

S3 ICT BY KABS ICT RESOURCE CENTER

ICT Master Curriculum Uganda's Competency Curriculum

Evaluation Grid / Scoring Guide With Expected Responses

ITEM 1 - Expected Response

Virtual learning sessions bridge the gap between resource-limited schools and well-resourced institutions. By leveraging ICT tools, Kato's Secondary School can access quality educational content and collaborate effectively with a Kampala-based school. Proper setup and data protection measures are essential to maximize the benefits of this grant.

1. Setting Up Virtual Learning Sessions Using ICT Tools

To establish a virtual learning environment, Kato's Secondary School can follow these steps:

- **Procure and Set Up Hardware:**

- **Computers/Laptops:** Install computers or laptops in the ICT lab or a classroom for student use.
- **Internet Connection:** Ensure a reliable broadband or satellite internet connection to enable seamless video conferencing.
- **Webcams and Microphones:** Equip each computer with webcams and microphones for audio-visual participation.
- **Speakers and Projectors:** Use speakers and a projector for group participation in large classrooms.
- **Power Backup:** Install an Uninterrupted Power Supply (UPS) to counteract power outages during sessions.

- **Install and Configure Software:**

- **Video Conferencing Tools:** Install applications like Zoom, Google Meet, or Microsoft Teams to facilitate real-time communication.

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- **Learning Management Systems (LMS):** Utilize platforms like Google Classroom for sharing learning materials and assignments.
- **Screen Sharing Software:** Enable screen sharing during collaborative lessons.
- **Conduct Trial Sessions:**
 - Organize test sessions to ensure all hardware and software are functioning correctly.
 - Train teachers and students on using ICT tools effectively.

2. Necessary Safety Precautions to Protect Personal Data

Data security is critical in virtual learning environments. Kato's Secondary School should implement the following precautions:

- **Secure User Credentials:**
 - Use strong passwords for accounts on video conferencing and LMS platforms.
 - Encourage periodic password changes for enhanced security.
- **Control Meeting Access:**
 - Use features like waiting rooms and meeting passcodes to prevent unauthorized access to sessions.
 - Limit screen sharing privileges to hosts or teachers.
- **Educate Students and Staff on Data Privacy:**
 - Train participants not to share sensitive information, such as addresses or financial details, during virtual lessons.
 - Avoid sharing personal photos or files unrelated to learning.
- **Protect Communication Channels:**
 - Use end-to-end encrypted platforms for video conferencing to ensure communication security.
 - Monitor chat and message features for inappropriate use.
- **Implement Device Security:**
 - Install and regularly update antivirus software on all computers.

- Disable auto-login features to prevent unauthorized access in shared environments.
- **Backup Data:**
 - Maintain regular backups of important files and session recordings in secure, offline storage.

Conclusion

With the right ICT tools and strict adherence to data security measures, Kato's Secondary School can create a safe and effective virtual learning environment. This approach will enable students to access quality education resources while ensuring their personal data remains protected.

Evaluation Grid

Competency (Basis of Assessment)	Evidence: Skill/Ability Exhibited/Score	Score
Provides a focused introduction	- Produces a focused introduction	01
Explains setup of virtual learning using ICT tools	- Identifies and explains 5 or more steps (e.g., hardware setup, internet, software installation, trial sessions). - Identifies and explains 3-4 steps. - Identifies and explains 1-2 steps. - Identifies and explains 1 step. - No response.	04 03 02 01 00
Discusses necessary safety precautions	- Identifies and explains 5 or more precautions (e.g., secure credentials, control access, educate users, encrypt platforms). - Identifies and explains 3-4 precautions. - Identifies and explains 1-2 precautions. - Identifies and explains 1 precaution. - No response.	04 03 02 01 00
Conclusion	- Provides a relevant conclusion	01

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ITEM 2 - Expected Response

Live presentations require proper ICT hardware to ensure clarity, visibility, and smooth delivery of content to a large audience. To make the career fair a success, Wandegeya High School must select appropriate hardware and implement safety measures to protect both equipment and users.

1. Recommended Hardware Devices and Their Functions

The following hardware devices are necessary to set up a live presentation:

- **Laptop or Desktop Computer:** Acts as the central device for storing and running the presentation, videos, and other multimedia content.
- **Projector:** Projects the presentation onto a large screen, ensuring visibility for everyone in the school hall.
- **Projection Screen:** Provides a flat, white surface for clear and high-quality display of projected content.
- **Speakers:** Amplifies audio for clear sound delivery, ensuring the audience can hear videos or the presenter's voice.
- **Microphone:** Enables the presenter to speak clearly and be heard across the hall.
- **Clicker or Remote Control:** Allows the presenter to navigate slides without having to stay near the laptop, improving engagement.
- **Power Backup (e.g., UPS):** Ensures the devices continue functioning during power outages.
- **Cables and Connectors:** HDMI or VGA cables connect the laptop to the projector, while audio cables link the speakers to the laptop.

