REMOTE LEARNING METHODOLOGIES

MANUAL FOR TEACHERS

FOREWORD

Teachers are critical in ensuring continuity of learning within and without the classroom walls. Periods such as during the COVID-19 pandemic, when teacher-learner face-to-face interaction is either stopped or significantly reduced, alternative delivery modes and pedagogies are required. The prolonged disruption of learning due to the pandemic brought to fore the need to continuously empower teachers to be able to respond to emerging trends that impact negatively to their practice.

The Teachers' Service Commission has been encouraging teachers to become more innovative in their service delivery and to *'inject new ideas and approaches.* The second Kenya professional teaching standard (KePTS) expects teachers to use a '*variety of instructional strategies in order to meet individual learning needs*' to effectively engage their learners. In essence, teachers are supposed to seek ways and means to practice at all times using whatever available resources in their disposal. Available resources in these instances, when learning within the classroom walls is not possible, include the radio, television, mobile phone, internet connectivity among others.

In response to the disruption, a few teachers attempted (within their means) to implement strategies for remote learning using WhatsApp, zoom, google classroom, Microsoft Teams among others. There are many other open-source platforms that teachers would have used had they known about them. Unfortunately, more than 95 percent of the teachers belong to the group that were unable to participate in the remote learning due inadequate technological capabilities. To increase a teacher's capacity in continually engaging learners within and without the classroom walls requires that they be trained in '*remote learning methodologies*.

The remote learning manual is designed to help teachers acquire technological skills, and promote interpersonal skills (e.g., active listening, presentation etc.). It will give the teachers skills to engage learners in a variety of online environments through appropriate devices and means. This manual is a landmark achievement for this country as it will help break new ground in the use of technology for teaching and learning. Our envisaged future is that where blended learning, synchronous and asynchronous, will be use to improve the quality of teaching and learning, and address the acute teacher shortage.

CHAIRPERSON TSC

PREFACE

The Teachers Service Commission has developed a Manual for Remote Learning as an alternative to the delivery of curriculum. The manual is meant to support teachers continue teaching their learners even when they are in different locations using different modes such as the radio, television, video conferencing, computers among other emerging technologies.

The Teachers' Manual for Remote Learning is carefully designed to provide technological knowledge and skills to all teachers at the basic level of education. It is organized in eight sessions which explain the concept of remote learning. Subsequent sessions delve into discussions on the access, delivery modes, pedagogies, assessments, and monitoring in remote learning. The manual has also designated a session on assistive technology in remote learning for learners living with special needs. Efforts have also been made to show how remote learning is anchored on both national and international policy frameworks, and the specific roles of different stakeholders.

The manual is designed to take teachers through a learning curve using the K-W-L (Know, Want to Know, Learned) strategy. Teachers using this manual will be asked to state what they know and what to know about remote learning. Using simple activities and tasks, the manual will be useful to build capacities of all teachers from those with no or little to those with advanced knowledge and skills. At the end of every session, the teacher will have an opportunity to reflect on what they have learnt and how they will use the acquired knowledge and skills.

The Commission is very confident that our teachers will find this manual for remote learning beneficial and helpful to their practice. Through remote learning we are going to reach more learners especially those in hard-to-reach areas and fasten the acquisition digital skills as desired in the Competence-based curriculum. This will ultimately contribute significantly to continuity of learning during times of pandemics such as the COVID-19 pandemic.

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ACKNOWLEDGEMENTS

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This Training Manual will facilitate capacity building of teachers to equip them with skills on online and distance learning methodologies to ensure teachers support remote learning during the COVID-19 period and beyond.

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OPERATIONAL DEFINITION OF TERMS

Asynchronous:	This is a remote learning method that does not require real-time interaction.
Blended	refers to integration of synchronous and asynchronous remote learning methodologies of teaching
Cloud	refers to servers that are accessed over the internet, and the software and databases that run those servers
Core Competence	A competence is the ability to apply appropriate knowledge, skills, attitudes and values to successfully perform a function.
Cybercrime	refers to criminal activities that involve computers or the network.
Digital Content	refers to content that is published, distributed and stored in electronic format such as text, voice recording, video clips, photographs, and animations that is used in teaching and learning.
KWL	is a research strategy. The approximate acronym stands for "What I Know," "What I Want to Know," and "What I Learned." Learners and teachers use it as a reading comprehension aid.
Modes of delivery	Medium of delivering content in remote learning
Monitoring	is a continuous process by which stakeholders obtain regular feedback on progress towards achieving the set milestones and results.
Netiquette	is a portmanteau of “net” and “etiquette,” which refers to a set of rules, and behaviour while communicating with others online
Pedagogy	Method and practice of teaching.
Remote Learning	is where the learner and the teacher are not physically present in a traditional classroom environment. Information is relayed through technology, such as discussion boards, video conferencing, and online assessments.
Synchronous	This is a remote learning method that happens in real-time with a set class schedule and required login times.

Venn Diagram an illustration that uses circles to visually represent the similarities and differences between two concepts. Circles that overlap have a commonality while circles that do not overlap do not share any similar traits.

ACRONYMS & ABBREVIATIONS

CD:	Compact Disk
DLP:	Digital Learning Programme
ECDE:	Early Childhood Development Education
KBC:	Kenya Broadcasting Corporation
KEC:	Kenya Education Cloud
KICD:	Kenya Institute for Curriculum Development
GPE:	Global Partnership in Education
OER:	Open Educational Resources
KWL:	Know Want to Learn
KNEC:	Kenya National Examination Council
KISE:	Kenya Institute for Special Education
KEPSHA:	Kenya Primary School Heads Association
KESSHA:	Kenya Secondary School Heads Association
LMS:	Learning Management System
LDD:	Learner Digital Device
TDD:	Teacher Digital Device
ICT:	Information Communication and Technology
TSC:	Teachers Service Commission
KICD:	Kenya Institute of Curriculum Development
ICTA:	Information, Communication and Technology Authority
KISE:	Kenya Institute for Special Education
KEPSHA:	Kenya Primary School Heads Association
KESSHA:	Kenya Secondary School Heads Association
MOE:	Ministry of Education
CEMASTEA:	Center for Mathematics, Science and Technology Education in Africa
SMS:	Short Messaging Service
RD:	Regional Director
CD:	County Director

SCD: Sub County Director

CSO: Curriculum Support Officer

RQASO: Regional Quality Assurance Officer

INTRODUCTION TO THE MANUAL

The Teachers Service Commission (TSC) in collaboration with MOE, KICD, KNEC, KISE, ICTA, KEPSHA & KESSHA under Kenya GPE COVID 19 Learning Continuity in Basic Education Project developed this Remote Learning Methodologies Training Manual. The manual has been developed on the foundation of the Digital Literacy Programme (DLP) to broaden the concept of remote learning.

This manual aims at entrenching ICT in teaching and learning, equip teachers and learners with 21st century learning skills and enhance their capacity to engage in remote learning.

This is of paramount importance especially now when education systems around the world are facing an unprecedented challenge in the wake of massive school closures as a result of the effects of COVID-19 pandemic.

Governmental agencies are working with international organizations, private sector partners and civil society to deliver education remotely through a combination of technologies in order to ensure continuity of curriculum implementation and learning for all. Establishing or scaling up remote learning strategies are a sector-wide response to sudden interruption of educational processes as a result of unexpected closure of learning institutions.

These strategies are guided by a concern for equity and inclusion and the need to ensure the design and delivery of remote learning do not exacerbate existing educational and social inequalities. The planning of more comprehensive remote learning strategies should, however, be guided by both immediate mitigation needs and long-term goals. Beyond the response to the current crisis, the efforts to deploy remote learning at scale across all levels of education provides valuable lessons and may lay the foundation for longer-term goals of building more open, inclusive and flexible education systems after the COVID-19 pandemic has passed.

Who is this manual for?

This manual has been developed primarily to support teachers in remote learning methodologies. In addition, instructional supervisors, parents and teacher training institutions will find considerable guidance herein, both in terms of ICT integration in education and remote learning methodologies.

About the manual

The manual guides the teachers on how to undertake and support learners, parents and peers during the remote learning process. It will also enhance teachers' skills on the pedagogies and modes to be used in remote learning.

The manual has been organized in eight sessions with each session having an introduction, expected learning outcomes, KWL, Activities, facilitators notes and reflection.

The facilitators notes are meant to provide basic information on the areas or topic under discussion. The information and the knowledge will be used to guide the activities to achieve the intended learning outcomes.

Self-reflection should be undertaken by both the teacher and the learner. Teachers who promote reflective classrooms ensure that students are fully engaged in the process of making meaning. It is a process where students describe their learning, how it changed, and how it might relate to future learning experiences. Reflection brings learning to life. It increases insight, and creates pathways to future learning.

Reflective practice is 'learning through and from experience towards gaining new insights of self and practice' (Finlay, 2008). It requires teachers to look at what they do in the classroom, and think about why they do it and if it works, it leads to a process of self-observation and self-evaluation.

The manual has also introduced a learning strategy used by researchers called KWL. This is a form of instructional reading strategy that is used to guide students taking them through the idea and the text. It may be useful in research projects and to organize information to help study for tests.

What is a KWL?

K-W-L is an acronym that stands for "Know," "Want to Know," and "Learned." The KWL chart is divided into three columns—one for each letter—under which learners record:

- What they already know about the topic
- What they want to know (or questions they have) about the topic
- What they learned (To be completed after the lesson or assignment)

Table 1: Basic example of a completed KWL Chart

Topic: Clouds		
K: Know	W: Want to Know	L: Learned
• **There are different types of clouds.** • **One type is called a cumulus cloud.** • **Clouds are made of water.**	• What are storm clouds? • How do clouds form?	• Types of clouds: Stratus, Cumulus, Cumulonimbus, Stratocumulus, Altostratus, Cirrus, Cirrocumulus, Altocumulus • When warm air rises, it cools and condenses into tiny water droplets. As more water droplets are created, a cloud forms.

Source: https://www.lucidchart.com/blog/what-is-a-kwl-chart

KWL charts are effective tools for engaging learners in the learning process, helping them recall knowledge, and tracking their learning progress. While they are often used to help learners improve their reading comprehension, KWL charts can be applied to any topic or lesson.

Why KWL?

KWL charts are a simple but powerful way for learners to engage in the learning process. There are many reasons to try this visual tool in your classroom. KWL charts:

- Are easy to use
- Demonstrate the level of knowledge and gaps in understanding
- Motivate and engage learners in the learning process
- Track progress and learning outcomes
- Present a simple method for organizing notetaking
- Offer flexibility and can be adapted to the lesson or learner's needs

By recording each stage of the learning process (current knowledge, questions or gaps, and outcomes), KWL charts help teachers identify learner needs and deliver lessons specifically catered to each class. This strategy keeps individual learners and teachers on the same page and encourages learners to engage with the material and take ownership of their learning. The KWL responses should be discussed and linked to the session's activities.

How will capacity building of teachers on remote learning be done?

Capacity building of teachers will be done through a cascade method in order to reach the teachers within the zones of their workstations. Teachers will be required to use Learning Management System (LMS) that is suitable, easily accessible and readily available across their geographical dispensation.

Reference

Finlay, L. (2008). Reflecting on 'Reflective Practice'. *Practice-base Professional Learning Centre*, 52.

SESSION ONE

CONCEPT AND DELIVERY OF REMOTE LEARNING

1.1. Introduction

This session covers the concept of remote learning and its various modes of delivery, implementation and benefits. In addition, it explores technologies in terms of their accessibility, effectiveness and user friendliness.

1.2. Expected Learning Outcomes

By the end of the session, you should be able to:

i. Explain the concept of remote learning
ii. Describe suitable modes of delivery and their benefits in remote learning
iii. Develop online safety guidelines and netiquette to be used in remote learning
iv. Appreciate the use of different modes of delivery in remote learning

KWL on Remote Learning Model

i. Know: What I know about the concept of remote learning and the various modes of delivery.
ii. Want to Know: What I want to know about the concept of remote learning and modes of delivery

Share your responses to your group and present common items to the larger group (the sharing can be done through video, call, chats, WhatsApp depending on the mode that is available)

1.3. Concept of Remote Learning

During the COVID-19 pandemic teachers explored several avenues to continue engaging their learners remotely with some degree of success.

