Overview of the planning process

Purpose

The purpose of this document is to clarify the meanings of the words used in the planning sections of some of the computing unit standards at levels 1-4.

The planning process

The overall planning process involves five stages, not all of which are required at all levels or for all types of standards. Some or all of these five stages may be integrated.

Definitions

The task: This is the problem to be solved, the task to be completed, or the issue to be addressed by the solution that the candidate will provide. The assessor or workplace supervisor will almost always provide the task.

The brief: This is a statement giving a clear description of the desirable outcomes sought, and the constraints to be met by the solution. It contains requirements against which the project outcomes can be evaluated. The brief may either be created as part of the candidate's employment (in the case of workplace assessment) or in response to a set task.

The plan: This outlines specifically how the requirements of the brief will be realised. For some standards, mostly at levels 1 and 2, a plan may be informal, and evidence of it may be produced during task completion rather than prior to starting the task or project. For other standards, mostly at levels 3 and 4, a plan is more formal and will usually include pre-task documented components.

The design: This is a representation clearly indicating the appearance or nature of the final outcome.

The evaluation: This ensures that the project realises the requirements stated in the brief, and that the presentation of the material conforms to appropriate standards of readability, legibility, presentation, and accuracy.

Explanations

The brief

At *levels 1 and 2,* the brief will almost always be supplied to the candidate as part of the assessment task. In such cases, the brief should include:

- a complete description of the task to be performed, including an indication of its purpose and, where appropriate, its target audience;
- a list of requirements and, if appropriate, design details for the task;
- a list with the location of resources (text or graphics files, etc) that may be required to complete the task.

At level 1, the candidate should have a fairly comprehensive list of instructions that clearly indicates what has to be done. At level 2, it is quite appropriate for the brief to leave room for the candidate to have considerable creative input, and so the list of instructions or requirements can be less precise.

In both cases, the brief must contain sufficient information so that the candidate can be certain whether or not the requirements of the task have been met. The brief should also include the requirements for evaluation.

At levels 3 and 4, the candidate is usually required to write the brief. In such cases, the task description can be much briefer, consisting perhaps only of a general description of the desired outcomes, or even just a statement of the problem to be solved, or the issue to be addressed.

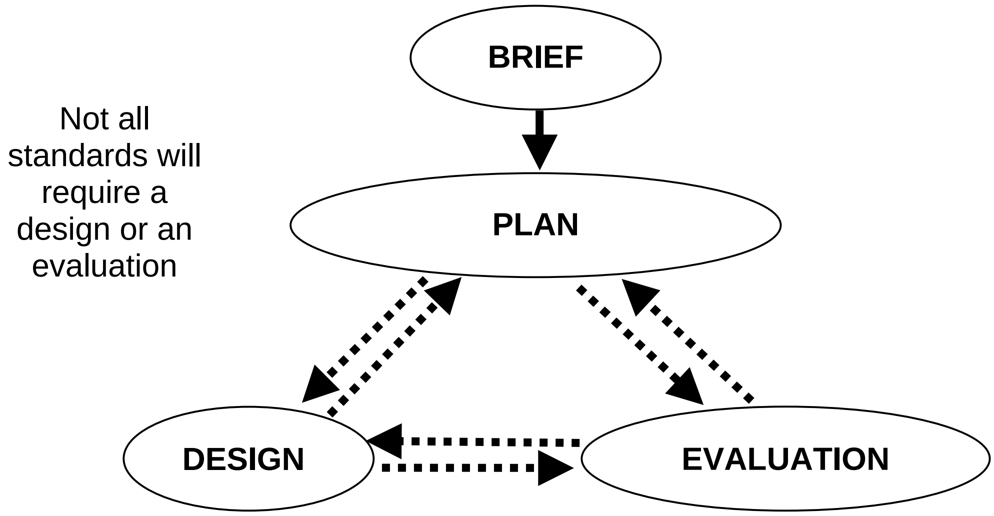
It is entirely appropriate at this level to require the candidate to develop questions to ask the task provider, in order to help formulate the brief. The brief would then become an outcome of negotiation between the candidate and the task provider. Particularly at levels 3 and 4, it may be necessary for the assessor to be involved in the negotiation in order to prevent the solution from becoming unreasonably large in relation to the outcomes of the standard against which the candidate is being assessed. In the workplace, where a more complete solution may be desired, this may be one factor that will determine whether the task is assessed at level 3 or level 4.

