REB

Rwanda Education Board

CADIE

Capacity Development for
ICT in Education

CADIE TEACHER TRAINING MANUAL

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Contents

FOREWORD

Rwanda's Education Sector Strategic Plan describes the use of information and communications technology (ICT) in general as fundamental to achieving the socio-economic development outlined in Rwanda's Vision 2050, and its use in education as critical. Enhancing teacher capabilities in and through ICT is one of the strategies used by the Government of Rwanda to develop a high-quality skills and knowledge base, leveraging ICT across various socio-economic sectors of the country. Teachers and learners are expected to use ICTs for teaching and learning purposes to improve quality education. Teachers will be guided on how to use ICTs in teaching and learning, including examples of lesson plans. However, teachers are encouraged to continuously decide on their own the variety of ICTs they can use to enhance curriculum delivery within a particular context.

Training teachers in ICTs will increase the resource base and improve education delivery at all levels, hence the need to institutionalize ICT usage and training for all teachers. Capacity Development for ICT in Education (CADIE) in-service teacher training course focuses on competencies to integrate the appropriate ICT tools in a classroom setting and bring new experiences to Rwandan schools. The CADIE in-service teacher training course is designed to empower Rwandan schoolteachers to use ICT as an educational tool to enhance their teaching and learning practices.

In an effort to ensure ICT integration in teaching and learning in schools, the Rwandan Government has over the years invested heavily in establishment of the requisite ICT infrastructure in schools such as smart classrooms. It is the expectation of the Ministry of Education that the current and future interventions will inject the much-needed infrastructure, skills, and attitude necessary to spur ICT integration for teaching and learning in our schools. It is important that teachers deliberately seek to acquire basic ICT skills as well as enhance their capacity in ICT integration. This will greatly improve their capacity in implementing Competency-Based Curriculum.

This Training Manual has been developed to assist CADIE Master Trainers who will train teachers for ICT integration in improving the instructional process. It provides hands on experiences for all teachers regardless of competencies in ICT. It is therefore imperative that master trainers acquaint

themselves with the contents of this manual in order to effectively guide the teachers in this endeavor.

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Shyaka EMMANUAL
Coordinator REB-SPIU

OBJECTIVES OF TRAINING MANUAL

By the end of the training, the participants should be able to:

1. apply change management strategies in embracing ICTs in his/her teaching practice;

2. facilitate and inspire innovative learning and creativity among teachers;

3. create and manage an effective ICT integrated learning environment;

4. appreciate the role ICTs play in day to day lives;

5. sustain virtual collaborations with peers on educational environments;

6. use ICTs and analyze learning progression of the student;

7. use ICTs to promote student's learning engagement in the classroom;

ABOUT THE MANUAL

This training manual has been developed to guide CADIE Master Trainers (MT) in training teachers to integrate ICTs in secondary education. The guide outlines the knowledge, skills and attitudes the teachers need to be equipped with in preparation for integrating ICTs in schools. The training manual is organized in the following:

a) Understanding ICT in Education policy;

b) Basic understanding of various ICT tools for innovative teaching and learning process;

c) Teacher's professional training on 21st Century Learning Design;

How to use the Manual?

The Manual has six (6) sessions. Each session has a topic, session objectives, content, and activities. In the introduction, the manual contains the resources, methodologies, and assessment. There are references such as links that the master trainers can refer to for additional information.

Methodology/ techniques used

This Manual is designed to adopt a practical online orientation; thus, the master trainers should use a variety tools such as Microsoft Teams, REB eLearning platform for participatory methods to involve the participants /teachers). It is important to note that participants also have important contributions in the training process, drawn from their varied experiences. This
Manual provides suggested activities that can be carried out using various methodologies. Some of the methods include:

Discussion – This is usually best done in groups where the participants engage in an online interactive and explorative talk as they analyze, review, or evaluate a specific topic/ subject. The group should not be too large to allow participation of all the members. It is important to have a leader moderating the discussion and ensure that some members do not dominate the discussion.

Demonstration – This is teaching by showing/doing as well as by telling. Participants learn by observing and then practicing the skills, processes or functions demonstrated in action. A demonstration may be carried out after a lecture, discussion, or explanation. The master trainers

should explain the purpose of the demonstration and allow participants to practice what has been demonstrated.

