



Ethiopian TVET-System

INFORMATION TECHNOLOGY SUPPORT SERVICE

Level I

LEARNING GUIDE # 14

Unit of Competence:	Apply Quality Standards
Module Title:	Applying Quality Standards
LG Code:	ICT ITS1 M06 L01- LG14
TTLM Code:	ICT ITS1 TTLM 1019v1

LO 1: Assess Own Work



Instruction Sheet	Learning Guide # 14
--------------------------	----------------------------

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Standards against workplace being undertaken.

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, upon completion of this Learning Guide, you will be able to –

- Check completed work against workplace standards relevant to the operations being undertaken.
- Demonstrate an understanding on how the work activities and completed work relate to the next process and to the final appearance of the activity.
- Identify and isolate faulty pieces or final products in accordance with company policies and procedures.
- Record and report faults and any identified causes in accordance with workplace procedures.

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information “Sheet 1 in page 3 respectively.
4. Accomplish the “Self-check 1 in page 10 respectively.

Page 2 13	Author: Federal TVET Agency(FTA)	IT Support Service Level 1	Date: Oct 2019
			Version: 1



Information Sheet 1	Standards Against Workplace Being Undertaken
----------------------------	---

- Apply quality standards and procedures
- Quality Assurance and Quality Control in general
- What is Quality?
 - ✓ The ongoing process of building and sustaining relationships by assessing, anticipating, and fulfilling stated and implied needs.
 - ✓ Quality is the customers' perception of the value of the suppliers' work output.
 - ✓ A product or process that is Reliable, and that performs its intended function is said to be a quality product.
 - ✓ Quality is nothing more or less than the perception the customer has of you, your products, and your services!
 - ✓ Quality is nothing more or less than the perception the customer has of you, your products, and your services!

- **Quality Policy**

Quality policy is a document jointly developed by management and quality experts to express the quality objectives of the organization, the acceptable level of quality and the duties of specific departments to ensure quality. Your quality policy should:

- ✓ State a clear commitment to quality
- ✓ Recognize customer needs and expectations
- ✓ Be actively supported by senior management
- ✓ List the quality objectives you want to achieve
- ✓ Be understood by everyone in the organization
- ✓ Be consistent with your organization's goals
- ✓ Be maintained throughout your organization
- ✓ Be applied throughout your organization

- **Responsibility and Authority**

Define quality system responsibilities, give quality system personnel the authority to carry out these responsibilities, and ensure that the interactions between these personnel are clearly specified. And make sure all of this is well documented.

This requirement must be met for those who:-

- ✓ Manage quality system work
- ✓ Perform quality system work
- ✓ Verify quality system work

Page 3 13	Author: Federal TVET Agency(FTA)	IT Support Service Level 1	Date: Oct 2019
			Version: 1



- **Resources**

Identify and provide the resources that people will need to manage, perform, and verify quality system work. Make sure that:

- ✓ Only trained personnel are assigned
- ✓ Managers have the resources they need to verify work.
- ✓ Internal auditors have the resources they need.

- **Management Representative**

Appoint a senior executive to manage your quality system and give him or her necessary authority. This senior executive must ensure that your quality system is developed and implemented. This executive must:-

- ✓ Monitor the performance of your quality system
- ✓ Control the performance of your quality system
- ✓ Report on the performance of your quality system
- ✓ Help improve the performance of your quality system
- ✓ Act as your organization's spokesperson on quality

- **Quality System**

Develop a quality system and a manual that describes it. Your quality system should ensure that your products conform to all specified requirements. Your quality manual should:-

- ✓ State your quality policy.
- ✓ List your quality objectives.
- ✓ Provide an overview of your quality system.
- ✓ Describe the structure of your organization.
- ✓ Discuss your quality system procedures.
- ✓ Introduce your quality documents and records.
- ✓ Teach people about your quality system.
- ✓ Control quality system work practices.
- ✓ Guide the implementation of your quality system.
- ✓ Explain how your quality system will be audited.

- **Quality Assurance**

Quality Assurance is a system of management activities involving planning, implementation, assessment, and reporting to make sure that the end product (i.e., environmental data) is of the type and quality needed to meet the needs of the user.



- **Quality Control**

Quality Control is the overall system of operational techniques and activities that are used to fulfill requirements for quality. The QC activities are used to produce and document the quality of the end product.

- **Quality Management Plan (QMP)?**

A QMP is a formal plan that documents an entity's management system for the environmental work to be performed. The QMP is an "umbrella" document which describes the organization's quality System in terms of the organizational structure, functional responsibilities of management and staff, lines of authority, and required interfaces with those planning, implementing, and assessing all environmentally related activities conducted.

- **Procedures of Quality system**

Develop and implement quality system procedures that are consistent with your quality policy.

