

# ESSENTIAL SKILLS



## ACTION BASED ACTIVITIES

# TOPIC VC24 USING TECHNICAL INFORMATION

## COMMUNICATION



## LEVELS 1 & 2

ISSUED AUGUST 2007

# INSTRUCTIONS

## WHAT DO I DO?

Use this booklet to help you:

- plan an Action-based Activity on the topic Using Technical Information
- carry out an investigation into the subject
- produce ALL the evidence needed for your portfolio

**NOTE:** Use this booklet WITH the Learner's Planner & Guide.

## BY THE END OF THIS ACTION BASED ACTIVITY YOU SHOULD BE ABLE TO:

### LEVEL 1

- take part in a one-to-one or group discussion
- read and obtain relevant information
- write two different types of document
- use at least one image effectively

### LEVEL 2

- take part in a group discussion, helping move the discussion forward
- give a short talk of at least 4 minutes
- produce a document that summarises two 500+ word documents you have read
- write two different types of document, one being more than 500+ words long
- use at least one image effectively

# COMMUNICATION

## TOPIC VC24 USING TECHNICAL INFORMATION

### TOPIC VC24 USING TECHNICAL INFORMATION

*Using Technical Information* is a big topic. If you want to study it for your Action-based work you will need to narrow it down. This guide will take you step by step from how to get started to writing and checking your final piece of work. Each step follows Part Two of your *Learner's Planner & Guide*, so read it alongside this booklet.



It's a good idea to follow this advice.



You must do this to get the qualification.



**STEP  
A**



### CHOOSING A TOPIC

Think about the topic "*Technical Information*" and things about it that you might like to study. Don't rush or you may miss something. One of the best ways to start is to *mindmap*.

### TASK 1 GETTING STARTED MAKING A MINDMAP

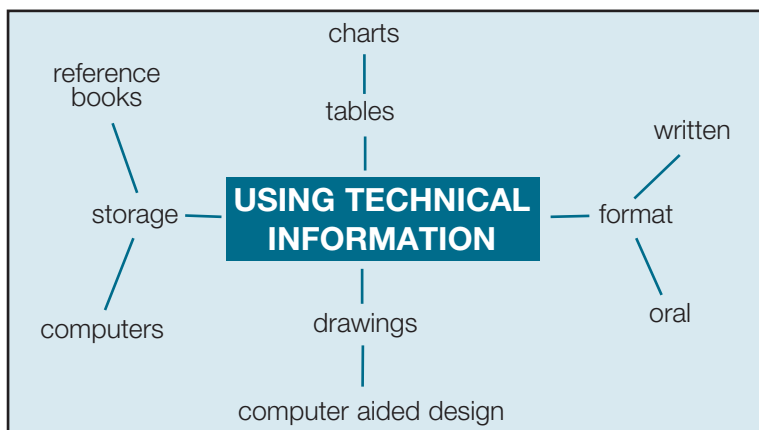
Allow about  
20 minutes

On your own, or with a colleague, think about and talk about "*Technical Information*" and aspects of it you might like to study.

Work together to make a **mindmap** of the subject. You can find how to do this on page 5 of the *Learner's Planner & Guide*. You may want to think about:

- what form the information might take
- the use of computers in the workplace
- the continuing use of traditional methods of communication
- pros and cons of different methods of storage and retrieval
- common conventions used in engineering drawing
- the use of computer aided design

**PORTFOLIO EVIDENCE** – You could copy and add to the unfinished example below. This could then go into your portfolio as evidence that you have thought about your chosen subject.



# ESSENTIAL SKILLS

## ACTION BASED ACTIVITIES



*Continued*

### TASK 2 FRAMING A QUESTION

Allow about 15 minutes

When you have made your mindmap, focus in on one or two ideas that:

- interest you
- will be easy to research and get information about (talk to your tutor if you are unsure)

Write these ideas down and then try to turn them into **QUESTIONS**. This will help when you write up your conclusions later. The examples in the box may help you do this.



#### Topic: Using Technical Information

Original Idea	Question
Information format	What format do I find easiest to use?
Traditional methods	Is there still a need for written and oral information?
Engineering drawings	Why are drawing conventions used?
Computer aided design	What is it and how is it used in an engineering environment?

In your portfolio, write down your chosen title/question.

Check with your tutor that it is okay. Remember, you can always change it later if necessary.

