

Federal Democratic Republic of Ethiopia Ministry of Education Special Capacity Building Training Program for Secondary School Leaders



Trainees' Module

June, 2024 Ministry of Education Addis Ababa Federal Democratic Republic of Ethiopia Ministry of Education Special Capacity Building Training Program for Secondary School Leaders

Trainees 'Module

June, 2024 Ministry of Education Addis Ababa

Contributors:

Part I- School Leadership Trainee Module

Developers

- 1. Dr. Tadesse Regassa: Jimma University, Head of center of Excellence
- 2. Tigist Tefera: Education Development trust, School leadership Lead
- 3. Petros Melaku: Senior Expert in Ministry of Education, TELD

Part II- Educational Technology-EdTech

- 1. Module Developer: Inku Fasil, EdTech Hub ET
- 2. **Reviewer:** Alemu Tesfaye, *Senior Expert in Ministry of Education-GEQIP-E*

Contents

Part I- Secondary School Leadership Module
I. Module Introduction
II. Purpose of the Module
III. Pedagogical Approaches
IV. Assessment Approaches9
UNIT ONE: UNDERSTANDING AND IMPROVING SCHOOLS AND SCHOOLS ENVIRONMENT (11 hrs.)
1.1 Introduction
1.2 Unit Objectives
Session 1: Leading School Improvement (3 hours)10
Session 2: Initiating and Facilitating Change (2 hours)
Session 1.5. Building a Learning Organization (2 hours)
UNIT TWO: LEADING EFFECTIVE TEACHING AND LEARNING (14 hours)27
2.1. Introduction
2.2. Unit Objectives
Session 2.1. Effective Teaching and Learning (3 hours)
Session 2.2. Updating your Knowledge and Understanding about Effective Teaching (3 hours)
Session 2.3. Facilitating Curriculum Based Assessment (2 hour)
Session 2.4. Creating a Continuous Improvement Cycle (2 hours)
Session 2.5. Observation and Feedback on Teaching and Learning (2 hours)
Session 2.6. Leading with Evidence: Monitoring, Evaluation and Resource Mobilization for Instructional Leadership (1 hour)47
UNIT THREE: LEADING EFFECTIVE STAFF PROFESSIONAL DEVELOPMENT (16 HOURS)
3. 1 Introduction (45 minutes)
3.2 Unit Objectives:
Session 1. Assessment of Staff Professional Development Needs (4 hours)55
Session 2. Prepare Competency Based Staff Development Plan, Implement and Evaluate (12 hours)
UNIT FOUR: PROMOTING A DIGITAL TECHNOLOGY LEADERSHIP CULTURE (8 HRS)
4.1 Unit Introduction (40 minutes)63
4.2 Unit Objectives
4.1. Building a Vision for Technology Integration (1 hours and 30 Minutes)65
Session 4.2. Equipping the capacity of Teacher with Technology Skills (2 hours)
4.3. Building a Sustainable Technology Infrastructure (1 hours and 30 minutes)67

Session 4.4. Building a Sustainable Technology Infrastructure (1 hour)	69
Session 4.5. Advocacy and sustainability for Leading Change (1 hour)	70
UNIT FIVE: CROSS CUTTING AND EMERGING ISSUES (9 hrs)	73
5.1. Introduction (45 minutes)	73
5.2 Unit Objectives:	74
Session 1. Facilitating Equity, Inclusion and Diversity (3 hours)	74
Session 2. Supporting Learners and Teachers with Disabilities (3 hours)	76
Session 3. Psychosocial and Psychological Support (3 hour)	78
Part II – Educational Technology	83
Introduction	83
UNIT ONE: UNDERSTANDING EDUCATIONAL TECHNOLOGY	87
Learning Objectives	87
Key Topics	87
Session One: Locally available digital resources and their function.	87
Session Two: The Concept of Educational Technology	90
Key Ideas	92
Implication to Teaching	93
Self-Assessment (Unit One)	93
Reference Materials	94
UNIT TWO: BASIC DIGITAL SKILLS	95
Learning Objectives	95
Key Topics	95
Session One: Computers and Smartphones	95
Session Two: Using Web Browsers	96
Key Ideas	100
Implication to Teaching	102
Self-Assessment	102
Reference Materials	103
UNIT THREE: THE USE OF SOCIAL MEDIA FOR EDUCATIONAL PURPOSES	104
Learning Objectives	104
Session One: Social Media for Educational Purpose	104
Key Ideas	107
Implication to Teaching	108
Self-Assessment	108
Reference Materials	109
UNIT FOUR: ONLINE EDUCATIONAL TOOLS	110
Learning Objectives	110

Key Topics	
Session One: Virtual Communication and Collaboration Tools	111
Session Two: Assessment Tools	114
Session Three: Creative Tools (Artificial Intelligence)	
Key Ideas	
Implication for Teaching	124
Self-Assessment	124
Reference Materials	126
UNIT FIVE: CREATE AND ACCESS TO DIGITAL CONTENTS	
Learning Objectives	
Key Topics	
Session One: Digital Contents	
Session Two: Creating Digital Contents	
Session Three: Open Educational Resources	
Key Ideas	140
Implication for teaching	142
Self-Assessment	142
Reference Materials	143
UNIT SIX: DIGITAL CITIZENSHIP	144
Learning Objectives	144
Key Topics	144
Session One: Internet Risks and e-Safety	144
Session Two: Computer and Smartphone safety	147
Key Ideas	147
Implication for Teaching	149
Self Assessment	
Reference Materials	

Part I- Secondary School Leadership Module

I. Module Introduction

Globally, school leadership has become a priority in the continuous school improvement agenda. It is accepted that effective school leadership is a key factor to contribute to improved student learning outcomes. Given the complexity and dynamism of schools in Ethiopia, the roles of leadership are paramount.

