

ICT - Information and Communications Technology

ICT30118

Cert. III in Information, Digital Media and Technology

Unit

ICTICT301

Create user documentation

This is a SAMPLE document

Not to be used for training purposes

May not be a complete document

Trainer/Teacher Manual



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STUDENT/TRAINEE DETAILS

Student/Trainee Name

Student/Trainee Email

Teacher / Trainer Name

School / Institution / Training Organisation / Employer

TABLE OF CONTENTS

Introduction	Page 5	
Unit of Competency Overview	Page 8	
Section One		
<i>Determine documentation standards and requirements</i>	Page 9	<u>(Student/Trainee Manual Page 9)</u>
Section Two		
<i>Produce user documentation</i>	Page 29	<u>(Student/Trainee Manual Page 29)</u>
Section Three		
<i>Review and obtain sign-off</i>	Page 49	<u>(Student/Trainee Manual Page 47)</u>
Self Assessment	Page 66	<u>(Student/Trainee Manual Page 64)</u>

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INTRODUCTION

This manual is developed to provide training content that addresses the specific 'Unit of Competency' as outlined on the following pages.

It provides the teacher and/or trainer with a document that includes all that the student and/or trainee manual content plus guidance notes as well as answers to the learning activities in the student/trainee manual.

This manual can be packaged with various manuals addressing other 'Units of Competency' in order to meet the 'Packaging Rules' of a particular Australian Training Package Qualification.

This resource has been designed to be delivered in a form that is conducive to the learning environment including:

- ☆ Online delivery
- ☆ Classroom delivery
- ☆ On the job training

The documents are designed in a 'landscape' format in order to make reading on a computer screen easier as well as reduces the need to scroll down pages. Documents can be easily printed if the learning environment requires the student or trainee to have hard copies of the learning materials.

INTRODUCTION—CONT'D

LEARNING ACTIVITIES

The learning activities in the student and/or trainee manuals are 'Form Enabled' so that if the resources delivered online, the activities can be filled in using the computer keyboard.

Each learning activity is identified with the following icon.

**Learning
Activity**

Learning activities come in the following forms.

- ☆ Questions
- ☆ Research
- ☆ Tasks
- ☆ Interviews

Questions

Questions would relate to the information presented on previous pages.

Research

This type of learning activity would require the student or trainee to locate information by using research methods. The information they would be required to locate would be in line and/or support the information that the manual had outlined in previous pages.

INTRODUCTION—CONT'D

SAMPLE ONLY

Tasks

This learning activity type would require the student/trainee to actually do or undertake something and would be reinforcing the knowledge they have gained from reading the manual's previous pages.

Interviews

This learning activity type would require the student/trainee to interview person(s) in an actual workplace environment or a person(s) who are experienced in the industry sector which the student/trainee is currently undergoing training.

The student/trainee is made aware of the type of learning activity by noting the learning activity type displayed under the learning activity icon.

**Learning
Activity**

Research

SELF ASSESSMENT

At the end of each manual is a series of questions that the student/trainee should review and answer.

This self assessment is to ensure in the student's or trainee's mind that they have reviewed and understood the information that was presented in their manual.

If they are unsure of their understanding in any of the topics reviewed, they are encouraged to go back and review the information again and/or seek the assistance of their teacher or trainer.

UNIT OF COMPETENCY OVERVIEW

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The following pages are extracts from Training.gov.au website and outlines this specific 'Unit of Competency' including the 'Elements' and the 'Performance Criteria'. The content within this manual has been developed to address this unit.

ICTICT301 - CREATE USER DOCUMENTATION

ELEMENT	PERFORMANCE CRITERIA
1. Determine documentation standards and requirements	1.1 Determine documentation requirements 1.2 Investigate documentation and industry standards for requirements, and determine appropriate application to user documentation 1.3 Design documentation templates using appropriate software and obtain approval from appropriate person
2. Produce user documentation	2.1 Conduct a review of the subject system, program, network or application in order to understand its functionality 2.2 Gather existing technical, design or user specifications and supporting documentation 2.3 Create user documentation based on the template to record the operation of the subject system, program, network or application
3. Review and obtain sign-off	3.1 Submit user documentation to target audience for review 3.2 Gather and analyse feedback 3.3 Make changes to user documentation 3.4 Submit user documentation to appropriate person for approval

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Section One

Determine Documentation Standards and Requirements

CREATE USER DOCUMENTATION

SECTION ONE—DETERMINE DOCUMENTATION STANDARDS AND REQUIREMENTS

INTRODUCTION

In the ICT industry sector many processes including those that are related to technical documentation are often covered by guidelines as specified in Australian/New Zealand and international standards.

In this section we look at what some of those standards are.

SECTION LEARNING OBJECTIVES

At the completion of this section you will learn information relating to:

- ☆ Determining documentation requirements
- ☆ Investigating documentation and industry standards for requirements, and determining appropriate application to user documentation
- ☆ Designing documentation templates using appropriate software and obtaining approval from appropriate person



DETERMINE DOCUMENTATION REQUIREMENTS

The user documentation may be required for system, program, network or applications.

It is self-evident that documentation must be clear and relevant to a user in order for it to be of value to them. For this reason it is vital to understand who will be using any documentation before you begin to prepare it for them.

If you do not write documentation that is appropriate for its users, you can be sure that they will either find it to be too challenging or too simplistic for their needs.

To prepare such useful user documentation you must consider:

- ☆ their existing relevant knowledge and skills, and
- ☆ what style of learning they prefer.

The relative level of sophistication of the users of the system, program, network or application will largely depend upon on how much previous relevant training and experience they have had with using similar systems. They may range from being complete beginners, to being savvy experts.

New users typically first need instructions about how to start using a system program, network or application.

They may then also need guidance about what main functions are available within the system, program, network or application and perhaps some 'quick start' instructions about how to accomplish common basic tasks.



Beginners may often appreciate context-sensitive help. Context-sensitive help is advice that is given depending on what a user is working on at the time. This help may be automated or may require the user to ask for it.

Because beginners likely have little understanding about the system, program, network or application, they require particularly simple and brief explanations. Any extra information is more likely to be a hindrance than a help to them.

More infrequent, occasional, users work with a system, program, network or application intermittently but they are still not fluent with all aspects of it. Therefore they do not require very basic instructions such as how to start the system, program, network or application. But they will probably still need some help with the less frequently used or more complex features of a system, program, network or application.

They will typically need particular answers to specific new situations as they encounter them. For this reason, context-sensitive help may be quite appropriate for occasional users.

