



Australian Government

Department of Education, Employment and Workplace Relations

BSBADM403A Develop and use complex databases

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the use of database software to complete business tasks and produce usable complex documents.

This unit is related to BSBADM305A Create and use databases.

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Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

Elements and Performance Criteria

Element	Performance Criteria
1 Use safe work practices	<ul style="list-style-type: none">1.1 Workspace, furniture and equipment are adjusted to suit the ergonomic requirements of the user1.2 Work organisation meets organisational and statutory requirements for computer operation1.3 Energy and resource conservation techniques are used to minimise wastage in accordance with organisational and statutory requirements
2 Develop a linked database solution	<ul style="list-style-type: none">2.1 Task is analysed and specifications for databases are determined2.2 Organisational and task requirements in relation to data entry, storage, output, reporting and presentation requirements are identified2.3 Databases are designed and constructed to meet the requirements of the given situation2.4 Field attributes are set according to data type and databases are linked by a common field in accordance with software procedures2.5 Database design utilises software functions and formulae to meet identified requirements
3 Develop database record forms and reports	<ul style="list-style-type: none">3.1 Data entry forms are designed and created to meet specified requirements for entering and displaying information3.2 Data table and form layout enable efficient data input and display3.3 Field attributes are set according to data type and formulae / calculated field incorporated to meet task specifications3.4 Report formats are designed and created according to specified criteria using conditional operators as required3.5 Database reports are formatted in accordance with organisational style and presentation requirements

- 3.6 Queries and formulae are tested to confirm output meets task requirements
- 4 Automate and standardise database operation
 - 4.1 Tasks are evaluated to identify those where automation would increase efficiency
 - 4.2 Macros are created, used and edited to fulfil the requirements of the task and automate database operation
 - 4.3 Templates are developed, edited and used to ensure consistency of design and layout for forms and reports in accordance with organisational requirements
- 5 Use databases
 - 5.1 Data is entered, checked and amended in accordance with organisational and task requirements
 - 5.2 Data is imported / exported between compatible databases and host documents adjusted in accordance with software and system procedures
 - 5.3 Manuals, user documentation and on-line help are used to overcome problems with spreadsheet design and production
 - 5.4 Database reports and/or forms are previewed, adjusted and printed in accordance with organisational and task requirements
 - 5.5 Database is named and stored, in accordance with organisational requirements and the application exited without data loss/damage

Required Skills and Knowledge

Not applicable.

Evidence Guide

The Evidence Guide identifies the critical aspects, underpinning knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

Critical Aspects of Evidence

Integrated demonstration of all elements of competency and their performance criteria

Successful operation of linked databases

Knowledge and application of advanced database functions to achieve efficient design of databases

Underpinning Knowledge*

* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts.

Relevant legislation from all levels of government that affects business operation, especially in regard to Occupational Health and Safety and environmental issues, equal opportunity, industrial relations and anti-discrimination

Advanced functions of database software applications

Impact of formatting and design on the presentation and readability of data

Organisational policies and procedures

Underpinning Skills

Literacy skills to interpret and evaluate the purposes and uses of various features of databases; use a variety of strategies for planning and reviewing own work

Proofreading and editing skills to check for accuracy and consistency of information by consulting additional resources

Problem solving skills to use processes flexibly and interchangeably

Numeracy skills to collate and present data; graphs and related references

Communication skills to follow complex oral instructions when using technology; listen to and interpret complex sequenced instructions

Keyboarding skills

Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

Resource Implications

The learner and trainer should have access to appropriate documentation and resources normally used in the workplace which may include:

workplace references such as computer user manuals, organisational policies and procedures and workplace procedural manuals

computer equipment including relevant software, printer

guide/examples of 'house style'

equipment (eg paper and other materials)

Consistency of Performance

In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations

Context/s of Assessment

Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement

Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package

Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment

Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit

Key Competency Levels

Collecting, analysing and organising information (Level 2)- to determine database requirements

Communicating ideas and information (Level 1)- through well-designed records and reports

