



Ethiopian TVET-System

INFORMATION TECHNOLOGY SUPPORT SERVICE

Level I

LEARNING GUIDE # 15

Unit of Competence:	Apply Quality Standards
Module Title:	Applying Quality Standards
LG Code:	ICT ITS1 M06 L02-LG 15
TTLM Code:	ICT ITS1 TTLM 1019v1

**LO 2: Assess Quality of Received
Articles**



Instruction Sheet	Learning Guide # 15
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This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Final product against workplace

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 received materials, articles or final product against workplace standards.
- Measure the materials, articles, or products using appropriate measuring instruments in accordance with workplace procedures.
- Identify and correct the causes of any identified faults in accordance with the workplace procedures.

Learning Instructions:

- Read the specific objectives of this Learning Guide.
- Follow the instructions described below 3 to 6.
- Read the information written in the information “Sheet 1, Sheet 2, Sheet 3 and Sheet 4, Sheet 5 ” in page 3, 22, 29, 33 and 35 respectively.
- Accomplish the “Self-check 1, Self-check t 2, Self-check 3 and Self-check 4, Self-check 5 in page 16, 27, 32, 34 and 37 respectively.
- If you earned a satisfactory evaluation from the “Self-check” proceed to “Operation Sheet 1 in page 18.
- Do the “LAP test” in page 20, 28.



2.1. Overview

Technological advances have made computers an important part of every workplace. Many companies store valuable data on computer systems, databases and networks, and most workplace communication is done using computers and networks. Although computers allow businesses to streamline processes, distribute information quickly and stay competitive, it also allows the potential for security issues that can ultimately affect business operations and integrity.

- **Benefits**

Because most data is stored on computers and almost all communication is done on an organization's computer network, the security of the data is crucial for the success of an organization. Monitoring workplace computers can be done using a variety of software products that monitor computer networks. This software can also be used to monitor or track employee activity and productivity as well. This ensures data is secure by using the software to block certain websites, alert information technology staff of potential threats, such as computer viruses, as well as monitor computer and Internet usage by employees.

- **Effects**

Monitoring workplace computers can secure data stored on computer systems, as well as ensure employees are using workplace computers for business purposes. Some monitoring software comes highly recommended at a reasonable cost and can be customized to an organization's needs. This requires some additional efforts by management or information technology staff, but proves it's a valuable tool to ensure the security of business data and integrity. Although computer workplace monitoring has become a necessity, employees often don't understand the reasons for computer monitoring and may feel violated or micro-managed.

- **Considerations**

When considering using computer monitoring software in the workplace, do extensive research on different products and services. Although some software is costly, it may be worth the investment to protect the integrity of a business. If an



organization decides to use this software--inform employees. Allow employees to see the software and its capabilities by demonstrating its features in a group setting. Be open and honest regarding how the software will be used and how it will add security to the business. Talk to employees about their rights regarding computer monitoring. The Texas Workforce Commission has policies for workplace computer monitoring and employees should be aware of those policies. Also allow employees to ask questions in a private setting if they wish.

- **Using appropriate measuring instruments**

If you've shopped around for just the right desk for your space, but haven't found exactly what you're looking for, consider building your own. Counter top desks are a unique way to modify your work area. Whether starting with a brand new section counter top, or repurposing old counters after a remodel, counter top desks make a sturdy addition to your office furnishings. A moderately simple do-it-yourself project, building a counter top desk is considerably less expensive than having a custom desk built, and requires less than one day's work to complete from start to finish.

- **Instructions**

- ✓ Make a space plan and measure the area where the desk will sit to ensure the right fit. Decide whether the desk will be straight or a corner unit, and how the desk will be supported, and plan accordingly. Straight desks are a simpler project, but corner units afford more workspace and often allow for the best use of the available area.
- ✓ Purchase supplies for the project, including counter tops, support system, and any brackets that may be required. Counter top can be cut at the time of purchase, or ordered to fit, so be certain to have exact measurements to ensure a correct fit without further cutting. Collect all tools needed for the project before beginning.
- ✓ Prepare your support system before assembling your desk. The simplest support solution is to use kitchen cabinets, metal filing cabinets, or sturdy plastic or metal drawers. This will make your desk both sturdy and easy to move and requires no tools, cutting, or drilling. This support solution is particularly idea for granite, metal, or stone counter top materials which are difficult to cut or drill.