Expert users frequently use a system, program, network or application and are therefore likely to be adept at utilising most of its features. Context-sensitive help -- such as pop-up boxes -- likely do not provide the level of detailed explanations that are required by such expert users. It is more likely that they would require access to a manual or access to an on-line expert adviser capable of providing them with detailed information about solving specific problems.



USER LEARNING STYLES

Now to complicate things even more, users, regardless of their levels of expertise, have different preferred styles of learning.

- ☆ Some are visually oriented and prefer to read instructions.
- ☆ Others are experimental and prefer the 'trial and error' approach.
- ☆ Still others are more orally inclined and prefer to hear actual explanations of how to do something as they watch a demonstration of it.

Ideally, user documentation should cater for all types of learning styles simultaneously. Although this might seem impractical at first, one strategy might be to offer users a choice of which style of material that is provided to them.



USER NEEDS ANALYSIS

You will not likely be able to fully identify the levels of skills of users of a system, or understand their preferred learning styles without undertaking some systematic research of them.

Most often this is accomplished by conducting some type of a user needs analysis. A user needs analysis may take many forms including: structured interviews, questionnaires, focus group meetings, discussions with supervisors and managers, observations of workers using a system, and reviews of relevant industry literature.

Most of these types of user needs analysis are, at least partially, dependant upon high quality oral communication skills.

In order to successfully communicate orally with the users of a system you need to take responsibility for ensuring that you thoroughly and accurately understand them, and that they clearly and unambiguously understand you. This is called active listening.

Some active listening techniques include:

- ☆ taking notes or recordings during discussions,
- ☆ asking questions to ensure that a person has understood what you have said,
- ☆ repeating what would you think a person has said, and asking them for confirmation
- ☆ ensuring that you are not interrupted by phone calls or any other distractions while you are speaking to someone.

Whatever methods of user needs analysis you use, it is important that you record both the methods you use, and your findings. These records will be of value to other people who may have an interest in the documentation you are working on, such as your co-workers, as well as for facilitating discussions with the project client.

After you have documented your user needs analysis, you can turn your attention to the system, program, network or application itself.



CHARACTERISTICS OF SYSTEM, PROGRAM, NETWORK OR APPLICATION

Issues to be considered when appraising a system (program, network or application) include:

- ☆ The system environment
- ☆ The system complexity
- ☆ The similarity of the system to other systems already known to the users

This also holds true with programs, networks or applications.

Systems, program, network or application are sometimes used in a variety of environments. For example military people might use a system in harsh outdoor conditions. Health care professionals may need to use systems in stressful and mobile situations throughout a hospital. Office workers, on the other hand, usually have the relative luxury of being able to work at typical workstations.

Each of these environments poses limitations on the types of user documentation which is feasible. Whereas an office worker might have the time and opportunity to be able to consult a hardcopy manual, an ambulance officer treating an emergency case in the field would need access to a much quicker and simpler form of documentation.

The quantity of a system, program, network or application's documentation must also be tailored to its complexity. For example, the introduction of a multifaceted and highly technical software system such as the Photoshop photo editing program, or the Adobe creative suite of programs would have to be supported by copious documentation. Introduction of a comparatively simple system, on the other hand, such as the Windows Paint program, would obviously require much less documentation.

The amount and depth of documentation required will also be influenced by how well users already understand similar systems, programs, networks or applications. Obviously, if a new system, program, network or application is quite similar to a system, program, network or application already understood by users, there may be little need for basic introduction and instructions. For example, users adopting a new version of a word processor that they are already familiar with might only require instructions about any significant changes between the versions. On the other hand, users adopting an entirely new operating system such as moving from MAC OS to UNIX, for instance, would likely require substantial and detailed instructions.

SAMPLE ONLY

Matrix of User Levels, System Environment Types, System Complexity Types, and Learning Styles

User Level	System Environment	System Complexity	Learning Style
Beginner	Office	Simple	Visual / Experimental / Oral
		Medium	Visual / Experimental / Oral
		Complex	Visual / Experimental / Oral
	Non-office	Simple	Visual / Experimental / Oral
		Medium	Visual / Experimental / Oral
		Complex	Visual / Experimental / Oral
Occasional	Office	Simple	Visual / Experimental / Oral
		Medium	Visual / Experimental / Oral
		Complex	Visual / Experimental / Oral
	Non-office	Simple	Visual / Experimental / Oral
		Medium	Visual / Experimental / Oral
		Complex	Visual / Experimental / Oral
Expert	Office	Simple	Visual / Experimental / Oral
		Medium	Visual / Experimental / Oral
		Complex	Visual / Experimental / Oral
	Non-office	Simple	Visual / Experimental / Oral
		Medium	Visual / Experimental / Oral
		Complex	Visual / Experimental / Oral

Your job of preparing user documentation would, of course, be easier if you were servicing only one type of user. However, it is most often the case that users of all levels of knowledge and with all types of learning styles may need to access the documentation. Therefore the added challenge is to take care to provide for the needs of a variety of types of users.

In fact, by considering the basic needs of documentation users in combination with the natures of the systems they will be using, we find that there is a wide variety of situations that user documentation might have to serve in. This variety is shown in the table to the left.

Using the type of terminology contained in this table could help you discuss aspects of user documentation with other interested parties – such as your client. For example, you might suggest that you see a need to prepare, ‘visually-oriented’ documentation for occasional users of a system, program, network or application of medium complexity that would be used in a typical office environment.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY ONE**

To prepare useful user documentation what must you consider?

TEACHER / TRAINER GUIDANCE NOTES

To prepare useful user documentation you must consider:

- ☆ their existing relevant knowledge and skills, and
- ☆ what style of learning they prefer.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY TWO**

Ideally, user documentation should cater for all types of learning styles simultaneously. What is one strategy that may allow you to do this?

TEACHER / TRAINER GUIDANCE NOTES

One strategy might be to offer users a choice of which style of material is provided to them.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY THREE**

Before creating user documentation the system, program, network or application will need to be appraised. What three areas should the appraisals include?

TEACHER / TRAINER GUIDANCE NOTES

- ☆ The system, program, network or application environment
- ☆ The system, program, network or application complexity
- ☆ The similarity of the system, program, network or application to others already known to the users

SAMPLE ONLY



INVESTIGATE DOCUMENTATION AND INDUSTRY STANDARDS FOR REQUIREMENTS, AND DETERMINE APPROPRIATE APPLICATION TO USER DOCUMENTATION

The term 'standard' has a particular technical and legal meaning in the IT industry. A standard is a document that is published to specify the procedures and specifications set to ensure that something consistently fulfils the purpose for which it was intended. So, a documentation standard directs us in how to prepare acceptable documentation and defines its appearance and function.