Question and Answer – The master trainer asks the participants a question(s) on a topic and they answer the question(s) based on their understanding. This may lead to a discussion forum on the topic.

Video clip – This should be selected based on the topic being taught. The trainer should give a summary of the video clip to the participants before viewing. The viewing should be followed by either a discussion or questions and answers.

Practical tasks: The participants are given some instructions to carry out an activity practically (hands-on). Sometimes the activity must be demonstrated first for example an experiment.

RESOURCES

The following are some resources that the master trainer can use during the training:

- Video clips
- Computer/Laptops
- Reference books/ manuals
- Internet/ online resources
- Microsoft Teams
- REB eLearning Platforms
- Email accounts
- Web browsers

Assessment Methods

The master trainer can use a variety of assessment methods such as:

- Pre-test and Posttest (this will be done before and after the training)
- Assignments (take away)
- Practical assessment
- Individual assignment
- Lesson plan/preparation
- Portfolio and personal development plan
- Final examination that will lead to Microsoft Certified Exam (MCE)

Other assessment methods include portfolio assignments designed to provide evidence that a participant has achieved specific competency. The portfolio items range from lesson plans, lesson preview, videos of teachers performing in class, teaching aids, etc. These items will be marked by the Master Trainers (CADIE MTs) and will be stored in the REB LMS platform.

The final assessment will be held online. This is a 1-hour examination assessed online and will be open to the participants after the training. The final assessment is used to test understanding of the theory that backs many of the competencies. Most of the assessment questions will be marked automatically by the REB LMS. A Microsoft Certified Educator (MCE) Certificate will be for excelling a professional development program as a benchmark. Record of Success goes into Teacher Management System profiles.

OVERVIEW OF THE ICT IN EDUCATION
INTRODUCTION

The Government of Rwanda's Education Sector Strategic Plan describes the use of information and communications technology (ICT) in general as fundamental to achieving the socio-economic development outlined in Vision 2050, and its use in education as critical (ESSP, 2018/2019 to 2023/20124). Increasing the use of ICT in teaching and learning through scaling up SMART classrooms and ICT devices as well as implementation of the new competence-based curriculum (NSTI, 2017-2024).

The Ministry of Education of Rwanda (MINEDUC) and Korea International Cooperation Agency (KOICA) embarked on an audacious initiative to enhance ICT utilization in education in line with the National Strategy for Transformation (NST1 2017-2024). As part of the collaboration between the Ministry of Education, and Korea International Cooperation Agency agreed to collaborate on a project entitled **"Capacity Development for ICT in Education"**, which was designed to develop ICT utilization capacity of schoolteachers.

Information and Communication Technologies (ICTs) in teaching and learning are technological tools in form of hardware and software that help communicate, develop, disseminate, store, and manage information. These technologies include computers, the Internet, broadcasting technologies (radio and television), and (mobile) telephony. ICTs can refer to hardware (such as computers, digital cameras), software (such as Excel, discussion forums), or both. Computers, laptops, Internet, television, and mobile phones are some of the ICT tools used in education to enhance the teaching learning process. Information and Communication Technology (ICT) has the potential to play a powerful role in increasing resources and improving the learning environment. ICT plays a role in equipping learners with fundamental skills and competencies to enhance competitiveness in the emerging global knowledge economy.

It is now globally accepted that quality education should empower learners with 21st century skills that include, learning and innovation skills (Creativity and Innovation, Critical Thinking and Problem-solving, Collaboration, Communication) Information, Media, and Technology skills. The availability of e-tools and the importance in using them in subject teaching and learning has a significant impact on classroom interaction.

It is stated in the National Curriculum Framework that: "*The curriculum must enable educators and learners to use ICT as a tool to improve the quality of education in all subjects at all levels in teaching and learning practices. ICT must support the emergence of teaching and pedagogical learner-centred approaches as well as encourage research, communication and collaborative learning.*" The success of the process largely depends on the use of technology in the preparation of the lesson plan with essential elements such as clear indications of what will be done, how it will be done, when it will be done and, more importantly, how technology is going to be used. Teachers must focus on the subject content through exploiting benefits of ICT and avoid distraction in presentation. Teachers must see how the technology selected fits into the objective of the lesson, methods of instruction, evaluation, feedback, and follow-up initiatives.