### TASK 3 LOCATING RELEVANT INFORMATION

Allow about 10 minutes

Your next task is to locate relevant information for your portfolio. Check with your tutor that:

- there is enough information
- it is easily located
- it is of the right standard

### TASK 4 ACTION PLANNING

Allow about 30 minutes



**PLAN** – It's a good idea next to draw up a plan of action. Make a table and on it write down what you intend to do and when you will do it by. Highlight key dates and deadlines (e.g. when you are giving a talk or having a discussion). Examples are located in the Learner's Planner & Guide – Level 1 Page 7, Level 2 Page 17.

# COMMUNICATION

## TOPIC VC24 USING TECHNICAL INFORMATION



### READING TO OBTAIN INFORMATION

Reading and obtaining information are an essential part of the qualification and you must be able to show that you have collected, read and extracted relevant information. Level 2 learners must be able to summarise what was read into one document.

There are lots of ways of finding information on this subject such as:

- reading manufacturers instruction manuals
- looking at job or work instructions
- checking how test schedules are presented
- examining reference tables and charts
- reading training booklets on the subject

#### TASK 5 READING AND FINDING OUT (to answer your question)

Allow about  
1½ hours

Look for suitable documents to read. If you are studying for **Level 2** communication skills they will need to be more than 500 words long, (see Page 18 of the Learner's Planner & Guide).

#### TASK 6 RECORDING INFORMATION

Allow about  
1½ hours

**READ and MAKE NOTES** from all documents that you think are helpful and relevant (the box below shows you how to write your notes).



##### TOPIC: "Using Technical Information"

**Information source:** 'Training Booklet ESP/204H'

**Author:** EMTA

**Section:** Types and Sources of Technical Information (pages 1 – 7)

##### Main points in the article:

- types of information
- advantages and disadvantages of each type
- sources of information
- records and drawings
- document control

##### Summary:

You will then need to write down in your own words what you have read in this section.

For **Level 2**, you must produce a document that brings together in **one** summary at least two 500 word long documents that you have read. A good way to do this would be to construct a response to the question/title you constructed in Task 2. An example of this is on Page 19 of the Learner's Planner & Guide.



##### ASSESSMENT Your tutor will assess that:

- the notes you have made are relevant
- you have clearly identified key points
- you understand what you have read

**ESSENTIAL SKILLS**

**ACTION BASED ACTIVITIES**

**STEP  
C**



**DISCUSSIONS**

Taking part in discussions is an essential part of the qualification. For Level 1 you can take part in a one-to-one OR a group discussion. At Level 2, it must be a group discussion.

Your **tutor** will need to observe and assess how well you do.

**TASK 7**

**TAKING PART IN DISCUSSIONS ABOUT YOUR TOPIC**

Allow about  
1 hour

1. **Invite** colleagues to join you in a discussion about your chosen topic and fix a time and date when you will meet. Make sure your tutor is also able to be there if you want to be assessed.
2. **Plan** and practise for the discussion so you are properly prepared (see the box below).



**PLANNING AND TAKING PART IN DISCUSSIONS**

1. Think about what you will talk about – it’s no good just having a chat! The discussion must be focused on the subject.
2. Decide on a subject and a question to discuss e.g. “What are the advantages & disadvantages of the CAD packages that you use?”
3. Agree a time and place for the discussion.
4. Set aside 15–20 minutes for the meeting.
5. Make sure your tutor is there to assess it.



**ASSESSMENT** Your tutor will assess you on:

- speaking clearly
- keeping to the point
- giving relevant information
- listening to others
- using positive body language
- keeping the discussion going

**COMMUNICATION**

**TOPIC VC24 USING TECHNICAL INFORMATION**

**STEP  
D**



**GIVING A TALK (Level 2 only)**  
At Level 2 you must give a short talk to an audience (see your *Learner's Planner & Guide*, page 21 for detailed tips on how to give a good talk).

Although there are no hard and fast rules, a talk will normally follow the format given in the box below (in this case on the topic of "The benefits of written job instructions")



It is a good idea to prepare prompt cards and material (e.g. pictures, PowerPoint etc) to illustrate your talk.



1. Think of a **title** e.g. "Why use written information?"
2. **Introduction** – Highlight the various types of information commonly used in engineering.
3. **Main section** – Explain the various formats and highlight the pros and cons of each.
4. **Conclusion** – Give your opinion on the benefits of a manually written system.
5. **Questions** – Seek comments from your audience.

### TASK 8

Allow about  
2 hours

### GIVING A TALK OF AT LEAST 4 MINUTES ABOUT YOUR TOPIC

**Note: This task is only relevant if you are doing Level 2.**

Plan and prepare for your talk. Make sure the time and date is fixed and that your tutor can be there to assess it. Practise at home – it really does help!