Planning and organising activities (Level 1)- to link databases and meet task specifications

Working with teams and others (Level 1)- to determine database purpose / use

Using mathematical ideas and techniques (Level 1)- to utilise formulae and calculate fields

Solving problems (Level 2)- using manuals and on-line help

Using technology (Level 2)- to develop and use complex databases

Please refer to the Assessment Guidelines for advice on how to use the Key Competencies

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Using mathematical ideas and techniques (Level 1)- to utilise formulae and calculate fields

Solving problems (Level 2)- using manuals and on-line help

Using technology (Level 2)- to develop and use complex databases

Please refer to the Assessment Guidelines for advice on how to use the Key Competencies

Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

Legislation, codes and national standards relevant to the workplace which may include:

- award and enterprise agreements and relevant industrial instruments
- relevant legislation from all levels of government that affects business operation, especially in regard to Occupational Health and Safety and environmental issues, equal opportunity, industrial relations and anti-discrimination
- relevant industry codes of practice

Organisational policy and procedures may include:

- log-on procedures
- password protection
- storage / location of data
- standard formats
- author's instructions
- use of templates

Ergonomic requirements may include:

- workstation height and layout
- chair height, seat and back adjustment
- footrest
- screen position
- keyboard and mouse position
- document holder
- posture
- avoiding radiation from computer screens
- lighting
- noise minimisation

Work organisation may include:

- mix of repetitive and other activities
- rest periods
- exercise breaks

Conservation techniques may include:

- double-sided paper use
- re-used paper for rough drafts (observing confidentiality requirements)
- recycling used and shredded paper
- utilising power-save options for equipment

Database design may include:

- Analysis
- Appropriateness
- field attributes
- formulae (if required)
- functions (if available)
- format
- entry and validation of data
- importing and exporting data

linking fields

formatting and reformatting

split screen operation (if available)

Formulae may include:

Addition

Subtraction

Multiplication

Division

Maximum

Minimum

Average

combinations of above

Data entry form creation may include:

field definitions

record layout

format

blank lines and spaces

insert

delete

titles

fields:

alter widths

move

re-label

add

delete

repeating (if available)

calculate/formula

Reports may include:

Query

selection criteria

conditional operators (and, or, not)

record selection

format

field selection

headers and footers (if available)

Macro selection options may include:

Append

Edit

Query

List

Delete

Report

Print

Exit

Templates may include:

Forms

Reports

headers/footers

page formats

font types and sizes

headings

Printing may include:

Records

Tables

Forms

Queries

Reports

Storage of data may include:

storage in folders / sub-folders

storage on hard/floppy disk drives, CDROM, tape backup

organisation policy for backing up files

organisation policy for filing hard copies of spreadsheets

filing locations

security

authorised access

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award and enterprise agreements and relevant industrial instruments

relevant legislation from all levels of government that affects business operation, especially in regard to Occupational Health and Safety and environmental issues, equal opportunity,

industrial relations and anti-discrimination

relevant industry codes of practice

Organisational policy and procedures may include:

log-on procedures

password protection

storage / location of data

standard formats

author's instructions

use of templates

Ergonomic requirements may include:

workstation height and layout

chair height, seat and back adjustment

footrest

screen position

keyboard and mouse position

document holder

posture

avoiding radiation from computer screens

lighting

noise minimisation

Work organisation may include:

mix of repetitive and other activities

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Conservation techniques may include:

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formulae (if required)

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Maximum

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combinations of above

Data entry form creation may include:

field definitions

record layout

format

blank lines and spaces

insert

delete

titles

fields:

alter widths

move

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repeating (if available)

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Reports may include:

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Report

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Exit

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Forms

Reports

headers/footers

page formats

font types and sizes

headings

Printing may include:

Records

Tables

Forms

Queries

Reports

Storage of data may include:

storage in folders / sub-folders

storage on hard/floppy disk drives, CDROM, tape backup

organisation policy for backing up files

organisation policy for filing hard copies of spreadsheets

filing locations

security

authorised access

Unit Sector(s)

Not applicable.