For most standards at levels 3 and 4, the candidate's brief is likely to include:

- a clear description of the task to be performed (or the problem to be solved, or the issue to be addressed);
- a clear description of the purpose to be achieved (which may be incorporated into the task description);
- where applicable, a statement of the target audience (which may be incorporated into the task description);
- a clear description of the intended solution. This is a broad description only; details and specifications will be included in the candidate's design;
- an outline of how the final solution will be evaluated against the brief;
- a list of any required resources. This may be software, hardware, data files, or other resources;
- a list of any stakeholders;
- a list of any constraints that might apply (time, finances, etc).

The plan

The purpose of this is to assist the candidate to determine exactly what has to be done, when, and in which order. A plan should be developed in conjunction with the design and the proposed evaluation process, if these are required. As these develop, they will impact on the plan. This interaction is summed up in the following diagram:



At *levels 1 and 2,* and for units 2785 and 2787, a simpler plan is acceptable. This usually consists of a list of steps to be undertaken (see the note on “step-by-step instructions” below). Some of these steps may be identified as milestones, where it may be appropriate for the candidate to report progress at significant points. It may also be appropriate to identify a timeline for the milestones to assist in tracking progress.

At levels 1 and 2, the candidate should identify the purpose of the project and the target audience as part of the plan. These will usually be included in the brief, but some interpretation or candidate choice may be appropriate, especially at level 2. The simple plan may be informal, and although candidates will need to think through their approach before beginning a task, *evidence* of planning may consist of documents produced while work is in progress. In some situations (for example, in the workplace), evidence of planning may be largely oral.

At *levels 3 and 4*, a fuller plan should be completed. This is likely to identify:

- the steps to be undertaken
- the milestones
- the resource commitment required for each milestone
- the evaluation procedures required at each milestone
- how consultation with stakeholders should occur in order to ensure that all requirements and constraints are met.

It is not necessary to include the purpose and target audience in these plans, because these candidates must include them in their brief.

At Levels 3 and 4, a plan is intended to be a dynamic document, produced at the beginning of the project, then annotated as the project proceeds to indicate any problems that have arisen and the procedure undertaken to solve them. This applies especially to the evaluation stage.

The design
The purpose of a design is to provide, before the project begins, a detailed description and specification of the project. A successful design should enable its reader to visualise the project in its final form, without having to seek clarification or further details.

Generally, a design is not required at levels 1 and 2, except for 18735 and 18736.

At levels 3 and 4, the level of detail in and the complexity of the design will depend on the project. It is not appropriate for the candidate to be given step-by-step instructions to create a design. Part of the assessment at these higher levels relates to the candidate's ability to create their own designs.

At level 4, the tasks will be more complex and will naturally require more complex design work, although the overall process will be very similar to that used at level 3. More detail is given in the examples in the following pages.

The evaluation
"Evaluation" here is used as an umbrella term. It encompasses the following elements:

- **testing:** Does the project function as it should (that is, does it actually work)?
- **applicability:** Does the project realise all the requirements of the brief (does it solve the problem, or address the issue)?
- **checking:** Is the outcome readable and legible and of an appropriate standard of presentation; is it accurate (data integrity check, spelling check); has it an appropriate sequence of presentation, harmony, style, proportion, etc? Not all these items may be appropriate for all solutions.
- **consistency:** Does it match the design, and does it result properly from the documented plan?
- **documentation:** Have any differences between the outcomes and the plan or design been appropriately recorded and explained?

At level 1, evaluation is usually limited to a check that the outcome is consistent with the brief (and any design information given in it).

At level 2, all parts of the evaluation should be completed, but testing and consistency checks may be simple, depending on the nature of the project.

At levels 3 and 4, the increased complexity of the tasks will usually demand a more thorough evaluation process. Also, changes in the evaluation process required as the project proceeds should be documented as changes to the plan, together with the reasons for them.

The evaluation section of a number of standards includes the requirement to check for 'readability' and 'legibility'. Assessors have sometimes confused these.

Readability refers to how easy it is to recognise the letters and words and how easy a document is to read. Many factors affect readability: eg black text on a dark background, white text on a light background, text written totally in capitals, too long a line length, headings too small.

Legibility refers more to character recognition than to reading blocks of text. For example, display type can be created where the individual letters are hard to recognise. The harder the letters are to recognise, the more illegible the typeface. Readable type could be arranged in such a way (for example, with letters on top of each other) so as to be illegible.

