



education

Department:
Education
REPUBLIC OF SOUTH AFRICA

COMPUTER APPLICATIONS TECHNOLOGY

GUIDELINES FOR PRACTICAL ASSESSMENT TASK

2010

These guidelines consist 26 pages.

Computer Applications Technology

Practical Assessment Task (PAT)

2010

Guidelines for the Teacher

This section consists of 6 pages.

1. The PAT in Computer Applications Technology

The 2010 Grade 12 PAT requires the presentation of a comprehensive report. The learners are required to investigate the health style (e.g. eating and exercising habits) of school children and write a report on their findings. Recommendations promoting a good life style (e.g. eating and exercising habits) to prevent current and future health problems must be made.

The learner must generate a report using four application programs (a word processor, spreadsheet, database program and a fourth program such as a presentation program) in an integrated manner in order to communicate his/her findings and recommendations. The report should include examples and/or evidence that will explain the problem and demonstrate **what** the current state of affairs is; **why** it is a problem or could become a problem and **how** the problem could possibly be addressed.

In order to do so, the learner must:

- Focus on aspects for healthy living such as the quality and quantity of foods one eats and exercise programmes one follows. Take into consideration the eating and exercising habits of learners; risks for diseases such as diabetes, high blood pressure, high cholesterol levels, suggestions for healthy living, etc.
- Find/research information on the habits of learners, why these habits might be a problem or could become a problem, present data/statistics to support this. Show through data/information processing how this could be addressed and what could possibly be done to encourage a healthy life style.
- Plan and create electronic documents that could be used for gathering information/data (e.g. a questionnaire created in a word processor), processing information/data (e.g. a spreadsheet), storing data (e.g. a table in database), extracting information (e.g. queries in database), etc.

The PAT includes the planning process and related evidence along with the **learner's** findings and suggested recommendations. It is about the **process** of planning as well as finding and accessing information to investigate a matter and present the findings and recommendations in a report **using** the application programs in an integrated manner.

2. Planning for the task

2.1 Description

In Computer Applications Technology learners are given a scenario for the PAT activity. The learner may choose his/her **own** topic or focus area within the scenario.

The PAT is completed and assessed in phases. Each phase has one or two tasks. The documentation for each task is submitted at specified intervals on dates set by the teacher. These tasks are assessed as they are submitted.

Summary of the tasks for the different phases:

Phase	Task	Marks	%
Phase 1	Task definition, find, access and evaluate information	45	30
Phase 2	Use of information – plan, process, analyse	50	33
Phase 3	Use of information – synthesise, report	55	37
		150	100

2.2 Requirements of the task

The learner must adhere to the following minimum criteria in developing the report. The instructions for the different tasks in the learner section of this document provide more detailed information.

- Learners have to define the problem, e.g. state what needs to be done, and highlight the essence of the task.
The structure of the task definition should be such that the learner states exactly what he/she is going to do (see learner instructions for an example):
 - About exactly 'what'
 - The 'how' of the investigation and the process involved
 - What he/she is going to present and how
- Learners must identify the information that they will need to investigate the matter and make recommendations by posing relevant questions. The questions are aimed at obtaining the relevant information/data. The answers to these questions will guide their investigation and writing the final report.
- Learners must determine where they will find the information and decide on how they will find the information as determined by the questions posed, as well as plan what tools they will need to find information, e.g. questionnaire/survey, etc.
- The learner must find the information/data and engage with the information/data: search, locate, access, extract information/data and determine the relevance of the information/data found.
- Learners must indicate where and how the information/data they have found will assist in their investigation and recommendations when writing their report.
- The learner must start planning the final report by studying the information/data found. He/she must plan how these will be used/manipulated/processed to answer the questions posed as well as how the different application programs will be used to facilitate the investigation and recommendations.
- The learner must use the information/data found and evaluated by manipulating/processing it, using appropriate application programs.
- The learner must compile a report to present his/her findings and recommendations.
- In investigating the matter and writing the report, the learner must demonstrate the appropriate use of the following application programs:
 - Word processing program
 - Spreadsheet program
 - Database program
 - The fourth application program that the learner studied, e.g. presentations program.

The learner is expected to do his/her planning and organisation in phases and to hand in evidence of the process.

3. Instructions for the learners

See the Learner Section of this document.

4. Resources

Learners will need the following resources to complete the task:

- Access to a computer with the following programs:
 - Word processing such as Word
 - Spreadsheet such as Excel
 - Database such as Access
 - Fourth (additional) package, e.g. presentation program such as PowerPoint
- Access to the Internet, a search engine such as Google, electronic reference material such as Encarta, printed media and expert opinion.

The task must be facilitated and monitored continuously by the teacher.

5. Assessment of the PAT

See the Assessment Tools Section for the assessment sheets for the different tasks.

The assessment tool for each task must be supplied to the learner with the instruction sheet for the task.