Activity 1.1: Concept of Remote Learning
Define remote learning and share your experience in the use of remote learning and share your reflection in the larger group.

In this manual, remote learning is defined as the process of teaching and learning where a learner and a teacher are in different locations. The learning instruction is disseminated through different modes such as radio, television, video conferencing, mobile phones, chats etc. There are several methodologies of remote learning (discussed in Session 3) used differently based on type of audience and the resources available. In all cases, though, remote learning involves four critical entities: learner or recipient, educator or teacher, parent, and stakeholders (see figure 1).

a) **Stakeholders:** TSC, MoE, ICT-A are some of the stakeholders expected to spearhead the implementation digital programs in schools. They are supposed to develop strategies that enable continuity of learning including the use to technological devices.

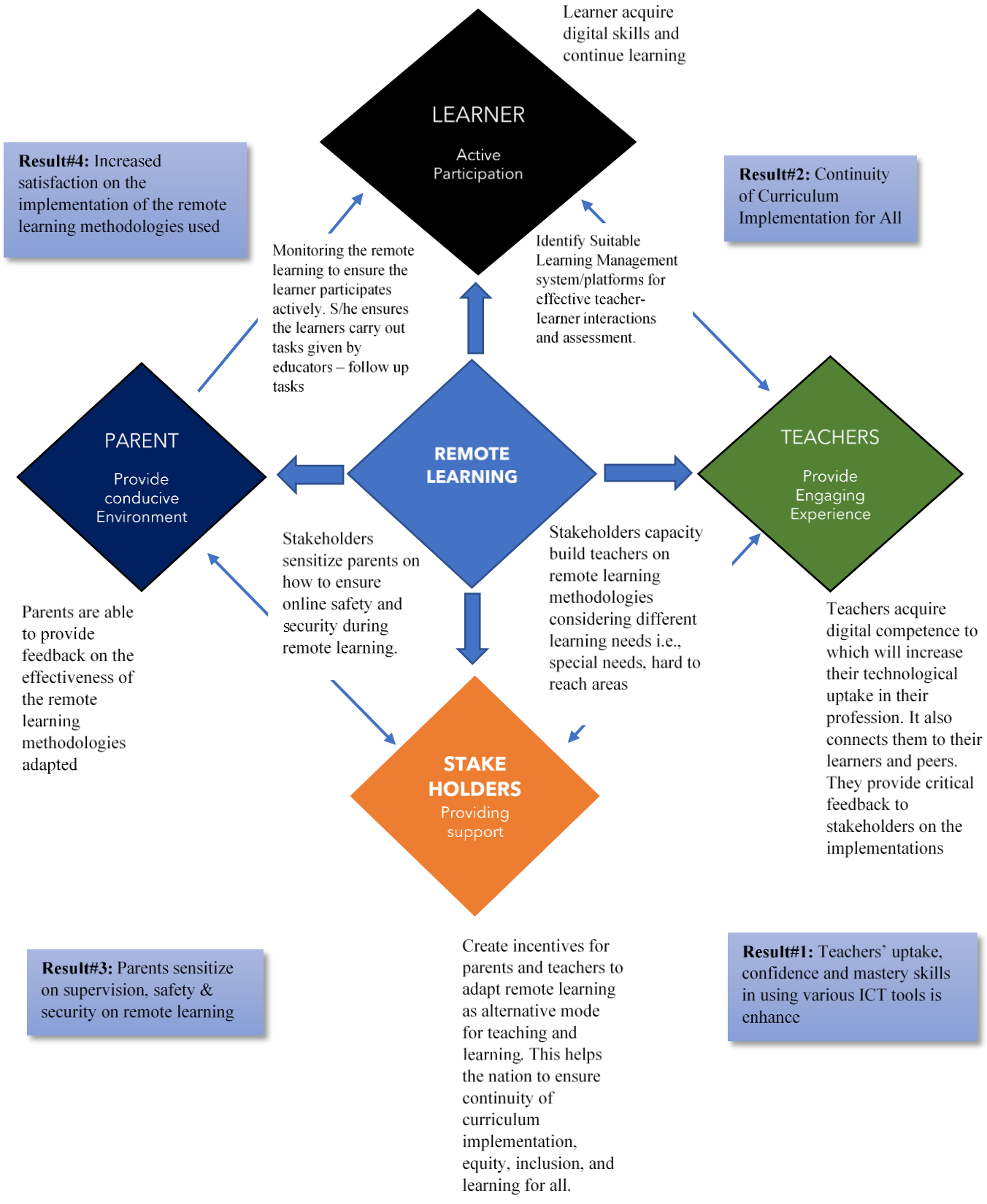
b) **Teachers:** The role of teachers in remote learning include choice of suitable platform for use in remote learning. S/he needs be familiar with variety of platforms or learning management systems so as to identify which one to use to reach his/her learners. In addition, the teacher needs to be aware that remote learning differs from face-to-face teaching and has to customize the lessons to an audience that is not available physically.

c) **Parents:** Remote learning require that parents supervise and monitor closely to ensure that learners are not distracted. They should not only provide devices to their children but take keen interest on what they are watching online. However, they need to be empowered to install children protection software that enhance safety and security while online.

d) **Learners:** The ultimate goal for remote learning is learning continuity when and where physical learning is not possible. There are several benefits to learners when they participate in remote learning. One of the benefits is that it enables them handle digital devices and acquisition of digital skills.

The main goal of rolling up remote learning provides opportunity for stakeholders, teachers, parents and learners to support continuity of learning. Figure 1 show benefits that accrue to all as they participate in remote learning.

Fig.1: Remote Learning Conceptual Framework



For the education sector to maximize the benefits of ICT, teachers need to have a range of different technical and communication skills. They also need to build confidence, develop competencies and mastery skills in using various ICT tools in instructional delivery.

1.4. Delivery Modes of Remote Learning

Delivery modes of remote learning are varied from those that support 'pure' to blended. Remote learning is not synonymous to virtual learning but provides an opportunity for learners and teachers to remain connected and engaged with the content while working from their homes and/or different locations. It includes use of broadcasted lessons (radio & television) and other technologies such as computers, mobile phones among other devices.

This session explores various modes and how they can be used for continuity of learning.

Activity 1.2: Modes of Remote Learning
In groups, brainstorm on what type of modes of remote learning that you know or have used

***You may have come up with the following* types of remote learning modes;**

i. Audio based modes
ii. Audio-visual modes
iii. Learning Management Systems i.e., Microsoft teams, google classroom, Edmodo, etc.
iv. Mobile based modes

1.4.1. Audio-Based Modes

Types of audio-based learning aids include: audiotapes, Compact Disks (CDs), flash disks, voice records and radio station channels dedicated to education. Audio outputs can be shared through email, WhatsApp or Bluetooth among others.

Activity 1.3: Radio & TV
a. Which audio-visual tools have you used or are using for remote teaching?
b. Discuss the benefits of using radio and television as mode for remote learning?

The most common audio-based mode of delivery for remote learning is the radio. For long time radio has been used in Kenyan classroom to supplement the work of teachers. Kenya Institute of

Curriculum Development (KICD) has ably developed radio educational broadcasts which have been instrumental instructional media during the COVID-19 pandemic. Even today, the radio remains popular and most preferred mode of delivery for learners in remote and hard-to-reach regions where internet & electricity connectivity and computers are limited.

1.4.2. Audio-Visual Modes

The audio- visual based learning can be delivered through television, videos, desktop computers and laptops among others. There are several television channels disseminating lessons on regular basis. One such channel is the EDU TV owned by Kenya Institute of Curriculum Development (see https://kicd.ac.ke/broadcast-schedule/tv-time-table-2020/)

Activity 1.4: TV
Watch a scheduled lesson in EDU TV Channel and discuss the merits and de-merits of using a television as delivery mode for remote learning?

You may have come up with the following benefits for audio-visual modes;

i. It helps the teacher to present the lesson effectively and students learn and retain the concepts better and for longer duration.
ii. Use of audio-visual aids improves students' critical and analytical thinking.
iii. It helps to remove abstract concepts through visual presentation.

However, the some of the demerits are that the teaching-learning process is one way since the learners, who are the viewers, are unable to engage their teachers.

1.4.3. Accessing Audio-Visual Content from KICD Website

Step 1: Open the web browser and key in the KICD url https://kicd.ac.ke

Step 2: Select **Out of Classroom Learning** select **KICD radio Timetable** or **EDU TV Time table** to access the time table of various programs

Step 3: choose a program to listen or watch with your learners, take note of the time and day of the week.

Step 4: Share the date and time with the students

Step 5: Listen to the topic and discuss with the learners

Step 6: learners can share their feedback using WhatsApp or any other mode of your choice.

For further information on how to access radio and TV content, use the following resources

1. KICD radio content timetable is posted on their website- **https://kicd.ac.ke** Select **out of classroom learning** select **KIC radio Timetable**
2. Kenya Education cloud contains some radio lessons for various grades **https://lms.kec.ac.ke/.**

1.5. Learning Management Systems (LMS)

KWL
Know: What I know about Learning Management System
Want to Know: What I want to know about Learning Management System?
Share your responses to your group and present common items to the larger group (the sharing can be done through video, call, chats, WhatsApp depending on the mode that is available)

A Learning Management System (LMS) is a software that is designed specifically to create, distribute, and manage the delivery of educational content (Hietala, 2020). In this session, you will explore three LMSs popularly used by teachers to deliver remote lessons during the COVID-19 pandemic. LMS are either proprietary (Google Classroom, Edmodo, Microsoft 365, Microsoft Teams etc.) or open-source (Moddle, Chamulo, Open edX, Canvas etc.) however, regardless of the type they have to main actors- administrator and user. In our case the teachers will be the LMS administrators while learners the users. The administrators or teachers are supposed to manage the LMS in terms of content, task creation, security & safety. Learners are the users and on the receiving end of the learning initiative --- responding or providing feedback to the teachers.

The three commonly used LMS by teachers; - Google Classroom, Microsoft 365 and Microsoft Teams

Activity 1.5: LMS
Share your experiences of using LMS?

1.6. Google Classroom

KWL

i. **Know:** Discuss some of the things you already know about Google Classroom

ii. **Want to Know:** What are some of the thing you would like to know about Google Classroom?

Share your responses to your group and present common items to the larger group (the sharing can be done through video, call, chats, WhatsApp depending on the mode that is available)

Google Classroom is a free paper-less service that allows teachers to share content, create and mark assignments and communicate with their learners remotely or while at home. Teachers can easily set up a class, invite learners and co-teachers, as well as share information such as assignments, announcements, among others.

Activity 1.6: Creating a Google Classroom

Create ONE Google Classroom and invite the head of institution, another teacher and your learners

To create Google Classroom, you need to follow the following steps

Step 1: Open your web browser and type www.google.co.ke

Step 2: Sign into your Google/Gmail account. If you do not have Sign Up then Sign-in using your correct credentials (username & password)

Step 3: From the play store select the Google classroom app from google apps option or open a Web browser and key in www.classroom.google.com

Step 4: Click on the "+" button at the top right of the Window to create a new class and then click on "Create class."

Step 5: Add information to the created class.

a. Type name for the class
b. Type "section" field (to differentiate between different classes)
c. Type "subject" field and then click on 'create'

Step 6: Inviting learners

a. Click on [ ] square bracket at the title area to display class code and one can copy the link that can be used to invite learners. Learners can log into Google Classroom, (e.g. click on "+" button and join class once code is entered)
b. Now invite learners to your class by email or share the link and class code with learners using a cell phone.
c. To invite learners, click on "People" tab at the top of the window and then, click on "Invite Students" button. You can invite students individually with email addresses or by groups if all students are in a Google Group.

Step 7: Upload learning materials for learners to access.

Resources

To learn more about how to navigate Google Classroom visit www.classroom.google.com

1.7. Microsoft Office 365

KWL

i. **Know:** What I know about Microsoft 365
ii. **Want to Know:** What I want to know about Microsoft 365

Share your responses to your group and present common items to the larger group. Upload the responses on Google classroom

Microsoft 365 is a software that provides access to Microsoft Office applications e.g., Word, Excel, PowerPoint online. You can access services, such as email and other collaboration tools from Microsoft's cloud server. Microsoft Office 365 provides desktop functionalities that are available by subscription.