**ASSESSMENT** Your tutor will assess you on:

- speaking and making your case clearly
- keeping to the point
- giving relevant information
- being well organised
- using positive body language
- answering questions clearly

## ESSENTIAL SKILLS

## ACTION BASED ACTIVITIES

STEP  
E

## PLANNING AND WRITING DOCUMENTS

Your portfolio must contain at least two different written or word-processed documents (see pages 12–13 in your *Learner's Planner & Guide*). At Level 2, one of them must be over 500 words long.

## TASK 9

Allow about  
2 hours

## PLANNING AND WRITING ONE TYPE OF DOCUMENT ON YOUR CHOSEN TOPIC

1. Check what you already have in your portfolio. You should have notes of documents you have read and information gathered. You may find that you have already written a letter or short report which you can use as evidence of writing! Level 2 learners could review the document they produced at Task 6.
2. Decide on **one** type of document you will produce. For example, you might include a report on a survey you carried out in your workplace on the most commonly used methods of accessing technical information.



## EXAMPLES OF DOCUMENTS YOU MIGHT WRITE ON 'USING TECHNICAL INFORMATION'

**Short documents:**

- a list of information you use in your workplace
- a short article on "How to read a drill chart"
- a work plan for one of your training tasks

**Longer documents:**

- an article on when written or oral instructions are best
- a structured report on care and control of drawings
- an essay explaining first and third angle projection

3. Start **WRITING** one type of document on your chosen topic. You are strongly advised to use a computer to do this as this will:
  - enable you to redraft work quickly and easily
  - make your work look more professional
  - make spell checking easy
  - provide opportunities to include images, tables, charts, graphs etc – you **MUST** include an **image**
4. **PROOF READ** your work carefully.

## COMMUNICATION

## TOPIC VC24 USING TECHNICAL INFORMATION



**ASSESSMENT** Your tutor will assess your work for:

- its relevance – sticking to the point
- its structure – it must be organised
- its style – easy to read and suited to the job

### **TASK 10** PLANNING AND WRITING A DIFFERENT TYPE OF DOCUMENT ON YOUR CHOSEN TOPIC

Allow about  
2 hours

Repeat Task 9 for a different type of document on your chosen topic. **Level 2** learners should make sure that one of the documents is more than 500 words long. One document should contain an image you have used to illustrate a point made in your writing.



### **COMPILING THE FINAL PORTFOLIO**

### **TASK 11** THE FINAL PORTFOLIO OF EVIDENCE

Gather together all your work and select from it the evidence needed to meet the requirements of the qualification. The minimum pieces of evidence you must produce are to be found on Page 3 of the Learner's Planner & Guide.

(Your tutor will help you with this task).

**USING TECHNICAL INFORMATION  
MORE ACTION BASED ACTIVITY IDEAS**

1. Carry out a small survey in your workplace to find out the most used way in which technical information is stored and accessed, e.g. charts, drawings, reference books etc.
2. The USA has retained the use of the imperial system of measurement whilst most other industrial countries have adopted the metric system. Research the impact this has on the technical information which needs to be available in the UK.
3. Investigate how computers have impacted on the ways technical information is produced, stored and accessed. e.g. production of drawings, storage of documents, updating of records etc. Consider and comment on the advantages and disadvantages.
4. Look at the most commonly used technical information format used in your workplace, e.g. written assembly procedures. Make suggestions for improvements, and explain what the benefits would be.
5. Design a 'visual display' of the technical information you need to carry out your work. Explain what you have included and how you know the information used is correct and up to date.
6. Look at a simple engineering drawing that is used where you work and produce a written description of the component or system it shows. Compare how your written description would communicate the information contained on the drawing, and establish which method is best and why.
7. Examine an engineer's reference book and explain what it contains, who might use it and how 'user friendly' you personally found it to be.





PUBLISHED BY NORTHERN IRELAND COUNCIL FOR CURRICULUM, EXAMINATIONS AND ASSESSMENT



COUNCIL FOR THE CURRICULUM EXAMINATIONS AND ASSESSMENT

29 Clarendon Road, Clarendon Dock, Belfast BT1 3BG

☎ +44 (0)28 9026 1200 📠 +44 (0)28 9026 1234 📠 +44 (0)28 9024 2063

✉ info@ccea.org.uk

🌐 www.ccea.org.uk