Learners should study the marked assessment tool after each task and reflect on their efforts. This will help them to improve on the subsequent tasks and the final product. Note, however, that the tasks should not be re-assessed.

6. Recording and Reporting

- Each teacher will determine the dates for the handing in of the different tasks in each phase, taking into account the final dates on which projects must be submitted for final moderation.
- After each task learners will hand in the required document(s) after which the teacher will assess the task, record the mark and give feedback to the learner in the form of remarks on the assessment sheet.
- After the final product is handed in, the marks for the different tasks in each phase are added and converted to 100 or 25% of the final promotion mark.
- Candidates may revisit previous tasks and make changes in order to improve the subsequent tasks and the final product. The tasks will, however, not be re-assessed.

7. Guidelines for managing the PAT

There are different possible approaches to managing the PAT:

Option 1:

- The teacher could dedicate one or two periods per week to the PAT while simultaneously continuing with normal teaching to complete the Grade 12 curriculum in the rest of the week.
- If he/she chooses this option, he/she should start with the PAT towards the end of the first term, completing one phase per term.

Option 2:

- The teacher could dedicate a continuous period of time to the PAT, e.g. the last week of each term, completing one phase per term.

The teacher must plan his/her work schedule according to the option that he/she prefers. It is suggested that the teacher 'registers' the learners' topics when they start with phase 1 to avoid 'instant projects' that might possibly not be the learner's own work.

8. Hints

Before learners start with Phase 1, first explain the PAT and provide an overview of the process to the learners.

Discuss the task and the topic with the learners. Allow them to ask questions and ensure that they clearly understand the problem to be solved.

Discuss various aspects and the end result. Focus on the solution, the process and what the final product might look like and consist of.

Discuss some examples with the learners. Encourage them to come up with ideas on how they will use the different applications to direct the investigation and discuss the appropriateness thereof.

Ask the learners to first brainstorm and create a 'brainstorm' document where they indicate their initial thinking/ideas, headings and sub-headings. Check their ideas and help them to determine the scope of their investigation.

Discuss each phase (the 'what' and the 'how') before learners start with that phase. Facilitate each phase while learners are busy doing it and provide feedback where and when necessary.

Allow learners to read each other's task definition and questions and make suggestions to each other.

Although a different scenario was used, it might be useful to show learners both good and bad examples of the PAT from the previous year(s).

NOTE:

You could use some of the ideas in the following table to guide learners.

Internet Information finding	Survey/Questionnaire	Excel	Access	Word	Fourth package
Foods and their kilojoules GI indexes of different foods Dietary Reference Intake (DRIs) Diets for certain health conditions Kilojoules burnt through exercise Possible source: http://www.nutritiondata.com/	Find out school children's attitudes towards healthy life styles, exercise programmes, eating habits, exercise habits, health conditions	BMI calculator Kilojoules intake Effect of exercise on calorie intake Convert calories to kilojoules Possible source: http://www.dietandfitness.com/body-fat-percentage-index.php/	Energy values of different foods Glycaemic indexes of different foods Kilojoules consumption of different activities/exercises DRI table	Questionnaire Awareness brochure or pamphlets Brochures/Pamphlets for healthy life style tips, e.g. food pyramid Report	Awareness presentation Report summary

Suggestion: refer learners to a website or give them an article that could serve as good introductory background to the topic and to start them thinking. Read more about this in Jamie McKenzie's article: <http://fno.org/mar08/searching.html>

Articles to read to help the teacher to understand and prepare for the different tasks: (Mostly from Jamie McKenzie's website: From Now On – www.fno.org)

For a good overview: The research cycle
Big 6 Information Management Model

<http://fno.org/oct97/researchcycle.html> and
<http://www.big6.com/>

Phase 1: The question is the answer
Questions and questioning:
Searching for the Grail
Comparing and evaluating web information sources:
When the book? When the net?

<http://fno.org/oct97/question.html>
<http://fno.org/nov99/techquest.html>
<http://fno.org/mar08/searching.html>
<http://fno.org/jun97/eval.html>
<http://fno.org/mar2000/whenbook.html>

Phase 2: Deep thinking and deep reading
Crunching numbers
Numerical Literacy

<http://fno.org/mar97/deep.html>
<http://www.fnopress.com/CRUNCH.htm>
<http://fno.org/PL/numlit.htm>

Phase 3: Putting it all together
A taxonomy of synthetic thought and production
Improving writing with the Six Traits

<http://fno.org/bio/SYN.HTM>
<http://www.fno.org/may09/synthesis.html>
<http://fno.org/bio/TRAIT.SHTM#anchor1010386>

Computer Applications Technology

Practical Assessment Task (PAT)

2010

Instructions for the Learner

This section consists of 10 pages.