Activity 1.6: Accessing office 365
Try accessing Microsoft Office 365

Step 1: Creating an account in Office 365

i. Open your web browser and log type www.office.com
ii. Sign in with your email account credentials

Step 2: Using online Microsoft Applications

i. Access your free online Ms Office tools on the top left-hand panel of your screen.
ii. Type an assignment in MS word, it is automatically saved in your online storage called the OneDrive .

Step 3: Share the assignment with your learners

i. Access the online assignment online
ii. Select the Share button on the screen and type the email of the learners in the space provided
iii. Once you share the documents the learners can access and download the assignment work on it offline (without internet connection)
iv. Once they have completed it they can connect to the internet and upload the assignment.

Step 4: Use this ? help icon to help you learn more about the online office 365 tools

1.8. Microsoft Teams

KWL

i. Know: What I know about Microsoft Teams.
ii. Want to Know: What I want to know about Microsoft Teams.

Share your responses to your group and present common items to the larger group.
Upload the responses on Google classroom/Microsoft Teams

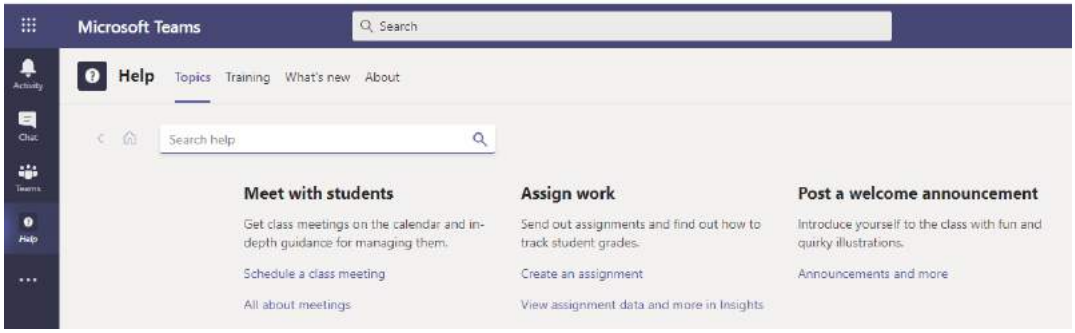
Microsoft Teams is one of the Microsoft Office 365 tools that you can be used to create classes, add students, share files and teaching materials. It also has a platform to allow you share and chat as well as create, distribute and grade quizzes. Teachers and learners can work together anytime, anywhere and on any device as long as they have internet connection.

Activity 1.7: Installing Microsoft Teams

Step 1: Open your web browser and type MS teams on the URL

Step 2. Select **sign in** to Log in with your assigned user-name and password.

Microsoft has provided free online tutorials on the Microsoft Teams Homepage to help you learn how to use it.



Step 3: Click on the help icon 

and use it to help you train on the following;

i. Start a chat and use the chat function
ii. Create courses for your class using the Teams function
iii. Create assignments using the assignment tool provided.

Resources

1. https://asher.edu/wp-content/uploads/2020/04/Office-365-Intro.-and-Tutorials.pdf
2. https://teamsdemo.office.com/index.html#/0/10
3. Microsoft Learning Tools (onenote.com)
4. https://schoolsict.co.uk/what-we-do/office-365/learning-tools/immersive-reader

1.9. Mobile Learning

Mobile Learning (mLearning) has soared in popularity and emerged as most preferred mode of remote learning in recent times. Singh (2020) defined mLearning as the process of learning via via the internet or network using personal mobile devices such as smartphones, tablets, laptops, and digital notebooks. In this mode, learning across multiple contexts takes place through social and content interactions using personal electronic devices. It is a form of distance education that supports continuous access to the learning process. The learning content in this mode can be passed to learners using; text messages, voice messages, video calls, sharing images, sharing documents etc. This mobile based model of learning uses platforms such as; ***WhatsApp***, *MwalimuPlus, Elimika, Elimu bora* among others. ***WhatsApp*** is the commonest mobile learning application that teachers use in remote learning.

WhatsApp 

KWL
Know: What I know about WhatsApp.
Want to Know: What I want to know about WhatsApp
Share your responses to your group and present common items to the larger group
Upload your responses in Google classroom/Microsoft Teams

Before the COVID-19 pandemic teachers have been using ***WhatsApp*** to engage their learners and parents remotely.

Activity 1.8: Discuss some of the benefits of using WhatsApp

You may have come up with the following;

- Participants can learn anywhere and there is real time feedback.
- Easy to deploy or implement.
- Improved learning outcomes.
- Increased engagement among learners.
- An easier ability to keep learners up to date about assignments.

Activity 1.9: Using WhatsApp to enhance remote learning

Step 1: install a WhatsApp platform

i. Turn on mobile phone data
ii. Click on play store
iii. Search for the WhatsApp
iv. Download WhatsApp on your phone

Step 2: Form WhatsApp platform/group

i. Launch WhatsApp
ii. Click on the green icon
iii. Select new group
iv. Add participants by selecting from WhatsApp phone book and then click on green arrow
v. Name the group and click on green arrow to save
vi. Post learning materials in the form of images, documents or texts to the group WhatsApp
vii. Have discussions with learners on chat

Activity 1.10: In groups, brainstorm on what you think are the benefits of remote learning

1.10. Benefits of Remote Learning

You may have come up with the following benefits stipulated in Fig 2

Fig 2: Benefits of Remote learning

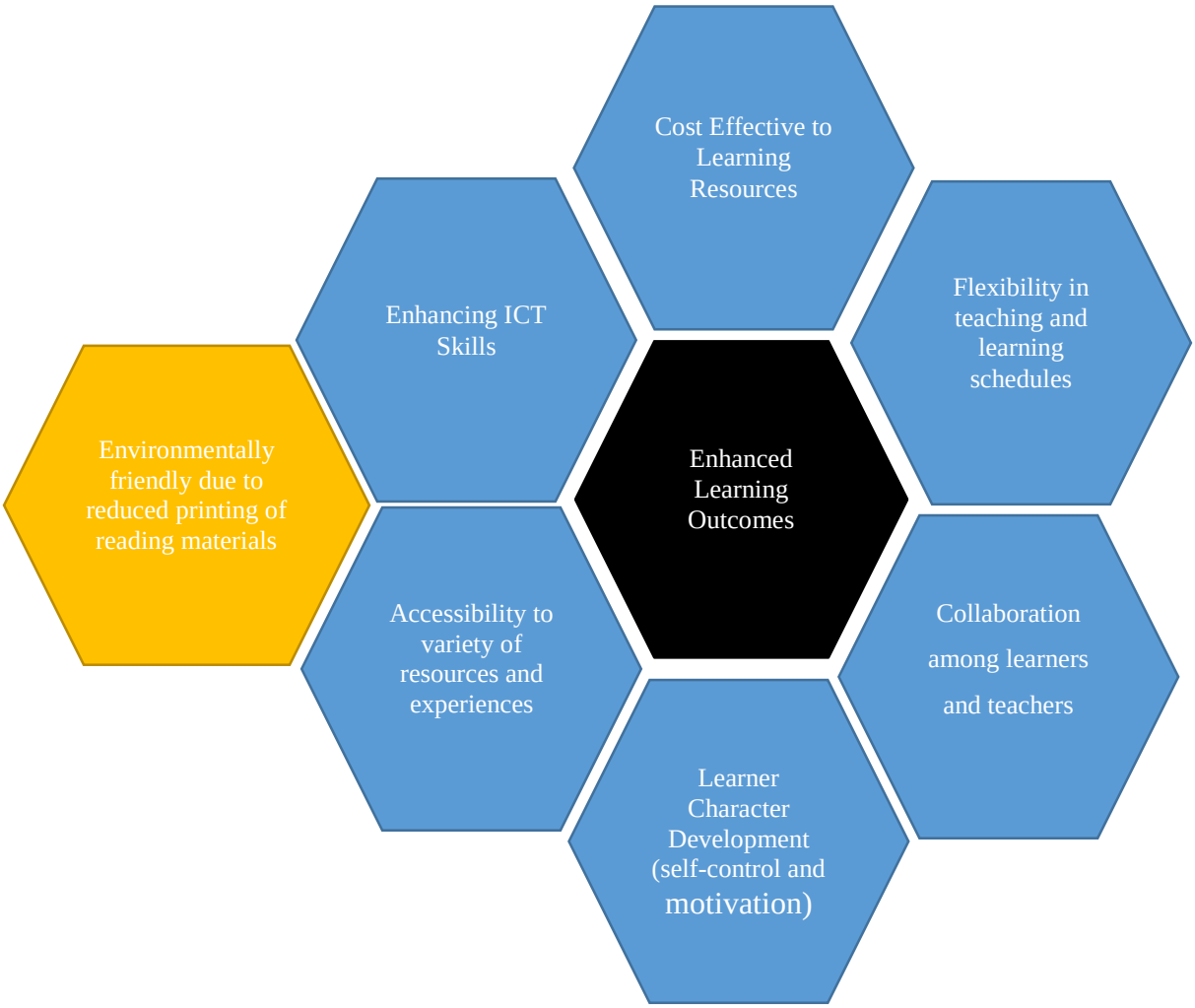


Fig 2 implies that enhanced learning outcomes is the central most important benefit for remote learning. Other benefits accrued include that of increasing access, self-worth, collaboration are pegged on improving learning outcomes.

1.11. Online Safety & Security

KWL
Know: What I know about safety guidelines for remote learning.
Want to Know: What I want to know about safety guidelines for remote learning?
Share your responses to your group and present common items to the larger group
Upload your responses in Google classroom/Microsoft Teams

Learners especially children are exposed to serious and pervasive threats when online. Shillar, et al (2015) posits that online safety begins with individuals in this case the learners who require adequate knowledge on how to protect themselves when accessing the internet, the risks associated with working online and its benefits; commonly known as internet safety, e-safety and cyber safety.

Some of the threats and risk that children and youth are exposed when using internet include; -

- Grooming, sexual abuse
- Cyberbullying, trolling and cyberstalking
- Digital footprint, reputation and identity theft
- Illegal and inappropriate behavior
- Pornography and inappropriate content
- Too much time spent on the internet
- Copyright infringement and illegal downloads

Activity 1.11: What are some of the things that teachers, learners, institutional administrators and parents need to do to ensure online safety in remote learning.

You may have identified the following safety guidelines for learners in remote learning as illustrated in Fig 3

Fig 3: Online Safety Guidelines

1.12. Netiquette during Remote Learning

Remote learning can be more effective to teachers and learners if conducive environment is created. One way is to set acceptable rules for such engagement. These rules are referred to as netiquette.

Activity 1.12: Suggest netiquette that will help learners for effective learning.

You may have identified the following rules

Netiquette

a. Establish norms and routines for your online classes
b. Advise learners to use devices in open places to allow monitoring by parent/guardian.
c. Only share links to video conferences or online information with parents/guardians.
d. Only one person should speak at a time during the virtual class.
e. Learners to use raise hand emoji for permission to speak
f. use the chat/text box for questions
g. Learners should mute their microphones and turn off camera unless their parent/guardian is present or you have permitted them to do so.

Self-Reflection

1. I learnt that…….
2. I need to learn more about…….
3. How I will apply what I have learnt
4. Suggestions I have for improvement of the session

Upload your responses on Google Classroom /Microsoft Teams

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SESSION TWO

ACCESS TO DIGITAL CONTENT FOR REMOTE LEARNING

2.0 Introduction

In this session, you will learn how to access, use and create digital content for use in remote learning. Digital content refers to content that is published, distributed and stored in electronic format such as text, voice recording, video clips, photographs, and animations that is used in teaching and learning. The content may be digitally broadcasted, streamed through internet or accessed through hard drives, flash drives, over networks.

2.1 Expected Learning Outcomes

By the end this session you should be able to:

i. Identify digital content in remote learning including those for learners with special needs;
ii. Use digital content in remote learning;
iii. Create digital content in remote learning;
iv. Appreciate the use of digital content in remote teaching and learning.

