Unit 301 Encourage innovation

UAN:	**J/506/2292**
Level:	3
Credit value:	4
GLH:	14
Relationship to NOS:	Management & Leadership (2012) National Occupational Standards: • CFAM&LCA1 Identify and evaluate opportunities for innovation and improvement
Assessment requirements specified by a sector or regulatory body:	This unit is endorsed by Skills CFA Assessment Strategy Competence units (S/NVQ)
Aim:	This unit aims to develop the knowledge and skills required to encourage innovation. Upon completion of this unit, learners will be able to identify opportunities for innovation and generate and test ideas for innovation and improvement. Learners will also be able to implement innovative ideas and improvements.

Learning outcome
The learner will: 1. be able to identify opportunities for innovation
Assessment criteria
The learner can: 1.1 analyse the advantages and disadvantages of techniques used to generate ideas 1.2 explain how innovation benefits an organisation 1.3 explain the constraints on their own ability to make changes 1.4 agree with stakeholders terms of reference and criteria for evaluating potential innovation and improvement 1.5 engage team members in finding opportunities to innovate and suggest improvements 1.6 monitor performance, products and/or services and developments in areas that may benefit from innovation 1.7 analyse valid information to identify opportunities for innovation and improvement.

Assessment guidance

1.1

The main techniques for generating ideas are:

- staff suggestions either individually or as part of 'away days' for the team
- cause and effect diagram (sometimes called Ishikawa or fishbone) as a technique for opening up thinking in problem solving process
- kaizen (incremental innovation) where any member of staff can suggest improvements,
- brainstorming (or thought showering) used in conjunction with a cause and effect tool. Every member of the group can put forward their own ideas in a non- judgmental way.
- force field analysis- by assessing the forces that prevent making the change, plans can be developed to overcome them
- Pareto analysis can be used to analyse the ideas from the brainstorming session- it is used to find that 80% of the effect is attributed to 20% of the cause (hence the nickname of the 80/20 rule)
- process flowcharting- recording pictorially what actually happens in a process as an aid for discussion to see if a proposed change is viable. Advantages and disadvantages of each technique will depend upon the nature (eg public or private) type (eg production, service) and size (eg small business, large international, public funded) of business. Consider number of employees, resources available, scale of innovation required and sector.

In this criterion the learner is required to provide evidence that he or she has:

- selected two different techniques for generating ideas and analysed the advantages and disadvantages of each.
- applied one of the techniques to a work based situation, generating realistic ideas which could be implemented.

1.2

Innovation could be described as the invention or use of new ideas, methods or equipment etc.

The organisation benefits from this fresh thinking by clarifying roles, bringing teams together and enriching the culture. This has an effect on markets and customers, bringing economic growth.

In this criterion the learner is required to provide evidence that he or she has:

- explained how innovation benefits an organisation.
- selected a specific example of innovation within the organisation and explained the method for generating the idea and the main benefits obtained.

1.3

Innovation differs from invention in that innovation refers to the use of a better idea or method. However, the ability to bring about changes is dependent on many factors such as:

- level of responsibility and authority
- resources available (including human)
- level of understanding of the impact of change on another area, process or product
- level of complexity of the change
- timescales, sometimes it takes time for an idea to 'grow' and have impact
- receptiveness of the organisation to new thinking ie is there an innovation culture?

In this criterion the learner is required to provide evidence that he or she has:

- explained the considerations that would have to be made in the current role in order to make changes.

1.4

A 'stakeholder' can be defined as anyone with a specific interest in the product or service; this usually includes the staff in your own area and other departments, suppliers, customers, sales and marketing teams.

The 'terms of reference' in this case, are the pre-agreed order of priorities that are to be used when evaluating whether a potential innovation and improvement is to take place. For example, will a new target market be reached or will levels of health and safety incidents be reduced, will the product generate higher returns or reduce the number of customer complaints?

In this criterion the learner is required to provide evidence that he or she has:

- agreed terms of reference with stakeholders for a potential innovation or change.
- selected one recent example of an innovation and improvement which has been successful and described who the stakeholders were and the terms of reference used, giving reasons for each.

1.5

Innovations are more likely to come from teams and probably arise from a set of circumstances that bring multiple experiences and information gathering into one place to help solve a problem. Creating a 'safe' environment where ideas can be expressed and evaluated in a non- judgmental way is vital to the process, together with a culture which can follow through new ideas by making resources available, responding to customer needs and external factors which can change the nature of the business.

In this criterion the learner is required to provide evidence that he or she has:

- explained the importance of engaging team members in the process of finding opportunities to innovate and making suggestions for improvements.
- engaged two team members in an activity which seeks to find an opportunity for improvement, suggesting ideas for innovation.

1.6

Monitoring performance, products and services depends on collecting, collating and interpreting the results of data and information in order to be able to agree on the levels required. Following on, once levels have been agreed, subsequent data collected can then be judged to be above, on or below the required standard (sometimes called the benchmark) and adjustments can be made to speed up outputs or improve levels of service and/or quality of products.