1. Planning for the task

1.1 Topic

Statistics of overweight and obesity have been ringing alarm bells in South Africa and studies are pointing to the fact that South Africans are eating themselves into an early grave.

Findings have also indicated that large numbers of South Africans suffer from high blood pressure, high cholesterol level, or diabetes. Furthermore, South Africans eat only half of the World Health Organisation's recommended 400 g of fresh fruit or vegetables per day.

The health dangers of bad eating habits and inactive life styles are reasons for concern. The Department of Basic Education has therefore launched a **Healthy Life Style** campaign to create awareness regarding these issues.

Learners need to be made aware of, inter alia:

- Kilojoules
- BMI (Body Mass Index)
- Daily kilojoules needed and kilojoules burned
- Fat and GI indices
- DRI (RDA) for nutrients
- Etc.

It is the quality and quantity of the foods you eat, and how you exercise, that play the greatest role in determining your appearance, weight, and risk of weight-related diseases.

Exercise plays an important role in maintaining a healthy body.

Eat healthy foods in reasonable quantities and exercise regularly to maintain good health.

Think how many times you've heard someone say, "I'll have dessert and work it off later." Food and kilojoules calculators will show you, that dessert can equate to hours of exercise -- something you're not likely to actually do.

Better to eat well in the first place.

As a Grade 12 learner you will investigate life style habits (e.g. eating and exercising habits) of school children and make recommendations that will make school children aware of unhealthy habits and show them how to live a healthy life style.

You must generate a report for the organisers of the campaign using four application programs (a word processor, spreadsheet, database program and a fourth program such as a presentation program) in an integrated fashion to communicate **your** findings and recommendations. You should focus on your immediate community such as your household, class, school, etc. The report should indicate what the eating habits of schoolchildren are such as the quality and quantity of food they eat, their exercise habits, etc. and what your findings and recommendations would be.

In preparing the report you must:

1. Focus on aspects for healthy living such as the quality and quantity of foods one eats and exercise programmes one follows. Take for example into consideration the eating and exercising habits of learners; risks for diseases such as diabetes, high blood pressure, high cholesterol levels, suggestions for healthy living, etc.
2. Find/Research information on the habits of learners, why these might be a problem or could become a problem. Present data/statistics to support this. Show through data/information processing how this could be addressed and what could possibly be done to encourage a healthy life style.
3. Show through data and information processing what the trend is, how problems could be addressed and what could possibly be done to solve or alleviate the problem or make school children more aware of healthy life styles.
4. Plan and create electronic documents that could be used for gathering information/data (e.g. a questionnaire created in a word processor), processing information/data (e.g. a spreadsheet), storing data (e.g. a table in database), extracting information (e.g. queries in database), etc.
5. In completing the task you will apply the following knowledge and skills that you have studied in CAT:
 - Information Management
 - Find, collect and evaluate information and data
 - Manipulate/Change/Process data/information to represent the matter and what you want to say
 - Present the information to someone or to an audience
 - Word processing
 - Spreadsheet
 - Database
 - The fourth package, e.g. a presentation program
 - Internet

1.2 Tasks of the PAT

The PAT is completed and assessed in phases. The tasks for the different phases are summarised as follows:

Phase	Task	Marks	%
Phase 1	Task definition, find, access and evaluate information	45	30
Phase 2	Use of information – plan, process and analyse	50	33
Phase 3	Use of information – synthesise and report	55	37
		150	100

The documentation and/or evidence of what you do in each task are submitted on dates set by the teacher. These documents are assessed as they are submitted and the marks for the task are recorded.

After the teacher has returned the assessment sheet for the task, study the feedback from the marked assessment tool and reflect as follows:

- Revise the steps completed so far
- Look at the steps that you still have to complete
- List things that you did not or still do not understand about the task
- Ask yourself whether you have enough material and information for the next step/task in the process
- List questions that you can ask your teacher/others that can help you to complete the task

This will help you to improve the next tasks and the final product. **However, note that the tasks will not be reassessed.**

1.3 What you will need to complete the task

You will need the following resources to complete the task:

- Access to a computer with the following programs:
 - Word processor such as Word
 - Spreadsheet such as Excel
 - Database such as Access
 - Fourth (additional) package, e.g. presentation program such as PowerPoint
- Access to the internet and a search engine such as Google, electronic reference material such as Encarta, printed media and any other material/people that will help you to find the information that you will need

The task must be completed under controlled conditions and facilitated and monitored by the teacher.

1.4 Requirements of the task

Your aim is to investigate the matter. Appropriate use of the programs refers to how the programs were used to understand the problem properly, to find information to direct your investigation, help you to find trends, patterns and answers and to help you to make recommendations in writing your final report.

(See instructions for the different tasks for more detail.)