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- ✓ Install the chosen support system, ensuring that it is both the proper height, and level, before applying counter tops. If you've chosen cabinets or other form of freestanding support, be certain they're positioned at appropriate intervals to support the weight of the counter top.
- ✓ Affix the counter top to the support system one section at a time. If your counter is a heavy material, such as granite or stone, be certain the support system is sufficient to harbor the weight before applying the next section of counter. Once all sections of counter are installed, use a level to check that there the desk is even and level.
- ✓ Apply the end cap finishing kit where necessary and add any brackets that might be required to anchor the counter top. This step is optional but may be necessary to ensure your desk is both attractive and stable.

- **Identifying all potential failure causes**

When confronted with a systems failure, there is often a natural tendency to begin disassembling hardware to search for the cause. This is a poor approach. Failed hardware can expose precious information and safeguards are necessary to prevent losing that information from careless remove procedures. One must know what to look for prior to disassembling failed hardware.

Faults that come and go are the worst ones to track down, since just when you think you know the cause of the problem and intend to do something about it can disappear, leaving you wondering whether or not it's cured.

The most serious random problem is a spontaneous reboot, which can be caused by a faulty, bad mains interference, or overheating, particularly of the CPU. This is often caused by failure of the CPU fan, but this is easy enough to check -- just open up the case and see if the fan is still spinning. If your cooling arrangements are not broken but simply insufficient (this can happen, particularly in the case of Athlon processors, which generate a lot of heat), you'll need to upgrade your CPU heat-sink and/or fan to bring its top temperature down to a more sensible level.

However, your computer is most likely to go wrong when you've just changed something, for instance when you've installed a new stick of RAM, a soundcard, hard drive, or a new CPU. Even though this may work perfectly well, you may have disturbed one of the cables inside your PC at the same time, giving you a completely unrelated problem; or if you've been overclocking your CPU, it may stop working when a new PCI card is installed.

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- **Power Supplies**

If your PC won't boot up, no LEDs illuminate on the PC's front panel, and you can't hear your hard drives or cooling fans spin up, you may have a problem with your mains supply, or a faulty or dead computer PSU (Power Supply Unit). Faulty power supplies can also cause random reboots: these can also mean that your power supply is working properly but is under such a heavy load that occasionally the voltages sag a bit, or even collapse.

- **BIOS Beep Codes**

If the power supply is working, booting your PC will light the front panel-power LED and let the BIOS perform a Power-On Self-Test, or POST. This initializes system hardware; tests RAM the keyboard, serial and parallel ports, initialize the floppy drive and hard disk controller, and diagnose any basic problems. If none are found, you'll get one short beep from the internal PC speaker. A combination of long or short beeps signifies a problem, and in most cases your PC will refuse to carry on. Although many 'beep codes' are similar from motherboard to motherboard, you really need to refer to the manual to find out what each sequence of beeps signifies.

- **Cable Issues**

Another source of sometimes weird hardware faults is internal cabling. For instance, if the IDE cable connecting your motherboard and hard drive is not inserted correctly, your drive may not be detected by the BIOS at all. One of the conductors on all IDE cables will either be colored red or have writing printing on it, so make sure these identification marks match up with pin one on your hard drive, and pin one on the motherboard socket.

- **Summary on How to Fix and Avoid General Protection Faults**

If you usually get a general protection fault when your computer has been running for a certain length of time, then overheating is a likely cause. You may have to reduce the level of over clocking or replace a fan that isn't working. When the problem occurs after the addition of new memory, remove or replace it to see if this cures the problem. If you can't do any of this yourself, get an engineer to do it for you.

- ✓ When the fault always occurs soon after turning on your computer, it may be caused by a driver used by one of the programs that loads at start up or by Windows itself. You can try a Windows install but choose the repair option, which will fix corrupt or missing files without losing your data or programs. If the fault always happens when a particular program is running, uninstall and

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then re-install it. Also, check the supplier's website for a later version of the program or drivers and install them.

- ✓ Actually finding the cause of the general protection fault can be a time-consuming process and you can speed this up by using a tool that will automate the task. One of the best I've found for this is Registry Patrol, which, despite its name, does much more than just sort out the PC's registry. It will, in fact, undertake a deep scan of the whole computer, sorting out all the drivers and DLLs that are the most likely cause of general protection faults. As a bonus, it will also fix all types of other problems so that you end up with a machine that starts quicker, runs better and is less likely to crash.
- ✓ Registry Patrol comes with a guarantee that it will do what it promises and is available to try as a free download from the company's website (www.registrypatrol.com). Once you've installed it and run the scan, your PC will run as it did when it was new and general protection faults will be a thing of the past.



Self-Check 1	Written Test
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Name: _____ Date: _____

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

Please ask your trainer for the questionnaire for this Self-Check.

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Experts

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

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