In Australia and New Zealand a number of such documents are available which can be used to set the standard/s for user documentation. The three standards most likely to relate to IT user documentation are:

- ☆ ISO/IEC/IEEE 26531:2015 Information technology -- Guidelines for the management of software documentation
- ☆ AS-NZS-ISO-IEC-15910-2004 Information technology -- Software user documentation process
- ☆ ISO/IEC 26514:2008 Software and system engineering -- Guidelines for the design and preparation of user documentation for application software

These three standards are produced by the ISO. The ISO (International Organization for Standardization) is the world's largest developer of International Standards. It is a network of non-governmental organisations of standards institutes in many countries. It strives to reach a consensus on its standards that meet both the requirements of business and the broader needs of society. The standards it publishes are commercial property and you therefore have to purchase them in order to use them.

In some cases Standards Australia may also publish its own standards which are normally very similar to the ISO standards. For example they have published: AS/NZS ISO/IEC 15910: 2004 Information technology - Software user documentation process. This standard may also be of interest to you if you are preparing user documentation for software that will be used in Australia or New Zealand.

A client might require that the user documentation you prepare for them be produced in accordance with such standards. But you, as a documentation writer, might decide to produce documentation in accordance with these standards – even if your client does not specify it.

Indeed, that would be a good idea because it would serve as a quality control procedure. It is useful to be able to point to such a quality control mechanism if disagreements should arise over the standard of the documentation.



As well as legal standards, such as the ISO standards, other types of standards might be used in preparing user documentation as well. For example an organisation might specify that documentation be produced in accordance with a style manual.

A style manual, itself, is a form of documentation which prescribes aspects of the: language, formatting and layout of published material.

The term, language, refers not only to whether English or some other language is to be used, but also to aspects of word usage such as the use of plain English and the provision of glossaries to explain technical terminology.

The term formatting, relates to a description of the elements that are placed on a page or screen. This might include such aspects as the:

- ☆ Fonts
- ☆ Line spacing
- ☆ Bullets to be used

The term, layout, refers to how these elements are then arranged on a page or screen. For example this would include: the size of margins and the use and positioning of headers and footers, the size and placement of graphics as well as the use of borders.

An organisation may also use other operational standards which might specify other important details relevant to documentation writing project such as:

- ☆ the conventions for naming of files and/or versions of documentation
- ☆ the system for storage of files
- ☆ the approval system for new documentation
- ☆ the training and distribution required for the distribution of new user documentation

In order for you to work productively and harmoniously with an organisation it is necessary for you to be aware of any such in-house standards. If such standards don't already exist it may even be worthwhile to propose some such standards for the organisation to ensure that your user documentation adequately meets their operational requirements.

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY FOUR**

What is a style manual?

TEACHER / TRAINER GUIDANCE NOTES

A style manual is a form of documentation which prescribes aspects of the: language, formatting and layout of published material.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY FIVE**

Who is the ISO?

TEACHER / TRAINER GUIDANCE NOTES

The ISO (International Organization for Standardization) is the world's largest developer of International Standards. It is a network of non-governmental organisations and it strives to reach a consensus on its standards that meet both the requirements of business and the broader needs of society. The standards it publishes are commercial property and you therefore have to purchase them in order to use them.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY SIX**

An organisation may also use other operational standards which might specify other important details relevant to a documentation writing project. What four possible internal standards might they include?

TEACHER / TRAINER GUIDANCE NOTES

An organisation may also use other operational standards which might specify other important details relevant to a documentation writing project such as:

- 1) the conventions for naming of files and/or versions of documentation
- 2) the system for storage of files
- 3) the approval system for new documentation
- 4) the training and distribution required for the distribution of new user documentation

SAMPLE ONLY

DESIGN DOCUMENTATION TEMPLATES USING APPROPRIATE SOFTWARE AND OBTAIN APPROVAL FROM APPROPRIATE PERSON

There are many kinds of templates which can be used to expedite the creation of many types of documentation – including graphics.

For example the figure to the left shows a Microsoft Word graphic template that can be used to create an organisational hierarchy chart.

Many templates for use with a variety of software applications can be found on-line.

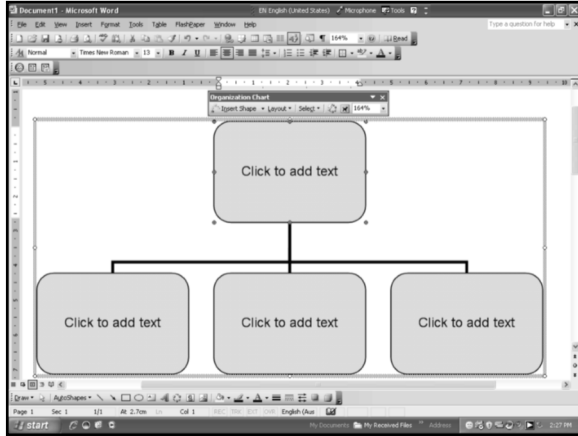
Templates could be useful to help you prepare a plan of your user documentation project to present to your client.

Templates can save you time because you only need to enter text into predefined areas. The designs of the forms are already completed for you.

Using prepared templates may also result in a reduction in the amount of errors that might occur compared to the amount of errors that might occur in templates you design yourself.

Templates, themselves, can serve as another type of documentation standard because they enforce a uniform style and layout throughout an entire document or series of related documents.

In fact, you will likely need to use some form of template/s when creating user documentation for a client – regardless of whether these templates are stipulated by the client or designed by yourself. In either case, make sure that you and your client understand and agree on all aspects of the templates.



SAMPLE ONLY

When negotiations about the use of templates are completed, you should seek to have your client give formal approval of them by 'signing them off'. This involves the client signing a document agreeing on the template's specifications.

The document used does not have to be overly complicated. A simple form such as the following, attached to a memo or letter, would suffice.

It is important to make sure that the person who signs off for the template actually has the authority to do so.

I, J. Nasher, Purchasing Officer with Australian Importers and Exporters Pty Ltd, approve the template version 2.2 proposed by W. Shakespeare, Training Consultant with UPTech COMPUTER, for use in preparing documentation for users

J. Nasher, _____

I. Nasher, Purchasing Officer

Date: 01/02/20XX

W. Shakespeare _____

W. Shakespeare, Training Consultant

Date: 01/02/20XX

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Task****LEARNING ACTIVITY SEVEN**

Examine a template provided by your word processor program for writing a report. How do you think it could save you time?

