Welcome to
Pukunui Fortnightly Tips

March 24, 2017: Adding Competency Frameworks and Learning Plans

CBE in the Australian VET sector

- ASQA – Australian Skills Quality Authority

- Registered Training Organisation (RTO) provides nationally recognised and accredited training in the VET sector in Australia

- ASQA is the national regulator of the vocational education and training (VET) sector and conducts registration and compliance audits

- Training Packages - sets of nationally endorsed qualifications and standards to assess students' skills and knowledge

Competency based training and assessment

Competency based training and assessment means that a person is trained and assessed to meet the performance and knowledge requirements to safely and effectively complete workplace activities in a range of different situations and environments, to an industry standard that is expected in the workplace.

What is competency based training and assessment

Competency based training and assessment

Competency based training and assessment does not compare the training outcomes between learners. Learners are assessed against the requirements of a training product.

What competency based training and assessment is NOT...

ICTPRG425 Use structured query language

Release: 1

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Write a simple SQL statement to retrieve and sort data	1.1 Retrieve all the data from a single table 1.2 Retrieve data from specific columns in a single table 1.3 Use 'order by' to sort query output
2. Write an SQL statement that selectively retrieves data	2.1 Restrict the number of rows retrieved, by placing criteria in the 'where' clause 2.2 Restrict the number of rows retrieved, by placing specific criteria in the select statement 2.3 Use comparison operators in the 'where' clause to compare numeric, character, string, date and time data 2.4 Use Boolean operators with the correct precedence 2.5 Use criteria in the 'where' clause, to check for a range of values, to select values from a list, and to check for values that match a pattern 2.6 Use SQL syntax to suppress duplicate values from query results 2.7 Take action to exclude null values from a query result
3. Write SQL statements that use functions	3.1 Use arithmetical operators with the correct precedence 3.2 Use string functions, and operators, to obtain the required query output 3.3 Use mathematical functions to obtain the required output 3.4 Use date functions to obtain the required output 3.5 Use SQL aggregate functions to obtain the required output
4. Write SQL statements that use aggregation and filtering	4.1 Use 'group by' to aggregate data by multiple columns 4.2 Sort aggregated data in the query output 4.3 Filter aggregated data using the 'having' clause
5. Write SQL statements that retrieve data from multiple tables	5.1 Employ the inner join syntax, to retrieve data from two or more tables 5.2 Use 'left outer', 'right outer' and 'full outer' syntax, to join tables in the select statement 5.3 Use correct syntax in the 'where' clause, to retrieve data from multiple tables 5.4 Write a union query that retrieves data from more than one table
6. Write and execute SQL sub-queries	6.1 Construct single and nested sub-queries 6.2 Construct sub-queries that return a single row and multiple rows 6.3 Use correlated sub-queries to retrieve required data 6.4 Write sub-queries that use aggregates
7. Create and manipulate tables	7.1 Identify the required columns, data types, keys, relationships, indexes and constraints 7.2 Use the relevant naming conventions for database elements 7.3 Create tables that implement the required elements 7.4 Manipulate tables to meet specific requirements
8. Create and use views	8.1 Create views that satisfy information requirements 8.2 Use check constraints in a view 8.3 Retrieve, insert, update, and delete data using a view 8.4 Drop a view from a database
9. Create and use stored procedures	9.1 Create and execute stored procedures that use SQL to retrieve, insert, or modify data, according to information requirements 9.2 Create and execute stored procedures, that use one or more parameters 9.3 Drop a stored procedure from the database 9.4 Create and test database triggers that automate data management, or perform specific required data-related functions

Element & Performance Criteria

- Element 1: Write a simple SQL statement to retrieve and sort data

- Criteria

  - 1.1 Retrieve all the data from a single table

  - 1.2 Retrieve data from specific columns in a single table

  - 1.3 Use 'order by' to sort query output

Let's go with something simpler...

- Imagine you're creating a new employee induction course

  - All new employees have to complete this Moodle course

- In the course, all new employees have to demonstrate they have skills or knowledge in the following areas:

  - The company's WHS policies

  - The payroll system

  - The whistleblower reporting system

  - The company's discrimination and sexual harassment policies