveness of the coaching e.g.                             <ul style="list-style-type: none"> <li>• continuous improvement</li> <li>• optimising future output</li> </ul> </li> </ol>		