TEACHER / TRAINER GUIDANCE NOTES

The student or trainee's answers and approach to this activities will vary, but should reflect a strong understanding of the steps and the methods used in creating user documentation and how those steps are handled using a template.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Task****LEARNING ACTIVITY EIGHT**

Create an agreement form that could be used to secure the client's sign-off of your template. The form relates to user documentation for a new type of customer database software application called XData.

Once completed, present your approval form to your teacher or trainer for review and discussion.

TEACHER / TRAINER GUIDANCE NOTES

The form should be simple enough, yet still have enough information to ensure sign off is clear.

SAMPLE ONLY

Section Two

Produce User Documentation

CREATE USER DOCUMENTATION

SECTION TWO—PRODUCE USER DOCUMENTATION

INTRODUCTION

The development of user documentation is not a quick and simple task and in fact can be a complicated and detailed task.

There are several steps that need to occur before a user manual even gets started and then there is the need to create a document that is both clear and easy to understand.

In this section we look closer at these topics.

SECTION LEARNING OBJECTIVES

At the completion of this section you will learn information relating to:

- ☆ Conducting a review of the subject system, program, network or application in order to understand its functionality
- ☆ Gathering existing technical, design or user specifications and supporting documentation
- ☆ Creating user documentation based on the template to record the operation of the subject system, program, network or application



CONDUCT A REVIEW OF THE SUBJECT SYSTEM, PROGRAM, NETWORK OR APPLICATION IN ORDER TO UNDERSTAND ITS FUNCTIONALITY

In order to write user documentation about a system, program, network or application you need to clearly understand what the system, program, network or application does as well as how it does it.

A good way of starting to gain this understanding is to examine the system, program, network or application's existing documentation – including any specifications for it.

Any commercially available system, program, network or application should have at least some form of user documentation already provided with it. (However the only documentation for programs written especially for a single organisation might exist in the form of annotations within the program itself.) But this documentation may be too sophisticated and too complex for some users. On the other hand, it may be too brief – relying upon incorrect assumptions that its users have considerable knowledge about the system, program, network or application already.

It is interesting to consider that, if the existing documentation was entirely satisfactory, there would be no need for you to prepare any more. The same could be said about software itself. Perfectly designed software with obviously logical interrelationships of its functions and an intuitive GUI means of navigation would not even require any user documentation at all. The more the need for documentation – the poorer the organisation and interface of the software.

This realisation presents an interesting career possibility for you as a user documentation writer. You might prefer to work for the developers of systems, programs, networks or applications – rather than for the end users of the systems, programs, networks or applications.

In either case, researching any available documentation – including technical specifications -- should be your first step when setting out to understand a system, program, network or application.

The technical specifications for a system, program, network or application should explain what the system is intended for as well as how it is supposed to operate.



There's no substitute for first hand experience. You will certainly need to use all the components of the system, program, network or application yourself in order to experience how they work in the real world. Only then will you encounter the types of problems and frustrations that other system, program, network or application users will come up against.

For example you might find that some features work in unexpected ways -- or not at all -- on different platforms. Or, you might realise that the existing documentation does not adequately explain some functions of the system, program, network or application.

When analysing the system, program, network or application pay particular attention to the navigation strategies that are used including: rollover shortcuts, buttons, and menus. Notice the icons or text highlighting strategies that are employed. For example in the notes you are reading now, icons are used to indicate learning activities and orange text is used to indicate section headings.

It is helpful to keep some form of notes to help you organise your understanding of a system, program, network or application when you study it. These notes might be in the form of a table, a mind map (such as illustrated to the left), or just point-form text. These will prove indispensable with your work in designing the documentation and also for reference when discussing issues with your client.

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY ONE**

How would you go about finding out about the new system you are writing documentation about?

TEACHER / TRAINER GUIDANCE NOTES

A good way of starting to gain this understanding is to examine the system, program, network or application's existing documentation – including any specifications for it.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY TWO**

Why is there no substitute for first hand experience?

TEACHER / TRAINER GUIDANCE NOTES

By using all the components of the system, program, network or application yourself you will experience how they work in the real world. Only then will you encounter the types of problems and frustrations that other system, program, network or application users will come up against.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY THREE**

We mentioned in this Section an career possibility for you as a user documentation writer. What was that possibility and why is it an opportunity?

TEACHER / TRAINER GUIDANCE NOTES

Any commercially available system, program, network or application should have at least some form of user documentation already provided with it, but this documentation may be too sophisticated and too complex for some users or on the other hand, it may be too brief. So you might prefer to work for the developers of systems, programs, networks or applications – rather than for the end users of the systems, programs, networks or applications.

SAMPLE ONLY



GATHER EXISTING TECHNICAL, DESIGN OR USER SPECIFICATIONS AND SUPPORTING DOCUMENTATION

Some systems, such as interactive online website systems, may have somewhat more specialised technical specifications.

These specifications might include details of factors such as:

- ☆ compatible system platforms
- ☆ acceptable response times
- ☆ hardware and software system requirements
- ☆ load limitations

Some systems, programs, networks or applications might also have some type of design specifications. These might take the form of the storyboard for example. They might show how pages or screens are meant to appear. They might also indicate the navigation strategy and links to external sources used in the system, program, network or application.

You need to find out if any such design specifications exist and ensure that your own user documentation is consistent with them.

Other users of the system, program, network or application may have encountered problems; found solutions and prepared their own procedural notes to support their use of the system, program, network or application.

The Internet is a rich source of such valuable information. User groups, chat rooms, and even private postings, may all contain useful information.

Don't forget your legal and technical requirements to acknowledge any other sources that you might use in your own documentation.

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY FOUR**

Why would other users of a program, network or application be a good source of information?

TEACHER / TRAINER GUIDANCE NOTES

Other users of the system, program, network or application may have encountered problems; found solutions and prepared their own procedural notes to support their use of the system, program, network or application.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY FIVE**

What is another good source of existing technical and design information?

TEACHER / TRAINER GUIDANCE NOTES

The Internet is a rich source of such valuable information. User groups, chat rooms, and even private postings, may all contain useful information.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Research****LEARNING ACTIVITY SIX**

There is a freeware application called 'Gimp' that is used for editing and manipulating digital photographs. On their website they have tutorials on how to use Gimp. Visit the website and locate these tutorials. Have a read through them and then answer the following questions:

Do you think the tutorial documentation is well written?

Is it easy for you to understand?

Is it easy for you to locate different topics about different features?