2. Instructions for the different tasks

The instructions for the different tasks are as follows:

Phase 1**Due date:** _____**Name:** _____**Class:** _____**Task 1: Task definition, find, access and evaluate information**

In completing this task you must:

1. Provide a broad description of the task and the problem that you have to solve. Study the scenario and describe in your own words what the problem is and what needs to be done, the concerns you will address, etc. This should tell the reader exactly what you are going to do, e.g.

I am going to investigate the life styles of learners in my class. From this investigation I will report to the organisers of the health style competition. I will indicate what the trend is and make suggestions to recommend some ideas to encourage a healthy life style. In order to produce a quality report I will apply quality control to find information and analyse this considering several relevant factors. I will use the Office package as a tool to achieve my objective.

2. Write down your main question. The purpose of the main question is to tell the reader exactly what your investigation will be, e.g.

Is there a common trend regarding life styles among learners in my class and what will the implications be for healthy living?

3. Identify the main aspects, e.g. exercise, food intake, health risks, weight levels. These could become possible headings/topics and subheadings/subtopics.

4. Write down other questions for each topic/heading. In total you should have at least a set of 15 – 20 questions that will help you to identify the type and amount of information you will need (i.e. that which will help you to understand the problem, what the current state of affairs is, why it is a problem, how the problem or potential problem can be solved or alleviated, what information will be needed to assist decision making or direct future actions, what processing needs to be done, what data/information needs to be stored, what information needs to be extracted, etc.) to complete the task and solve the problem.

A good quality investigation will reflect different levels of thinking. To ensure that you will have a good quality report, identify the level for each question, using the following guidelines:

Level 1: Questions that can be answered explicitly by facts, e.g. questions starting with words such as What? When? Where? Who? How many? etc.

Example: *What are the BMI indices of the learners in my class?*

Level 2: Questions that will help you to examine, explore, query, e.g. questions starting with words such as Why? How? etc.

Example: *Why are some learners overweight?*

Level 3: Questions that will help you to adjust, alter or predict, e.g. questions starting with words such as If? What if? etc.

Example: *What will the result be if learners eat the recommended quantities of the different food types as recommended by the World Health Organisation?*

Level 4: Questions that will help you to make a judgment, critique, review or find meaning of some sort, e.g. questions starting with words such as *Would it be better if? What recommendation? How can I determine? What would be the best way?* etc.

Example: How can I determine if a learner is at risk of suffering from high blood pressure, cholesterol or diabetes?

- Label questions according to type/level. This will help you to adjust questions if necessary.
- Arrange questions according to headings/topics or subheadings /subtopics.

5. Plan on where you will find information/data to help you to answer the questions. Possible sources to consider (other than the internet): electronic encyclopaedia such as Encarta, printed media such as magazines, brochures, newspapers, books, etc., opinion polls/surveys, interviews, e-mails, SMSs, telephone calls, etc.

- Plan on how you are going to find the data/information on the internet that will answer the questions to help you to complete the task, e.g. using key words/phrases for internet searches.
- Plan on how you are going to find information/data from questionnaires/surveys/interviews that will answer the questions to help you to complete the task/solve the problem, e.g. write down the questions for the interview/questionnaire/survey.

Example: If you want to answer the questions posed in the examples above, you need to ask questions such as the following in the questionnaire or during the interview:

What is your height?

What is your weight?

How often do you exercise?

What type of exercise are you doing?

Do you or any of your parents suffer from high cholesterol, diabetes or high blood pressure?

List the food that you eat on a daily basis.

Do you check the GI or Fat indices of the food that you eat?

Remember:

- 'Closed' questions are better for a survey/questionnaire, e.g. questions with only one answer or where people can select an answer from a list provided.
- Do a trial run before doing a survey to make sure the results can be analysed (graphs etc.)
- Open-ended questions are sometimes difficult to analyse.

NOTE:

You will need about 20 – 30 completed questionnaires/survey forms.

- Plan on how you are going to find information/data from other sources (such as printed media, etc.) that will answer the questions to help you to complete the task/solve the problem.

Example: DRIs for different nutrients, food and their kilojoules value, burning kilojoules through exercise, etc.

6. Indicate for each question how answering that question will help to complete the task or solve the problem, e.g. *obtaining the height and weight of the learners will help to calculate the BMI.*
7. Access relevant/appropriate data/information for all the main aspects (topics/headings and subtopics/subheadings).
8. Provide evidence of the data/information found, e.g. notes taken from books, clippings from magazines, newspapers, copies of printed material, brochures, screen shots from electronic material, printouts of websites, your survey or opinion poll, etc. Make a summary, highlight important facts, add comments, etc.
9. Provide evidence that the data/information found is linked/cross-referenced to questions, e.g. highlight a question and all information related to that question in the same colour, insert comments, etc.
10. Write down how you will determine whether the information is trustworthy and of good quality for the different types of sources, e.g. look at accuracy, authority, currency and coverage.
11. Create an appropriate electronic file structure, with sub-folders, that is clearly labelled to organise and store documents and evidence.
12. Keep details of all bibliographic information to use when compiling your final report.

