



Australian Government

FSKNUM027 Collect, organise and interpret statistical data for work

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with FSK Foundation Skills Training Package Version 2.0.

Application

This unit describes the skills and knowledge required to collect and organise data, present the data graphically, summarise the data, and interpret a range of statistical data for work. It includes extracting and interpreting statistical information, undertaking statistical investigations, and communicating results.

An individual performing these tasks works independently and uses support from a range of established resources.

This unit applies to individuals who use, or are preparing to use, numeracy skills to complete workplace activities. This includes existing workers and individuals preparing for employment through vocational education and training. This unit should be integrated and contextualised with vocational training to support achievement of vocational competency.

This unit is aligned to, but does not fully address, the Australian Core Skills Framework (ACSF) numeracy core skill indicators .09, .10 and .11 at level 4 in the workplace and employment domain of communication.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Numeracy

Elements and Performance Criteria

Element	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Extract and interpret statistical data	1.1 Identify workplace issue requiring investigation and describe specifications and sources of data collection, including being aware

Element	Performance Criteria
	of audience of data and purpose of collection 1.2 Extract relevant statistical data from spreadsheets or other sources of raw workplace data required to support analysis 1.3 Identify and interpret key features of complex graphs and charts
2. Undertake statistical investigation using discrete data	2.1 Select mathematical and problem solving strategies to undertake workplace task 2.2 Describe an expected result of data collection, analysis and results 2.3 Select method to collect workplace data, and collect relevant data sample 2.4 Collect, order and collate data into a table or spreadsheet 2.5 Represent statistical data in appropriate graphical formats for analysis 2.6 Calculate simple summary statistics for collected data and interpret data and summaries, and finalise results 2.7 Check and reflect on data interpretation and outcomes and appropriateness of outcome to workplace task
3. Communicate information from statistical investigation	3.1 Use formal, informal and some specialised written mathematical representation to document, interpret and communicate statistical processes, results and implications 3.2 Use formal, informal and some specialised mathematical language to discuss and explain statistical processes, results and implications

Foundation Skills

This section describes language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Technology	Uses a scientific calculator to calculate summary statistics and a spreadsheet to display data

Mapping Information

Supersedes and is equivalent to FSKNUM27 Collect, organise and interpret statistical data for work.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=f572fe10-a855-4986-9295-3852c771f178>

Assessment Requirements for FSKNUM027 Collect, organise and interpret statistical data for work

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- extract and interpret statistical information from a complex table and spreadsheet and routine graph and chart embedded in workplace texts and tasks
- perform a multi-step mathematical problem solving process with statistical data, including:
 - collecting, representing, summarising and interpreting statistical data to meet a workplace purpose
 - illustrating data using workplace appropriate methods
 - calculating summary statistics and interpreting results, including:
 - measures of central tendency (mean, median and mode)
 - simple measures of spread (range).

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- types of statistical information
- common workplace issues that can be investigated through data collection
- purpose and application of data analysis to workplace tasks
- range of data collection methods
- difference between discrete and continuous data
- types, features and uses of different graphs
- strategies to effectively illustrate data
- measures of central tendency (mean, median and mode)
- simple measures of spread (e.g., range)
- purpose and use of relevant technology such as scientific or CAS calculator, spreadsheets or graphing software

- estimation and assessment processes
- implications of calculations and results for workplace tasks.
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Assessment Conditions

Competency is to be assessed in the workplace, a workplace simulated environment or a vocational training context.

Assistive technologies can be utilised to assist with oral and written communication.

Skills must be demonstrated independently using complex texts and tasks that reflect those typically found in a workplace.

The following resources are to be made available:

- a scientific calculator
- data utilised in the performance evidence
- own familiar support resources.

Assessors must:

- satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards, and
- have sound knowledge of the ACSF and performance features of the ACSF level being assessed, and
- have demonstrable expertise, knowledge and skills in the vocational contextualisation and assessment of the core skill, numeracy, and
- have completed the following or equivalent:
 - TAESS00009 Address Foundation Skills in Vocational Practice Skill Set; or
 - a higher level education qualification, such as:
 - TAE80113 Graduate Diploma of Adult Language, Literacy and Numeracy Practice (and its equivalent TAE70111); or
 - Bachelor of Education, Graduate Certificate or Graduate Diploma of Education, or higher. This may include qualifications relating to TESOL, adult education or vocational education.
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