Capacity Development for ICT in Education (CADIE) in-service teacher training program was developed and adapted to UNESCO ICT Competency Framework for Teachers (CFT Version 2&3) and built by adapting and supplementing existing Open Educational Resources (OER). The underlying idea is that teachers who have competencies to use ICT in their professional practice will deliver quality education and ultimately be able to effectively guide the development of students' ICT competencies. CADIE in-service teacher training course focuses on competencies to integrate the appropriate ICT tools in a classroom setting. The training focuses on ICT tools for more hands-on practices so that teachers can apply ICT tools in the teaching and learning process.

ICT in Education Policy is drawn from the following documents:
- National ICT Strategy & Plan, NICI 2015;
- EDPRS 2013-2018;
- Rwanda Vision 2020;
- Education Sector Strategic Plan 2013-2018;
- Curriculum Framework- Competence-Based Curriculum, 2015;
- Etc;

(The Master Trainers can ask the participants to read the documents during their free time)

Goal of the manual: To improve the quality of teaching and learning in the classroom through the integration ICT.

ROLES OF DIFFERENT STAKEHOLDERS
REB-CADIE Project,

a) Supervise and co-ordinate the training of the teachers.

b) Supervise and file progress reports on the implementation of the programme.

c) Ensure that the internet connectivity for the trainees and training allowances for the master trainers disbursed on timely manner.

d) Monitoring and Evaluation of the program

Master Trainers

a) Training of teachers on ICT integration in the teaching and learning process.

b) Provide support to the teachers on daily basis.

c) Provide daily progressive reports

UNIT 0: ORIENTATION ON ICT IN EDUCATION POLICY

Session1: introduction to eLearning platform (ICT in education Policy)	
Session objective(s) By the end of this session, participants will be able to: 1. Know and understand existing and planned national policies related to ICTs in Education; 2. Identify how classroom practices correspond to and support national policies; 3. Demonstrate a determination to play a positive role in nation building; 4. Use all eLearning platform tools;	
Materials/resources: Computers connected to internet, browser, and Microsoft teams, ICT in education policy documents, national curriculum framework and eLearning platform accounts.	
Methodology or Techniques used in this session: Online training using Microsoft teams/eLearning platform	

Timing & materials	Session activities (Facilitator and participant activities)
Introduction **20 minutes**	↓ Ensure that all Participants accounts are accessed in Microsoft teams and REB eLearning platform to ease online activities during the training session ↓ Welcome remarks and training objectives ↓ The participants write down their expectations and share them in the forum (MTs will harmonize the achievement of some or all noted expectations). ↓ Teachers should be able to identify how classroom practices correspond to and support these national policies in education.
Main body **140 minutes**	**Activity 1: Introduction to eLearning platform (ICT in education policy orientation)** **Logins in their accounts through: https://elearning.reb.rw**

	The Master trainers support the participants to login into REB eLearning platform, Master Trainers must use the forum and chartroom to allocate each member of the class a policy document to review. The idea is that you need to review only one of the documents but be ready to inform the rest of the class what the reading contains. Access the appropriate document below and familiarize yourself with the policy statements, visions, goals, and objectives and prepare a summary to be shared.
	Expected results
	By the end of this unit participants should be able to explain how existing and planned national policies impact classroom practices and how classroom practices correspond to and support policies related to ICT.
	Activity 2: Groups discussions and sharing of reading on policy documents
	The Master trainers support the participants to access the forum to start and discuss what each policy suggests the participants do to implement policy first at the national level (all schools) and then consider how to implement the policy in their own classroom.
	Expected results
	Participants should be able to discuss through the access of forum and the Master trainer will set the quiz to be done by every participants (trainees) after reading ICT Policy in education.
	Activity 3: Portfolio Assignment on national policies and the classroom
	The Master trainers support the participants to develop a presentation that identifies what the ICT in education policy documents suggest participants to implement them first at national level (all schools) and in their own classroom. Master trainers to make sure that the participants also identify what are the key issues and challenges in implementing ICT in teaching and learning.
	Expected Results:
	All participants will be skilled in the implementation of ICT Policy in Education.
Conclusion 20 minutes	**End of the unit 0:**

	Using the submission tool to create a presentation answering the following questions:
	• What do the polices tell us about classroom practice?
	• How would we implement the policies at a national level?
	• How would we implement the policies at classroom level?
	• What are the challenges of implementing the policies? and suggest their solutions.
	All Master Trainers must be aware on these National Policy documents, especially ICT Policy in education that will enable them to give constructive feedback where necessary.