KWL

i. What I know about using digital content in remote teaching and learning?
ii. What I want to know about digital content in remote teaching and learning?
iii. Share your responses to your group and present common items to the larger group?

(the sharing can be done through video, call, chats, WhatsApp depending on the mode that is available)

2.2 Selection of Digital Content

Teachers are faced with an avalanche of digital content and need to be careful in selecting authentic, reliable and relevant content.

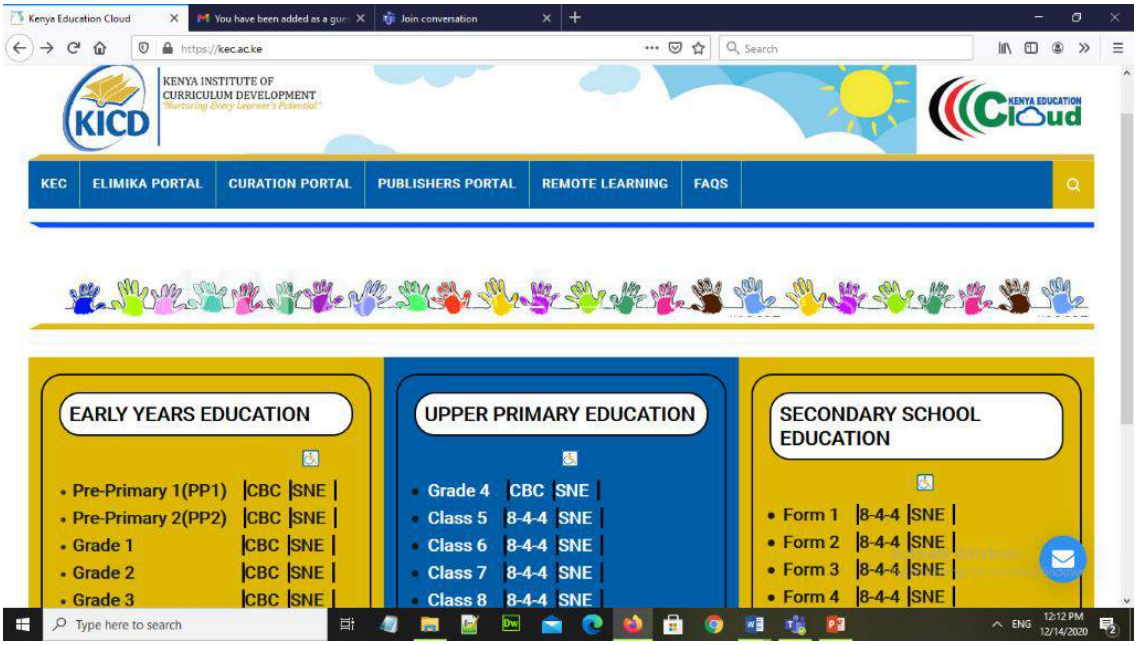
Activity 2.1:
Step1: Discuss with your fellow teachers' factors to consider when selecting quality digital content for remote teaching and learning?
Step 2: Upload your responses in the Google Classroom [Trainees Responses Folder]/ Microsoft Teams.

2.3 Kenya Education Cloud

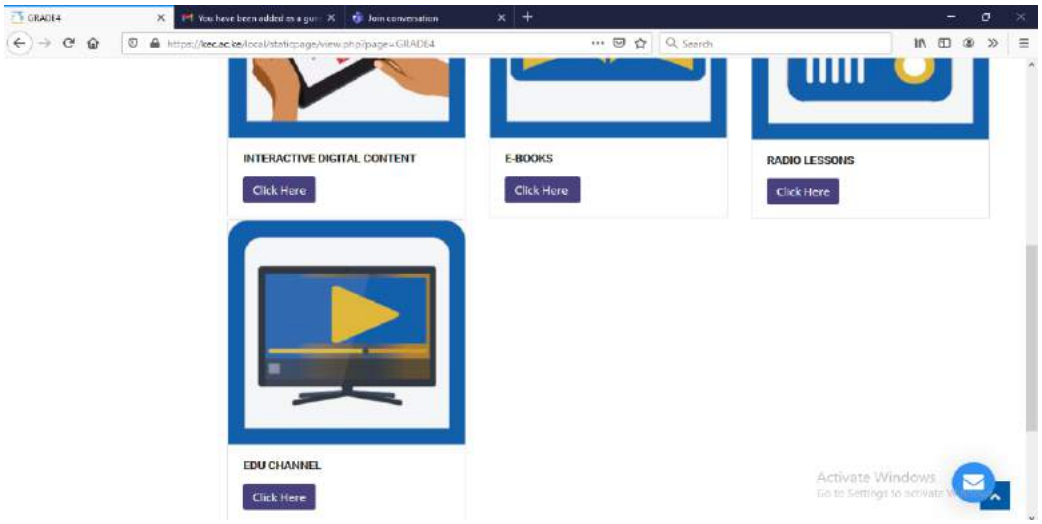
There are several reliable sources of digital content that teachers and learners can use among them the Kenya Education Cloud (KEC). **But what exactly is the cloud**? '*The cloud*" refers to servers that are accessed over the internet, and the software and databases that run those servers (CloudFlare, 2020). Teaching and learning resources are no longer confined to textbooks but are accessible online through computers and mobile devices (Stone, 2019). Cloud computing is a very disruptive technology that shifts the emphasis from physical resources such as the need for library to accessing these resources virtually. Cloud computing enables teachers and learners to work together in a single unified platform. The Kenya Education Cloud is such a platform meant where teachers and learners can access approved resources for teaching and learning. Lack of awareness, and exposure to KEC is associated with low uptake in the cloud.

The following activity will help you access digital content in KEC.

Activity 2.2:
Step 1: Log into Kenya Education Cloud using www.kec.ac.ke.
Step 2: Select some content from a learning area of your choice and describe how you would use it in a lesson.



Step 2: Click on content of your choice



2.4 Other Sources of Quality and Relevant Digital Learning Content

2.4.1. KBC English Service and EDU Channel

The radio and TV educational programmes that run on KBC English Service and EDU Channel respectively are usually converted and uploaded onto KEC for continuous reference. They also come in handy in case a learner missed a lesson either on radio or EDU Channel.

Resources

- To access KEC, log into www.kec.ac.ke and access content of your choice.
- To access the EDU Channel lessons on KEC, log into https://kicd.ac.ke/broadcast-schedule/
- To access Radio broadcast you log into https://kicd.ac.ke/broadcast-schedule/radio-english-service/

2.4.2. KICD Digital Content

Kenya Institute for Curriculum Development (KICD) has developed various type digital content. Some of the content is packaged in Compact Disks (CDs) while others are made accessible through radio broadcast on KBC English Service and Radio Taifa, EDU TV Channel and Kenya Education Cloud (***see Activity 2.2***). It is important to note that digital content by KICD, broadcasted by KBC or EDU TV and those uploaded in to the KEC are quality controlled and approved for use in remote learning.

2.4.3. Open Education Resources (OERs)

Open Educational Resources (OERs) are teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions.

Activity 2.3:
What other sources of digital content have you used in remote learning? In groups, discuss some examples of sources of digital content and the reason for your choice.

You may have come up with the following:

i. Discovery Education (2020) (see **http://www.discoveryeducation.com/teachers/**) has content in English, Mathematics, Science, Social Studies. Provides Lesson plans, interactive games, puzzles, programs and contest
ii. Jumpstart (2021) (see **http://www.jumpstart.com/parents/resources/teacher-resources**) Teacher resources; worksheets, lesson plans, social networking sites, learning games, audio-visual teaching aids, interactive educational software.

iii. Geogebra (2021) (see **www.geogebra.org**) A mathematics software used in graphing, equations and Algebra

iv. Khan Academy (2021) (see https://www.khanacademy.org/) has lessons on math, science, history, grammar, coding, music and so much more.

2.5 Digital Content for Learners with Special Needs

Learners with special needs would require assistive tools to participate effectively in remote learning. There are several types of assistive devices that can be used to make remote learning a reality for learners with special needs. Some examples of assistive technologies are:

i. Hearing aids to help people hear or hear more clearly.

ii. Cognitive aids, including computer or electrical assistive devices, to help people with memory, attention, or other challenges in their thinking skills.

iii. Computer software and hardware, such as voice recognition programs, screen readers, and screen enlargement applications, to help people with mobility and sensory impairments use computers and mobile devices.

iv. Closed captioning to allow people with hearing problems to watch movies, television programs, and other digital media

Activity 2.4:

i. Watch the video on parts of plants by Makemegenius (makemegenius, 2011) [visit https://www.youtube.com/watch?v=uUH8iAanREY] and explain how the video increase learner access, promote positive values, learner diversity, gender equity and upload your response in Microsoft Teams/ Google Classroom?

ii. From the video propose some adaptations to suit learners with different categories special needs (HI, VI, & PH).

You may have come up with the following adaptations -

- Content with large print (Large font)
- Content with magnifiers
- Signed content
- Narrated content
- Brailed content
- Complexity of the content
- Compatibility of the content with other tools or technologies
- Nature of special need of the learner

2.6 Digital Content Creation

Activity 2.5:

i. Make a 2-3 minutes video clip on any strand/topic of your choice and upload it in the Google Classroom/Microsoft Teams.

i. What are some of the benefits of using your own video clips in remote learning?

Once a while a teacher will need to create his/her own digital content to share with his/her learners. The teacher needs to identify prepare content and the devices required to record the video. Podcasts, YouTube, Facebook, are some of the platforms a teacher can use to broadcast their content.

2.7 Benefits of Using Video Clips in Remote Learning

Activity 2.6: What are some of the benefits of using your own video clips in remote learning?

You might have come up with the following benefits of using short video clips in remote learning

i. Attracts a student's attention, spark curiosity, and provide value to the course content.

ii. Provide multiple perspectives of the same content rather than relying on a single view point.

iii. Be reflective tools for learners as they work to integrate and apply new information.

iv. Used to provide instructional material as an alternative to in class live teacher.

Self-Reflection

1. I learnt.....
2. I need to learn more about.....
3. How I will apply what I have learnt

Suggestions I have for improvement of the session

Upload your responses on Google Classroom

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SESSION THREE

PEDAGOGIES OF REMOTE LEARNING

3.0 Introduction

This session describes pedagogies that promote effective remote learning. Further, it explains how teachers should plan, implement, and evaluate a remote learning lesson using inclusive pedagogies. It also provides a discussion how to provide emotional support to learners.

3.1 Expected Learning Outcomes

By the end of this session, you should be able to:

i. Describe various pedagogies for remote learning that enhance learner engagement for effective learning.
ii. Design a remote lesson using inclusive pedagogies in your learning areas.
iii. Appreciate the need for learner cognitive and emotional support in remote learning.

KWL

Know: What I know about pedagogies for remote learning
Want to know: What I want to know about pedagogies for remote learning
Share your responses with your group and present the common items to the large group. Upload the responses on Microsoft Teams/Google Classroom

3.2. Pedagogies that Promote Effective Remote Learning

Remote learning is defined as a process of teaching and learning where a learner and a teacher are in different locations. The instructional methods and strategies applied in face to face can also be applied in remote teaching and learning. However, in remote learning pedagogy, interaction may change but it creates opportunities for new ways of engagement. Such interactions allow the teacher to teach the same lesson but in different settings leveraging on technology. The key element in effective and successful remote learning is teachers' pedagogical knowledge.

Remote learning pedagogy has three main methods of instructional delivery; synchronous, asynchronous, and blended. These methods allow learners to engage with material enthusiastically and across multiple learning styles through technology.

3.1. Activity

In your group, respond to the following questions:

1. Explain the difference between synchronous and asynchronous remote learning, and their advantages and disadvantage
2. *Draw a Venn diagram to illustrate the relationship between synchronous and asynchronous remote learning and label the part that represents blended instructional delivery*

Upload the responses on Microsoft Teams/Google Classroom

3.2.1. Synchronous Method of Instruction Delivery

Synchronous method of teaching is where learning is taking place at the same time. This happens in real-time with a set class schedule. Common methods of synchronous learning include video conferencing, teleconferencing, live chatting, and live-streamed lessons, scheduled radio and television lessons.

