

Learning Assessment Guide

Unit Standard 8082 – Version 5

Analyse data and communicate information for a specified purpose

Level 4 – 8 Credits

Assessment Summary			
Learner to complete			
Learner's name:			
Employer:			
NSN no. (ROL):		DOB:	
Signed:		Date:	
Assessor to complete			
<input type="checkbox"/> Meets requirements <input type="checkbox"/> More training required <input type="checkbox"/> More evidence required			
Assessor's name:		Assessor's No.	
Signed:		Date:	

Before you begin...

- As well as this Learning Assessment Guide, you may also want to refer to the unit standard from the NZQA website (<http://www.nzqa.govt.nz>).
- Read the Trainee Information Kit. The kit contains important information and guidelines for Learners and can be found on the Learning State website (<http://www.learningstate.govt.nz>) under Learners, then Learning Assessment Guides.
- Check the learning resources available for this unit standard on the Learning State website (<http://www.learningstate.govt.nz>) under Learners, then Learning Assessment Guides.

The tasks in this assessment are designed to show your assessor that you can:

- Collate data for analysis to meet the requirements of a specified purpose
- Apply statistical analysis to the data
- Draw conclusions from resulting information
- Communicate information.

This Learning Assessment Guide is made up of:

- Tasks for you to complete.
- A Preparation Checklist to help you to prepare for the assessment
- A Manager or Team Leader Verification Form
- Assessment Guide that the assessor will use to assess your competence.

Special notes relating to this unit standard:

- 1 The credit value for this unit standard has been calculated on the basis that people seeking credit have acquired competence in relevant statistical analysis skills.
- 2 Although the skills in this unit standard have particular relevance to quality management, they are also relevant to other contexts.
- 3 **Definition**
Valid means fit for purpose, and relating solely to the attributes or data being gathered and analysed. Where applicable, the term *valid* should also be taken to mean *statistically valid*.
- 4 All activities must comply with any policies, procedures, business protocols, and requirements of the organisation/s involved; the ethical codes of relevant professional bodies; the cultural requirements of the organisation/s and individuals involved; and any relevant legislative and/or regulatory requirements.

- 5 Legislation relevant to this unit standard can include but is not limited to: Health and Safety in Employment Act 1992, Resource Management Act 1991, Official Information Act 1982, Privacy Act 1993, State Sector Act 1988, Employment Relations Act 2000, Fair Trading Act 1986, Consumer Guarantees Act 1993, and subsequent amendments.
- 6 The specified purpose will require data and information relating to people, processes, and/or physical objects. The plan may be provided to or developed by the Learner, and will specify analysis and communication requirements.

Assessment Task One – Elements 1, 2, 3 and 4

Introduction

This assessment is designed to assess your ability to identify a project requiring the collation and analysis of data for a specific purpose; to apply statistical analysis and draw conclusions from the resulting information and effectively communicate this information.

Instructions

You will need to provide your assessor with documentary evidence of the project and its specified purpose, data analysis and your communication of this project within the workplace.

A Preparation Checklist has been provided to allow you to check off your evidence against the performance criteria of each element before you submit it for assessment. There is space on the checklist for you to make comments to help your assessor to locate relevant evidence. In some cases your work may have been completed as a member of a team and you will need to clarify your own involvement.

In many instances data will be reporting and management information gathered through your organisation's computer system. Your analysis and communication is likely to be for:

- Annual reporting purposes
- Use during planning sessions with staff
- Meetings with managers
- Discussion with your manager

However it could also arise from a research project commissioned or for other investigative purposes.

You do not have to have initiated the data collection to meet the requirements of this unit standard. Nor does the data need to belong to your own organisation.

Your activities **do**, however, have to comply with:

- Any policies, procedures, business protocols and requirements of the organisations involved;
- The ethical codes of relevant professional bodies;
- The cultural requirements of the organisation/s and individuals involved;
- Any relevant legislative and/or regulatory requirements.

Preparation Checklist

My statistical analysis covers each of the following performance criteria:

1. Collate data for analysis for a specified purpose

- Identification of the project and its specified purpose
- Collation of data is consistent with the specified purpose.
- Actions were taken to minimize the impact of any missing data.
Both re-test and re-sampling have been demonstrated and documented.
- Data is stored in a way which protects its integrity and allows it to be retrieved if required.

Learner comments related to evidence submitted:

2. Apply statistical analysis to data:

- Statistical analysis techniques match the data obtained and the information required.
- Statistical analysis techniques have been applied in accordance with statistical conventions.
- Key events have been documented in accordance with plan and/or as they occurred.
Documentation covers all key events, including anomalies and variations from plans.
- Any actions which were taken regarding anomalies maintain the validity of the analysis.
This includes consideration of outliers in the data and actions taken when reviewing the data.

Learner comments related to evidence submitted:

3. Draw conclusions resulting from data:

- Interpretation methods are applied consistently to all of the information.
- Conclusions drawn are derived from a logical interpretation of statistically significant information.
- Key points are documented in accordance with research or management plan requirements, i.e. all information objectives in the plan are reported on; interpretation methods used; assumptions made; conclusions drawn.
- Assumptions made are supported by valid analysis.

Learner comments related to evidence submitted:

4. Communicate information:

- Information communicated contains key points, is traceable, validly reflects the data, and is unambiguous. Covers anomalies, variations from plans, interpretation methods used, assumptions made and conclusions drawn.
- Communication of information meets recipient requirements for format, style, detail and complexity.
- Communication method meets organization and legislative requirements for timing, distribution, confidentiality and security, and is congruent with the information gathered from the analysis.