SAMPLE ONLY

SAMPLE ONLY***TEACHER / TRAINER GUIDANCE NOTES***

This activity is to put the student or trainee into the shoes of a user of an application then try and understand the way an application works from basic user documentation.

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CREATE USER DOCUMENTATION BASED ON THE TEMPLATE TO RECORD THE OPERATION OF THE SUBJECT SYSTEM, PROGRAM, NETWORK OR APPLICATION

So now is the time to create the actual user documentation and you will either use a pre-defined template or one that you created and have gained approval for its suitability.

Because documentation writing is such a complicated – and often distracting – task, you need to be able to keep a clear, well defined idea of your purpose in mind.

Taking the trouble to write an ‘objectives statement’ for your documentation would help you keep this purpose clearly in mind.

For example an ‘objectives statement’ might be:

‘This guide is intended to provide users of the OpenOffice suite with detailed instructions about how to integrate various software applications.’

Such a statement is best presented near the start of your documentation.

One thing in common to most documentation users is that they are typically working under pressure and need to be able to find help quickly. So, you must use language that is simple for them to read.

Make the most use of the active voice in preference to the passive voice. The active voice speaks to the reader as if they were directly carrying out some instruction.

For example an active voice statement is:

‘Now press the “Enter” key.’

Whereas the corresponding passive voice statement is:

‘The “Enter” key should now be pressed.’

Use consistent: conventions, spelling and terminology. For example don't:

- ☆ identify menu titles in bold italics sometimes, but then underlining them at other times,
- ☆ refer to 'jpg' files sometimes, but to 'jpeg' files at other times, or
- ☆ instruct users to press an 'Enter' key sometimes, but tell them to use the 'Return' key at other times.

All these sorts of inconsistencies will surely confuse and frustrate the document's users.

Use short sentences and short paragraphs. Avoid technical jargon where possible, and explain technical terms wherever they are first used – if they are required.

Write using simple, clear, plain English. The use of such plain English principles is highly regarded in these times when technological jargon tends to overwhelm us. Indeed national campaigns have been initiated in order to encourage the use of plain English.

One such example is The Plain English Campaign at— <http://www.plainenglish.co.uk/free-guides.html> which offers free guidelines for using plain English.



Even international organisations such as The Plain Language Association International have arisen to promote the use of plain English. (<http://www.plainlanguagenetwork.org/>) This association defines plain English as '*...an international language that everyone in your audience can easily understand. Clear writing in plain language saves time, money, and lives.*'





As well as being simple to read, effective user documentation must also be efficient. That is, it must not take any more time or space than is absolutely necessary to communicate the information required by the user.

Some strategies for writing efficient documentation are:

- ☆ using small words in place of larger words or phrases
- ☆ eliminating redundant words or statements
- ☆ using headings and bullets or numbers to make it easy for the user to find material
- ☆ ensuring that only one idea is presented in each paragraph
- ☆ using fonts and font sizes which are physically easy to read. For example sans serif fonts are generally easier to read on monitors, whereas serif fonts are usually easier to read on hardcopy material.

You must also take care to present a consistent and well thought-out organisation of the material in your documentation.

Explain any conventions you use such as the use of icons, or the use of underlining, quotes or bold text to indicate actions.

Number procedural steps to help users keep track of where they are and make it easier for them to refer to the documentation when talking to other people. Inserting a blank line between each step also makes it much easier for users to visually keep the steps separated when they are concentrating on working through them.

Use annotations when necessary to explain confusing situations. For example: *'It might take several seconds for this video to download but you will not see any icon warning of this delay.'*

Most often user documentation instructions are written in the sequential order that a user would normally be expected to follow. An example of user documentation showing a grouping and sequencing method is provided in the notes for 'Downloading a Picture from a Sony Digital Camera' located below.



Downloading a Picture from a Sony Digital Camera

Conventions used in this document

Words inside quotations marks '' are the actual words that appear on a screen or the actual names of files.

Words which are underlined are words which you need to pay particular attention to as they are often mistaken -- which leads to confusion.

Instructions

Connecting camera to Computer

First you need to connect the digital camera to the computer by:

1. Plugging the USB cable into top of camera (must open slide flap first) and then connecting it to the USB port in front of the computer (must open front door of computer first).
2. Plugging in the power cable and then connecting it to the adaptor/battery charger and then using another chord to connect the adaptor to the battery dock of camera (must open side panel first and remove battery if it is inserted).
3. Turning camera power switch to 'On' -- making sure the camera flash memory card that the image is saved on is inserted in the camera.

Using the software

Now you can use the software by:

1. Double-clicking on the 'My Computer' icon.
2. Selecting 'Removable Disk (E:)' icon.
3. Selecting the 'DCIM' folder.
4. Selecting the '100MSDCF' folder (or a similar one).
5. Selecting the image to download by viewing thumbnails of the images stored on the camera flash memory card. Do this by clicking once on any picture number and waiting a few seconds for the image to appear.
6. Double clicking the picture number to open the image in MGI PhotoSuite.
7. Selecting 'File' from the MGI PhotoSuite menu bar.
8. Selecting 'Save As'.
9. Browsing to find the location you which to store the image at. This might be your 'MyPhotos' folder in your student section of the server for example.
10. Giving the file a filename to help you find it in the future -- such as 'MyDog' for example.
11. Clicking 'Save' twice. You can then exit MGI PhotoSuite and reopen the image from wherever you saved it by double clicking its name. This will automatically simultaneously open MGI PhotoSuite so you can edit your photo.