UNIT 1: INTRODUCTION TO THE OFFICE 365

Session1: General introduction to office 365

Session objective(s)
By the end of this session, participants will be able to:
5. Explain and understand Microsoft office 365 basics and its uses
6. Login in office 365 using their accounts
7. Install Microsoft teams in their computers and smartphones
8. Join created teams and creating their own teams
9. Use different elements of teams (Chat, recording…)

Materials/resources: Computers connected to internet, browsers, gmail account, Microsoft teams and Microsoft account.

Methodology or Techniques used in this session: Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)

Timing & materials	Session activities (Facilitator and participant activities)
Introduction 20 minutes	✦ Ensure that all Participants accounts are accessed in Microsoft teams to ease online activities during the training session

	↓ Welcome remarks and training objectives ↓ The participants write down their expectations and share them
Main body **140 minutes**	**Activity 1: Introduction to office 365** **Logins in their accounts through:** https://portal.office.com The Master trainers support the participants to login into Office 365, the participants explore different applications available in office 365, then the facilitators will explain each one to help participants to know their roles in teaching and learning activities. **Expected results** ↓ Participant will be able to clearly explain the meaning of office 365 and each of its applications ↓ Participants will be able to login into Office 365 **Activity 2: Downloading and installing Microsoft teams' application** The Master trainers support participants to download Microsoft teams application and install it in their devices (Download teams from : https://teams.microsoft.com/downloads) **Expected results** ↓ Participants will be able to download the Microsoft teams application ↓ The participants will be able to install Microsoft teams application in their devices **Activity 3: Using teams** The Master trainers support participants on how to: 1. Create teams, 2. Join created teams 3. Use the chat room to ask questions and give their comments 4. Use different elements in teams such (assignment, call, recording) 5. Etc

	Expected results
	↓ The participants will be able to effectively use Microsoft Teams application
	↓ The participants will be to create their own teams, invite their colleagues to join created teams, and use different elements of teams
Conclusion **20 minutes**	**End of the session 1:** ↓ Answering asked questions in team's chatroom as well as direct questions ↓ Give assignment to participants for self-practice at their homes (Everyone will create a team and add facilitators as the team members)

Session 2: Microsoft teams application management

Session objective(s)

By the end of this session, participants will be able to:

1. Differentiate types of teams (Class, PLC, staff and others)
2. Create team and manage the created teams (Edit and delete teams, add new or remove members and changing their roles)
3. Use calendar, assignment, and calls icons of Microsoft teams

Materials/resources: Computers connected to internet, browsers, Microsoft teams and Microsoft account.

Methodology or techniques used in this session: Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)

Timing & materials	Session activities (Facilitator and participant activities)
Introduction **30 minutes**	↓ Recap of the previous sessions ↓ Ensuring that all Participants are connected to teams through created link to be able to follow new session ↓ Sharing experiences on homework practice done ↓ The trainers have to avail the links to participants 30 minutes before starting session.

Main body **120 minutes**	A**ctivity 1:** Different types of teams Master trainers help participants to know different types of teams to allow participants to choose the ones to use depending on the objectives they have before creating the team. **Expected results** ➢ Participants will be able to differentiate types of teams (Class, PLC, staff and others) referring to their purpose of using teams. A**ctivity 2:** Editing and deleting created teams Guided by Master trainers, participants will: ➢ Edit created teams, manage created teams ➢ Delete created teams if they are no longer needed **Expected results** Participants can manage created teams and delete them if needed A**ctivity three:** Add or remove members in teams and changing their roles Guided by Master trainers, participants will: ➢ Add new members or remove existing ones in teams ➢ Edit roles of members in teams **Expected results** Participants can add or remove members in teams and edit their roles A**ctivity four:** Use of calendar, assignment and calls icons of Microsoft teams Guided by Master trainers, participants will: ➢ Use calendar to create new events in teams ➢ Use assignment icon to guide participants to give assignments to team members ➢ Get skills on the use of call icon for calling individuals using teams