Pre-service education and in-service programs have been run in universities and teacher training institutes to provide teachers and schools that meet the demand of such a complex educational system of Ethiopia. The pre-service education program has made it possible for the education system to have qualified subject area teachers. The in-service programs that have taken such different forms as Post Graduate Diploma in Teaching (PGDT), Post Graduate Diploma in Traineeship (PGDSL) and Post Graduate Program in School Supervision (PGPSS) have all served to produce teachers, school principals and school supervisors that have been serving at different levels of the general education system in general and for the service in the primary and secondary in particular.

Notwithstanding, the roles of pre-service and in-service education and training in delivering qualified and training teachers that have been serving in the education system, several challenges persist, particularly concerning teachers and school leaders' competence, students' learning outcomes and quality of education at all levels.

Currently, there is a focus on implementing a new curriculum developed for the whole general education system that extends from pre-primary to secondary about which teachers and school leaders on job lack awareness and knowledge. Still the new curriculum incorporates cross-cutting issues like diversity, inclusion, gender, and technology in addition to the new subjects to be delivered in the school systems. Thus, realizing the new curriculum calls for rebuilding the capacity of teachers, school leaders and supervisors. To this effect, teachers need to update their subject matter knowledge and subject specific methodology while educational leaders need to build their capacity with special focus on instructional leadership for effective teaching learning to happen in schools and facilitate the professional development of teachers in view

of realizing the new curricula that consequently, improve schools', teachers' and, students' performances at all levels.

In addition to the demand posed by the new curriculum, there have been persistent challenges in the Ethiopian education system. For example, students' performance on National exam was not only discouraging but also shocking as it was learned from the last two years students' results. Similarly, teachers and school leaders licensing exam results and different assessments highlighted weak teaching skills and instructional leadership capacity as a crucial area for improvement. Consequently, ensuring all students achieve desired learning outcomes remains a significant challenge and addressing various challenges teachers face requires ongoing support and development.

These backdrops set the stage for a deeper discussion of learning outcomes as a specific challenge within the Ethiopian education system. It highlights the complex context in which educators operate and emphasizes the need for innovative solutions to achieve quality education for all and at all levels of the education system, ultimately, the training contributes to what teachers and school leaders engage in to continuously develop teachers and improve school and student performances with broad-based participation of community.

In Ethiopian context though there an interruption in the formal training school leaders, there were attempts made by education development trust. Education development trust (EDT) underlined that school leadership has become a priority in the continuous school improvement agenda. It is accepted that effective school leadership is a key factor to contribute to improved student learning outcomes. To realize school improvement, school leaders should have the know-how and skills for influencing, motivating, and building the capacity of teachers to improve the quality of teaching and learning, in addition to creating a conducive and inclusive school environment and strengthening the school-community relationship. Impactful school leaders are those who can establish and realize the goals of the school and promote equity of education in the context of their schools. Therefore, school leaders should not only possess the required knowledge and skills to lead schools but should also be able to apply them to improve the school and learning outcomes. Research and the international context show that the role of the school leader is critical to improving learning outcomes and that the success of the school largely rests upon them. Thus, it is important to recognize that leadership is not only about having the required knowledge and skills but also the ability to apply these in the school context by deploying a cycle of review, planning, and targeted action. So, this special capacity building

program is an addition the actions taken by the EDT to strengthen school leadership and hence learning outcome.

Our school today more than ever before requires leaders who understand and improve school and school environment, focus on classroom teaching and learning, effectively and continuously work on staff development and build a digital leadership culture in the school. Leaders today have to asquint themselves with the 21st century skills and expected to ensure inclusion, diversity, gender equality and facilitate psychosocial support in the school and classroom.

Accordingly, this module is meant to address school improvement to enhance teaching and learning, continues teacher professional development, technology integration and emerging issues in schools.

The module is composed of five units where the first unit presents how to improve schools and school environment. The second unit dealt with improving classroom teaching and learning. The third unit has presented staff professional development strategies and the fourth unit threats school leadership using technologies. Finally, the fifth unit is about cross cutting and emerging issues.

II. Purpose of the Module

The purpose of this training module is to acquaint school leaders with the new curriculum; to use technology for instruction; to address the declining quality of education; and above all to address the inadequacy of pre-service training. This special capacity building training is meant to equip school leaders with the skills that enable them to lead the implementation of the new curriculum while it also empowers educational leaders to champion and guide the integration of technology into teaching and learning, and leading instruction, and maximizing its potential for improved learning outcomes.

This special capacity building training module is expected to foster the instructional leadership practice and provide educational leaders with the skill and knowledge to mentor and coach teachers and bridges the gap between pre-service training and real-world classroom needs. Thus, it is believed this module will contribute to improve the quality of education by capacitating educational leaders for maximum impact.

The delivery of this training module follows various approaches to clarify different school leadership and teaching-learning improvement practices. This includes engaging in various professional development activities which lead you to analyze the case studies in relation to your own school and other cluster school practices. Furthermore, the training will allow trainees to identify diversity, analysis emerging issues, and apply technology. The trainees are expected to capture the remedial actions they employed and the results obtained in to the portfolio by supporting it with relevant and tangible evidences in relation to gender equality, inclusion and diversity.

Each unit begins with unit introduction, unit objectives and then followed by activities and tasks related to the knowledge, practical skills and personal experiences the school leader will acquire after successfully completed the topics and subtopics of each unit. At the end of each unit, there is a concluding remark that highlights the main ideas treated. Finally, assessment mechanisms are presented at the end of each unit of the module.

III. Pedagogical Approaches

Pedagogical approaches are the methods educators use in the practices of teaching, from course design to delivery. The forthcoming training encompasses multiple pedagogies, each stemming from a different philosophy of learning. The major pedagogical approaches include but not limed to be used in this training are the inquiry based approach, the reflective approach and the collaborative approach.

IV. Assessment Approaches

In this training the recommended assessment approaches are presentations, project work, tests and portfolio assessment. On top of these there are assessment approaches to be used depending up on the topic under discussion.

UNIT ONE: UNDERSTANDING AND IMPROVING SCHOOLS AND SCHOOLS ENVIRONMENT (11 hrs.)