Evaluation is an important part of the process, but the method of evaluation may vary depending on the nature and level of the standard, and the assessment context. However, for moderation purposes, documented evidence that evaluation by the candidate has taken place must be available. Such evidence may include, for example, an evaluation written by the candidate, a checklist completed by the candidate, or a verification form signed by the assessor.

Note on step-by-step instructions

It is important that a task given to a candidate requires the candidate to supply some expertise to the completion of the task.

At *level 1*, it is appropriate to give step-by-step instructions. However, these could be of the form:

1. Open the file <*filename here*>
2. Format the heading in 24 pt Arial and centre it

They should **NOT** be of the form:

1. Click on File, then click on Open
2. Click on <*filename here*>
3. Highlight the heading "*text here*"

and so on…**Instructions of this nature are too simple.**

At *level 2*, the instructions should be even more general. They could simply be a list of steps, but without details on how each step is performed. An example could be:

1. Format the floppy disk
2. Copy the files from <*location*> to the floppy disk

and so on…

This does not allow a candidate to complete the task unless they know what they are doing.

At *levels 3 and 4*, only the outline of the task is given. The candidate is expected to create the brief, and then determine the necessary steps to implement it by themselves.

Candidates at levels 3 and 4 are expected to be able to create this sequence of steps, and any project design requirements, by themselves.

Level	Brief	Plan	Design	Evaluation	Documentation
1	Supplied	• Purpose • List of steps • Basic outline of specifications or features required for solution	Simple • Sketch of outcome[1] • Formatting[2]	Simple • Does it do the job?	Not required
2	Supplied for some, required for others • Simple task outline • Requirements	• Purpose • List of steps • Basic outline of specifications or features required for solution	Complete • Sketch of outcome • Formatting • Content outline[3] • File names[4]	Complete, after the fact • Description of how it was done	Not required
3	Complete brief • Task Outline • Requirements • Key factors • Constraints • Stakeholders	• List of steps • Required resources • Explanation of variations • Evaluation procedure • Results of evaluation	Complete • Sketch of outcome • Formatting • Content outline[5] File names[6]	Complete, before the fact • Description of how it will be done • Records of results • Changes made and reasons	Simple user document • How to use it • Where things are found
4	Complete as Level 3, plus: • Legislative requirements[7] • Costs	Level 3 requirements as above, plus: • Recommended improvements	Complete • Sketch of outcome • Formatting • Content outline[8] File names[9]	Level 3 plus: • Recommended improvements	Simple user document • How to use it Where things are found

[1] The **sketch** should be sufficiently complete so as to allow the assessor to visualise the finished product.
[2] **Formatting** should indicate text size, style, typeface and colour; also colour, texture and fill for graphics, backgrounds and enhancements.
[3] A **short** description of the content of text blocks, to allow the assessor to visualise….
[4] **Filenames** are required for inserted files, graphics files, hyperlinks, etc.
[5] A **short** description of the content of text blocks, to allow the assessor to visualise….
[6] **Filenames** are required for inserted files, graphics files, hyperlinks, etc.
[7] **Legislation** that may be relevant to the task at hand. Mention of the Act, and how it is relevant, will be sufficient.
[8] A **short** description of the content of text blocks, to allow the assessor to visualise….
[9] **Filenames** are required for inserted files, graphics files, hyperlinks, etc.

The planning process - specific examples

The following section gives some specific examples of these items, together with a discussion of how they can be applied at each level. Some of the examples have been developed for school-based assessment, others for workplace assessment. All can be adapted for any assessment context. Other approaches are equally valid. These are samples only.

1. A combined brief and task - level 1 - unit standard 2792

Overview
In this assessment, you will be required to create some promotional material for a special event, such as your Mum's 40th birthday party. You will need to use desktop publishing software to create:

a. a card inviting people to the event;
b. a flyer advertising the event; and
c. a card that offers thanks to people for coming to it (or for bringing presents).

Notes

a. One of the cards must be top-fold, and the other must be side-fold.
b. You are allowed to use the templates (also called wizards) provided with the software.