	Expected results
	Participants can effectively use calendar, assignment and call icons of Microsoft teams' application
Conclusion **30 minutes**	**End of the session 2:**
	♦ Answer questions asked in team's chatroom as well as direct questions
	♦ Assignment to participants for self-practice at their homes (Everyone will add 6 new members in their created teams and change their roles to owners

UNIT 2: USE OF ICT TOOLS IN LESSON PLAN PARTS

Session 3: Using kahoot in the Lesson Preview- Introduction to Kahoot (P part of PLE approach)

Session objectives

By the end of this session, participants will be able to:

Explain kahoot tool and its effectively use in the lesson preview part

Materials/resources: Computers connected to internet , browser, google account, questions bank and Microsoft teams

Methodology or Techniques used in this session: Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)

Timing & materials	Session activities (Facilitator and participant activities)
Introduction **30 minutes**	♦ The trainers have to avail the links to participants 30 minutes before starting session.
	♦ Ensuring that all Participants are connected to teams through created link to be able to follow new session
	♦ Recap of the previous sessions
Main body **120 minutes**	**Activity 1: Introduction to kahoot tool**
	Signing up/in through: https://kahoot.com/

	Through presentation on teams using sharing screen, Master trainers will guide participants to sign up for the ones who access kahoot for their first time and login for the ones who already have accounts in kahoot **Expected result** All participants will have accounts in kahoot tool **Activity 2: Creating a quiz in kahoot** Master trainers will guide participants to create Quiz in kahoot by showing them all steps to follow when creating a quiz after signing in. **Expected result** Participants will be able to create their own Quiz in kahoot tool
Conclusion **30 minutes**	**End of the session 3:** ↓ Answer questions asked in team's chatroom as well as direct questions ↓ Prepare assignment to participants for self-practice at their homes (Everyone will Create a quiz in kahoot basing on his /her teaching subject at least ten questions

Session 4: Using Kahoot in the Lesson Preview-Developing Quizzes
Session objectives By the end of this session, participants will be able to: ↓ Effectively use Kahoot tool in their lesson plan preview part ↓ Guide other teachers and students to create and play quizzes using kahoot.com/ kahoot.it
Materials/resources: Computers connected to internet , browser and Microsoft teams
Methodology or Techniques used in this session: Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)

Timing & materials	Session activities (Facilitator and participant activities)
Introduction **20 minutes**	↓ Ensuring that all Participants are connected to teams through created link to be able to follow new session ↓ Recap of the previous sessions

Main body	**Activity 1: kahoot as a game based learning tool**
120 minutes	**Login through:** https://kahoot.com/
	Guided by master trainers , participants login using the last day's created accounts in kahoot and be shown how to share the created Quiz allowing students to play it through https://kahoot.it/
	Expected results
	Participants will be able to share Quizzes created in kahoot and guide students to play created kahoot games in lesson plan preview part.
Conclusion	**End of the session4:**
40 minutes	♦ Answer questions asked in team's chat room as well as direct questions
	♦ Assignment to participants for self-practice at their homes (Everyone will create kahoot quiz and share its link to the team chat)

Session 5: Google docs for lesson development (L part of PLE approach)
Session objectives
By the end of this session, participants will be able to:
♦ Search, prepare and save class notes in Google docs tool to help leaners in lesson development
♦ Support other teachers and students to use class notes prepared using Google docs tool
♦ Facilitate the class to achieve learning objectives using Google docs tool
Materials/resources: Computers connected to internet, internet browser, google account and Microsoft Teams
Methodology or Techniques used in this session: Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)

Timing & materials	Session activities (Facilitator and participant activities)
Introduction **30 minutes**	♦ Ensure that all Participants are connected to teams allowing them to follow new session ♦ The trainers have to avail the google docs link to participants 30 minutes before starting session.