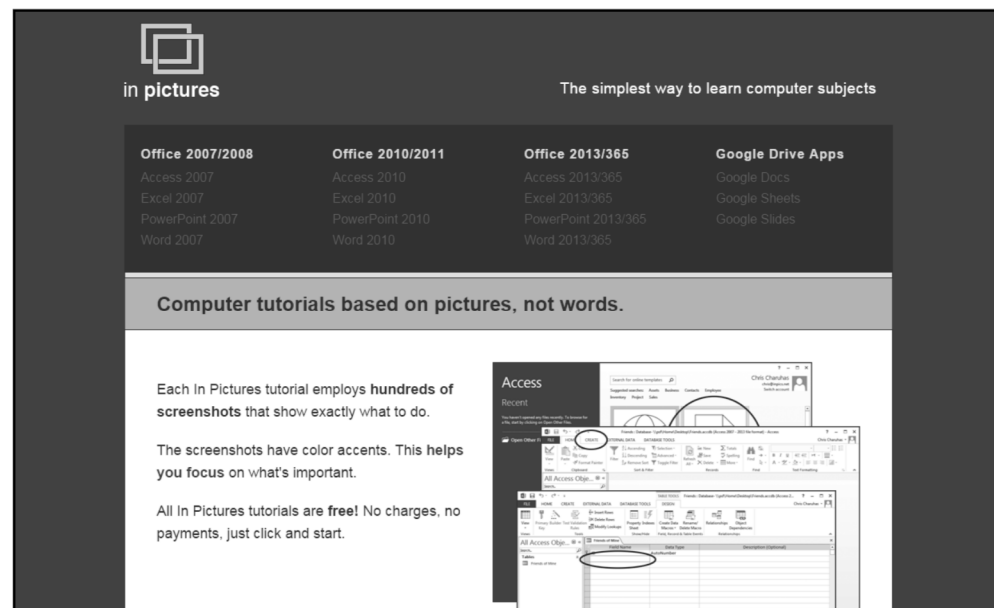


However, when writing notes about systems such as websites that are organised in interlinked pages, or systems that are mainly graphical, it might be preferable to describe the screens or pages instead – in the order that they are encountered.

If the language of your documentation is of an unsatisfactory level your reputation will be diminished. That is bad enough. However if there are any technical or factual errors in the content of your documentation the situation could be even worse. You could face legal action for failing to fulfil your contract – especially if your documentation has caused hardship to your client – such as loss of files, or loss of productivity.

But not all documentation needs to be based upon text. Some documentation creators try to avoid text altogether. They attempt to present their documentation entirely by using pictures, flow charts, or other graphics – including little or no text.

For example you might like to visit a website that offers complete tutorials based on pictures. Its free and it is at <http://inpics.net/>.



Of course, always keep an up to date backup copy of all versions of your documentation – preferably at a separate location from your computer. You risk instantly losing hours – or perhaps even months of work otherwise.

**Learning
Activity****SAMPLE ONLY****Task****LEARNING ACTIVITY SEVEN**

Below are statements, some written in an active voice and others in a passive voice. Next to each tell us which are in an active voice and which ones are in a passive voice:

Harry ate six prawns at dinner. _____

The flat tire was changed by Sue. _____

We are going to watch a movie tonight. _____

Tim read the novel in one day. _____

The novel was read by Mom in one day. _____

The entire house was painted by Tom. _____

The whole suburb was destroyed by the bush fire. _____

Larry generously donated money to the homeless shelter. _____

SAMPLE ONLY

SAMPLE ONLY**TEACHER / TRAINER GUIDANCE NOTES**

Harry ate six prawns at dinner. *(active)*

The flat tire was changed by Sue. *(passive)*

We are going to watch a movie tonight. *(active)*

Tim read the novel in one day. *(active)*

The novel was read by Mom in one day. *(passive)*

The entire house was painted by Tom. *(passive)*

The whole suburb was destroyed by the bush fire. *(passive)*

Larry generously donated money to the homeless shelter. *(active)*

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Task****LEARNING ACTIVITY EIGHT**

What are five strategies for writing efficient documentation?

TEACHER / TRAINER GUIDANCE NOTES

Some strategies for writing efficient documentation are:

- 1) using small words in place of larger words or phrases,
- 2) eliminating redundant words or statements,
- 3) using headings and bullets or numbers to make it easy for the user to find material,
- 4) ensuring that only one idea is presented in each paragraph, and
- 5) using fonts and font sizes which are physically easy to read. For example, sans serif fonts are generally easier to read on monitors whereas serif fonts are usually easier to read on hardcopy material.

SAMPLE ONLY

Section Three

Review and Obtain Sign-Off

CREATE USER DOCUMENTATION

SECTION THREE—REVIEW AND OBTAIN SIGN-OFF

INTRODUCTION

In the final stages of developing user documentation there is the need for reviews, proofreading and feedback before getting the final sign off approval.

In this section we look at those final steps.

SECTION LEARNING OBJECTIVES

At the completion of this section you will learn information relating to:

- ☆ Submitting user documentation to target audience for review
- ☆ Gathering and analysing feedback
- ☆ Making changes to user documentation
- ☆ Submitting user documentation to appropriate person for approval



SUBMIT USER DOCUMENTATION TO TARGET AUDIENCE FOR REVIEW

As mentioned before, writing high quality user documentation is a highly skilled and time consuming undertaking. However, if you do this job well, clients who read your documentation will usually take it for granted. It seems to them that because it is easy to read and use – it must have been easy to write. They are not aware of the amount of work required to make it seem easy to them and they, therefore, may want to see evidence of the work involved. This is another reason that it is useful to document your work – including saving all versions of the user documentation you prepare.

Preparing high quality user documentation cannot be a one-step process. It requires at least several iterations.

You have to become your own strictest critic when revising these iterations. Read and reread.

Only one standard of: grammar, spelling, and punctuation is acceptable: perfection.

Checking such mechanical details is actually called proofreading – but people often mistakenly presume that it is part of the editing process. Useful proofreading tips can be found on the Internet at various sites including:

- ☆ <https://owl.english.purdue.edu/owl/resource/561/01>
- ☆ www.chicagomanualofstyle.org/tools_proof.html



When developing various versions of your documentation it is important to keep track of each version.

Often a numbering system such as: 1.0, 1.1, 2.0 and so forth is used. Numbers before the decimal point indicate major redrafts, while numbers after the decimal distinguish minor revisions. If copies of the various versions are to be retained by your client, they might want to use their own in-house system for keeping track of the various versions. Make sure you discuss this with them and use a system that they accept.

Most word processor programs provide at least some form of versioning control. Take the time to learn how to automate the version control feature on the word processing application you may be using.

As well as proofreading the documentation, you need to carefully edit it as well. Editing involves checking the: style, content, and language of the document.

Then, after you have edited and revised your own work, ask someone else to critically read it. By this stage you will have become too close to the material to be able to see gaps or problems in it any more.