Task One: Plan your publications 2792 – 1.1

1. *Examine the available templates, and select the ones you are going to use.*
2. *Examine the available clip art and select the images you are going to use.*
3. *Draw up a plan. It is best to do this on a word processor. Your plan **must** include:*
    - *the purpose of your publications;*
    - *the type of audience for which they are intended. Examples of this could be family, or your mother's friends, or her workplace associates, etc.*
    - *the names of the templates that you are using, and which one is used for which purpose (as listed in the Overview above). You should state the size and orientation (portrait or landscape) of the paper used for each publication.*
    - *a simple pencil sketch of each publication, showing the position and name of the graphics you have chosen to use in Step 2 above.*
4. ***You must get your plan approved by your teacher before going on.***
5. ***Keep the plan; you will need to hand it in with your printouts at the end.***

Task Two: Create the publications 2792 – 1.2
Once your teacher has approved your plan, you can go ahead and create your publications.

DO NOT PRINT THEM YET!

Task Three: Save your publications to your H: drive. 2792 – 1.3
Once you have created your publications, save them in a suitable folder in your H: drive.

Task Four: ***Check that your publications agree with your plan*** ***2792 – 2.1***
Make sure that the designs of your publications agree with the designs in your plan.
Also make sure that they fit the requirements in Task One.
If you have to change something, you should briefly state ***what it is that you changed, and why you changed it.***

Task Five: ***Print your publications.*** ***2792 – 2.2***
When you are sure that your publications are correct, print them.
Use the check-list below to make sure that you have got everything you need.
Staple your work together and hand it in for marking.

Check-List for handing in
You should have:

- *your written plan;*
- *your publication design sketches;*
- *your printed publications; there* ***must*** *be two cards and a flyer.*
- *if you made changes, a list of the changes and the reasons for them.*

MAKE SURE THAT ALL YOUR WORK IS NAMED!

NOTES

1. A supplied brief is not specified by unit standard 2792, but the assessor has chosen to frame the task in this way.
2. This example is intended for use in a school.
3. Because this is a level 1 task, the instructions are very full.
4. This example is a supplied brief, and is not structured in the same way as a brief that a candidate might write for themselves.

2. A brief - level 2 desktop publishing - unit standard 2788

1. Overview

Use the following information to create a desktop published document as part of your assessment for Unit Standard 2788.

The document is intended to advertise Anywhere College to the parents of prospective Year 9 students. It is a formal document, aimed at the parents, not the students.

2. Source Material

The text and graphics you must use are found in the ***G:\DTP\School*** *folder.*

3. Format

The document must be presented as either:
a. a four-page A5 booklet, containing at least three pages of information; OR
b. a three-fold brochure, which may be single-sided or double-sided.

4. Specifications

1. *The title page must contain the name of the school and the crest.*
2. *The document must contain at least 50 words of text; you may use any appropriate text from that provided; you may edit the text; or you may provide your own text.*
3. *The text in the document must all be spelt correctly; use a dictionary if necessary.*
4. *Appropriate typefaces, styles and sizes must be used for all text;*
5. *The document must contain at least two of the graphics provided, in addition to the school crest.*
6. *Ruled lines, borders, boxes, bullets, colour or other enhancements should be used. A minimum of three such enhancements are required. They should be clearly noted in your document design.*
7. *Ensure that your name appears on the document. An appropriate place is at the bottom of the first page, in small type.*

NOTES
1. This example is also clearly intended for school use, but could easily be adapted to a tertiary provider or workplace task.
2. This brief is much shorter than the level 1 example, but still contains complete instructions.
3. Full document specifications are given, but final document appearance and layout leave a lot of room for creative input by the candidate.
4. Full requirements, as listed in the special notes of the unit standard, are included with this brief. This level of detail might not be necessary in briefs written by candidates, as they would be expected to read the standard and the special notes for themselves.

3. A brief for level 2 databases – unit standard 2786

Robin Hood is President of the Sherwood Forest Archery Club. All the club members live in Nottingham.

Robin would like the records of the archery club computerised into a database displaying the information in an appropriate format that is legible and easy to read. A hard copy containing the membership data has been supplied in a word processed table.

You are to plan, create and evaluate a database using appropriate field sizes, types and formats to display the club members' information. Because Robin may want to create envelopes from the database in the future, please format the Town/City field to capital letters.

Robin wants to be able to view and print out complete lists of members' details and other selected data from the database as required. He will want to print out the database viewed in different ways (eg arranged by Number or Last Name).

Robin will also want you to use the database to:
a. edit records in the table (add, amend, and delete) and reprint the table
b. query (filter) the database to produce only specified information
  i members' data only (no scores)
  ii only male members' names and addresses
  iii members names and scores only
  iv details of members with certain surnames only eg Tuck or Hood
c. sort the table/query on a specified field
d. print the table/query.