	⬥ Recap on the use of Kahoot tool in the lesson preview part
Main body: **120 minutes**	**Activity 1: Introduction to Google docs tool** ⬥ The Master Trainers have to link Google docs to known MS word application in the computers. ⬥ Use of Google docs requires first of all opening user account in www.gmail.com. ⬥ Guided by master trainers, participants will create Gmail's user accounts for the ones who don't have them and sign in for the ones who already have created Gmail accounts. After signing in their Gmail accounts, through https://docs.google.com/document/u/0/?usp=direct_url link , participants will be guided on how to created Google docs that will be used to help them in lesson development to achieve learning objectives **Expected results** Participants will be able to use Google docs in preparing summary notes for the learners and guide them about the effective use of them to achieve learning objectives.
Conclusion **30 minutes**	**End of the session5:** ⬥ Answer questions asked in team's chat room as well as direct questions ⬥ Give assignment to participants for self-practice at their homes (Every participants will plan this part of lesson and create Google docs notes related to his teaching subject and submit his/her work to the given platform)

Session 6: Google slides for lesson development (L part of PLE approach)

Session objectives By the end of this session, participants will be able to: ⬥ Support other teachers and students to summarize class notes using Google slides tool and prepare an attractive and interesting online presentation ⬥ Facilitate the class to achieve learning objectives using Google slides tool
Materials/resources: Computers connected to internet, internet browser, google account and Microsoft Teams

Timing & materials	Session activities (Facilitator and participant activities)
	Methodology or Techniques used in this session: Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)

Timing & materials	Session activities (Facilitator and participant activities)
Introduction **30 minutes**	♦ Ensure that all Participants are connected to teams allowing them to follow new session ♦ Recap on the use of Google docs tool in the lesson part (body of lesson)
Main body: **120 minutes**	**Activity 1: Introduction to Google slides tool** The Master Trainers have to link Google slides to known Power point application in the computers. After signing in their Gmail accounts, through https://docs.google.com/presentation link, participants will be guided on how to create Google slides summarizing class notes for individual presentations as well as group presentation to achieve learning objectives. **Expected results** Participants will be able to use Google slides in preparing class notes and summarize and share class notes with others the created link.
Conclusion **30 minutes**	**End of the session 6:** ♦ Answer questions asked in team's chat room as well as direct questions Give assignment to participants for self-practice at their homes (Every participants will plan this part of lesson and create Google slides notes related to his teaching subject and submit his/her work to the given platform)

Session 7: Using YouTube channel in the lesson evaluation (L part of PLE approach)

Session objectives

By the end of this session, participants will be able to:

teach learners daily using YouTube channel tools.

Use YouTube channel in the lesson development to motivate learners

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Materials/resources: Computers connected to internet, browser, teams, google account smartphone.

Methodology or Techniques used in this session:

Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)

Timing	Lesson activities (Facilitator and participant activities)
Introduction 30 minutes	Ensure that all Participants are connected to teams and have gmail account that allow them to follow new session Recap of the previous session content
Main body 120 minutes	**Activity**: Introduction to YouTube channel YouTube It's a video sharing website that provides good quality education that has been developed. So, learners can save both their time and money. If a student is not able to understand a concept, they have an option to watch it again. Facilitators introduce practically the YouTube tool with a demonstration step by step then the participants follow. The Master trainers support the participants to sign into YouTube channel, the participants explore different task done into YouTube, then the facilitators will explain each one to help participants to know their roles in teaching and learning activities. **Expected results** Participant will be able to clearly explain the role of YouTube channel in teaching and learning. Participants will be able to download, upload their own created YouTube channel All participants **create an eLearning community** according to their teaching subjects and hand into REB portal or in teams as an assignment.

Conclusion 30 minutes	**End of the session 7**: Answer questions asked in team's chatroom as well as direct questions Assignment to participants for self-practice at their homes (Everyone will create a link lesson upload it at his/her YouTube charnel

Session 8: Using Quizlet in the lesson evaluation (E part of PLE approach)	
Session objective By the end of this session, participants will be able to: Assess learners daily using quizlet tool and motivating leaners Use quizlet in both Preview and Evaluation-parts of lesson planning	
Materials/resources: Computers connected to internet, internet browser, quizlet account and Microsoft Teams	
Methodology or Techniques used in this session: Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)	

Timing & materials	Session activities (Facilitator and participant activities)
Introduction 30 minutes	Ensure that all Participants are connected to teams and have quizlet account that allow them to follow new session Recap of the previous session content
Main body 120 minutes	**Activity**: Introduction to quizlet Quizlet is a web-based tool that allows users to create study tools such as interactive flashcards, tests, and study games. With Quizlet, students can choose their own "Study Mode." This allows activity content to be migrated from flashcards to matching games to other types of study games easily and responsively. Facilitators introduce practically the quizlet tool with a demonstration step by step then the participants follow. **Expected results** All participants prepare a quizlet set based quiz according to their teaching subjects and hand into REB portal or in teams as an assignment.