In this criterion the learner is required to provide evidence that he or she has:

- collected data and information on at least three occasions from a product or service and established an acceptable standard of performance. This could be for example, in attendance monitoring, three days unauthorised absence per calendar year. in engineering, one rejected part per 1,000
- in the selected example given two reasons why the organisation and two reasons why the customer would benefit from a stated innovation.

1.7

When information is collected and used for performance monitoring, there needs to be confidence in the fact that it is taken from trusted sources, is reliable in terms of method of collection, is recently obtained and is relevant to the product or service. The term 'valid' is taken to mean factual or based on truth, this might also mean legally and ethically sound.

In this criterion the learner is required to provide evidence that he or she has:

- interpreted the results of collecting valid information which is relevant to the operational level within the sector of work.
- suggested two opportunities for innovation and improvement giving at least one reason for each suggestion.

Learning outcome
The learner will: 2. be able to generate and test ideas for innovation and improvement
Assessment criteria
The learner can: 2.1 generate ideas for innovation or improvement that meet the agreed criteria 2.2 test selected ideas that meet viability criteria 2.3 evaluate the fitness for purpose and value of the selected ideas 2.4 assess potential innovations and improvements against the agreed evaluation criteria.

Assessment guidance

2.1

Depending on the size, type and culture of the organisation, ideas can be generated informally, such as in a team meeting with open discussion, a brainstorming exercise, usually as part of time out of the working day or more formally using more structured 'tools and techniques'. Examples include Kaizen and Force Field Analysis.

In this criterion the learner is required to provide evidence that he or he has:

- identified the criteria (ie the brief) used for the selection of potential ideas for innovation or improvement.
- generated two separate ideas demonstrating innovation or improvement on products, processes or service delivery.

2.2

Testing for 'viability' means looking at the existing business or proposed ideas to determine whether there is a 'fit' with the organisation in terms of the nature and type of the business. How would the innovation or improvement affect the customer, perhaps by adding value to the service or product?

In this criterion the learner is required to provide evidence that he or he has:

- tested two selected ideas with others and gathered brief information that would support the claim that the ideas were viable options.

2.3

Evaluating fitness for purpose could be considered as the next stage of the testing for fitness of purpose and value. 'Value' may mean more than just financial value and could be interpreted as other non-financial benefits. It is possible to determine how realistic the ideas are in practical terms by asking the question - Would this really work, given the ethical, financial and other resource implications as an innovation or improvement?

In this criterion the learner is required to provide evidence that he or she has:

- evaluated the fitness for purpose and value of selected ideas by giving reasons for choice which include benefits to the organisation and the customer.

2.4

A frequently used method of testing to see if an idea is capable of working under favourable conditions i.e. financial, time limitations and other resource implications is the 'Decision Matrix'. Essential and desirable criteria are identified and each proposal or options is evaluated against these criteria.

In this criterion the learner is required to provide evidence that he or she has:

- listed the ideas (options) to be tested explaining the resource implications (including cost)
- used a decision making tool correctly in order to select an option and explained the reasons for selecting the best option.

Learning outcome
The learner will: 3. be able to implement innovative ideas and improvements
Assessment criteria
The learner can: 3.1 explain the risks of implementing innovative ideas and improvements 3.2 justify conclusions of efficiency and value with evidence 3.3 prepare costings and schedules of work that will enable efficient implementation 3.4 design processes that support efficient implementation.

Assessment guidance
3.1 Risks can be defined as chances of success, as well as risks of failure, however, risks are usually focused on any potential adverse effects. Bringing in new ideas, systems and products can sometimes have unplanned consequences, again, not all negative, however, because there will always be some risk involved; the aim is to avoid or minimize the risk wherever possible. In this criterion the learner is required to provide evidence that he or she has: • identified the main risks involved with the implementation of innovative ideas and improvements • described the main actions taken to minimize or eliminate the risks to all parties. **3.2** 'Efficiency' refers to the good use or management of resources i.e. money, time, materials, effort, usually with a view to using less of each. 'Value' refers to the reduction in the waste of time, effort and materials for the same or improved quality – from the customer point of view. In this criterion the learner is required to provide evidence that he or she has: • selected resources (human and physical) where conclusions of efficiency and value can be applied. **3.3** Once ideas for innovation and improvement have been selected and justified, they require implementation and this usually involves others. Each member will need to know the order of work, timescales involved, the human and physical resources available and cost allocations. In this criterion the learner is required to provide evidence that he or she has: • correctly and appropriately applied costs and schedules of work, including *SMART criteria for one aspect of implementation. *SMART –is an acronym for Specific, Measurable, Achievable, Realistic and Timely.

3.4

Knowing who is responsible for each stage for managing the process and outcomes is required in the implementation stage. By producing a flowchart or process mapping chart that identifies each stage of implementation there is a means which can be used as a discussion aide and a monitoring aide. These aspects very important for successful outcomes to be achieved.

In this criterion the learner is required to provide evidence that he or she has:

- designed a visual representation (or approximately three minute audio recording) of the processes involved in the implementation.