

US 8087 Use core quality management tools Level 3, Credit 5, Version 3

This evidence guide aims to assist you in preparing for assessment of this unit standard. It outlines the requirements for each element in the unit standard and the knowledge you need to have before you are assessed.

Purpose of the unit standard:

People credited with this unit standard are able to: select and use quality management tools; and interpret results and evaluate the effectiveness of the quality management tools used.

Special notes:

1. This unit standard is applicable in a wide range of contexts where information needs to be generated and used for the management of quality.
2. Definitions:
 - *Quality* is the degree to which a set of inherent characteristics of products and services fulfils the stated and implied requirements of customers and other stakeholders.
 - *Quality management* is a philosophy of management that encompasses quality management systems, customer focus, and a consultative culture. The purpose is to improve continuously the value of goods and services to internal and external customers, with outcomes of improved business results and greater effectiveness and efficiency in day-to-day activities.
 - *Quality management systems* refers to a formal management system that establishes policy and objectives (and ways of achieving them) in order to direct and control an organisation with regard to quality.
3. Candidates must demonstrate competence with at least six different quality management tools. Tools may be used individually or in conjunction with each other. Examples of quality management tools may include but are not limited to the following:
 - *Idea generation and refinement* - brainstorming, cause and effect diagram (fishbone), affinity diagram, mindmapping;
 - *Problem solving* - flow chart, cause and effect diagram (fishbone), tree diagram, workflow diagram, who-what-when-where-why-how analysis, 5 whys;
 - *Decision making* - force field analysis, nominal group technique, decision tree (tree diagram), who-what-when-where-why-how analysis;
 - *Data collection, handling and presentation* - Pareto diagram, check sheet, histogram, pie chart, run chart, control chart, activity sampling, multi activity charting, scattergram.
4. Assessment evidence for this unit standard must be collected from practical workplace experience related to quality improvement.

Resources:

1. Workplace operation with teams of people using quality management tools.
2. Access to information relating to quality management tools.

Sources of evidence may include:

- Expert witness testimony
- Direct observation of performance
- Answers to oral or written questions
- Audio tape
- Video tape
- Documentation

TRAINEE EVIDENCE GUIDE



ATTTO

Instructions:

Read through the checklist on the following page; if you can confidently tick all the boxes then you are ready to be assessed. If not, you will need to complete additional work before you are assessed.

The column labelled *evidence* is there for you to make notes about the type of evidence you are going to supply. This is optional.

If you are unsure of any requirements you may contact your assessor or workplace mentor for further clarification. It is recommended that you have all your evidence prepared before you meet with your assessor.



To meet the requirements of this unit standard you must produce documentation relating to the use of quality management tools.

You must be able to select and use quality management tools. You must also be able to describe the tools and when to use them and the information they generate. This knowledge can be inferred by the accurate use of the tools.

The documentary evidence can include records of workplace activities, more particularly records of quality management tools that you have used and other documents that will provide evidence relating to the elements of the unit standard.

Assessment evidence for this unit standard must be collected from practical workplace experience related to quality improvement, and must include evidence of your underpinning knowledge.

Evidence must relate to the following and be consistent with the all requirements in the special notes and evidence checklist:

- Select and use quality management tools
- Interpret results and evaluate the effectiveness of the quality management tools used

You must demonstrate competence with at least six different quality management tools. Tools may be used individually or in conjunction with each other.

At least one tool from each of the following four areas must be selected and used:

- *Idea generation and refinement* - brainstorming, cause and effect diagram (fishbone), affinity diagram, mindmapping;
- *Problem solving* - flow chart, cause and effect diagram (fishbone), tree diagram, workflow diagram, who-what-when-where-why-how analysis, 5 whys;
- *Decision making* - force field analysis, nominal group technique, decision tree (tree diagram), who-what-when-where-why-how analysis;
- *Data collection, handling and presentation* - Pareto diagram, check sheet, histogram, pie chart, run chart, control chart, activity sampling, multi activity charting, scattergram.