During the course of this assessment, your tutor will need to observe you locate and open your database.

NOTES

1. The brief is effectively the task description.
2. The specifications in this example are given as a list of outcomes. The structure of the database can be deduced from the table of data supplied.
3. There are no requirements as to the structure of the database. As long as the outcomes are achieved, the requirements of the brief will be met.
4. A fully-worked assessment resource based on this brief can be found at http://www.nzqa.govt.nz/for-providers/resources/computing/subject.html#resource

4. A brief for level 3 macro/script programming - unit standard 5954

Overview

This assessment requires you to use your programming skills to create a macro or a script, which automates a computer application. You can do one of:

- *a macro in a word processor, spreadsheet or database;*
- *a script to go on a HTML page;*
- *an ASP page.*

In all cases, you must fulfil the same overall requirements, which are as follows.

- *The macro/script must contain at least five steps. For the purposes of this unit standard, a step is regarded as an operation on a selection. Thus, changing the typeface, size and colour of selected text is regarded as one operation, not three, because the selection is the same.*
- *The macro/script must include conditional logic; this usually means that an IF or SELECT CASE statement (or their equivalents) must be used.*
- *The macro/script must include user interaction. This means that the user must respond to a prompt while the macro/script runs. This may involve the use of a message box in a macro, or a text input box on a web page. It is probably best to combine this with the conditional statement.*
- *The macro/script must modify data. This means that selected text, selected cells, or selected database fields must be changed, or in the case of a script, the web page must be changed.*

NOTES

1. This is a brief at level 3. It does not contain all of the instructions for the assessment, but it covers the essentials of the task. The remainder of the instructions are largely concerned with presentation requirements, and how the results of the task must be presented for this assessor.
2. There is quite an amount of supporting explanatory information in this brief. It may not always be necessary to add this, depending on the organisation.

5. A brief for a level 3 web site - unit standard 18737

In this case, the candidate has been asked to create a web site for a school English department, for use on an Intranet. Here is an example of how the candidate might write a brief.

Brief
The task here is to construct a web site for the English department. The web site will have eight pages, broken down as follows. More details are available in the attached design.

- *One site index page*
- *One sub-index page for each of the five year levels 9-13*
- *One page on this year's Year 13 Shakespeare topic*
- *One page outlining course requirements at each level*

The site will serve as a foundation for future developments, and so no attempt has been made to provide complete coverage for the English department.

Site navigation
The user will navigate this site using a frame at the left of the screen, containing graphic images with buttons, linked to the other pages. Each frame will be contextual; that is, the buttons will change according to which page is being accessed at the time.

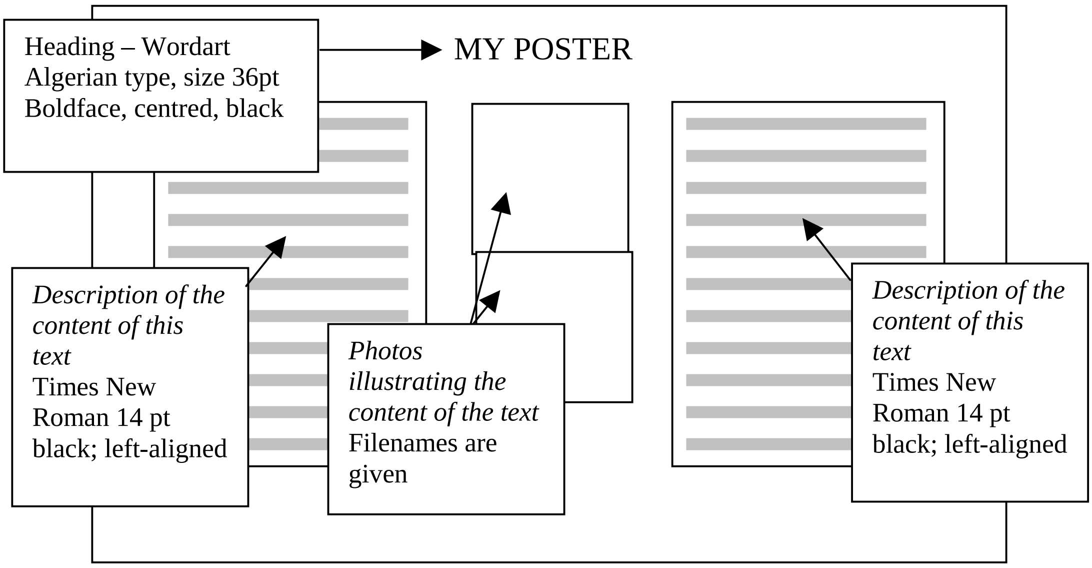
Stakeholders
The stakeholders for this project are Mr Smith, the College Webmaster, and Mrs Brown, the Assistant HOD English, who is acting as customer for the project.