1.1 Introduction

This unit presents issues related to understanding and leading school improvement, school improvement planning, improving school and student's performance, roles of schools and wider community in improving student's outcome, fostering a positive and supportive school environment, creating a safe and supportive classroom environment.

School Leaders have a leading and influential role in schools and communities. The values and vision leaders have determined the success of the school. School leaderships play an important role in the teaching-learning process, which authorizes the conclusion that they are key to strengthening a positive school environment, applying methodologies , techniques and strategies that implement motivation, values, content, active participation, aspirations, assertive communication and bonds of affection, to establish commitments related to the educational development of students.

1.2 Unit Objectives

At the end of this unit, trainees will be able to:

- Reflect on the strengths and gaps of their school
- Develop clear school improvement plan
- Analyze how to ensure diversity accommodation in their schools
- Design and implement change management plan in their schools
- Foster a supportive and inclusive classroom environment
- Create a safe and supportive school environment for all school community

Session 1: Leading School Improvement (3 hours)

Introduction (30 minutes)

Session one focuses on school self-improvement and the role of school leadership in improving schools. School improvement is about raising student achievement through focusing on the teaching and learning process and the conditions which support this. Continuous school

improvement is about establishing a culture that is focused on improving the achievement levels of students and increasing the overall performance of the school through a planned set of processes and strategies.

School improvement is about putting in place a set of well-tested processes for identifying and addressing the developmental needs of each school. Effective school improvement is about change that is driven by commitment to increase the learning outcomes of every student (Australian Capital Territory, 2009). Effective school improvement refers to planned educational change that enhances student learning outcomes as well as the school's capacity for managing change.

Effective school improvement is a major concern for both school effectiveness and school improvement theory and research. While school effectiveness is strongly focusing on student outcomes and the characteristics of schools and classrooms that are associated with these outcomes without automatically looking at the processes that are needed to bring changes about, school improvement is mainly concerned about changing the quality of teachers and schools without automatically looking at the consequences for student outcomes. In short, school effectiveness is trying to find out what is to be changed in schools in order to become more effective while school improvement is trying to find out how schools can change in order to improve.

The model for effective school improvement must allow us to explain why improvement efforts succeed or fail. It must make clear which factors promote or hinder effective school improvement. Therefore, an effective leader of school improvement 1) understands the elements that contribute to student learning; 2) can assemble these elements into workable, coherent instructional programs; and 3) can work with faculty and other stakeholders to implement these instructional programs in a fashion appropriately tailored to particular students and local circumstances. In short, a strong educational leader (master teacher, principal, superintendent or school board member) skillfully can define, manage and improve curriculum and instruction. He or she maximizes student achievement by leading and shaping the daily practices of formal schooling (Hoachlander, 2001).

Objectives

At the end of this session, trainees will be able to:

- Reflect on their own experiences of school improvement practices so far
- Demonstrate on why school improvement fail or succeed
- Link the theoretical knowledge and actual school improvement challenges
- Evaluate and judge the continuity of their school CPD

Activities

Form a group and discuss the following questions:

- I) Why is school improvement important? (45 minutes)
- a. To you as a school leader
- b. To the school?
- c. To the community
- d. To the pupils and parents?
- e. To the education system in Ethiopia?
- II) How do you identify what needs improving? (15 minutes)
- III) What do you need in order to begin to plan for school improvement? (20 minutes)

Brain Storming Questions (30 minutes)

- 1. Who is responsible to ensure school improvement? As leader, why do you think schools are not improving? What do you think should be done to reverse this?
- 2. In today's school reality in Ethiopia, are schools improving? Why and why not?

Key Ideas (25 minutes)

Scholars underlined that continuous improvement is based on the principles that making sustainable change takes time and involves collective effort; is context specific; and requires constant adaptation, data collection, and learning (Bessant and Caffyn, 1997; Bhuiyan and Baghel, 2005; Langley, Moen, Nolan, Nolan, and Norman, 2009). Effective school improvement refers to planned educational change that enhances student learning outcomes as well as the school's capacity for managing change.

Moreover, it is also said that international and national studies have shown that school leadership is a major factor in schools' and students' results (Robinson et al.2008, OECD 2013, Jarlet al.2017, Leithwood et al.2020), and thus also in school improvement (Fullan 2015).

Basically, school improvement is a plan created to improve academic achievement and improve leadership, systems, and processes within a school. One way to improve school is through continuous self-checking as school self-evaluation can be a fundamental force in achieving school improvement.

So, school leaders need to know what the key debates are in relation to school self-evaluation, what principles and processes are associated with it, and what the implications are for school self-evaluation as a means of leading school improvement.

Themes that build success and encourage school improvement are: Data, professional development, role of leadership, and the importance of sustained support. Work in groups to think about, discuss and develop lists of what you already have in school to support each of these themes and what you need to do to ensure that you have these themes in place to support your planning and school improvement processes. Concerning the factors and action for school improvement, there are different views and opinions. Therefore, one essential requirement of strong school leadership is the ability to blend many practices into a balanced, well-managed package of school improvement.

Data: What data is important to have, know, use and understand in school to inform your school improvement planning? How will to monitor and review data as you work through the process of school improvement? What will the data show/ tell you? The next session is about school improvement planning and how to do it in school.

Implications (15 minutes)

Based on the activities and key ideas given above where do you think is the bottleneck for our schools not improving? For a school principal today, the task of leading school improvement can be formidable; schools are large organizations filled with those most unpredictable of things like people. They are also places where there is a plethora of opinions about the methods that should be used to achieve success.

As leaders, what strategies do you have to overcome these multidimensional needs and views? Usually, the role of the school leader is seen as of prime importance in raising standards and promoting school improvement, how do you explain your roles from this perspective? What have you done and what is left to be done?

One of the definitions of SI is "about putting in place a set of well-tested processes for identifying and addressing the developmental needs of each school". Is it actually happening in your school? Who do you think is responsible for testing and choosing if a process of your school improvement is practically working for your own school context?