EVIDENCE CHECKLIST

Element 1: Select and use quality management tools Range: at least one tool from each of the following four areas must be selected and used - idea-generation; problem solving; decision-making; data collecting, handling, and presentation.		
<input checked="" type="checkbox"/>	Performance Criteria	Evidence
<input type="checkbox"/>	<p>You must be able to demonstrate that you can describe quality management tools.</p> <p>At least one tool from each of the following four areas must be selected and used</p> <ul style="list-style-type: none"> ■ <i>Idea generation and refinement</i> - brainstorming, cause and effect diagram (fishbone), affinity diagram, mindmapping; ■ <i>Problem solving</i> - flow chart, cause and effect diagram (fishbone), tree diagram, workflow diagram, who-what-when-where-why-how analysis, 5 whys; ■ <i>Decision making</i> - force field analysis, nominal group technique, decision tree (tree diagram), who-what-when-where-why-how analysis; ■ <i>Data collection, handling and presentation</i> - Pareto diagram, check sheet, histogram, pie chart, run chart, control chart, activity sampling, multi activity charting, scattergram. <p>Must match:</p> <ul style="list-style-type: none"> ■ the situation in which it is to be used ■ information it generates ■ outcomes it produces ■ describe 6 characteristics 	
<input type="checkbox"/>	<p>You must be able to demonstrate that you can select and customise each tool to the task.</p> <p>At least one tool from each of the following four areas must be selected and used</p> <ul style="list-style-type: none"> ■ <i>Idea generation and refinement</i> - brainstorming, cause and effect diagram (fishbone), affinity diagram, mindmapping; ■ <i>Problem solving</i> - flow chart, cause and effect diagram (fishbone), tree diagram, workflow diagram, who-what-when-where-why-how analysis, 5 whys; ■ <i>Decision making</i> - force field analysis, nominal group technique, decision tree (tree diagram), who-what-when-where-why-how analysis; ■ <i>Data collection, handling and presentation</i> - Pareto diagram, check sheet, histogram, pie chart, run chart, control chart, activity sampling, multi activity charting, scattergram. ■ Must match the requirements of the task and enable the achievement of task objectives. ■ Must select 6 quality management tools 	

EVIDENCE CHECKLIST

Element 1: Select and use quality management tools Range: at least one tool from each of the following four areas must be selected and used - idea-generation; problem solving; decision-making; data collecting, handling, and presentation.		
<input checked="" type="checkbox"/>	Performance Criteria	Evidence
<input type="checkbox"/>	You must be able to demonstrate that you can use each tool to ensure valid results. At least one tool from each of the following four areas must be selected and used: <ul style="list-style-type: none"> ■ <i>Idea generation and refinement</i> - brainstorming, cause and effect diagram (fishbone), affinity diagram, mindmapping; ■ <i>Problem solving</i> - flow chart, cause and effect diagram (fishbone), tree diagram, workflow diagram, who-what-when-where-why-how analysis, 5 whys; ■ <i>Decision making</i> - force field analysis, nominal group technique, decision tree (tree diagram), who-what-when-where-why-how analysis; ■ <i>Data collection, handling and presentation</i> - Pareto diagram, check sheet, histogram, pie chart, run chart, control chart, activity sampling, multi activity charting, scattergram. ■ Must use 6 tools. 	
<input type="checkbox"/>	You must be able to demonstrate that you can record and present results to be consistent with the tool and the requirements of the task. At least one tool from each of the following four areas must be selected and used: <ul style="list-style-type: none"> ■ <i>Idea generation and refinement</i> - brainstorming, cause and effect diagram (fishbone), affinity diagram, mindmapping; ■ <i>Problem solving</i> - flow chart, cause and effect diagram (fishbone), tree diagram, workflow diagram, who-what-when-where-why-how analysis, 5 whys; ■ <i>Decision making</i> - force field analysis, nominal group technique, decision tree (tree diagram), who-what-when-where-why-how analysis; ■ <i>Data collection, handling and presentation</i> - Pareto diagram, check sheet, histogram, pie chart, run chart, control chart, activity sampling, multi activity charting, scattergram. ■ Must give evidence of 6 tools 	

EVIDENCE CHECKLIST

Element 2: Interpret results and evaluate the effectiveness of the quality management tools used		
<input checked="" type="checkbox"/>	Performance Criteria	Evidence
<input type="checkbox"/>	You must be able to demonstrate that you can analyse and interpret information to maintain its validity and match task requirements.	
<input type="checkbox"/>	You must be able to demonstrate that you can evaluate the appropriateness of each tool used in terms of effectiveness of outcomes. 6 tools must be evaluated.	