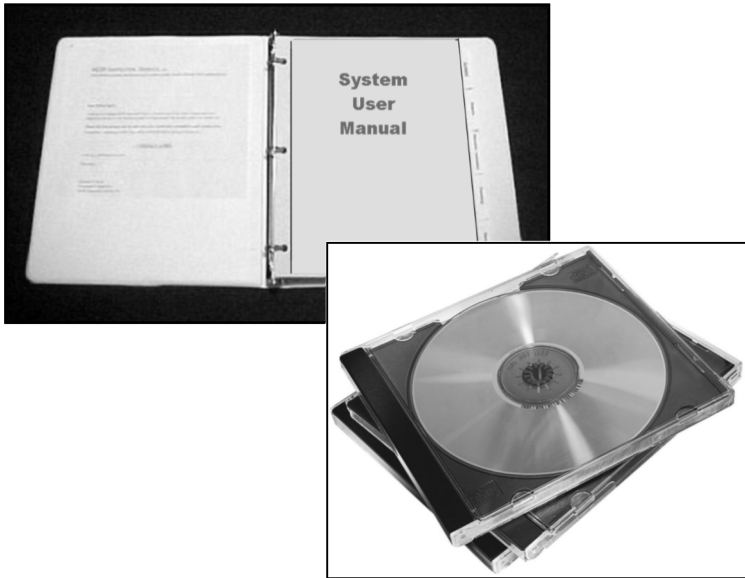
There is an old saying: *'You can't see the forest for the trees.'*

This adage alerts us to the fact that when you become too immersed in a topic you may no longer be able to see individual details within it.

Choose someone to read the documentation who is similar to your intended client/s. Ask them particularly to point out any ambiguities they discover, as well as any problems or questions they experience which are not adequately addressed by your documentation.

Do not underestimate the time and effort required for this stage. It might even take you as much time to revise your documentation and then to receive it back from a critical reader, as it did to originally write it.

Do not become emotional or defensive when your critical readers (or later on, your document users) actually make criticisms about your documentation. Remember, they are actually doing you a favour.

SAMPLE ONLY

When you can no longer find any improvements to make in the documentation, you are ready to present it for appraisal by its intended users. Once again, do not underestimate the amount of time that may be required for this stage. Users are typically busy with their normal occupations and testing documentation for them can be a tedious and time consuming undertaking. Do not expect them to drop everything else they have to do just to trial your draft documentation.

Even giving the documentation to users is not as simple as you might imagine.

You will need to consider how your documentation will actually be given to the users who are reviewing it.

For example: Will you mail them a hard copy? Will you send them a digitised copy on a storage medium such as a CD? Will you send them an e-mail copy? Will you present it to them in person, such as at a formal business meeting?

You also need to ensure that the recipients have received the documentation and keep records to confirm that they have?

In addition, you must ensure that the users are able to access the documentation.

Electronic versions are often provided on CDs or DVDs so the user needs access to the CD or DVD drives or players.

Finally, you must also consider what protocols will be implemented to protect the security of the documentation.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY ONE**

When developing various versions of your documentation it is important to keep track of each version. What is the common version control conventions and how is it used?

TEACHER / TRAINER GUIDANCE NOTES

Often a numbering system such as: 1.0, 1.1, 2.0 and so forth is used. Numbers before the decimal point indicate major redrafts, while numbers after the decimal distinguish minor revisions.

SAMPLE ONLY

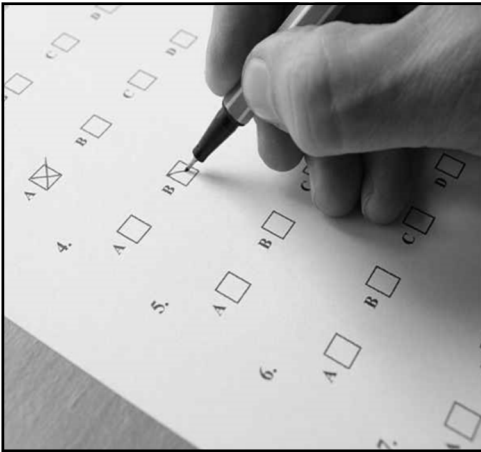
**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY TWO**

Who is a good person to ask to proof read your document?

TEACHER / TRAINER GUIDANCE NOTES

Choose someone to read the documentation who is similar to your intended client/s.

SAMPLE ONLY



GATHER AND ANALYSE FEEDBACK

Before you submit your documents to its users you should already have planned and prepared the method you will use to gain feedback from them.

The critical things you need to discover from the feedback include:

- ☆ Can the users easily read and understand the documentation?
- ☆ Can the users efficiently navigate through the documentation?
- ☆ Can the users suggest any ways that the documentation could be improved for their benefit?
- ☆ And most importantly, does the documentation meet their actual needs?

Traditionally the most economical way to gain feedback from a group of people was to use hardcopy questionnaires.

Questions on questionnaires can either be closed-ended, which only allow respondents to choose from prepared answers, or open-ended which allow respondents to use their own words to say whatever they want.

Both types of questions have their respective advantages and disadvantages. Closed-ended questions help direct users and their answers are much easier to record in databases or spreadsheets which can then be used to generate useful statistics.

However, open-ended questions might sometimes elicit answers which would not otherwise be discovered by limiting respondents to the use of closed-ended questions.



Some closed-ended questions can only be answered by selecting from a certain number of responses. For example: *'Have you received any training in using the UNIX operating system?' [] Yes [] No*

But other closed-ended questions may involve degrees of agreement with a statement. A good deal of research has shown that offering respondents a range of five levels of agreement with such closed-ended questions is a good compromise between making the answer too complicated and giving the respondents a reasonable latitude for their answers.

For example: *'I like the documentation'*.

Strongly disagree ____ *Disagree somewhat* ____ *Uncertain* ____ *Agree Somewhat* ____ *Strongly Agree* ____

However there is no reason to limit yourself to the use of hardcopy questionnaires these days. In fact some services such as SurveyMonkey are available which permit you to design sophisticated questionnaires -- using a wide variety of question types -- and then have your recipients answer the questions on-line. The SurveyMonkey service will then even automatically give you the statistical results of all the answers on-line.

However, there are limitations on the number of responses that will be processed for free.

You can investigate SurveyMonkey at: <http://www.surveymonkey.com/>.

If you decide to use some type of online survey make sure that your respondents have convenient access to the necessary technology to use it. Also, make sure that they are adequately prepared and instructed about how to efficiently use it.



Whatever form of questioning you decide to use, some principles to bear in mind include:

- ☆ Use simple, clear, nontechnical language. People cannot respond to questions that they don't understand.
- ☆ Use the minimum number of questions. People are very busy and quickly become annoyed with answering questions which they see as being of little relevance.
- ☆ Use a method that will be convenient for respondents to access. If answering questions is too difficult, people will avoid answering them.

Sometimes it may be preferable to gain feedback through interviews with users rather than by using questionnaires. A major advantage of this technique is that users can elaborate on their comments and discuss their answers with one another. This may turn out to be a simple form of brainstorming that can sometimes lead to creative solutions. Also, people often find it less laborious to talk than to write answers; so they may be more willing to give complex feedback orally rather than in writing.