Take Away Resources

- Cole, P. (2012). Linking Effective Professional Learning with Effective Teaching Practices. Australian Institute for Teaching and School Leadership, Melbooune.
- MoE (2023). Leading School Improvement Part I: Education Development Trust, Ministry of Education, Addis Ababa

Session 2: School Improvement Planning (2 hours)

Introduction (35 minutes)

A school improvement plan is a road map that sets out the changes a school needs to make to improve the level of student achievement and shows how and when these changes will be made. School improvement plans are selective: they help principals, teachers, and school councils answer the questions "What will we focus on now?" and "What will we leave until later?" They encourage staff and parents to monitor student achievement levels and other factors, such as the school environment, that are known to influence student success. With up-to-date and reliable information about how well students are performing, schools are better able to respond to the needs of students, teachers, and parents. A school improvement plan is also a mechanism through which the public can hold schools accountable for student success and through which it can measure improvement. One of the first steps—a crucial one—in developing an improvement plan involves teachers, school councils, parents, and other community members working together to gather and analyze information about the school and its students, so that

they can determine what needs to be improved in their school (Education Improvement Commission, 2000).

In general, the best school improvement plan:

- Puts students first by focusing on improving the level of their academic achievement.
- Involves the school board, PTSA, parents, the community, school leaders and teachers as drafters, implementers, monitors and evaluators of the plan.
- Honors the unique nature and characteristics of the school community.
- Adheres to the MoE and REB standards for students' learning and achievement.
- Is based on reliable data.
- Follows research on what makes school effective.
- Is realistic yet aims high.
- Is easy to understand by everyone in the school community.
- Remains flexible to change

Objectives

At the end of this session trainees will be able to:

- Identify the phases of school development plan
- Articulate the strategy for preparing school improvement plan
- Design a school development plan
- Evaluate their schools and their own performance in line with the SI framework

Activities

- 1. How do you understand the concepts of school improvement and school improvement planning? What are the expected qualities that make your school improvement plan is good? (10 minutes)
- 2. How do you find your understand that and now about the concepts of school improvement and school improvement planning? (5 minutes)
- 3. Who do you think is responsible for testing and choosing if a process of your school improvement is practically working for your own school context? Why? (10 minutes)

- You have read about some of the qualities of a good school improvement plan. Looking back to your SI plan experience, which of them are qualities of your plan, and which are not? Why? (15 minutes)
- 5. What is the purpose of school improvement planning? (10 minutes)

Individual Tasks (15 Minutes)

By examining your past three years' SI plan documents, reflect on the purposes of SI plans using the following guiding questions. 1. Which of the above purposes of SI planning are the purposes of your school? Why? 2. Does your SI plan have different purposes other than those mentioned above? Why? If one of them is not your purpose of SI planning, do you have the intention to make it a reality in your next planning?

Key Ideas (15 Minutes)

The main purposes of SI planning are to:

- Improve the quality of teaching and learning in the school and ensure continuous progress of students learning.
- Provides a framework for analyzing problems and addressing instructional issues in a school that has not made sufficient progress in students' achievement.
- Improve student achievement levels by enhancing the way curriculum is delivered, by creating a positive environment for learning, and by increasing the degree to which parents are involved in their children's learning at school and in the home.

Implications (5 Minutes)

As a leader, how do you apply the school improvement planning as a strategy to transform your school? What do you do to ensure the continuity of the improvement process? How do you think and link this with the enhancement of student learning outcome?

Not all problems can be tackled in one school improvement plan, so how do you prioritize and work on it to solve the most important and urgent problems first? What are the sources of evidences for you to correctly prioritize the problems? Can you think of and mention some of the criteria for prioritization?

Take Away Resources

- Cole, P. (2012). Linking Effective Professional Learning with Effective Teaching Practices. Australian Institute for Teaching and School Leadership, Melbooune.
- Federal State of Micronesia (2009). School Improvement Planning: A Guidance for Departments of Education, Elementary and Secondary Schools, National Department of Education

Session 1.3 Understanding and Managing School Environment (2 hours)

Introduction (25 minutes)

According to Hess and Smythe, (2004) the learning environment can produce conditions and mediate relationships that can positively influence student cognitive, social, emotional, and mental well-being, and increase student receptivity to teacher, content, exchange in the classroom, student motivation and study habits, and learning. School leaders can help students improve their emotional well-being and connectedness with others by: Carefully selecting or thoroughly developing activities that emphasize social and emotional competencies. Schools can identify and implement programs that are developmentally appropriate and culturally relevant for students. Thev are also integrating skill building, modeling, practice, and assessment that improve emotional well-being and school connectedness across all academic areas. They help teachers can incorporate opportunities for students to practice skills and develop competencies such as establishing positive relationships and understanding diverse perspectives through group learning activities. School leaders are strengthening teacher, staff, and administrator core competencies through professional development. Schools can provide staff training on role modeling and applying interpersonal skills to improve teacher-student relationships.

They also foster safe, inclusive learning environments for all young people. Schools can establish a culture that emphasizes the importance of showing empathy in relationships, using effective communication, and demonstrating respect for diversity. Informing families and communities about school-wide initiatives and activities, school leaders promote healthy and supportive school environments and student and staff emotional well-being.

17

Objectives

At the end of this session, trainees will be able to:

- Know to create a stronger school and classroom environment
- Understand what is considered as school environment
- Identify the roles of school environment in enhancing learning outcome
- Demonstrate the skill of creating an environment that empowers students and teachers

Activities

- What do you do to ensure a safe and conducive environment for students learning? Who is responsible to link school with internal and external school environment? (20 minutes)
- As a school leader what is the futures of safe and conducive school environment? List down and analyze the benefits of creating a positive and supportive school environment? (35 minutes)
- 3. What are the benefits of promoting safe and supportive school environments? What are the components of school environment that leaders should take care? (25 minutes)

Key Ideas (8 minutes)

A school environment is broadly characterized by its facilities, classrooms practices, schoolbased supports, and disciplinary policies and practices. It sets the stage for the external factors that affect students. Creating safe and supportive environments (SSE) emphasizes aspects of the school environment that encourage students to be more engaged in their school life and feel connected to important adults at school and at home. School environments that are safe and supportive are successful in ensuring a better learning outcome.