	Teachers will launch Quizlet Live from any study sets and create a game (no accounts needed for your students). Just ask his/her students to type in quizlet. live on any device (computers, mobile phones, iPads etc) and enter the unique join code on the screen.
Conclusion 30 minutes	**End of the session 8:** Answer questions asked in team's chat room as well as direct questions Give assignment to participants for self-practice at their homes (Every participants will plan this part of lesson and create Quizlet questions (quiz) related to his teaching subject and submit his/her work to the given platform in both Preview and Evaluation)

Session 9: Using mentimeter in the lesson evaluation (E part of PLE approach)
Session objectives By the end of this session, participants will be able to: 🞥 Assess learners daily using mentimeter tools. 🞥 Use mentimeter in the lesson evaluation to motivate learners
Materials/resources: Computers connected to internet, internet browser, mentimeter account and Microsoft Teams
Methodology or Techniques used in this session: Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)

Timing & materials	Session activities (Facilitator and participant activities)
Introduction **30 minutes**	🞥 Ensure that all Participants are connected to teams and have mentimeter account that allow them to follow new session 🞥 Recap of the previous session content
Main body **120 minutes**	**Activity: Introduction to mentimeter** 🞥 Facilitators introduce practically the mentimeter tools with a demonstration step by step then the participants follow. 🞥 Mentimeter is a cloud-based solution that allows you to engage and interact with your target audience in real-time.

	✚ It is a polling tool wherein you can set the questions and your target audience can give their input using a mobile smart phone or any other device connected to the internet. **Expected results** ✚ All participants prepare a mentimeter game based quiz according to their teaching subjects and hand into REB portal or in teams as an assignment. ✚ Participants can get audience when connected to the presentation which will help them to know how to vote easily.
Conclusion **30 minutes**	**End of the session 9:** ✚ Answer questions asked in team's chat room as well as direct questions ✚ Prepare assignment to participants for self-practice at their homes (Every participants will plan this part of lesson and create mentimeter questions (quiz) related to his teaching subject and submit his/her work to the given platform in both Preview and Evaluation)

UNIT 3: ICT TOOLS FOR CLASSROOM MANAGEMENT

Session10: introduction on 21st century learning design	
Session objectives By the end of this session, participants will be able to: Design and evaluate lessons according to the 21st century skills standard. Teach 21st Century Skills and Knowledge.	
Materials/resources: Computers connected to internet, browser, teams, links,…	
Methodology or Techniques used in this session: Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)	

Timing & materials	Session activities (Facilitator and participant activities)
Introduction **30 minutes**	Brainstorm on the meaning of 21st century learning designs for 21st Century learners.
Main body **Discussion and presentation** **Using teams.** **60 minutes**	**Activity 1: DISCUSSION USING TEAMS** **Discuss the 21st century skills for both teacher and learners and share with others in the forum** **The participant may use this resource for more understanding and be able to answer any question related to this session.** **https://bit.ly/2Y40VF1** Master trainers share the following question to the participants using teams and the facilitators help them to answer in constructive way. How can you teach 21st century skills to the learners with the use of ICT tools? **Expected answers:** Answers may be varying according to the deeper discussion. Most important answers are in above resources. For more research, this is another resource https://bit.ly/2Ncyuyx

PRACTICE	Activity 2: Evaluate the lessons based on the 21st century principles
60 minutes	The participants will be given the tasks to develop good lesson plan indicating how the learners will get at most 21st century skills during teaching and learning process.
	Master Trainers will assist and guide participants through sharing one note document talking about 21st century learning design.
	Expected answers
	♣ Answers may be varying depending on the lesson plan.
	♣ This lesson plan may be the example, open this link.
Conclusion	**End of the session 10:**
30 minutes	
	♣ Answering asked questions in team's chatroom
	♣ Give assignment to participants for self-practice at their homes where every participant will submit to REB portal.