- ✓ Develop your procedures for all areas of your quality system.
- ✓ Document your procedures, and keep them up to date.
- ✓ Each procedure should:
 - ✓ Specify its purpose and scope.
 - ✓ Describe how an activity should be carried out.
 - ✓ Describe who should carry out the activity.
 - ✓ Explain why the activity is important to quality.
 - ✓ Describe when and where it should be carried out.
 - ✓ Explain what tools and equipment should be used.
 - ✓ Explain what supplies and materials should be used.
 - ✓ Explain what documents and records should be kept.

Procedures may also refer to detailed work instructions that explain exactly how the work should be done.

- **Quality Management Plan (QMP)?**

A QMP is a formal plan that documents an entity's management system for the environmental work to be performed. The QMP is an "umbrella" document which describes the organization's quality System in terms of the organizational structure, functional responsibilities of management and staff, lines of authority, and required interfaces with those planning, implementing, and assessing all environmentally related activities conducted.



- **Quality planning**

Develop quality plans that show how you intend to fulfill quality system requirements. You are expected to develop quality plans for products, processes, projects, and customer contracts. Your quality plans should list the quality objectives you intend to achieve, and the steps you intend to take to achieve these objectives. When you construct your quality plan, consider the following questions:

- ✓ Do you need to purchase any new equipment or instruments, or any new inspection and test tools?
- ✓ Do you need to carry out any special training in order to fulfill all quality system requirements?
- ✓ Do you need to improve design, production, testing, inspection, installation, or servicing procedures?
- ✓ Do you need to improve your quality measurement and verification procedures?
- ✓ Do you need to develop any new measurement methods or instruments?
- ✓ Do you need to clarify your organization's standards of acceptability?
- ✓ Do you need to develop any new documents, forms, reports, records, or manuals?
- ✓ Do you need to allocate more resources in order to achieve the required levels of quality?

- **Quality management standards**

Quality management system (QMS) standards establish a framework for how a business manages its key processes. They can help whether your business offers products or services and regardless of your size or industry. They can also help new businesses start off on the right foot by ensuring processes meet recognized standards, clarifying business objectives and avoiding expensive mistakes.

To comply with the standard you'll first need to implement a QMS. Implementing a QMS can help your business to:

- ✓ Achieve greater consistency in the activities involved in providing products or services
- ✓ Reduce expensive mistakes
- ✓ Increase efficiency by improving use of time and resources
- ✓ Improve customer satisfaction
- ✓ Market your business more effectively



- ✓ Exploit new market sectors and territories
- ✓ Manage growth more effectively by making it easier to integrate new employees
- ✓ constantly improve your products, processes and systems

For example, the quality system of a manufacturing business might include looking at more efficient manufacturing processes or speeding up distribution.

The ISO 9000 series of standards is the main set of International Standards applying to the management of quality systems. It includes ISO 9001, the key internationally agreed standard for a QMS. Businesses can be certified against this standard when they meet its requirements. The ISO 9001:2008 standard

ISO 9001:2008 is the key internationally agreed standard for quality management systems. It is used by over 951,000 businesses in 175 countries worldwide (source: British Standards Institution (BSI), 2010).

The ISO 9001:2008 standard has four elements:

- ✓ Management responsibility - ensuring top level management shows commitment to the quality system and develops it according to customers' needs and the business' objectives
- ✓ Resource management - ensuring the people, infrastructure and work environment needed to implement and improve quality systems are in place
- ✓ Product realization - delivering what customers want, looking at areas such as sales processes, design and development, purchasing, production or service activities
- ✓ Measurement, analysis and improvement - checking whether you have satisfied customers by carrying out other measurements of your system's effectiveness

The advantages of ISO 9001:2008 for your business can include:

- ✓ Greater efficiency and less waste
- ✓ Consistent control of major business processes, through key processes lists - see our example key processes master list - opens in a new window
- ✓ Regulation of successful working practices
- ✓ Risk management
- ✓ Increased customer satisfaction
- ✓ Greater consistency in the quality of products and services through better control of processes

Page 7 13	Author: Federal TVET Agency(FTA)	IT Support Service Level 1	Date: Oct 2019
			Version: 1



- ✓ Differentiation of your business from its competitors
- ✓ Increased profits
- ✓ Exploitation of new markets, both in the UK and overseas

However, you should also be aware of some of the disadvantages to implementing the standard. These can include:

- ✓ The cost of getting and keeping the certification
- ✓ The time involved
- ✓ Overcoming opposition to implementing change from within the business

The standard is adaptable to your business' needs and resources, though you may need the help of a consultant.