Researches have clearly indicated that school environment can significantly influence students' academic performance. Students need a safe, healthy and stimulating environment in which to grow and learn and hence environment plays a crucial/critical role promoting better learning outcomes. School leaderships have a big role to cultivate such an environment where teaching learning is facilitated. The next session is about the roles of the school leaders in facilitating and initiating change.

Implications (7 minutes)

School leaders, families, and communities should work together to build a safe environment for students at school and at home. Activities to improve school environments should aim to promote three protective factors like school connectedness, parental monitoring, and parentaladolescent communications. How do you evaluate your role in relation managing school environment?

Schools are intimately linked to society as a whole and so how do you plan to address this in your future school leadership roles by working with community and the students?

Take Away Resources

- Daniel KK and Filex K. (2014). The Impact of School Environment and Peer Influence on Student's Academic Performance in Vihige County, Kenya: Journal of Education and Practices, 5(11), 1-11
- Sunday AA. (2012). The Relationship Among School Environment Students Approach to Learning and their Academic Achievement in Senior Secondary School in Physics. International Journal of Research in School Phycics 3(1), 21-26

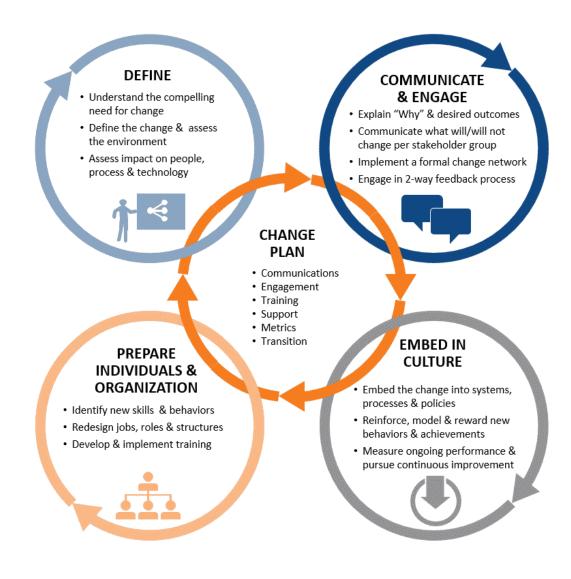
Session 2: Initiating and Facilitating Change (2 hours)

Introduction (20 minutes)

School leaders as change agents can learn better attributes of implementing a change strategy in a school setting. Hence, they are expected to create a shared vision, mission and core values. Change management is the overarching approach taken in schools/organizations to move from the current to a future desirable state using a coordinated and structured approach in collaboration with stakeholders in this case mainly teachers.

In initiating and managing change one important caution for school leader is risk assessment and risk management. In the process of considering the different aspects of the change we need to consider what might happen leading up to and implementing the change as well as what may be the unintended consequences of the change. Keep in mind that the larger and more disruptive the change the greater the risk whereby small and incremental change will have less risk. The Risk Matrix will allow you to assess the likelihood and consequences of the change to indicate whether the activity is low, medium or high risk to the project.

The below diagram shows the major steps school leaders need to follow whenever they plan a change, implement, facilitate and decide if to continue to stop or continue the change.



Source: The University of Virginia Change Management

Objectives

At the end of this session, Trainees will be able to:

- Reason out why reforms in education succeed or fail
- Design a strategy of wining the commitment of school community
- Demonstrate the skills of change agent in schools
- Introduce new school improvement strategies
- Engage school community in the change process

Activities (80 minutes)

- 1. The trainers will ask the trainees to reason out and justify why many school reforms fail? The trainees then continue to ask, do Trainees have a line share to implement reforms? How? (12 minutes)
- 2. The trainer group the class in to a team of 5 people and ask them to identify the reforms introduced to schools in the last 3 years. Then inform to evaluate how far these reforms were effective. Were really the Trainees effective in facilitating these school improvement issues? Finally ask them to present in the class by including their suggestions and implications for the future. (15 minutes)
- 3. Are changes in school always planned? How? The trainees will list down their responses and present it to the class and trainer has to facilitate this. (12 minutes)
- 4. Also ask the trainees; what risks may occur upfront, during implementation and after implementation of the change? What tactics will you put into place to minimize these risks? (12 minutes)
- 5. One of the principal's roles is managing curriculum change and its implementation for the provision of quality education. So, how do school leaders as internal change agents are expected to facilitate and implement curriculum changes? Can you list down the roles you will play in order to support teachers effectively implement the new curriculum and improve the learning outcome? (15 minutes)
- 6. Are you a coach or mentor of the school teacher? Why? (14 minutes)

Key Ideas (12 Minutes)

Change and change management is not an isolated concept that simply appeared out of thin air, nor is it the mere result of a simple decision taken at the top hierarchical levels. Change or transformation cannot be enforced from the top level down, but need to be understood and adapted by all involved in order to minimize resistance against changes, preventing the obstruction of these types of processes.

We must not forget that to the individual, change and transition always pose a threat to his or her current status or even to his or her means of income unless that change is properly adapted or initiated. Involving a school organization in a process of change also means involving every person working for the school. For a change or transformation to be successful in school, first good to define the objectives of change as precisely and clearly as possible and then develop a strategy aimed at innovation and change which can be either top down or bottom up. Change or innovation or transformation or innovations should be evaluated both in terms of their uptake and their impact on student learning outcomes.

Implications (8 minutes)

Why do most reforms and changes in school fail? Today more than any times before, school are expected to proactively respond to modernization, globalization, migration, displacement and diversity inclusion. Can you imagine what school leaders need to do as a champion to effectively lead school improvement and transformation by creating culturally responsive schools?