Key Factors
Key factors in this project are the restricted time available (four weeks), and the requirement to have original digital photographs of staff and students. I will need to learn how to use a digital camera and Photoshop LE in order to complete it.

NOTES

1. Although this task has a definite school focus, it can be very easily modified for workplace or tertiary provider use.
2. Clearly, there are other ways of presenting this information; the example is intended to illustrate the content a student might provide.
3. The suggested time allocation for this project in a school would be very tight. In the workplace, it would probably be too long.
4. There may not be a noticeable difference between this brief and a level 4 web design brief. The level 4 standard will require extra features in the web site, and the brief will reflect this.

6. A design for a level 2 poster – unit standard 5946



NOTES

1. The purpose of the design is so that the assessor can visualise the final result. There must be sufficient information included so that this visualisation is possible.
2. The descriptions of text and graphics should be just that. The italic text shown above should be replaced by the actual descriptions.
3. The design should clearly indicate the layout, colours, typefaces, sizes and styles used. The actual wording will not usually be shown. An alternative approach would be to supply a name for a file where the text could be found.

Web site/presentation design

4. The same ideas could be used for a web site design, or a presentation. In those cases, a sketch like this would be required for each page of the web site, or each slide of the presentation.

7. A simple plan – level 2 desktop publishing – unit standard 2788

This example uses the brief given in Example 2 above.

Plan

Purpose: To provide a desktop publication that advertises Anywhere College to parents of prospective year 9 students.

1. *Decide on the format of the final document*
2. *Check to see what sort of pictures and text are available*
3. *Select suitable pictures and text to use*
4. *Create the design for the document, showing the layout of the pages*
5. *Create the document, adding text and graphics according to the design*
6. *Check the spelling and page/column breaks in the text*
7. *Select and add the enhancements*
8. *Adjust the layout as necessary to remove any widows and orphans, or missing words*
9. *Print a draft and evaluate it against the brief*
10. *Modify the document if required.*

NOTES

1. This is a simple plan; it does not include details of the evaluation because these are specified in the unit standard itself.
2. In a simple plan, the reasons for candidate choices need not be expressed. In a more complex plan, candidates should be prepared to justify their selections of material, methods of evaluation, or changes made as the project progresses.

8. An evaluation – a level 3 web site– unit standard 18737

This is an example of what a student might supply.

Proposed evaluation procedure

1. *I will test all the links to ensure that they operate correctly, and that all pages have the required links on them.*
2. *I will load all the pages to ensure that they display as intended in the design.*
3. *I will check the pages for spelling, readability and legibility. I will change colours, text size and typeface as required.*
4. *I will check the web site against the specifications in the brief.*
5. *I will check to see that the required outcomes of the brief are met.*
6. *I will record any changes.*

NOTES

1. This has been written as if it was a candidate's own work. It could just as easily have been expressed in a different way.
2. The **Testing** section of the evaluation is largely covered in parts 1 and 2 above.
3. The **Applicability** section is covered in part 5.
4. The **Checking** section is covered in part 3.
5. The **Consistency** section is covered in parts 4 and 5.
6. The **Documentation** section is covered in part 6.

Planning in the workplace

Those of you performing workplace assessments may find it difficult to reconcile what is required for planning within a unit standard with what actually happens 'on the job'. So, what is actually required as far as planning in the workplace goes?

Planning tends to be carried out differently in the workplace than, for example, a training establishment. In the workplace, the emphasis is normally on getting a job done within a limited period of time. Whilst full-scale written planning would be great in a perfect world, time constraints in the workplace often mean that planning is done as part of the project outcome. Therefore, be broad-minded when you are looking at planning evidence – it may often be more appropriate to question your candidate orally about their planning, rather than having them provide you with written evidence.

Briefs may also be given in all sorts of contexts, from a casual suggestion in the tearoom, to discussions as parts of teams, to noticing an area that needs improvement and wanting to solve the problem. Normally the brief starts as a basic statement, e.g. "We're having a lot of problems with the spreadsheet we're using to cost out photocopying, and we'd like a better solution". The candidate then has to spend quite a bit of time investigating the issue/s and determining the best method to employ to provide a solution. This may involve watching tasks being carried out, asking questions to understand relevant issues better, and getting a 'feel' for the requirements that will need to be incorporated into the solution.