Submit an appropriate file structure that contains:

1. A document (\pm 2-3 pages) prepared in an appropriate application containing:
 - 1.1. The description of the task and the problem in your own words.
 - 1.2. The main question.
 - 1.3. The set of questions posed (at least 15 - 20 questions):
 - Labelled according to level
 - Arranged according to topics/headings or subtopics/subheadings
 - With sources of data/information for each question,
 - Indicate for each question how the information/data will answer the question and how it will assist in finding a solution to the problem.
2. Evidence of sources and information (folder containing electronic documents with single electronic document containing links to evidence and a paper folder for hard copy evidence such as completed surveys/questionnaires) found such as:
 - Completed questionnaires and surveys
 - Summaries of completed surveys and questionnaires
 - Notes on interviews conducted
 - Clippings, photocopies and scanned documents
 - Printouts, screen shots and disk/folder with electronic copies, etc.
3. Evidence that the different types of sources and information have been checked for trustworthiness and quality.

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Phase 2**Due date:** _____**Name:** _____**Class:** _____**Task 1: Use information – Planning**

In completing this task you must:

1. Create a framework using a diagram, mind map, word outline or storyboard etc. to indicate:

- How the information/data will be organised and used
 - How you will organise your information based on the questions, e.g. use headings and subheadings in the final report
 - Integration between the packages
2. Start planning the final report:
- Under each heading and subheading:
 - Briefly note what will be in that paragraph
 - Indicate where and how you intend using the applications

This task is meant to plan every section and paragraph of your final report in which you will present your findings/solution/recommendation to the problem.

*Example of possible partial framework***Introduction** {Heading 2}*{Background to the problem}*

Learners' health styles and habits
 Diseases regarding unhealthy life styles
 General issues regarding findings
{give context of report}

Weight problems {Heading 2}

Overweight and obesity as calculated through BMI

Learners' eating habits
 Excel graph to indicate weight trends
{Remember to place a proper caption underneath each graph}
 Excel graph to indicate trend with national trend

Possible causes of overweight and obesity {Heading 3}

...*{Indicate which information regarding causes will be discussed here}*

...

Exercise {Heading 2}

...*{Indicate which information regarding exercise will be discussed here}*

Health risks

...*{Indicate which information will be discussed here}*

High blood pressure {Heading 3}

...*{Indicate which information will be discussed here}*

Cholesterol {Heading 3}

...*{Indicate which information will be discussed here}*

Diabetes {Heading 3}

...*{Indicate which information will be discussed here}*

Conclusion {Heading 2}

...*{Keywords regarding findings, recommendations or solution}*

Task 2: Use information – Processing/Analysing

In completing this task you must:

1. Create the documents (at least ONE per package) using the application programs to manipulate/process information/data to answer questions:
 - Create and use the spreadsheet to manipulate/process/analyse information/data to answer questions or contribute to the solution, e.g. calculating BMI
 - Use formulae and functions to manipulate and/or process/analyse data
 - Integrate with other programs
 - Use graphs to display results of processed data for easy interpretation thereof
 - Create and use the database to store/manipulate/process/extract information/data, e.g. fat and GI indices of food or exercises and the kilojoules they burn
 - Create table(s) with enough fields and records to provide data in meaningful records
 - Create meaningful queries
 - Create meaningful reports
 - Integrate with other programs

Submit an appropriate file structure that contains:

1. Documents prepared in an appropriate application containing a framework of how information will be organised
2. The completed documents and electronic files used for processing/manipulating/analysing information/data:
 - Completed spreadsheet
 - Completed database

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Phase 3**Due date:** _____**Name:** _____**Class:** _____**Task 1: Use information – Final presentation/synthesis**

In completing this task you must:

1. Finalise your report
2. Prepare the report and the presentation.
 - Decide which of the information manipulated/processed will support your discussion/proposal and will be used in your final report and presentation.
 - Present the findings/solution/recommendation supported by evidence collected/processed in previous tasks.
 - Use the word processor to compile the final report.
3. Use the fourth package to create a summary or a visual presentation on the report.

Submit an appropriate file structure that contains

1. A report (± 10 pages) using the word processor containing the following:
 - Introduction
 - Body/Paragraphs discussing the task and the solution including information, graphics/images, tables, graphs, queries, reports created in Phase 2 to support the recommendation or findings
 - Conclusion – give the solution/make a proposal/present your findings/idea

The report must include:

- Title page
 - Table of contents
 - List of references
 - Hyperlinks to documents/evidence from previous phases
2. A summary of the report/findings/plan/proposal/solution/recommendation or a visual presentation on any related matter using the fourth package that you studied, e.g. slideshow(s) using a presentations program such as PowerPoint **[55]**

Computer Applications Technology

Practical Assessment Task (PAT)

2010

Assessment Tools

This section consists of 9 pages.