Learner comments related to evidence submitted:

The completed assessment for task one will include:

- documentary workplace evidence which meets the requirements of the Preparation Checklist.
- a completed Preparation Checklist which includes explanations and comments relating to any performance criteria which are not obviously addressed in your documentary evidence.

Assessment Task Two – Elements 1, 2, 3 and 4

Introduction

Assessment task two is designed to assess your ability to competently meet all four elements of this unit standard.

Instructions

This task requires you to obtain a completed Manager or Team leader Verification Form from your workplace.

You will need to show the verifier the completed evidence that you are providing for Task One and the explanations on your Preparation Checklist, as this person is confirming your involvement in the analysis and communication of information, and your ability in these areas.

Have your Manager or Team Leader complete the Verification Form and pass it on to your assessor.

Your assessor may wish to discuss some of these issues with your Manager or Team Leader. Please ensure that you provide a daytime telephone number to enable them to do so.

Manager or Team Leader Verification Form

_____ (name of learner) is currently being assessed toward Unit Standard 8082 Analyse data and communicate information for a specified purpose.

Your knowledge of the learner's activity in the workplace is sought to confirm that:

- the documents relating to statistical analysis and the information communicated have been prepared by the learner;
- the content of the learner's Preparation Checklist is accurate, as far as you are aware; and
- evidence and the information communicated meets the needs of the organisation and the specified purpose for which it was intended
- you are comfortable with the learner's ability to :-

collate data for analysis
apply statistical analysis to data
draw conclusions from the resulting information
communicate information

(Note: the learner has been asked to show you the evidence that they are submitting for assessment mentioned in the first three bullet points above.)

Name of verifier: _____

Signature of verifier: _____

Position in relation to learner (e.g. Team leader): _____

Contact telephone number: _____

Thank you for your assistance.

The completed assessment for task two will include:

- a completed Manager or Team Leader Verification Form
- Comments which are supportive of your ability to analyse data and communicate information for a specified purpose.

Assessment Task Three – Elements 1, 2, 3 and 4

Introduction

Assessment task three is designed to assess your ability to competently meet all four elements of this unit standard.

Instructions

This task involves a discussion with your assessor.

Your assessor will use a Discussion Checklist which is identical in content to that of your Preparation Checklist to document the discussion.

However, unlike the focus of the Preparation Checklist, your assessor will be assessing your knowledge and skills related to analysing data and the communication of information for the purpose it was intended.

Although the documentary evidence which you are presenting for this assessment will form the basis of this discussion, expect it to become broader than this. Your assessor has to have sufficient evidence that you have a sound knowledge of statistical method, analysis and interpretation at the level of this unit standard.

The completed assessment for task three will include:

- Discussion with your assessor based upon your documentary evidence, but likely to be broader than this.
- Discussion results in completion of the Discussion Checklist by your assessor.

Assessment Guide

These are the evidence and judgements that your assessor will use to assess your competence in unit standard 8082.

Task / Element	Evidence required	Judgement
<p><i>Tasks 1, 2 & 3 / Element 1</i> (P.C. 1.1 – 1.3)</p> <p>Collate data for analysis to meet the requirements of a specified purpose.</p>	<p>The learner provides substantive documentary evidence from the workplace of an identified project requiring analysis of data including:</p> <ul style="list-style-type: none"> • Identification and scope of the project • Collation of data for analysis <p>Completed Manager/Team Leader verification form.</p> <p>Discussion between learner and assessor using the Preparation Checklist as a basis to evaluate the learner's evidence</p>	<p>Documentary evidence is comprehensive and meets Preparation Checklist criteria 1.</p> <p>Signed Verification Form by Manager/Team Leader attached.</p> <p>Discussion & documentary evidence from Task 1 meets all criteria of Preparation Checklist.</p> <p>Discussion results in completion of the discussion Checklist by assessor.</p>
<p><i>Tasks 1, 2 & 3 / Element 2</i> (P.C. 2.1 – 2.4)</p> <p>Apply statistical analysis to the data.</p>	<p>The learner provides substantive documentary evidence including:</p> <ul style="list-style-type: none"> • Statistical analysis of data <p>Completed Manager/Team Leader verification form.</p>	<p>Documentary evidence is comprehensive and meets Preparation Checklist criteria 2.</p> <p>Signed Verification Form by Manager/Team Leader attached.</p>

Task / Element	Evidence required	Judgement
	Discussion between learner and assessor using the Preparation Checklist as a basis to evaluate the learner's evidence	Discussion & documentary evidence from Task 1 meets all criteria of Preparation Checklist. Discussion results in completion of the discussion Checklist by assessor.
<i>Tasks 1, 2 & 3 / Element 3</i> (P.C. 3.1 – 3.4) Draw conclusions from resulting information.	The learner provides substantive documentary evidence of conclusions drawn from the resulting information. Completed Manager/Team Leader verification form. Discussion between learner and assessor using the Preparation Checklist as a basis to evaluate the learner's evidence	Documentary evidence is comprehensive and meets Preparation Checklist criteria 3. Signed Verification Form by Manager/Team Leader attached. Discussion & documentary evidence from Task 1 meets all criteria of Preparation Checklist. Discussion results in completion of the discussion Checklist by assessor.
<i>Tasks 1, 2 & 3 / Element 4</i> (P.C. 4.1 – 4.4) Communicate information.	The learner provides substantive documentary evidence of their communication of the data within the workplace. Completed Manager/Team Leader verification form. Discussion between learner and assessor using the Preparation Checklist as a basis to evaluate the learner's evidence	Documentary evidence is comprehensive and meets Preparation Checklist criteria 4. Signed Verification Form by Manager/Team Leader attached. Discussion & documentary evidence from Task 1 meets all criteria of Preparation Checklist. Discussion results in completion of the discussion Checklist by assessor.