Generally, the more complex the task (as denoted by the level on the unit standard), the more questioning and investigation must occur before the candidate can provide an appropriate workplace solution. This whole 'investigation' process therefore becomes part of the brief and is likely also to merge into the planning stage. It is important that you, as the assessor, gain evidence that this process has been carried out… again, either by questioning the candidate orally or seeing written evidence of the data that supports investigation of the issue/s.

A scenario for three database standards at levels two, three and four has been provided below. The scenario is based within the same company; however, at each level the depth of understanding and work required is significantly different. The scenarios summarise the original "we've identified a problem" concept, along with providing the information that would normally be identified by the candidate through investigation. Hopefully, this will give you an idea of what you may be looking for at the different levels.

1. Level two assessment task – unit standard 2786

Omega is an independent insurance sales company employing ten brokers in its three branches. The brokers sell insurance products for four major insurance companies. The company is overseen by a head office, which coordinates and tracks sales from the three branches.

Omega's Head Office is responsible for tracking all client details. At present, client information is transferred from insurance proposal documents onto manual index cards and kept in the office administrator's filing cabinet.

On a recent occasion when the administrator was on leave, a client phoned to advise a new address and the relevant card could not be found. Unnecessary duplication also occurs when monthly newsletters are sent out to all clients. An example card is shown below:

Client No:	1
Name:	Mr David Drury
Initials:	PD
Address:	91 Antigua St Redwoodtown Blenheim
DOB:	17/10/1959
Current?	☑

The back of the card contains an area for miscellaneous notes, including details such as policy information, dates for policy renewals, etc.

Omega recognises the problems with the current system and has decided to update to a computerised database. They have tasked you with creating a flat-file database to record client data. As part of your job as database designer, you will be responsible for transferring the client data from the existing index cards into the database. However, due to the large amount of information held on the backs of the cards, the company administrator will enter the notes at a later date.

When completed, the database must provide Omega with the following information:

- clients who are 'current' (i.e. still have active policies)
- addresses of people who live in specific locations, e.g. Kaikoura

2. Level three assessment task – unit standard 2787

Omega is an independent insurance sales company employing ten brokers in its three branches. The brokers sell insurance products for four major insurance companies. The company is overseen by a head office, which coordinates and tracks sales from the three branches.

Mr Joe Sands, Managing Director of Omega, uses weekly sales data to check company and broker performance. He is interested in which brokers are writing the most sales each week, along with which companies and products the sales are being written for. He is also keen to see which branch performs the best each week.

Unfortunately, at present, all sales data are kept in a manual filing system. As sales come in, the company administrator photocopies them for the records, and then adds the sales data into a book.

The sales book is laid out as follows:

Date	Surname	First Name	Company	Product	Premium	Commission	Broker	Branch
6/01/2003	Czepanski	Ric	AMI	Car	$345.99	$51.90	Grace	Kaikoura
7/01/2003	Jones, A	Alana	Sun	Car	$225.45	$33.82	Perema	Kaikoura
7/01/2003	Tuitavuki, R	Rikki	NZI	Car	$1,188.55	$178.28	Vujanic	Nelson

The manual sales book is also reproduced as a spreadsheet. At the end of the week, this file is used to calculate the total sales for each broker, branch and company. This is a time consuming chore requiring much duplication of data. There are often errors in the figures due to data transposition or incorrect formulas.

Mr Sands would like a more efficient system to generate the sales data he requires. He would like a database where the sales data are entered only once, preferably via a method that is easy for his administrator to use.

From the database, Omega needs to produce the following reports:

- premium and commission breakdown by Branch
- premium and commission breakdown by Broker
- premium and commission breakdown by Company, with subtotals for each Product

Multiple data may be combined on one report, as long as all details above are included. All reports must be formatted with the company logo at the top and date and page number information at the bottom of each page. The corporate colours are blue and purple and Mr Sands would like these colours to be incorporated into reports.

He is also interested in printing out the following specific information:

- all sales data for clients whose surnames start with the letter “S”.
- all sales data for Sun House insurance with a premium over $350.00.
- all sales data for the week of 13-17 January 2003.
- all sales data for AMI insurance sales for brokers Moana Grace and Kim Mony.