3.2.2. Asynchronous Method of Instruction Delivery

The asynchronous method of teaching is where learners are given activities that they can do outside of class time. This method does not require real-time interaction. Content in the asynchronous mode of instruction is availed for learners to access when it best suits their schedules, and assignments are completed within set deadlines.

3.2.3. Blended Remote Learning

This is the use of both synchronous and asynchronous method of instruction delivery. In many instances, the teacher may blend the two remote learning pedagogies to deliver a lesson. For instance, the asynchronous method can be used to give learners assignments immediately after the learners have had a radio or TV lesson synchronously. Fig 4 below is a *venn diagram* showing the relationship between synchronous and asynchronous remote learning where the intersection represents the blended learning model of remote learning.

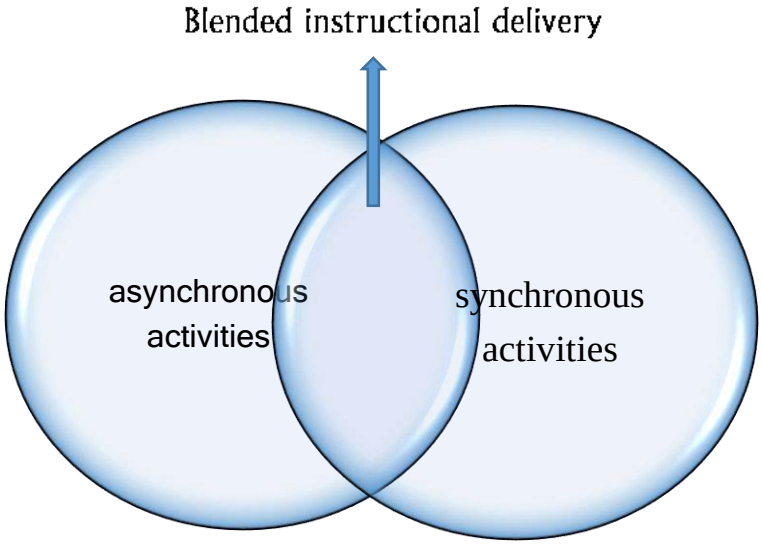

Fig 4: Blended instructional delivery

3.2.4. Case Study

The following is an adapted case study on remote learning from the article by Shane Lerstonhttps://docs.google.com/document/d/1uxGFUhttDN6hQX7JQWyzSES_geYklf0NWSFmL7aiKhg/edit?usp=sharing

Read the case study and respond to the activities that follow

3.2. Activity

Based on the experiences from Mwembeni Secondary School

i. Discuss the strategies that ensured successful implementation of remote learning

ii. Based on this statement, "We found a wealth of opportunities to support our learners with special needs and disabilities remotely..." Propose some of the opportunities that Mwembeni school would have exploited to support learners with special needs and disabilities during school closure

iii. Discuss some of the strategies that Mwembeni school used to ensure learners' emotional support

3.3. Planning and Implementing Remote Learning Lessons

Remote learning requires planning by setting goals, deciding on instructional strategies, medium to be used and the appropriate assessment methods for all learners including those with special needs and disabilities. Therefore, you are required to reflect on these questions:

i. **Where are we going**? What are the goals of the instruction?
ii. **How will we get there?** What is the instructional strategy and the instructional medium?
iii. **How will we know when we have arrived?** How will you evaluate and revise the instructional materials for future improvement?

Instructional planning is therefore a process of the teacher using appropriate curricula, instructional strategies, resources and data during the planning process to address the diverse needs of learners. Planning and implementing a remote lesson may require more time than when planning for the in-person lessons because of the influence of various factors on remote lessons.

KWL

Know: What I know about planning and implementation of remote learning lessons
Want to know: What I want to know about planning and implementation of remote learning lessons.
Share your responses with your group and present the common items to the large group.

Activity 3.3

i. In your current school, who do you think should be involved in designing and implementing a remote learning lesson?
ii. What considerations would you make when planning for implementation of remote learning lessons:
    a. As a head of institution
    b. As a teacher

You may have mentioned the following persons who are involved in designing and implementing remote learning lessons:

- The head of institution
- Teacher,
- learner,
- care givers or school support staff
- parents

3.3.1. Role of the Head of Institution in Planning for Remote lessons

The head of institution needs to put in place a remote learning plan that lays out a full strategy for adoption of remote learning. It will serve as a guide for the teachers and explains both the logistics of how to conduct classes remotely and how to communicate the plan. The plan should contain information on the expected engagement for learners, teachers and parents/guardians. It is important that teachers engage parents to support learning and therefore communicate frequently about learning progress. A sample remote learning plan to brief parents is attached. See appendix 1

3.3.2. Role of Teachers in Planning Remote Lessons

i. Creating detailed lesson plans, which should include learning outcomes, learning experiences or activities, time estimates, and required learning resources.
ii. Preparing the required learning resources prior to the lesson. This can include recorded audio/video clips, PowerPoint slides among others.
iii. Designing remote learning experiences that have very clear instructions.
iv. Developing learners profile considering their background, special needs and disabilities.
v. Planning for attendance and engagement: Attendance during remote learning is based on the extent to which a learner has actively engaged in remote learning within specified period. Therefore, you need to collaborate with the parents to ensure that the learner attends and participates in the remote learning activity.
vi. Creating assessments, including authentic tasks. This can be done through google forms, Microsoft teams, google classroom, exam.net etc.
vii. Determining which remote learning option is best for your learners in collaboration with parents/guardians. You should plan how the various types of learner engagement will be done, how learners will access learning materials, which channel/ medium will be used.

viii. Planning to upload content in a repository (e.g. Microsoft teams, LDDs, One drive, Google drive, Dropbox) where learners who need to refer to the content can access it.

Activity 3.4
In reference to the sample of a remote lesson plan, prepare one in a learning area of your choice (see appendix 2)

3.4. Learners Emotional Support

Remote learning environment, particularly where learners are in different locations, limits learner-learner, learner- teacher and teacher-parent interaction to an extent that it may affect the learner's emotional development. It is important therefore that when planning for remote lessons, the pedagogies used should incorporate strategies that will encourage both social and intellectual interactions among learners, teachers and parents.

Activity 3.5
Discuss how you can enhance learner emotional support. You can share responses through Google classroom

You may have come up with the following strategies that can be used to strengthen the learner emotional support:

i. Establishing the learners current experience and learning needs using an appropriate assessment tool e.g., online questionnaire, poll
ii. Providing opportunities for open discussion on particular tasks and assignments
iii. Allowing learners to engage in call group discussions in breakout rooms. Such discussions should not be limited to school work only but social life as well.
iv. Creating opportunities for synchronous and asynchronous learner collaboration through software like Google docs, Google Classrooms, Teams,
v. Building a strong parental involvement network to support the learners at home.
vi. Preparing rules for remote learning engagement (netiquette) and taking the learners through them.

3.5. Participation of Learners with Special Needs and Disabilities in Remote Learning

Learners with special needs and disabilities can actively participate in the learning process delivered remotely. Their participation is enhanced by presence of inclusive instruction during the synchronous lessons and inclusive provisions during asynchronous learning sessions. It is therefore the role of the teacher to ensure that the remote strategies used to facilitate learning are considerate of the learning needs of each category of disability.

Activity 3.7

How would you ensure that learners with various special needs and disabilities are taken care of during planning for and implementing remote learning?

You may have considered the following:

3.5.1. During Planning

When planning for a remote learning lesson for learners with special needs and disabilities, it is important to note their heterogeneous nature even within each category. For instance, under visual impairment category there are those with low vision and those with total blindness and each category require unique support from development of the content, preparation of learning experiences, choice of learning resources and medium of delivery. In your reflection you may have mentioned the following:

i. **Content:** Before delivery of any lesson, you need to develop the content and package it in a manner that is friendly to all learners. For learners with special needs and disabilities, the content for use during remote learning needs to be developed and packaged in a way that is interactive, accessible and usable.

ii. **Learning experiences**: You need to develop learning experiences and adapt them to suit the varying needs of learners with special needs and disabilities. For instance, for learners who are gifted and talented, more challenging activities can be given; for learners with hearing impairment, more visual activities can be used; for learners with visual impairment, more activities that involve tactual manipulation, listening can be given. For learners with physical impairment, give activities that minimally involve fine and gross motor skills.

iii. **Accessible and usable Medium**: The medium of presenting the content, e.g., radio, TV, Computer or smart Phone need to be accessible and usable by these learners considering their

type of disability, e.g., use of screen readers and screen magnifiers for learners with visual impairment, when using a computer or a smart phone.

iv. **Individualized remote learning plan**: prepare an individualized plan for learners with special needs and disabilities incorporating their strengths and specific needs in remote learning participation. The plan should include strategies to be used to support an individual learner during remote learning.

3.5.2. During Implementation

You may have mentioned the following provisions that could enhance participation of learners with special needs and disabilities during synchronous and asynchronous learning sessions:

During Synchronous learning session:

i. Keep learners actively engaged during the learning session.
ii. Keep Instructions simple and clear.
iii. Vary instruction strategies to cater for individual needs.
iv. Use instructional language that is considerate of the individual needs e.g., do not say 'look here' for a learner with visual impairment or 'listen to me' for a learner with hearing impairment.
v. Monitor learner progress and offer intervention whenever they need support
vi. Keep progress record for effective implementation of the individualized remote learning plan.
vii. Provide learner specific instructional support

Consider the following for Asynchronous learning:

i. Develop remote learning activities and adapt them to suit the needs of learners.
ii. Empower learners to use appropriate assistive technologies (Suitable per type of disability) to access the remote learning platform.
iii. Ensure the learning platform meets the minimum usability attributes for learners with various disabilities: that is, it is user friendly, it is easy to learn, it meets the web accessibility standards among others.
iv. Create opportunities for remote learner support through teacher-learner-parent collaboration.

Self-Reflection

1. I learned that …….
2. I need to learn more about…….
3. How I will apply what I have learnt

Suggestions I have for improvement of the session

Upload your responses on Google Classroom

Resources for further reading

You may use the following links to know more about the advantages and disadvantages of synchronous and asynchronous modes of remote learning: https://cutt.ly/8hPGnE1

Reference

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SESSION FOUR

ASSESSMENT IN REMOTE LEARNING

4.0. Introduction

The primary purpose of this session is to assist teachers to understand how to conduct assessment in remote learning environment. The session will introduce teachers to various remote learning tools for evaluation of learning and providing feedback to learners, parents, and other stakeholders.

4.1. Expected Learning Outcomes

By the end of this session, you should be able to:

i. Plan and embed formative assessment activities in remote learning lessons.
ii. Conduct assessment in remote learning using interactive remote learning assessment tools.
iii. Communicate learners' progress in a timely and respectable manner through various platforms.

4.2. Assessment in Remote Learning

Current assessment strategies are designed for face-to-face interactions and has to be adapted for use in remote learning. Formative and Summative assessments only need to aligned to appropriate assessment tools to be used in remote learning environment. Assessment of learners in remote learning environment involves planning, administering assessments, and Communicating feedback

KWL
Know: What I know about planning for assessment in remote learning
What to: What I want to know about planning for assessment, in remote learning
Share your responses in your group and present common items to the larger group through Google classrooms/ Teams

4.3. Planning for Assessment in Remote Learning

Activity 4.1

In groups,

i. Watch the video titled "strategies for assessing students remotely "by Carl Hooker

ii. Discuss factors to consider when planning for remote assessment

iii. What are some of the challenges you are likely to encounter when planning for remote assessment?