Literatures recommended that students work better in a diverse environment, and hence what does this imply for the current and prospective school leaders? As leaders, the implication is a lot is expected to be done to enjoy the benefits of effective diversity management. In schools what kind of changes have you experienced? How have you handled it?

Take Away Resources

Mallinger, M. J. (2018). Positive School Culture: Facilitating Changes to Cultivate Learning and Change Perceptions [Master's thesis, Bethel University]. Spark Repository. <u>https://spark.b</u>

Green, M. (2007). *Change management masterclass: A step-by-step guide to successful change management*. Kogan Page Publishers.

Session 1.5. Building a Learning Organization (2 hours)

Introduction (35 minutes)

This session is about schools as learning organizations and how to build school where sustainable learning and improvement is a culture. The session also highlights the roles of school leadership in building and shaping the schools ready to share take best practices with other schools.

Today's schools must equip students with the knowledge and skills they'll need to succeed in an uncertain, constantly changing tomorrow.

Schools as learning organizations develop processes, strategies and structures that allow the schools to learn and react effectively in uncertain and dynamic school environments. They institutionalize learning mechanisms in order to revise existing knowledge. Schools as learning organizations are expected to solve their school problems systematically (identify, evaluate, prioritize and act), learn from their own prior experiences and the best practices of others, transferring knowledge quickly and efficiently.

Objectives

At the end of this session Trainees will be able to:

- Apply systematic problem solving
- Try new approaches of school improvement strategies
- Learn from past experiences
- Learn from best practices of other through PLC and COP
- Measure and document changes and audit performance gaps

Activities (50 minutes)

- The trainer will ask a brain storming question, why improvement rates are low in our school system? Then, the Trainees will individually reason out why improvement rates in our school are not promising. (10 minutes)
- 2. The trainer also groups the trainees in to 7 each and asks them to identify how they learn from past experiences, from best practices of others and how they can support school improvement. As leaders do you believe you can get best practices from other schools? In what way? (10 minutes)
- 3. Ask the trainees to discuss on; do principals felt they had received the necessary professional development on how to be a leader of change? How? (15 minutes))
- 4. As training alone may not make teachers and school leaders a complete professional, so what strategies do you have for sustainable learning and change for teachers and leaders? Do school leaders conduct CPD? Do you think it is possible to reinitiate school CPD? (15 minutes)

Key Ideas (20 minutes)

As a school leader, it is always good to remember organizational learning as a process that unfolds over time and link it with knowledge acquisition and improved school performance. Schools as a learning organization need to be skilled at creating, acquiring and transferring knowledge and at modifying its behavior to reflect new knowledge and insights.

Therefore, a school as a learning organization is an entity that fosters a culture of continuous learning and knowledge creation at all levels. It is an institutional paradigm that recognizes the importance of adapting to change, acquiring new knowledge, and leveraging insights to improve performance and achieve strategic objectives in terms of improving schools.

Hence, learning schools are those that encourage adaptive and generative learning where teachers are motivated to think outside the box to solve school and societal problems. Therefore, school principals need to take an exemplary leading role in creating and sustaining a supportive learning culture.

Implications (15 minutes)

In today's world, learning is a key for survival and hence knowledge should be continuously enriched through any form of learning. For this to happen, school leaders need to support and energize the school, the people and the technology for learning. As a transformative instructional leader, how far you focus on continuous learning as a road to developing the school effectiveness?

Serrat (2010) underscored that the leadership of a learning organization is committed to the importance of learning and clearly communicates that learning is critical to organizational success. So, what is your plan to make your school a real learning organization?

Hence, school leaders better ask themselves that how far they provide the coworkers, teachers and others the motive, the means and opportunities for continuous learning. Van der Westhuizen (2003) asserts that principals as instructional leaders are expected to initiate, facilitate and implement curriculum changes. Do you think that you helped your teachers to know and effectively implemented the reformed curriculum?

Take Away Resources

Serrat O. (2010). Building a Learning Organization. Washington DC. Cornell University ILR School, Asian Development Bank

UNIT TWO: LEADING EFFECTIVE TEACHING AND LEARNING (14 hours)

2.1. Introduction

You are a pioneer in a new way of strengthening school leadership expertise. This unit focuses on supporting school leaders to recognize effective teaching and learning, and study the processes and tools used inschool to lead the improvement of teaching and learning.

The concept of instructional leadership includes all those actions related to teaching and learning that a principal (or his/her delegate) takes on, to ensure the provision of quality teaching and learning. Huber and West (2002) posit that a principal is most often cited as the key person in school development, either blocking or promoting curriculum changes, acting as change agent, and overseeing the processes of curriculum growth and renewal.

Chell (2011, in Marishane et al., 2011) concurs by stating that effective instructional leader exercises supervision, evaluates instruction, promotes teachers' development activities, and oversees curriculum change development, initiates and implement teacher professional development, promotes action research, develops a positive school climate, and creates links between school and community.

The unit will explore how school leaders effectively lead teaching and learning and study the processes and tools that will be used in schools to lead the improvement of teaching and learning.

2.2. Unit Objectives

At the end of this unit, trainees will be able to:

- Take responsibility for leading the improvement of teaching and learning in their school.
- Update their knowledge and understanding of effective teaching and learning from research.
- Recognize potential barriers to improving the effectiveness of teaching.
- Create a draft continuous improvement cycle.

• Create a culture of professional learning by involving teachers in the improvement of teaching and learning.

Alignment with school leaders Competency (20 minutes)

Unit 2 outcomes	Competencies	
Take responsibility for leading the	Competency 1: The school leader will demonstrate	
improvement of teaching and learning in	their commitment to driving improved student	
their school.	outcomes and increasing the inclusion of all students.	
Update their knowledge and understanding of	Competency 2: The school leader willpromote	
effective teaching and learning from research.	a culture of continuous, self- sustaining school	
	improvement.	
Recognize potential barriers to improving the	Competency 3: The school leader will model and	
effectiveness of teaching.	guide leadership for learning andthe inclusion of all	
	students.	
Create a draft continuous improvement	Competency 4: The school leader will useevidence	
cycle.	to plan, implement, and review improvements in	
	inclusion and learning.	
Create a culture of professional learning by	Competency 5: The school leader will work	
involving teachers in the improvement of	collaboratively with all stakeholders to drive school	
teaching and learning.	and system improvement.	