Steps for Setup:

1. Position the projector and screen at the front of the hall for maximum visibility.
2. Connect the laptop to the projector and speakers using
3. appropriate cables.
4. Test the microphone and speakers to ensure clear audio.
5. Use the remote control to test slide navigation.

2. Essential Safety Measures

To ensure effective and risk-free usage of the hardware devices:

- **Cable Management:**

- Secure all cables with tape or cable organizers to prevent tripping hazards.
- Ensure cables are not stretched to avoid damage.

- **Stable Power Supply:**

- Use surge protectors to prevent damage from power surges.
- Employ an Uninterrupted Power Supply (UPS) to maintain power during outages.

- **Proper Ventilation:**

- Place devices like projectors and laptops on stable, flat surfaces in well-ventilated areas to avoid overheating.

- **Device Maintenance:**

- Regularly clean projectors and screens to maintain image clarity.
- Ensure microphones and speakers are checked for functionality before the event.

- **Emergency Protocols:**

- Have a fire extinguisher nearby for electrical fires.
- Train staff on how to turn off devices safely in case of emergencies.

- **Safe Handling:**

- Use padded cases for transporting fragile devices like projectors and microphones.
- Allow only trained personnel to handle and operate the equipment.

Conclusion

By equipping the career fair with the recommended hardware and adhering to these safety measures, Wandegaya High School can deliver a professional and risk-free live presentation, ensuring an engaging and informative experience for students.

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Evaluation Grid

Competency (Basis of Assessment)	Evidence: Skill/Ability Exhibited/Score	Score
Provides a focused introduction	- Produces a focused introduction	01
Recommends hardware devices and explains their functions	<ul style="list-style-type: none"> - Identifies and explains 5 or more hardware devices (e.g., projector, laptop, speakers, microphone). - Identifies and explains 3-4 devices. - Identifies and explains 1-2 devices. - Identifies and explains 1 device. - No response. 	04 03 02 01 00
Outlines safety measures for hardware use	<ul style="list-style-type: none"> - Identifies and explains 5 or more safety measures (e.g., cable management, power backup, proper ventilation). - Identifies and explains 3-4 safety measures. - Identifies and explains 1-2 safety measures. - Identifies and explains 1 safety measure. - No response. 	04 03 02 01 00
Conclusion	- Provides a relevant conclusion	01

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ITEM 3 - Expected Response

ICT tools play a critical role in researching, organizing, and sharing information effectively. Using these tools, information on malaria can be disseminated to the community to raise awareness and prevent its spread while ensuring safe internet practices.

a) Searching, Organizing, and Sharing Information Using ICT Tools

1. Researching Information on Malaria

- **Search Engines:** Use reliable search engines like Google to search for keywords such as “Malaria causes,” “Malaria symptoms,” “Malaria prevention,” and “Malaria treatment.”
- **Trusted Websites:** Focus on reputable sources like the World Health Organization (WHO) website, Uganda Ministry of Health website, and academic resources for accurate information.
- **E-Libraries:** Access digital libraries such as ResearchGate or PubMed for detailed studies and reports on malaria.

2. Organizing the Information

- **Document Software:** Use Microsoft Word or Google Docs to compile the research findings, creating sections for causes, symptoms, prevention, and treatment options.
- **Spreadsheets:** Use Microsoft Excel or Google Sheets to categorize data, such as statistics on malaria cases or prevention measures.
- **Presentation Tools:** Use PowerPoint or Canva to create an engaging visual presentation summarizing key points for community sharing.

3. Sharing the Information

- **Posters and Flyers:** Use desktop publishing software like MS Publisher to design posters and flyers for distribution in the community.
- **Social Media Platforms:** Share summarized information, infographics, and awareness messages through school social media accounts (e.g., Facebook, WhatsApp, or Twitter).

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- **Community Meetings:** Use a projector and presentation software to deliver the information during scheduled gatherings.

b) Precautions for Safe and Respectful Internet Use

1. Verify Information Sources:

- Ensure all sources are reliable and credible before using or sharing information.
- Avoid spreading misinformation by cross-checking facts from multiple sources.

2. Respect Copyright and Intellectual Property:

- Use publicly available or licensed content when downloading images, videos, or research materials.
- Always credit sources appropriately in presentations and publications.

3. Protect Personal Information:

- Avoid sharing personal or sensitive information, such as phone numbers or addresses, on public platforms.

4. Avoid Plagiarism:

- Paraphrase information and write original content when compiling research findings.
- Use plagiarism detection tools like Grammarly or Turnitin to ensure originality.

5. Adhere to Community Guidelines:

- Follow the rules of social media platforms and online forums when sharing information.
- Avoid using harmful language or images that might upset or misinform the audience.

6. Ensure Data Security:

- Use strong passwords for online accounts and enable two-factor authentication for security.

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- Avoid clicking on suspicious links or downloading unverified files during the research process.

Conclusion

By effectively using ICT tools for research, organization, and communication, the school can create a comprehensive and impactful awareness campaign on malaria prevention. Observing safe and respectful internet practices ensures that the information shared is reliable, respectful, and beneficial to the community.