Share in large group through Google classroom/ Microsoft Teams

In the above activity, you may have included factors:

The assessments have to be carefully considered and planned to some of the following issues:

a) **Mode of delivery**; will it be synchronous or asynchronous assessment. The mode will determine technologies to be used and length of the assessment

b) **Assessment items or tasks**; The tasks must address the expected learning outcomes in the curriculum to ensure that the overall assessment measures what it intended to measure.

c) **Criteria for success**: performance indicators for performance criteria must be developed in advance and shared with learners. The criteria can be shared in the form of rubrics and checklists

d) **Developing assessment tasks:** teachers should avoid working alone when developing assessment tasks. It has been found that teachers collaborating to write assessments produce more effective assessments than teachers working on their own.

e) **Assessment tools**: Teachers must decide well in advance which assessment tool will be used since each tool has its own unique advantages.

f) **Supportive assessment environment:** an environment that creates a climate of transparency and integrity is essential to build a foundation for honesty and preventing cheating.

g) **Technologies:** The choice of the technologies to be used is crucial for the success of the administration of the intended assessment.

h) **Parental role:** Parents or guardians' roles in remote assessment may include provision of devices for assessment, monitoring the learners during the assessment

4.4. Learner Engagement in Assessment

Activity 4.2

In groups,

I. Discuss what is formative assessment and its importance in remote learning

II. identify formatives assessment activities that you will consider to include in a remote lesson of the day.

II. Develop a remote lesson plan and embed the assessment activities idetified in (i) above.

Share in large group through Google classroom/ Microsoft Teams

In the above activity, you may have included the following activities

a) It is important to use formative assessment as well as summative assessment. Formative assessment is the information that you collect from students to establish the level of understanding and adjusting the instructional design.

b) Learning activities should therefore include opportunities for learners to be involved in developing tasks to be performed towards achieving a specific learning outcome.

c) Tasks that require instant feedback from the learners

d) Tasks that promote collaboration among learners e.g., project-based tasks

e) Tasks with more open questions than closed questions

f) Activities that encourage learners to solve a real-life challenge collaboratively and sharing through remote learning technologies.

g) Activities that encourage the learners to keep records of their performance and monitor personal progress.

h) Refer to the sample remote learning lesson in section three of this manual

4.5. Conducting (administering) Assessment in Remote Learning

KWL on Conducting Assessment in remote learning

Know: What I already know about conducting assessment in remote learning

What to Know: What I want to know about conducting assessment in remote learning.....

Share your responses with your group and present common items to the larger group.

There are various ways through which you can conduct assessment in remote learning using different remote learning approaches including synchronous, asynchronous or a blended. Audio based modes and mobile technologies can be used to facilitate the administration of the remote assessment.

Activity 4.3:

Discuss in your group how to conduct assessment of learning outcomes in a particular learning area/ subject delivered through the following remote learning modes

- Audio- and Visual- delivery Modes of remote learning e.g., Radio & TV Programs
- Use od computer-based delivery modes of remote learning e.g., Google Classroom, Microsoft Teams etc.
- Mobile technology

Share your discussions points with the large group through Google classroom/ Microsoft Teams

You may have come up with the following ways of using different modes of remote learning delivery:

a) You can record questions using audio-visual technologies and send to the learners to respond to as per earlier shared programme.
b) Learners can respond orally, write or take photos and submit using available modes.
c) Mobile phone technologies provide platforms to assess learners in a remote learning environment. Through the phone, teachers can access mobile based applications e.g. Google Docs, Google forms etc. that can be used to create and administer assessment. For example, you can set questions in Google docs and ask learners to respond to them at any time within a week.
d) Sending the assessment questions to the learner through Email, Social media platforms (e.g., WhatsApp, Facebook, Kaizala etc.) with instructions to the person monitoring when to administer the assessment.
e) At the end of the assessment, the learner should submit it through remote learning platforms e.g., google classroom, WhatsApp, Microsoft Teams or email
f) Inform learners when to expect the feedback and channel of communication
g) Communicate with the person (parents/ guardians) who will monitor the learner during the assessment, if conducted at home
h) Prepare and share rubrics for assessment for each test item in advance

Activity 4.4: Setting a quiz

There are many online applications that can be used to administer quizzes with instant feedback to the learners. Most of them are free for use. One such example is Kahoot. Follow the instruction below to administer a quiz using kahoot.

i. Log into www.kahoot.it
ii. Create your account and then create a quiz for your learners
iii. Take your learners through how to use kahoot to respond
iv. Administer the quiz which also gives instant feedback to the learners

4.6. Assessment Tools in Remote Learning

Assessment tools are techniques used to measure learning outcomes which could take different formats for different purposes. The same tools can be adopted for use in remote learning but using different online platforms e.g., kahoot, menti

Activity 4.5

i. In groups, discuss the assessment tools frequently used to assess learning outcomes
ii. Identify the most commonly used assessment tool in your group.
iii. What are some of the challenges associated with remote assessment?
iv. Compare various assessment tools indicating the appropriateness of each in remote learning
v. Share your responses through google classroom

You may have discussed the following assessment tools:

i. Rubrics
ii. Checklists
iii. Reflective journals
iv. Questionnaires
v. Observation schedule
vi. Portfolio
vii. Written test
viii. Project
ix. Oral/Aural among others

All these tools can be used in assessing learning outcomes in remote learning. For example, tasks in project-based assessment can be sent to learners via several platforms and can be performed asynchronously.

4.7. Communicating Assessment Feedback

Communicating assessment feedback to various stakeholders should be in a way that encourages growth of the learner. The language used should be able to motivate learners to continuously yearn for better results. Learners usually believe that their success or failure in school is due to factors outside of their control hence the need to empower learners to develop positive growth mindset. learners have to be taught that success is more to do with working efficiently and diligently as opposed to the believe that some are born naturally cleave while others are not.

KWL on Communicating Feedback in Remote Learning

Know: What I already know about feedback and reporting in remote learning.

What to Know: What I want to know about feedback and reporting in remote learning.

Share your responses with your group and present common items to the larger group.

Activity 4.6

In groups: Discuss how to communicate feedback to students, parents and other stakeholders in remote learning environment

I. It is said "it does not matter what you say but rather how you say it" . Justify the above statement in providing feedback to learners and parents.
II. Share your responses through google classroom

You may have discussed the following factors in your groups:

i. Developing assessment plan including purpose, frequency and expectation
ii. Establishing communication structure to learners, parents/guardians, teachers using appropriate platforms

iii. Identification and sharing of the medium of communicating learners' assessment information

iv. Communicating assessment feedback in a manner that supports motivation and participation in remote learning. Hastings, & Madaus, (1981) suggests the following steps in providing feedbacks that builds the learners;

a) Always begin with the positive. Comments to students should first point out what students did well and recognize their accomplishments.

b) Identify what specific aspects of students' performance need to improve. Students need to know precisely where to focus their improvement efforts.

c) Offer specific guidance and direction for making improvements. Students need to know what steps to take to make their product, performance, or demonstration better and more in line with established learning criteria.

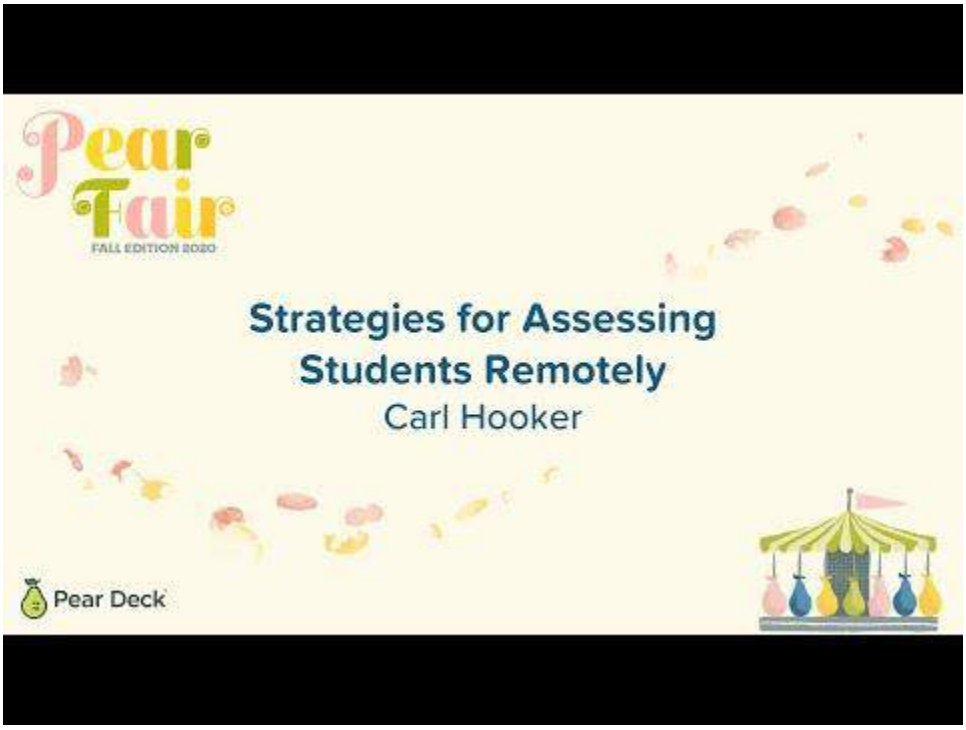
d) Express confidence in students' ability to achieve at the highest level. Students need to know their teachers believe in them, are on their side, see value in their work, and are confident they can achieve the specified learning goals.

Self-Reflection

a. I learned that .....
b. I need to learn more about.....
c. What I liked about the day was.....
d. Suggestions I have for improvement of the session

Upload your responses on Google Classroom

Resources


Pear Fair
FALL EDITION 2020
Strategies for Assessing Students Remotely
Carl Hooker
Pear Deck

SESSION FIVE

ASSISTIVE TECHNOLOGIES IN REMOTE LEARNING

5.0. Introduction

This session will introduce participants on assistive technologies for learners with special needs and disabilities. Assistive technology is "assistive, adaptive and rehabilitative devices" for persons with disabilities. These devices are adapted based on the type of disability or need to aid in remote learning. Learners with special needs and disabilities require various assistive technologies ranging from the hardware to the software for them to participate in remote learning.

5.1. Expected Learning Outcomes

By the end of the session, you should be able to:

i. identify appropriate assistive technologies of different types of special needs and disabilities in remote learning
ii. Appreciate the use of appropriate assistive technologies of different types of special needs and disabilities in remote learning

KWL on assistive technologies for learners with special needs and disabilities

Know: What I know about assistive technologies for learners with special needs and disabilities

Want to know: What I want to know about assistive technologies for learners with special needs and disabilities

Share your responses with your group and present common items through Google Classroom/Microsoft Teams

Activity 5.1

In groups, complete the table below to provide information to assist your educational teams in considering assistive technology for learners with special needs

Instructional Area	Common standard tools	Assistive technology solutions
writing	Pen, Pencils, Makers, computers with word processing	
Spelling	Flashcards, dictionary, computers	
reading	Textbooks, Worksheets, printed materials	
Listening	Television, video player, headphones, phones	
Oral communication	Organizing diagram for presentation	

In response to the KWL, you may have come up with the following:

5.2. Assistive devices for learners with Visual Impairment

i. Screen readers
ii. Screen magnifiers
iii. Refreshable Braille displays
iv. Braille translation software
v. Note taker/Note touch
vi. Mobile devices
vii. Voice recognition soft-ware

5.3. Assistive technologies for learners with hearing impairment

i. Speech recognition software
ii. Closed captioning
iii. i-communicator

5.4. Assistive technologies for learners with autism

Learners with autism process visual information easier than auditory information. Visual Assistive devices for such learners include:

i. Video tapes
ii. Touch screen devices
iii. Big keys
iv. Visual representation systems

5.5. Assistive technologies for learners with intellectual disabilities

i. Mobile Devices/Tablets/iPads with learning apps
ii. Word Prediction soft-ware
iii. Text-to-Speech soft-ware
iv. Screen Magnification Software - ZoomText, Magic, Immersive Reader in office 365 etc.
v. Screen Readers - JAWS, NVDA etc.
vi. Speech Recognition Soft-ware

vii. Expanded Keyboards - Big Keys

Self-Reflection

i. I learned that .....
ii. I need to learn more about.....
iii. What I will apply .....
iv. Suggestions I have for improvement of the session

Upload your responses on Google Classroom

Additional Resources for Assistive Technologies

https://www.teachthought.com/technology/15-assitive-technology-tools-resources-for-students-with-disabilities/

SESSION SIX

MONITORING REMOTE LEARNING

6.0. Introduction

This session covers methods to be used when monitoring remote learning in order to promote effective learning. It also highlights roles of stakeholders in the monitoring of remote learning and how to ensure that the quality of education offered is not compromised.