Session11: introduction to Class Notebook
Session objectives
By the end of this session, participants will be able to:
Set up a OneNote Class Notebook
Prepare assignments/Quizzes for class
Grade and provide feedback to the learners
Materials/resources: Computers connected to internet, browser, teams, links…
Methodology or Techniques used in this session: Online training using Microsoft teams and REB e-learning platform

Timing & materials	Session activities (Facilitator and participant activities)
Introduction	- Recap of the previous session
30 minutes	- Ensure each participant has created at least a classroom in teams

Main body **120 minutes**	**Activity 1: Setting up a OneNote class Notebook** The Master trainers support the participants to set up a class resources so that each one will create content for his/her classroom by integrating resources in different formats and after creating resources, participants will be guided on how to distribute created resources to students to allow them to use those developed resources **Expected results** ✓ Participant will be able set class resources for their students and distribute them to each and every student for them to explore those materials to achieve learning objectives **Activity 2: Evaluate learners using OneNote class notebook** ✓ The participants will be guided on how to set up an assignment using this ICT tool and how to distribute the assignment to students so that they do it. ✓ The participants will be guided on how students will access on assignments/Quizzes and submit their answers to be graded ✓ The participants will be guided on how to grade their students and send results to each student. **Expected answers** ✓ All participants are able to set up an assignment/Quiz and distributing it to the learners in their online designed classrooms. ✓ All participants are able to grade students and provide results to learners .
Conclusion **30 minutes**	**End of the session 11:** ➕ Answering asked questions in team's chat room ➕ Give assignment to participants for self-practice at their homes where every participant will create a class and set up an assignment for one class and grade at least 5 students in that class.

Session12: Using ZoomIt in Lesson Development and Class Management

Session objectives:

By the end of this session, participants will be able to:

- Improve technical presentations by using ZoomIt in teaching and learning process
- Make effective presentations and annotate and place text on the live screen and then take this screen shot.
- Use teams' icons (attachment chat…) for exchanging works to the students

Materials/resources: Computers connected to internet, ZoomIt setup and Microsoft Teams

Methodology or Techniques used in this session: Online training using Microsoft teams and REB e-learning platform (elearning.reb.rw)

Timing	Lesson activities (Facilitator and participant activities)
Introduction **30 minutes**	- Ensure that all Participants are connected to teams allowing them to follow new session - Ensure that the ZoomIt setup is downloaded and installed in the participants 'device - Recap on the previous session
Main body **120 minutes**	**Activity 1: Introduction to ZoomIt** - Master trainers will briefly present the five main icons of the ZoomIt application (zoom, live zoom, draw, type and break). - Master trainer will explain in details with practice the working of each icon of ZoomIt - Briefly the master trainer will focus on the hotkeys of ZoomIt including Ctrl+1, ctrl+3, ctrl+4 and crtl+2 - With ZoomIt, you can change the color of the annotations and text as well; once a screen is zoomed, you press the first letter of the color you want from pink, red, yellow, orange, blue, or green. ZoomIt can make the concepts you're trying to show a little clearer to your audience. - ZoomIt can make the concepts you're trying to show a little clearer to your audience. - ZoomIt is a screen zoom and annotation tool for technical presentations that include application demonstrations.

	♣ **ZoomIt** runs unremarkably in the tray and activates with customizable hotkeys to zoom in on an area of the screen, move around while zoomed, and draw on the zoomed image.
	Expected answers:
	The master trainer must explain any related question to each hotkey
	Activity 2: Using ZoomIt in Class Presentation
	The master trainers prepare the activity to do using ZoomIt and share to the participants using e-mails or attachment of teams in chat and ask them to download, perform it and submit using one among e-mails or teams.
	Expected answers:
	Here answers will be varied according to the submitted activities by participants.
	The master trainer must give the support for the raised question or any comments from participant.
Conclusion **30 minutes**	**End of the session 12:** ♣ Answer questions asked in team's chat room as well as direct questions ♣ Give assignment to participants for self-practice at their homes (Every participant will use ZoomIt software for editing any document using all five icons(menus) and submit their works on the given platform.