As this information is for his use only, it does not need to be in report form but does need to be printed.

As Mr Sands is a very busy man, the company administrator will be expected to use the database you create. To this end, you will need to write a simple user document with instructions as to how the various areas of the database should be used.

The company administrator has provided a copy of the spreadsheet file to save you manually re-inputting the sales data.

3. Level four assessment task – unit standard 18742

Omega is an independent insurance sales company employing ten brokers in its three branches. The brokers sell insurance products for four major insurance companies. The company is overseen by a head office, which coordinates and tracks sales from the three branches.

Currently Omega uses two separate flat-file databases to track sales and client information. The tables are laid out as follows:

Date	Surname	First Name	Company	Product	Premium	Commission	Broker	Branch
06-Jan-03	Heremia	Tawera	Sun	Contents	$89.76	$22.44	Nepia, M	Blenheim
06-Jan-03	Chang	Ho Chi	Sun	Contents	$107.65	$26.91	Li, G	Nelson
06-Jan-03	Allan	Clifford	FAI	Car	$345.99	$103.80	Perema, K	Kaikoura

Title	FirstName	Surname	Initials	Address	Suburb	City	DOB	Current?	Notes
Mr	Tavita	Fa'agase	T.K.	91 Antigua St	Redwoodtown	Blenheim	17/10/1959	Yes	
Ms	Mihi	Jameson	P.M.	9 Hazledean Dr	Stoke	Nelson	27/12/1957	No	
Mr	Yoshi	Lee	Y.	22 Taylors Avenue	Spring Creek	Blenheim	13/08/1971	No	

Mr Joe Sands, Managing Director, is convinced there is a better way to do 'administrative' business. Whilst it is a simple matter to input the data, Mr Sands has noticed the results are not always accurate due to 'typos' when the data is transferred from one table to another. The administrator has complained about the large amount of duplication, with the same values often having to be re-entered row after row. Creating the reports the company requires is a difficult procedure and the administrator is the only person proficient at generating the reports the Managing Director requires. All hell breaks loose when the administrator is sick or on leave!

Mr Sands has hired you, a relational database designer, to determine if the existing databases can be modified to better suit the company's needs. Any database you create will need to be accompanied by a simple user document with instructions as to how it should be used.

You have decided to 'take the job' and create a relational database for Omega. To this end you have spent a week at the company observing them going about their business – and asking lots of questions! You have determined the following:

- Each day, insurance proposals are delivered to the Head Office. The company administrator copies the documents and inputs client and sales details on the computer. Currently there is no link between the clients and sales databases, so client data has to be entered twice.
- Omega has three branches:
  1. Blenheim
  2. Kaikoura
  3. Nelson
- The Blenheim brokers are:
  Graeme Henry, Marcy Nepia, and Hank Yorich
- The Kaikoura brokers are:
  Kavae Perema, Kelly Grace, and Teresa Norton

- The Nelson brokers are:
  Gerald Li, Kim Mony, Yvonne Vujanic, and Lester Jameson
- Omega sells insurance for four companies:
  1. AMI
  2. FAI
  3. NZI
  4. Sun
- For each company, the policy types can be broken down into:
  - Car
  - House
  - Contents
- Brokers are paid a set percentage of the premium as their commission. These rates are the same for all companies. The rates are:
  - Car insurance 15%
  - House insurance 17.5%
  - Contents insurance 22.5%
- The company receives many phone calls from clients either wanting or changing information, e.g. broker name, new address, change of name, etc.
- The administrator receives many enquiries about client details from the brokers in each branch. Some items you have seen requested include: client address lists (for mail-outs), upcoming client birthdays (for cards), client lists with policy details (for broker files), and premium/commission details (for budget and pay run). Sometimes the request comes in from a single broker; at other times it is the branch that requires the information.
- All of Omega's reports are laid out with the corporate logo at the top, and the date and page number in the footer. Corporate colours of blue and purple are used on all standard paperwork.
- The Managing Director requires weekly and monthly sales reports, broken down by company, product, broker and branch. He uses this information to rate broker and branch performance, along with determining which company and products the brokers write the most business for. This information also allows him to negotiate promotions from the insurance companies, and run competitions within Omega branches.
- Reports get sent from head office to the branches each week via email.

To assist in your creation of the database, the Omega administrator has provided you with the following files:

- Clients.mdb (client details database)
- Sales.mdb (sales details database)
- Omega.jpg (corporate logo)