6.1. Expected Learning Outcomes

By the end of the session, you should be able to:

i. Explain what monitoring in remote learning entails.
ii. Identify who are involved in monitoring remote learning.
iii. Describe the importance of monitoring in remote learning
iv. Demonstrate skills in monitoring remote learning

KWL on Monitoring in Remote Learning

Know - What I already know about monitoring in remote learning
Want to know: What I Want to Know about monitoring in Remote Learning
Share your responses to both sections in your group and present common items to the larger group.

Activity 6.1

On 16th March 2020, schools in Kenya closed due to rising cases of COVID-19. The closure of schools was unforeseen. No one was prepared for the long duration that learners stayed out of school. The situation may persist or a similar one may occur in future. Reflect back on your school;

1. How did you engage your learners during the school closure?
2. How did the learning take place?
3. How did you know that learning took place during Covid-19?

Share your thoughts on the chat.[www.menti.com]

6.2. Monitoring Remote Learning

Monitoring is a continuous process by which stakeholders obtain regular feedback on progress toward achieving expected learning outcomes. In remote learning you have to develop a monitoring plan that identifies what needs to be monitored, how it will take place and what tools will be used to gather evidence.

Activity 6.2
You are required to undertake monitoring in remote learning of a lesson for a fellow teacher,

a. How would you undertake monitoring in remote learning?
b. Which tools would you use to monitor?
c. How would you ensure that the quality of learning is maintained?

In response to the activity above, complete the table 2 below:

Table 2: Monitoring in remote learning

Mode of delivery	What is monitored	How to monitor	Tools of monitoring

Refer to appendix 3 for additional information

Activity 6.3
In groups

I. Identify the importance,
II. Highlight some challenges and possible remedies of monitoring remote learning
III. Share your responses in google classroom

6.3. Importance of Monitoring During Remote Learning

i. It ensures effectiveness in the content delivery.

ii. It improves performance of remote learning due to constant interaction between the monitor and the one being monitored

iii. A monitor can schedule multiple teacher monitoring sessions per day. This is both cost and time effective

6.4. Challenges Facing Monitoring Remote Learning

Table 3: Challenges facing monitoring of remote learning and possible solutions

	Challenges	**Possible solutions/remedies**
1.	Inadequate skill to monitor remote learning.	Professional development to upgrade teachers' skills in monitoring remote learning
2.	Inadequate ICT infrastructure and technical constraints.	Mobilize resources Form private partnerships with stakeholders
3.	Internet connectivity challenges.	Mobilize resources Liaise with the ICT centres, SMASE centres, STEM &STEAM centres
4.	Lack of guidelines on remote learning.	National Comprehensive guidelines on remote learning be developed
5.	Cyber safety and security.	Use strong password Use anti-virus Share your meeting links with trusted persons Use trusted sources of information Avoid cyber bullying Raise awareness on cyber security

Self-Reflection

i. I learned that .....

ii. I need to learn more about.....

iii. What I will apply .....

iv. Suggestions I have for improvement of the session

Upload your responses on Google Classroom

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SESSION SEVEN

POLICY FRAMEWORK SUPPORTING REMOTE LEARNING

7.0. Introduction

This session presents the overview of the policy framework guiding the integration of ICT in education in Kenya. Remote learning is one way of integrating ICT in education and has played an important role to ensure learning continuity during the prolonged school closure. The session also presents competencies that teachers require to successfully adapt remote learning methodologies.

7.1. Expected Learning Outcomes

By the end of the session, you should be able to:

i. Identify policies and legal frameworks guiding ICT integration in education.
ii. Demonstrate understanding of the policies and legal framework on ICT integration in education
iii. Explain the rights of learners as provided for in the Sustainable Development Goals (SDGs), the Constitution of Kenya 2010, Basic Education Act 2013, and other legal documents.

KWL on Policy Frameworks and ICT Integration in Education

In preparation to undertake a study on the policy framework on ICT integration in education, complete the following;

Know: What I already know about the policies that guide on ICT integration in education in Kenya.
Want to Learn: What I would like to learn about policies that guide on ICT integration in education in Kenya.
***Share** your responses to both sections in your group and present common items for the two categories to the large group.*

7.2. Integrating ICT in Education

The Government of Kenya is committed to the development of education and training. Sustainable Development Goal (SDG) Number 4 commits countries to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Similarly, the Constitution of Kenya (2010) provides for the right to quality, inclusive education and training for all Kenyans. Kenya Vision 2030, the National Education Sector Strategic Plan (NESSP, 2018 – 2022) and Sessional Paper No. 1 of 2019 provide the policy framework for modernizing and re-branding the country's education and training system towards achieving Kenya Vision 2030.

Information and Communication Technology (ICT) is an enabler for knowledge, innovation and skills development. ICT can help to transform education and address significant challenges of access, quality, relevance and equity faced by the education system in Kenya. In order to achieve this, significant resources have been geared towards this course resulting in improved infrastructure and increased enrolment in all sub-sectors of education and training.

The Education sector has leveraged on the Government initiatives for efficient and effective delivery of curriculum, improved governance and management, as well as delivery of quality education, relevant skills and services. To this end, the Government has initiated two main programs: Computer for school program for secondary schools and Digital Literacy Programme (DLP) for primary schools.

Under the DLP programme a total of 1,079,398 learner digital devices and 43,276 teacher digital devices have been supplied, 21,637 projectors and 21,637 content access points. The special needs learner devices with HI and VI and embossers were also installed in special schools (see digischool.go.ke). Several schools have been connected to the internet through various initiatives such as *iMlango*, Constituency Development Fund, county governments, UNICEF and Communications Authority through the Universal Access Fund.

7.3. Overview of Policy Framework

ICT integration in education is a priority area for the Ministry of Education as articulated in the various policies, which supports remote learning including, Sessional paper No. 1 of 2019 and the National Education Sector Strategic Plan (NESSP), among others. Other applicable legal and policy documents include; The Code of Conduct and Ethics for Teachers, 2015, Code of Regulation for Teachers, 2015, the Technical Vocational Education and Training (TVET) Act, 2013.

The Commission for University Education (CUE) under the Universities Act, 2012, The Science Technology and Innovation (STI) Act, 2013, The National ICT Policy, 2019 and many others.

The following links will lead you to some of the various policy and legal documents, which guide the ICT integration in education (see **www.tsc.go.ke, www.education.go.ke, www.kicd.ac.ke, www.icta.go.ke, www.knec.ac.ke, www.kenyalaw.org, www.digischool.go.ke)**

Activity 7.1

Steps to access Sessional Paper No. 1 of 2019:

i. Use your digital gadget to access the Ministry of Education website link www.education.go.ke
   a. Click on downloads and select policy documents tab
   b. Open the document Sessional Paper No. 1 OF 2019
   c. Download the document and read Chapter 5, Section 5.1 on Integration of ICT in education, training and research, and write the five areas the government has focused on in ICT integration

ii. In reference to the Science Technology and Innovation (STI) Act, 2013 Section 29 (1a to t) identify areas that you can use in ICT integration in teaching and learning. www.nacosti.go.ke

You may have come up with the following;

7.3.1. Five areas the government has focused on in ICT integration

i. Expand ICT infrastructure in education, training and research

ii. Strengthen public partnership in ICT

iii. Enhance availability and utilization of digital learning materials and open education resource centres at all levels of education, training and research.

iv. Promote integration of ICT in the education and training for learners with special needs and disabilities

v. Enhance security, safety and ethical use of ICT

7.3.2. Areas that you can use in ICT integration in teaching and learning as per Science Technology and Innovation (STI) Act, 2013

i. Creation of science and innovation parks, institute or schools or designate existing institutions as centres of excellence in education.

ii. Ensure the inclusion of science, technology and innovation in the country's programme and policies at all levels.

iii. Disseminate scientific knowledge or technology through any medium.

7.4. Interventions in ICT Integration in Teaching and Learning

Activity 7.2
In groups, discuss and share on the interventions that the Government has made in integration of ICT in teaching and learning.

You may have mentioned the following:

i. Rolled out the Digital Literacy Programme (DLP) for primary schools, also known as the Laptop Project and Computer for school program for secondary schools.

ii. Capacity Building of teachers by TSC through multi-agency approach

iii. Development of digital content by KICD

iv. Expanding ICT infrastructure

7.5. The Digital Literacy Program

The UNESCO ICT Competency Framework for Teachers (2019) emphasizes that it is not enough for teachers to have ICT competencies and be able to teach them to their learners. Teachers need to be able to help the learners become collaborative, problem solving, creative learners through using ICT so they will be effective citizens and members of the workforce.

Activity 7.3
What are the components of the UNESCO ICT competency framework for teachers?

You may have come up with this

It is against this Framework upon which DLP training approach was crafted to addresses all aspects of a teacher's integrating in learning: The Framework is arranged in three different approaches to teaching (three successive stages of a teacher's development). The first is Technology Literacy, enabling learners to use ICT in order to learn more efficiently. The second is Knowledge Deepening, enabling learners to acquire in-depth knowledge of their school subjects and apply it to complex, real-world problems. The third is Knowledge Creation, enabling students, citizens and the workforce they become, to create the new knowledge required for more harmonious, fulfilling and prosperous societies. See the summary on table 4.

Table 4: The UNESCO ICT Competency Framework for Teachers (Source: UNESCO 2019)

Competencies	**Technology Literacy**	**Knowledge Deepening**	**Knowledge Creation**
Understanding ICT in Education	Policy awareness	Policy understanding	Policy innovation
Curriculum and Assessment	Basic knowledge	Knowledge application	Knowledge society skills
Pedagogy	Integrate technology	Complex problem solving	Self-management
ICT	Basic tools	Complex tools	Pervasive tools
Organization and Administration	Standard classroom	Collaborative groups	Learning organizations
Teacher Professional Learning	Digital Literacy	Manage and guide	Teacher as model learner

Self-Reflection

i. I learned that .....
ii. I need to learn more about.....
iii. What I will apply .....
iv. Suggestions I have for improvement of the session

Upload your responses on Google Classroom

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SESSION EIGHT

ROLES OF STAKEHOLDERS IN REMOTE LEARNING

8.0. Introduction

This session covers the roles of various stakeholders involved in the implementation of remote learning. These stakeholders include educators or teachers, parents, learner, administrators, ICT champions, officials from MOE, TSC, ICTA, CEMASTEA, KICD, KNEC, development partners, and other policy makers. Successful roll out of remote learning initiatives requires a multi-agency strategy.