The ISO 9004:2009 standard

ISO 9004:2009 goes beyond ISO 9001:2008 and provides guidance on how you can continually improve your business' quality management system. It also contains information on managing for sustained success. This can benefit not only your customers but also:

- ✓ Employees
- ✓ Owners
- ✓ Suppliers
- ✓ Society in general

By measuring these groups' satisfaction with your business, you'll be able to assess whether you're continuing to improve.

The ISO 9000 series, which includes 9001 and 9004, is based around eight quality management principles that your senior managers should use as a framework for improvements to the business:

- ✓ Customer focus - they must understand and fulfill customer needs.
- ✓ Leadership - they should demonstrate strong leadership skills to increase employee motivation.
- ✓ Involvement of people - all levels of staff should be aware of their responsibilities within the business and the importance of providing what the customer requires.
- ✓ Process approach - identifying your essential business activities and considering each one as part of a process.



- ✓ System approach to management - managing your processes together as a system, leading to greater efficiency and focus. You could think of each process as a cog in a machine, helping it to run smoothly.
- ✓ Continual improvement - this should be a permanent business objective.
- ✓ Factual approach to decision-making - senior staff should base decisions on thorough analysis of data and information.
- ✓ Mutually beneficial supplier relationships - managers should recognize that your business and its suppliers depend on each other.



Self-Check 1	Written Test
--------------	--------------

Name:- _____ Date: - _____

Instruction: Answer all the questions listed below, if you have some clarifications- feel free to ask your teacher.

Part I: Choose the correct answer for the following questions and write on the space provided

- _____ 1. Standards are sets of rules that outline specification of dimensions, design of operation, materials and performance.
A. Standards B. Quality C. Performance D. None
- _____ 2. Key characteristic of quality for the customers include, _____
A. Good design and functionality B. Reliable/Dependable C. Consistency D. All
- _____ 3. Quality measured in:- _____ . A. Failure or reject rates B. Level of product returns C. Customer satisfaction D. All
- _____ 4. Which one of the following are not the main components of quality management?
A. Quality planning C. Quality assurance
B. Quality control D. Quality improvement D. None
- _____ 5. Is systematic process that translates quality rule into measurable objectives and requirements? (Use the list of chose on question number four, Q4).
- _____ 6. It means to ensure that the product or service provided meets the specific requirements of the customer. (Use the list of chose on question number four, Q4).
- _____ 7. Is any systematic process of checking to see whether a product or service being developed is meeting specified requirements? (Use the list of chose on question number four, Q4).
- _____ 8. Quality Improvement is a formal approach to the analysis of performance and systematic efforts to improve it. (Use the list of chose on question number four, Q4).



_____ 9. Which one of the following are not determinants of service quality that may relate to any service/product? A. Competence B. Courtesy C. Credibility
D. Security E. None

_____ 10. Which one of the following is determine the quality standard of computer system?
A. Hard disk capacity B. CPU speed C. RAM size D. All E. None

Part II: Write “True” if the statement is correct otherwise “False” on the space provided

- _____ 1. Quality management is focused not only on product/service quality, but also the means to achieve it.
- _____ 2. Quality control focuses on the product.
- _____ 3. The aim of quality control is simply to ensure that the results generated by the test are correct.
- _____ 4. Quality assurance is concerned with much more than the right test is carried out on the right sample.
- _____ 5. A quality standard is a documented process intended to control work resulting in a certain level of excellence (quality).
- _____ 6. Standards are the key to effective quality management
- _____ 7. Service quality is a measure of how well a delivered service matches the customers' expectations.
- _____ 8. TQM takes into account all quality measures taken at all levels and involving all company employees.
- _____ 9. Quality management Standards (QMS) is standards establish a framework for how a business manages its key processes.
- _____ 10. The condition of the sample and sample size affect the quality of results.

Part III: Write the short answer for the following question neatly and briefly

1. Write at least five criteria of service quality?
- A. _____
- B. _____
- C. _____



D. _____

E. _____

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____

Short Answer Questions

Note: Satisfactory rating - 30 points Unsatisfactory - below 15 points

You can ask your teacher for the copy of the correct answers.



Experts

The development of this Learning Guide for the TVET Program Information technology support service Level I.

No	Name of Trainers	Phone Number	E-mail Address	Region
1	Abdulakim Ahemed	0921900418		Harari
2	Assefa Million	0911034866	amen192005@gmail.com	Harari
3	Derese Teshome	0913938439	dereseteshome@gmail.com	AA
4	Getenesh Osamo	0923816933	gete.osamo@gmail.com	SNNPR
5	Remedan Mohammed	0913478937	remedanm77@gmail.com	Harari
6	Sewayehu W/Yohanes	0911716733	Baroke0816@gmail.com	SNNPR
7	Damelash Yihalem	0911912015	demenati@gmail.com	Harari