Phase 1 Task definition, find, access and evaluate information

Name of learner: _____

Phase 1: Criteria					Maximum Mark	Mark Obtained
1	The learner describes the task/problem in his/her own words:				4	
	4	3	2	1		
	Clearly described and unambiguous – clearly states where the learner will go and what needs to be done Learner clearly understands all aspects of the task/problem	The description is clear but with minor shortcomings Learner understands most aspects of the task/problem	The description is vague, leaving the reader unsure of what the purpose is Learner understands some aspects of the task/problem	The description is so vague that no discernable purpose can be found Little evidence of understanding the task/problem		
2	The main question has been posed to help complete the task direct the investigation				1	
3	The learner created a set of questions (at least 15 – 20 overall) to help answer the main question				1	
4	Appropriate headings and sub-headings have been identified				1	
4	The learner created questions for all headings and sub-headings identified				1	
5	Questions are grouped/arranged according to headings/subheadings				1	
7	All the questions are relevant to the topic				1	
8	The questions are labelled according to level				1	
9	Overall variety/quality of questions				4	
	Level 1: Can be answered explicitly by facts, e.g. questions starting with What? When? How many? Where? Who? Level 2: Help to examine, explore, query, e.g. questions starting with Why? How? Level 3: Help to adjust, alter or predict, e.g. questions starting with If? What if? Level 4: Help you to make a judgment, critique, review or find a larger meaning of some sort, e.g. questions starting with Would it be better if? What recommendations? How can I determine? What would be the best way?					
	4	3	2	1		
	Four levels of questions included	Three levels of questions included	Two levels of questions included	Only one level of questions included	No questions formulated	
10	It is indicated how the answer to the question will assist the investigation				3	
	3	2	1	0		
	For each question	For most questions	For less than 50% of the questions	No indication		
11	Possible sources of information are supplied for each question				3	
	3	2	1	0		
	For each question	For most questions >= 50% but < 100%	For less than 50% of the questions	None specified		
12	Variety of sources (Internet, other electronic, e.g. Encarta, printed media, questionnaires/surveys, interviews)				3	
	3	2	1	0		
	More than two different types of sources used	Two different types of sources used	Only one type of source used	No sources		

13	Survey or questionnaire				3	
	3	2	1	0		
	Most appropriate use of survey or questionnaire Will provide relevant data to help the investigation or answer the questions	Used and will provide some useful data to help the investigation or answer the questions	Used but not appropriately Data collected not always relevant	Not used		
14	Evidence of sources is available, e.g. completed questionnaires, interviews, photocopies, screen dumps or saved copies of websites Give two marks each for the following up to a maximum of 6 marks: (no evidence = 0)				6	
	Completed questionnaires/surveys or summary of questionnaires/surveys	Evidence of interviews conducted	Photocopies/clippings from printed media or scanned information from printed media			
	Printouts or screen shots of e-mails	Copies or screen shots of whole web pages from websites (not text copied to word processor only)				
	Other: List					
15	Data/information found is highlighted/marked/cross-referenced/annotated/linked to the questions asked or to groups of questions				3	
	3	2	1	0		
	For all major categories (headings/subheadings)	For most categories (headings/subheadings)	For less than 50% of the categories (headings/subheadings)	Not indicated		
16	Evidence that relevant/appropriate data/information were found, i.e. motivation that found information/data is likely to direct the investigation or answer the questions				3	
	3	2	1	0		
	For all categories (headings/subheadings)	For most categories – >= 50% but < 100% (headings/subheadings)	For less than 50% of the categories (headings/subheadings)	None		
17	Evidence that the different types of sources and information were evaluated against currency, authority, coverage, accuracy				3	
	3	2	1	0		
	Evaluated against all four criteria	Evaluated against at least three criteria	Evaluated against at least two criteria	Evaluated against only one criterion or no evidence		
18	Electronic file structure				2	
	2	1	0			
	Learner created an appropriate e-file structure with subfolders to store files and evidence that is clearly labelled Logical organization within structure	Created with minor shortcomings File structure not appropriate or not clearly labelled or no subfolders or no logical organization of documents within structure	Not created			
19	The spelling and grammar of the document were checked and corrected				1	
Total for Phase 1:					45	

Comments:

Phase 2 Task 1: Use information – plan
Task 2: Use information – process/analyse

Name of learner:

Phase 2: Criteria				Maximum Mark	Mark Obtained	
Planning – Task 1						
1	Planning document				3	
	3	2	1	0		
	Planning is clearly done by section and paragraph Learner clearly understands the problem and where he/she is heading Learner shows insight in planning and use of information	Planning is done by section and paragraph in most instances Planning shows some evidence of understanding and insight	Planning done, but not by section and paragraph	No planning		
2	The planning framework is created in an appropriate format, e.g. diagram, mind map, storyboard, word outline with headings and subheadings				1	
3	Organisation of information				3	
	3	2	1	0		
	Planning framework clearly indicates how information will be organised and used	Planning framework indicates how information will be organised and used with minor shortcomings	Framework given but not clear on how information will be organised and used	Not included		
4	Questions				3	
	3	2	1	0		
	Planning framework clearly outlines and indicates where the questions (grouped according to headings and subheadings) will be accommodated in the final report	Planning framework outlines and indicates where the questions (grouped according to headings and subheadings) will be accommodated in the final report but with minor shortcomings	Framework given but not clear on how questions will be accommodated	Not indicated		
5	Paragraphs				2	
	2	1	0			
	Planning framework indicates briefly what one could expect in each paragraph	Planning framework indicates briefly what to expect for some paragraphs/sections	No indication			
6	Planning document indicates how all four different application programs will be used to solve the problem				1	

7	Word processor				3	
	3	2	1	0		
	The use of the word processor is most appropriate in all instances in the context of the task/directing the investigation	The use of the word processor is appropriate in most instances in the context of the task/directing the investigation	The use of the word processor is not always appropriate	Not appropriate at all		
8	Spreadsheet				3	
	3	2	1	0		
	The use of the spreadsheet is most appropriate in all instances in the context of the task/directing the investigation	The use of the spreadsheet is appropriate in most instances in the context of the task/directing the investigation	The use of the spreadsheet is not always appropriate	Not appropriate at all		
10	Database				3	
	3	2	1	0		
	The use of the database is most appropriate in all instances in the context of the task/directing the investigation	The use of the database is appropriate in most instances in the context of the task/directing the investigation	The use of the database is not always appropriate	Not appropriate at all		
11	Fourth package				3	
	3	2	1	0		
	The use of the fourth package is most appropriate in all instances in the context of the task/directing the investigation	The use of the fourth package is appropriate in most instances in the context of the task/directing the investigation	The use of the fourth package is not always appropriate	Not appropriate at all		
Use of application programs – Task 2						
Spreadsheet						
12	Design				2	
	2	1	0			
	The design of the spreadsheet allows for easy interpretation of information	Information can be interpreted but there are minor shortcomings or some vague areas	Difficult to interpret or not clear			
14	Functions/formulae/calculations				3	
	3	2	1	0		
	Functions/formulae/calculations used are meaningful Definitely answers questions and contributes to the solution	Functions/formulae/calculations answer questions but with some minor gaps Contribution to solution not always clear or sometimes forced	Used but shows little evidence of understanding the problem	Not used		
15	Use of Graph(s)				2	
	2	1	0			
	Graph(s) included are meaningful and serve a purpose Definitely answers questions and contributes to the solution.	Graph(s) do not always serve a purpose or contribute to answering questions. 'Forced' in some instances	No graphs included			

16	Design of Graph(s)				2	
	2	1	0			
	Headings, labels, legends and formatting make it easy to interpret the graph Clear and easy to understand and interpret	Shortcomings make it difficult to understand and interpret	No graphs included			
17	Integration of spreadsheet with other programs				2	
	2	1	0			
	Integration is meaningful and has a clear purpose and would contribute to finding answers to questions	Integration does not always serve a purpose or contribute to answering questions. Forced in some instances	No integration			
Database						
18	Design				2	
	2	1	0			
	The design of the database allows for easy interpretation and capturing of information Good design principles used, e.g. field types, size, properties	Information can be interpreted and captured but there are minor shortcomings or some vague areas	Difficult to interpret or capture information and not clear o			
19	Table				2	
	2	1	0			
	Table definitely includes an appropriate number (20+) of meaningful records to answer questions and solve the problem	Could have included more records	No records or table			
20	Queries				3	
	3	2	1	0		
	Queries are meaningful Definitely answers questions and contributes to the solution	Answers questions but with some minor gaps	Shows little evidence of understanding the problem	No queries		
21	Reports				3	
	3	2	1	0		
	Reports are meaningful Definitely answers questions and contributes to the solution	Answers questions but with some minor gaps	Shows little evidence of understanding the problem	No reports		
22	Calculations				2	
	2	1	0			
	Calculations in reports and/or queries are meaningful Definitely answers questions and contributes to the solution	Answers questions but with some minor gaps Contribution to solution not always clear or sometimes forced	No calculations used in reports and/or queries			
23	Integration of database program with other programs				2	
	2	1	0			
	Integration of database with other programs is meaningful Integration has a clear purpose and would contribute to finding answers to questions	Integration does not always serve a purpose or contribute to answering questions. Forced in some instances	No integration			
Total for Tasks 1 & 2					50	

Phase 3**Task 1: Use information – Final presentation/synthesis**

Name of learner:

Task 1: Criteria			Maximum Mark	Mark Obtained	
Report					
<i>Introduction</i>					
1	Introduction			2	
	2	1	0		
	Problem clearly stated. Reader knows what the report is about	Some shortcomings	No introduction		
<i>Flow of thought</i>					
2	Organisation of information			2	
	2	1	0		
	Well organised using headings/subheadings that group related information together	Headings/subheadings do not always group related information	No information or no headings/subheadings used		
3	Graphics/images			2	
	2	1	0		
	Relevant and support or explain content in meaningful manner Woven into report	Do not always support or explain content or not always meaningful or not always part of report	No graphics/images or totally irrelevant		
<i>Problem (Hypothesis) and conclusion</i>					
4	Content vs. the original problem (hypothesis) – the questions posed in previous tasks			2	
	2	1	0		
	Content relates to the original problem/questions posed. Clear relationship throughout	Some shortcomings	No relationship		
5	Data or information			2	
	2	1	0		
	No duplication of data or information	Some data or information unnecessary duplicated	Many instances of duplication		
6	Findings			2	
	2	1	0		
	Clear and make sense	Not always clear or meaningful	Unclear or not meaningful		
7	Proposal/plan/solutions/recommendations			2	
	2	1	0		
	Well-supported by data or evidence in a meaningful manner	Some shortcomings – not always supported or not always meaningful	No data or evidence to support or not meaningful		
8	Hyperlinks to evidence			2	
	2	1	0		
	Active hyperlinks to supporting documentation and/or evidence	Some shortcomings, e.g. hyperlinks not active or not working correctly	No hyperlinks		

9	Conclusion			2		
	2	1	0			
	Conclusion answers the main question and provides a clear finding/solution/recommendation/ plan/ proposal	Conclusion does not answer the main question or does not provide a clear finding/solution/ recommendation/ plan/ proposal	No conclusion			
10	The learner created new knowledge/thoughtful ideas				3	
	3	2	1	0		
	Learner created new knowledge/thoughtful ideas. Conveys new knowledge/original ideas which effectively addresses original problem or issue	Conveys some new knowledge/original ideas which addresses original problem or issue	Conveys knowledge/ideas of others with regard to the original problem or issue	Little evidence of understanding the problem or issue		
<i>Physical outlay and handling of sources</i>						
11	Title page				1	
12	Table of contents				1	
13	References				1	
14	Sources cited correctly, using APA or Harvard method				1	
Word processing						
15	Table of contents is created automatically using a word processing function				1	
16	Automatic page numbering used on all pages, except cover page				1	
17	Spelling and grammar				2	
18	2	1	0			
	Spelling and grammar checked and corrected No evidence of obvious spelling and grammar errors	One or two errors	More than two errors			
19	Other advanced technique(s) used (at least 2 other – 2 marks each), e.g. automatic index, cross-referencing, bookmarks etc. List each of the techniques used.				4	
<i>Fourth package – Criteria for presentations, web authoring, desktop publishing¹</i>						
<i>Physical appearance</i>						
20	Title page/slide/front cover				1	
21	Table of contents or menu				1	
22	Introduction clearly states what the audience can expect				1	
23	The body slides/pages are arranged logically according to the content/subheadings				1	
24	Action buttons/hot spots/hyperlinks used to link to other sections/slides/supporting documentation				1	
25	Logical navigation through action buttons, hot spots or hyperlinks – adds value				1	
26	The conclusion suggests a solution/conveys a message				1	
27	The summary/solutions solves the problem stated in the introduction				1	
28	Graphics/images explain/enhance content/motivate solution/recommendation				1	
29	Appropriate and tasteful use of colours of background and fonts (consistent use of colour, appearances and styles)				1	
30	Appearance suited to target group				1	

¹ Suitable assessment criteria must be substituted if another package other than a web-authoring, presentations program or DTP package is used.

31	Spelling and grammar checked			2	
	2	1	0		
	Spelling and grammar checked and corrected No evidence of obvious spelling and grammar errors	One or two errors	More than two errors		
32	Uniform alignment and styles where needed to give professional appearance			1	
33	Quality of multimedia effects: sparingly, appropriately, tastefully and professionally used			1	
34	Quality of animation: tastefully used on text, images and graphs where it contributes to meaning			1	
35	Quality of transitions/timings with regard to animations: sparingly used, appropriate, tasteful and meaningful			1	
36	Slides/pages not too 'busy'			1	
37	Integration			2	
	2	1	0		
	Integration of fourth program with other programs has a clear purpose	Integration does not always serve a purpose Forced in some instances	No integration		
38	File organisation			2	
	2	1	0		
	Files and documents are well organised using folders and subfolders All files and folders are clearly labelled and easy to find Logical organisation within structure	Files and documents organised and labelled with minor shortcomings Not always easy to find or not clearly labelled	Files and documents disorganised, difficult to find		
Total for Tasks 1				55	