2.3. Unit Sessions

Session 2.1. Effective teaching and learning

Session 2.2. Updating your Knowledge and Understanding about effective teaching

Session 2. 3. Facilitating Curriculum Based Assessment

Session 2.4. Creating a continuous improvement Cycle

Session 2.5. Observation and feedback on teaching and learning

Session 2.1. Effective Teaching and Learning (3 hours) Introduction (30 Minutes)

The only way to improve learning outcomes is by improving the quality of teaching. Teachers spend hours daily face-to-face with pupils and are the single strongest leverto improve learning. School leaders are the second strongest lever in improving learning, in their role as leaders of learning.

The instructional leadership involves the role that principals assume to influence teachers to use their expertise and skills to implement curriculum or the changes hereof towards the attainment of improved learner outcomes. When principals adopt an instructional leadership role, they are most likely to develop a shared vision for the school, empower and inspire teachers, and initiate strategies to improve the quality of teaching and learning.

Effective instructional leaders motivate teachers to introduce changes strategically and effectively so that learners feel comfortable and motivated to achieve higher standards. Such school leaders can also facilitate the curriculum implementation and adaptation to the contexts of the school and students.

Objectives

At the end of this session Trainees will be able to:

- Take responsibility for leading the improvement of teaching and learning in school.
- Update their knowledge and understanding of effective teaching and learning from research.
- Recognize potential barriers to improving the effectiveness of teaching; Create a draft continuous improvement plan; and,
- Create a culture of professional learning by involving teachers in the improvement of teaching and learning

Activities

1. Introduction to Improving the Quality of Teaching and Learning (20 minutes)

As we have noted already, the primary way to improve learning outcomes is by improving the quality of teaching. Teachers spend hours daily with pupils and are the single strongest lever to improve learning.

Therefore, improving the quality of teaching and learning is the most critical activity for school leaders in improving schools – but it takes time, effort, and commitment.

Who is responsible and accountable for the improvement of teaching and learning? Look at the Ethiopian Standards for School Leadership and the competencies for the Ethiopia Foundational Leadership Programme. The responsibility and accountability rest with the school leader – the leader of learning. (15 minutes)

Who can deliver improved teaching and learning each day in the classroom? The teacher – but not on their own: as leader they need your guidance, expertise, and support. (5 minutes)

- 2. Group discussion: How can we find time to lead learning? (25 minutes)
- What currently takes up most of our time and effort?
- How will we make time to lead teaching and learning?
- Identify 3 strategies/ actions/ideas you can adopt to carve out time to lead learning.

Individually make a commitment to carve out 3 x 20 mins each week to lead learning in your school. Identify 3 strategies/actions/ideas you can adopt to carve out time to lead learning. (15 minutes)

- Key actions that School Leaders Need to Lead Learning: please read individually points listed below that inform you what is needed to do to lead learning in your schools.(25 minutes)
 - Use research to update knowledge and understanding about effective teaching and learning;
 - Understand the need to create an environment that supports professional learning for all teachers;
 - Secure the understanding and engagement of all teachers;

- Understand and draft a continuous improvement cycle to ensure that improvement to teaching and learning is continuous and incremental rather than a one-off;
- Create a timetable for each stage of the continuous improvement cycle to be actioned and,
- Recognize the importance of using a consistent set of tools and frameworks to support the process and capture improvements.

Key Ideas (25 minutes)

Effective teaching is an essential component of quality education. It refers to the ability of teachers to engage and inspire students, facilitate their learning, and promote their overall development. In general, effective teaching involves several key components:

- **Knowledge and expertise:** Effective teachers possess a deep understanding of their subject matter and pedagogical strategies. They are well-prepared and continuously update their knowledge to deliver accurate and up-to-date information to students.
- **Communication skills:** Teachers need strong communication skills to effectively convey information and ideas to their students. They should be able to explain complex concepts in a clear and concise manner, encourage student participation, and provide constructive feedback.
- **Classroom management**: Maintaining a positive and well-organized classroom environment is crucial for effective teaching. Teachers should establish clear rules and expectations, manage time effectively, and create a supportive atmosphere where students feel comfortable and motivated to learn.
- **Differentiation**: Recognizing and addressing the diverse learning needs of students is an essential component of effective teaching. Teachers should employ various instructional strategies, adapt their approach to cater to different learning styles, and provide additional support when necessary.
- Assessment and feedback: Regular assessment of student progress is vital to effective teaching. Teachers should use a variety of assessment methods to evaluate student learning and provide timely and constructive feedback to help students improve.
- **Continuous professional development**: Effective teachers are committed to their own professional growth. They actively seek opportunities to enhance their teaching skills, stay informed about educational research and best practices, and engage in

professional learning communities.

Implications (20 minutes)

This session will have a strong implication to the instructional leadership role of school leaders as it helps them to take responsibility for leading the improvement of teaching and learning in their respective schools. What have you done so far in your school to positively influence learning-teaching? The activities and recommended readings from research will help them to update their knowledge and understanding of effective teaching and learning which is one of the key characteristics for instructional leadership. What are the qualities of an effective instruction for you as an instructional leader?

Take Away Resources

Noonan J. (2023). Leaders of Learning. Adult Development, Teacher Learning and Leadership, International Study Association on Teachers and Teaching, Salem State University, USA

Rag Mestry (2022). The principal's role in managing curriculum change: Implications for the provision of quality education, South African Journal of Education, Volume 42, Number 4

Session 2.2. Updating your Knowledge and Understanding about Effective Teaching (3 hours)

Introduction (40 minutes)

This session is about models and dimensions of measuring teacher and teaching effectiveness. Studies generally define 'effective- teaching in terms of pupil outcomes, particularly pupil achievement.