Evaluation Grid

Competency (Basis of Assessment)	Evidence: Skill/Ability Exhibited/Score	Score
Provides a focused introduction	- Produces a focused introduction	01
Describes how to search for, organize, and share information using ICT tools	- Explains 5 or more methods/tools (e.g., search engines, document software, social media platforms). - Explains 3-4 methods/tools. - Explains 1-2 methods/tools. - Explains 1 method/tool. - No response.	04 03 02 01 00
Lists precautions for safe and respectful internet use	- Identifies and explains 5 or more precautions (e.g., verify sources, respect copyright, avoid plagiarism). - Identifies and explains 3-4 precautions. - Identifies and explains 1-2 precautions. - Identifies and explains 1 precaution. - No response.	04 03 02 01 00
Conclusion	- Provides a relevant conclusion	01

ITEM 4 - Expected Response

Report: Promoting Healthy Computer Practices in the Community

Introduction

The introduction of public computer labs provides opportunities for learning and development. However, prolonged computer use can lead to health problems if precautions are not taken. This report highlights common health risks, practical solutions, and best practices to ensure safe computer usage for the community.

a) Common Health Problems from Long-Term Computer Use

1. Eye Strain:

- Caused by prolonged focus on screens, leading to discomfort and difficulty focusing.

2. Back and Neck Pain:

- Results from poor posture and prolonged sitting without support.

3. Repetitive Strain Injuries (RSI):

- Caused by repetitive movements, such as typing or mouse use, leading to wrist or finger pain.

4. Headaches:

- Triggered by improper lighting, screen glare, or prolonged focus on screens.

5. Fatigue:

- Prolonged use of computers without breaks can lead to mental and physical exhaustion.

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b) Practical Tips to Avoid Each Health Problem

1. Preventing Eye Strain:

- Follow the **20-20-20 Rule**: Every 20 minutes, look at an object 20 feet away for 20 seconds.
- Adjust screen brightness and contrast to comfortable levels.
- Use anti-glare screen protectors and position the monitor slightly below eye level.

2. Reducing Back and Neck Pain:

- Use an ergonomic chair with lumbar support.
- Sit with feet flat on the floor and knees at a 90-degree angle.
- Adjust the monitor to be at eye level to avoid neck strain.

3. Avoiding Repetitive Strain Injuries:

- Use an ergonomic keyboard and mouse to reduce strain on wrists.
- Take short breaks every 30 minutes to stretch fingers, wrists, and arms.
- Keep wrists straight and relaxed while typing.

4. Minimizing Headaches:

- Position the computer to reduce screen glare from windows or lights.
- Use proper lighting that isn't too dim or too harsh.
- Stay hydrated and take short breaks to relax the eyes.

5. Combating Fatigue:

- Take regular screen breaks, stepping away for at least 5 minutes every hour.
- Alternate tasks to avoid prolonged periods of screen use.
- Get sufficient rest and ensure proper hydration throughout the day.

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c) Encouraging Safe Computer Practices for Community Members

To promote safe computer usage, community members should adopt the following habits:

1. Proper Posture:

- Sit upright with back support and avoid slouching.
- Ensure the monitor is positioned at a comfortable height and distance (about 20-30 inches away).

2. Regular Screen Breaks:

- Schedule breaks to relax eyes and stretch muscles.
- Encourage users to stand and move around during breaks to improve circulation.

3. Lighting Adjustments:

- Ensure ambient lighting is sufficient to prevent screen glare.
- Use curtains or blinds to reduce sunlight glare on the monitor.
- Adjust screen brightness to match the surrounding light levels.

Conclusion

By understanding the risks associated with prolonged computer use and implementing these practical solutions, community members can safely enjoy the benefits of the public computer lab. Regular awareness sessions on healthy computer practices should also be conducted to promote long-term well-being.

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Evaluation Grid

Competency (Basis of Assessment)	Evidence: Skill/Ability Exhibited/Score	Score
Provides a focused introduction	- Produces a focused introduction	01
Identifies common health problems from computer use	<ul style="list-style-type: none"> - Identifies and explains 5 or more health problems (e.g., eye strain, back pain, RSI). - Identifies and explains 3-4 health problems. - Identifies and explains 1-2 health problems. - Identifies and explains 1 health problem. - No response. 	04 03 02 01 00
Explains practical tips to avoid health problems	<ul style="list-style-type: none"> - Explains 5 or more practical tips to address health issues (e.g., 20-20-20 rule, posture adjustments). - Explains 3-4 practical tips. - Explains 1-2 practical tips. - Explains 1 practical tip. - No response. 	04 03 02 01 00
Encourages safe computer practices	<ul style="list-style-type: none"> - Identifies and explains 5 or more safe practices (e.g., posture, breaks, lighting). - Identifies and explains 3-4 safe practices. - Identifies and explains 1-2 safe practices. - Identifies and explains 1 safe practice. - No response. 	04 03 02 01 00
Conclusion	- Provides a relevant conclusion	01

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