8.1. Expected Learning Outcomes

By the end of the session, you should be able to:

i. Identify stakeholders involved in remote learning
ii. Explain the roles of the stakeholders involved in remote learning
iii. Appreciate the roles of stakeholders involved in remote learning

KWL on Roles of Stakeholders in Remote Learning

In preparation for undertaking a study on the session the roles of stakeholders in remote learning, complete the following

Know: What I know about the roles of stakeholders in remote learning,

Want to know: What I want to know about the roles of stakeholders in remote learning,

Share your responses with your group and present the common items to the large group. Upload the responses on Microsoft Teams/Google Classroom

8.2. Key Stakeholders Involved in Remote Learning

Activity 8.1

i. Identify stakeholders involved in remote learning

ii. Outline the roles and responsibilities of stakeholders involved in remote learning

You may have identified the following:

i. Heads of institution
ii. Teachers and ICT champion teachers
iii. learners
iv. parents/guardian,
v. TSC
vi. ICTA
vii. KICD
viii. MOE

8.3. Roles and responsibilities of key stakeholders who are involved in remote learning

8.3.1. Head of Institution

i. Supervise and ensure quality implementation of remote learning.
ii. Provide leadership in promoting remote learning in school
iii. Establish a strategic framework for remote learning and ensure its consistency across the school.
iv. Act as an enabler for remote learning to take place by providing resources where needed.
v. Regularly update the field officers on the progress of remote learning.
vi. Addressing gaps that arise during remote learning and work to its success.
vii. Provide feedback to teachers, learners and parents on remote learning
viii. Promote utilization of digital devices in teaching and learning

8.3.2. ICT Champion Teacher

i. Coordinate remote learning at the sub county and zonal level.
ii. Offer peer support to other teachers during remote learning.
iii. Promote ICT Integration in teaching and learning.
iv. Sensitize stakeholders on remote learning across the sub county and at school level.
v. Contact the service providers call centre to report faulty devices through the available contacts.
vi. Mentoring and coaching teachers and learners on ICT integration in teaching and learning.
vii. Promote utilization of digital devices in teaching and learning

8.3.3. Teachers

i. Contact the service providers call centre to report faulty devices through the available contacts
ii. Use and maintain digital devices
iii. Managing Learning Management System activities.
iv. Ensure children are protected from accessing unauthorized content
v. Designing and delivery of the online lessons, developing activities for learners to do remotely or at home, designing simple learning plans to support parents to home school, being on call or other relevant social media platforms for interaction with learners and parents, hosting online or phone-based group learning conversations.
vi. Promote utilization of digital devices in teaching and learning

8.3.4. Parents/ Guardian

i. Maintain communication with the teacher through phone calls, email or through virtual meeting to discuss the progress of a learner
ii. Regular checking of the learner's progress.
iii. Provision of remote learning resources.
iv. Promote utilization of digital devices in teaching and learning
v. Provide feedback to teachers and stakeholders on the participation of their children in remote learning

8.3.5. TSC Field Officers

i. Making physical and virtual school visits to monitor remote learning.
ii. Offering support to the teachers in carrying out remote learning.
iii. To ensure that policies governing remote learning are adhered to and implemented.
iv. Collaborate with other stakeholders to ensure that infrastructure required for remote learning is provided.
v. Prepare a regular remote learning progress report.
vi. Promote utilization of digital devices in teaching and learning

8.3.6. KICD

i. Provision of digital content
ii. Ensure access and equity to digital content through the use of radio, EDU Channel and Kenya Education Cloud.
iii. Quality assurance of digital content
iv. Promote utilization of digital devices in teaching and learning

8.3.7. CEMASTEA

i. Collaborate with TSC to identify teacher proficiency gaps in remote learning to inform Teacher Profession Development content
ii. Liaise with TSC, KNEC, KISE and KICD in the development of teacher professional development inclusive course content in remote learning to enhance teachers' capacity
iii. Liaise with TSC, KNEC, KISE and KICD in training to enhance teachers' capacity
iv. Promote utilization of digital devices in teaching and learning

8.3.8. ICTA

i. Provision of digital devices to schools
ii. Provide support for Digital Devices in schools
iii. Collaboration with TSC on teacher capacity building on remote learning
iv. Promote utilization of digital devices in teaching and learning

8.3.9. Ministry of Education

i. Promote utilization of digital devices in teaching and learning

Self-Reflection

i. I learned that .....
ii. I need to learn more about.....
iii. What I will apply .....
iv. Suggestions I have for improvement of the session

Upload your responses on Google Classroom

APPENDICES

APPENDIX 1: SAMPLE REMOTE LEARNING PLAN

[INSTITUTION NAME**]**

Dates for this plan:	
Start Date: 7th Dec 2020	End Date: 11th Dec 2020

Learner information		1. The purpose of this plan is to communicate how educational opportunities and services will be delivered to your child during remote learning. 2. Special education services for your child will look different during this period. 3. This plan may be modified as the government continues to develop and improve remote learning
Name	Tumbox Waweru	
Phone/email		
Parent/Guardian		
Name	Josphat Waweru	
Phone/email		

How will remote learning be done?
The school has developed remote learning plan that will involve use of virtual platforms like zoom, Microsoft Teams, google meets etc. to undertake the following: video conferencing, assignments being sent to the learner,

Resources and Supports	
Special education and related services provided remotely through strategies, assignments, projects provided to learners	
Generally what kind of strategies, assignments can I expect from the teachers	• ***Use of virtual platforms such as zoom, Microsoft Teams, google meets etc. to undertake the live teaching*** • ***Communication through emails, WhatsApp to send quizzes, tests, assignments and other related print information*** • ***Access to devices like phones, tablets, radio, TV and access to email.*** • ***Parental support and supervision***

Services and Instruction		
Which teachers will be providing services through virtual, online or telephone/mobile instruction		
Name	**Role**	**Contact Info**
Kazungu Moto	**Maths Teacher**	**0723 *** *** **
What, when and how will teaching/learning be done remotely? What is the duration of each service?		

Day	Mon	Tue	Wed	Thur	Fri
What					
When	Mathematics 8:00am-8:25am				
How/Mode	*Synchronous activities that will involve use of virtual platforms e.g. zoom,tv, radio, Microsoft teams*				
How? Evaluation	*Mode of Assessment-formative*				

What else do I need know to prepare my child for remote learning?

APPENDIX 2: SAMPLE REMOTE LEARNING LESSON PLAN

The following is a sample remote learning lesson plan which can be adapted for use in primary and secondary schools

SAMPLE LESSON PLAN

DATE	CLASS/GRADE	SUBJECT	TIME	ROLL
15/12/2020	5	SOCIAL STUDIES	9:00am -9:25am	40

Strand/Topic: RESOURCES & ECONOMIC ACTIVITIES
Sub Strand/sub topic: WILDLIFE AND TOURISM

Learning Outcomes
By the end of the lesson the learner should be able to;

a. *Identify tourist attractions in Kenya*
b. *Label on the map, where the main tourist attractions sites are in Kenya*
c. *Appreciate the diversity of tourist attraction sites in Kenya.*

Key Inquiry Question

- *Why do tourists come to Kenya?*

Organization of learning
Introduction
Connection: (how you will keep learners connected to each other and to you)
Activity (3 Minutes): Learners are guided to play 'a get to know you game' whereby they use the initials of their names and provide a name of an area in Kenya or name of an animal that has a similar initial for example M- Maasai Mara or E-Elephant
Focus Activity (activity to help learners focus on learning)
Let learners mention some of the places of fun and enjoyment they have ever visited in our country.

Lesson development
Content time
Synchronous Activity (What learners are doing to learn together at the same time).
Step 1 (7 minutes): Learners are asked to watch a short video showing images of some of the tourist attractions in Kenya. (Learners with visual impairment e guided to listen to audio descriptions of the video). The learners are asked to name some of the places shown in the video. At this point, learners use the emoji/thumbs up or thumbs down showing raising hands in order for the teacher to allow them to speak. (Guide learners with visual impairment to navigate to the correct emoji using devices with screen readers and screen magnifiers)

Step 2 (7 minutes) learners meet virtually in breakout rooms and through collaborative Google Doc label tourist's attraction sites on the map of Kenya provided

Step 3 (5 minutes): Learners engage in a discussion on the diversity of tourist attraction sites in Kenya.
Step 4: (3 minutes) Conclusion by assessing learners' oral responses to the names of the tourist attraction sites in Kenya and where they are located.

Extended learning:
Asynchronous Activity (What learners are doing individually or in small groups to learn outside of class time).
Draw *a map of Kenya, locate and label game reserves and national parks. Take a photo of your drawing and upload to google classroom. (Learners who are blind be guided to develop an embossed map using spur wheel, threads, sand and other locally available resources). The teacher evaluates the drawing, and then shares feedback through Google Classroom*.

- *The core competencies of communication and collaboration will be enhanced as they meet through zoom or MS teams to discuss; Digital literacy will be improved as they engage in learning using the different platforms and use of images, videos etc (Learners with special needs and disabilities use appropriate assistive technologies). Citizenship will be enhanced as they appreciate the diversity of tourist attraction sites. It will encourage learners to appreciate other people's cultures.*
- *Values of respect are enhanced since the learners have to give each other time as they deliberate and talk through the virtual platform.*
- *PCIs: Parental engagement and empowerment as they find out from parents, guardians and elders about how to use the platforms to communicate and also in the identification of the images.*

Resources*: Laptop, PowerPoint presentation, video and photos of tourist attraction sites , map of Kenya, data bundles, embossed map of Kenya, Assistive technology devices and softwares.*

Assessment tools: Oral questions and rubrics

Reflection:

Additional resources: (References materials in the google classroom with links on relevant learning materials)

Important reminders (deadlines, reminders etc.)

APPENDIX 3: SAMPLE MONITORING PLAN IN REMOTE LEARNING

Mode of delivery	What is monitored	How to monitor	Tools of monitoring
Radio / Television broadcasts	Learner's attendance, engagement and participation	Assignment	Timetable Form e.g Attendance register, Assignment submission form Learners ' portfolio
		Calls, SMS, WhatsApp	Mobile phone
		Supervision Signing of assignment	Forms
		Calls, SMS, WhatsApp Web based forms	Report Feedback
Conferencing softwares: Microsoft Teams (Log In | Microsoft Teams) Zoom (Sign In - Zoom), Google meet (Google Meet), Skype (Skype | Communication tool for free calls and chat) Gotomeeting, (Secure Sign In (logmeininc.com)) Webex (Cisco Webex)	Content	Virtual visit Professional documents	Lesson observation form
		Virtual visit Lesson plan	Lesson observation form observation
	Pedagogy	Virtual visit Lesson plan On site visit	Lesson observation form Timetable Virtual attendance form
		Virtual visit On site visit	virtual attendance form Timetable
	Learner's attendance, engagement and participation	Observation Virtual Use a caregiver	Phone
		Assignment Chat participation	Attendance list Assignment submission form Google classroom submissions
		Observation Virtual visits	Attendance list Assignment submission form Google classroom submissions

		Observation Virtual visits	Attendance list Assignment submission form Google classroom submissions
	Monitoring by the head of institution	Observation Virtual visit	Attendance list School report
Live streaming - Facebook live (Live (facebook.com)), YouTube live (Live - YouTube)	Content Pedagogy	Chat messages Virtual presence	Attendance form Assignment submission form Recorded session links
	Learners participation and engagements	Chat messages Virtual presence	Recorded session links
Google classroom (Courses (google.com)), Edmodo (https://new.edmodo.com)	Content and learner engagement	Virtual visit	Virtual markbook Comments on tasks Task completion
	Content and learner engagement	Virtual visit	Virtual markbook Report by teacher / school
Mobile based- SMS and WhatsApp	Content	Chat messages/calls	Attendance form
Open Education Resources - example (https://www.khanacademy.org, https://www.senecalearning.com)	Content	Mobile chats	Portfolio
Learning Management Systems (LMS Platforms) Kenya Education Cloud www.kec.ac.ke	Content	Mobile chats	Portfolio
Audio visual on CD, DVD and flash disks	Content	Mobile calls,sms/chats	Portfolio
Postal delivery / Home visits	Content	Physical visit	Portfolio/Assignment checklist.

APPENDIX 4: SAMPLE VIRTUAL VISIT LESSON OBSERVATION FORM

VIRTUAL VISIT LESSON OBSERVATION FORM FOR FIELD OFFICERS AND HEADS OF INSTITUTIONS

Name of the institution: **Teacher's name TSC No……..**		**Monitor's Name** **Position** **TSC No.**
Class/form…… Time started……Time ended **Learners' present……. Date**		
Subject / Learning Area **Topic/ Strand Subtopic / Sub Strand**		
ACTIVITY	**PERFORMANCE INDICATOR**	**REMARKS**
Introduction **Lesson Development/content delivery**	● Review of the previous lesson /content related to the current lesson ● State the objectives of the current lesson ● Quality of introduction to stimulate the learners' interest ● Content mastery ● Developed Online content ● Responding to students' questions satisfactorily ● Timely coverage of the online lesson	
Pedagogy / E-learning methods	● Use of suitable E-learning methods ● Demonstrating creativity and innovativeness during the lesson	
Learners' Activities / participation	● Participation in responding to questions ● Asking of questions by students / seeking clarification ● Ability to use ICT resources	
Assignments	● Assignments given to learners ● How learners will submit the assignments	
Parental/guardian involvement	● Provision of support for on-line teaching and learning	

APPENDIX 5: MONITORING TOOL FOR GUARDIAN /PARENT AND LEARNER

Name of parent/Guardian……. Name of Learner…….

Class……Subject…… ……

Time……
Date…….

Mode of Learning……

Assignment done…… …….....

Yes	
No	

If No, communicate to the teacher