Disadvantages associated with using personal interviews include:

- ☆ The higher costs related to having someone conduct the interview rather than merely analysing statistics gained from using a questionnaire
- ☆ The fact that users may be influenced or misled by one another during group meetings
- ☆ The greater time and money costs to the client's company associated with arranging for users to leave their normal work to attend group (or even individual) interviews

Remember also, that if you use the interview method instead of questionnaires you will still need to maintain your own accurate objective records of the responses given during the interviews.

If you are ever uncertain what a respondent actually means on a questionnaire or during an interview, you should contact them directly to ask for further clarification.



When you have collected your feedback, by whatever method you employ, you will then need to analyse it. When working with only a few users, analysing feedback should be a relatively simple operation. However when dealing with many users, and / or complex survey instruments analysis can be enhanced and made more efficient by using computer-based databases and / or spreadsheets. Data from databases, and even word processor tables, can be exported into spreadsheets for further statistical analysis and the production of charts.

When analysing the data, pay particular attention to similar answers from more than one respondent or multiple responses that seem to point to a particular area of concern. For example different respondents might indicate in various ways that they find the text of the documentation to be too difficult to read. Perhaps there is too much or too little contrast between the text and the background, or perhaps the font is unfamiliar, or maybe the font size is too small to be comfortably read on a monitor.

Always bear in mind when analysing users' feedback that it is the users -- not yourself -- who actually have to use the documentation.

Don't dismiss their comments too readily without very good reason.

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY THREE**

What were the three principles to bear in mind when questioning people to gain feedback.

TEACHER / TRAINER GUIDANCE NOTES

Some principles to bear in mind when questioning people to gain feedback include:

- 1) Use simple, clear, nontechnical language. People cannot respond to questions that they don't understand.
- 2) Use the minimum number of questions. People are very busy and quickly become annoyed with answering questions which they see as being of little relevance.
- 3) Use a method that will be convenient for respondents to access. If answering questions is too difficult people will avoid answering them.

SAMPLE ONLY

**Learning
Activity****SAMPLE ONLY****Question****LEARNING ACTIVITY FOUR**

When analysing the data what should you pay particular attention to and give us an example.

Example**TEACHER / TRAINER GUIDANCE NOTES**

When analysing the data pay particular attention to similar answers from more than one respondent or multiple responses that seem to point to a particular area of concern. For example different respondents might indicate in various ways that they find the text of the documentation to be too difficult to read.

SAMPLE ONLY



MAKE CHANGES TO USER DOCUMENTATION

Based on your feedback, there likely will be the need to make some changes to the user documentation.

If the changes are simple and not numerous, then it is unlikely that you would need to have all the users have a look at the documentation the second time and ask them for feedback.

However, if there dramatic changes, then the previous steps may need to be repeated.

When you deliver the documentation your job should not be permanently finished. All systems, programs, networks or applications inevitably change. The users of the system, program, network or application will change. The environment of the system, program, network or application will change. The platforms that the system, program, network or application runs on may change. The business requirements that depend upon the system, program, network or application will, sooner or later, change. Also, the other software systems that a system, program, network or application must interface with will inevitably change as well.

Therefore some strategy for reviewing and updating the documentation should be established at the time that it is presented. This strategy will usually be contained in your organisations operational standards.

**Learning
Activity****SAMPLE ONLY****Interview****LEARNING ACTIVITY FIVE**

In this activity you are to interview six people who work in an environment where they need to refer to user manuals to use a system, program or and application.

Ask them if the user documentation was clear and easy to understand and if not, have they ever suggested updated documentation be developed.

Tell us their first name, age, what job they have and what type of system, program or application they are referring to.

Compile your interviews in a report form and present it to your teacher or trainer for review and discussion.

TEACHER / TRAINER GUIDANCE NOTES

The student or trainee should get a feel for how many people need to rely on user documentation at times and how they feel about the documentation when they are required to follow it.

SAMPLE ONLY



SUBMIT USER DOCUMENTATION TO APPROPRIATE PERSON FOR APPROVAL

When you have made the final revisions to the documentation based upon the user's feedback you are ready to present it to your client and have the project signed off. It is advisable to formalise this sign-off with some form of official documentation.

Make sure that the person who accepts the documentation and signs off for it is the person that has the authority to do so.

This person might actually have little or nothing to do with using the documentation themselves. So it may be helpful to show them the analysis of the users' feedback that you have prepared. This information would give them some added assurance about the utility of your documentation.

The sign-off document need not be especially complicated.

It should have details that include:

- ☆ The name of the system, program, network or application
- ☆ The final version number of the document
- ☆ Any suggested review dates
- ☆ Author of the documentation
- ☆ Date finalised

**Learning
Activity****SAMPLE ONLY****Task****LEARNING ACTIVITY SIX**

Prepare a document which could be used to obtain final acceptance and sign-off of your documentation. For this activity the user documentation is for Gimp. (we used this application in a previous activity)

Present your document to your teacher/trainer for review and discussion.

TEACHER / TRAINER GUIDANCE NOTES

The sign off document should have enough details that the project as a whole is signed off, yet not so complicated as to look like an over the top legal document.

SAMPLE ONLY

SELF ASSESSMENT

Self assessment is where you ask yourself certain questions to ensure you have understood what you have learned while reading this manual and completing the learning activities.

This unit requires you the student or trainee at the completion of your training to have a certain level of 'Required Knowledge' in which you would be need to have acquired and in which you will be assessed on.

This self assessment section reviews this required knowledge by way of questions and if you are able to say YES to all of them you can be confident your assessment will be satisfactory.

- ☆ Do you remember the two areas that should be of consideration when preparing user documentation?
- ☆ Can you recall what a 'documentation standard' in the IT industry ensures, as well what as the three standards provided by the 'ISO' are?
- ☆ Are you able to explain what type of form to use when acquiring formal approval by signing off on a template design?
- ☆ Do you know why it is recommended to have first hand experience when reviewing a system, program, network or application in order to write user documentation?
- ☆ Can you describe what type of sources could provide information about design specifications that your documentation would need to be consistent with?
- ☆ Are you able to understand what are some of the recommended strategies to follow in order to write effective user documentation?
- ☆ Do you remember one of the tips to adopt in order to correctly proofread and edit any user documentation you have prepared?
- ☆ Can you recall the types of questions to use in order to gather and analyse feedback from users of the documentation?

If there were any questions that you were unable to confidently say YES to, we encourage you to review the information again in this manual and if needed seek the assistance of your teacher or trainer.

SAMPLE ONLY

NOTES

SAMPLE ONLY

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Manual**

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