It is now argued that effectiveness needs to go beyond impact on pupil achievement to include other observable pupil outcomes such as engagement and attitudes.

Effectiveness includes the impact of teaching on such pupil behaviors as volunteering answers to questions, explaining their answers and ideas, and the time they spend on learning tasks.

More recently it has been suggested that teaching effectiveness should also consider the impact on groups of pupils (for example, different ethnic groups, gender differences, and those with special educational needs and disabilities).

Objectives

At the end of this lesion Trainees will be able to:

- Explain the roles of school leaders in leading effective teaching and learning
- Understand different aspects of leading teaching and learning at school
- Understand the benefit of leadership and engaging others for better learning outcomes
- Reflect on their own practices of effective teaching and learning leadership

Activities

1. Individually read and understand the case study designed for this session and discuss in group on the discussion questions.

Case Study: Transforming Teaching and Learning in Rural Ethiopia (15 minutes)

Context: Addis Alem Elementary School is a rural school in Ethiopia. The school has limited resources, large class sizes, and a mix of experienced and newly qualified teachers. Despite these challenges, the school has seen a significant improvement in student achievement in recent years. This case study explores the leadership practices of Director Abebech and how they have fostered effective teaching within the school.

Challenges:

- Large class sizes: With limited resources, Addis Alem struggles with overcrowding, making individualized attention difficult.
- **Teacher experience:** The mix of experienced and new teachers can lead to inconsistencies in teaching methods.
- Limited resources: The school lacks access to a variety of instructional materials and technology.

Director Abebech's Leadership Approach: (25 minutes)

• Instructional Leadership: Director Abebech prioritizes instructional leadership by:

- Vision and Goal Setting: She collaboratively developed a clear vision for the school that emphasizes implementation of the new curriculum with student-centered learning and improved academic performance.
- **Curriculum Implementation:** Abebech works closely with teachers to ensure the national curriculum is adapted to the local context and effectively implemented.
- **Classroom Observations and Feedback:** She conducts regular classroom observations, providing constructive feedback and coaching to improve teaching practices.
- **Professional Development:** She organizes workshops and training sessions focused on active learning methodologies, classroom management, and integrating local knowledge into the curriculum.
- Teacher Collaboration: She fosters a collaborative environment by:
 - **Teacher Learning Communities (TLCs):** Abebech established TLCs where teachers share best practices, discuss challenges, and develop lesson plans together.
 - Mentorship Program: Experienced teachers mentor new teachers, providing guidance and support.
- **Community Engagement:** She recognizes the importance of community involvement by:
- **Parent-Teacher Student Association (PTSA):** She actively works with the PTSA to secure resources and generate support for the school's initiatives.
- Local Expertise: Abebech incorporates local knowledge and cultural practices into the curriculum, making learning more relevant to the students.

Outcomes:

- **Improved Student Achievement:** Test scores at Addis Alem have risen steadily in recent years, demonstrating the effectiveness of the implemented strategies.
- **Increased Teacher Morale:** Teachers report feeling more supported and motivated due to the collaborative environment and professional development opportunities.

• **Stronger Community Partnerships:** The active involvement of the PTSA has led to increased resource availability and community support for the school.

Discus on the following question in group (35 minutes)

- What leadership practices resonate with Director Abebech approach?
- How can school leaders adapt these practices to their own contexts?
- What are the challenges of implementing instructional leadership in resourceconstrained settings?
- How can school leaders foster collaboration among teachers in their schools?
- How can school leaders build stronger partnerships with their communities?
- 2. Individual assignment: Based on the learning from the above case study prepare an action plan which can help you to demonstrate effective leadership to plays a crucial role in transforming teaching and learning at your school (25 minutes)
- **3.** So, how far did you strategically plan and address issues of teaching and learning in your school today? What are the expectations of the community on what their students should learn? (10 minutes)
- **4.** As leader of teaching learning, you will manage to answer the following key questions as a self-reflection; do I use teacher evaluation for the purpose of improving teaching and learning? How teacher evaluation can best benefit both the teacher and the school leader? (5 minutes)

Key Ideas (15 minutes)

One of the key tasks of an instructional leader is evaluating teachers as part of their regular job of the school year which is a valuable moment for leaders to improve instruction and learning. One of the organizational policies and process that is intended to improve teaching and learning is teacher evaluation. Teaching and teacher evaluation have a great potential to improve instruction.

Principals can spot strengths and weaknesses in instructional methods and classroom management and provide the teacher early opportunities to make adjustments. The variation in

teaching quality explains more of the variation in student achievement than any other school factors.

Implications (10 minutes)

In the past, education leaders were judged routinely on their effectiveness in managing fiscal, organizational and political conditions in their schools. The leadership of teaching and learning lacks attention. However, that does not work more today. Now leaders are increasingly being held accountable for the actual performance of those under their charge.

Take Away Resources

Sinnema C. (2007). The Leadership of Teaching and Learning: Implications for Teacher Evaluation. Leadership and Policy Schools, 6 (4), 1-25.Doi:10.1080/1570076001431603

Westbrook, et al. (2013). "Pedagogy, curriculum, teaching practices and teacher education in developing countries: Final report, Education Rigorous Literature Review, Department for International Development, UK

Session 2.3. Facilitating Curriculum Based Assessment (2 hour) Introduction (25 minutes)

This session introduces the role of school leaders in facilitating condition for assessment to be curriculum based. The essence of curriculum based is leaders need to ensure if the teacher made assessments are on-going and involves periodic monitoring of a student's daily performance in relation to what is taught.

Objectives

At the end of this session trainees will be able to:

- Reflect on their role in student assessment
- Oversee how teachers made assessment is curriculum based
- Identify if the assessment mechanisms are competency based
- Ensure whether teachers apply multiple modes of assessment

Activities

- Ask the Trainees, do you have roles in conducting student assessment? What are these roles and have you discharged your responsibilities? Ask each to reflect on their prior experiences and understandings to the class?(15 minutes)
- Encourage the Trainees to be in group and discuss on what strategies they have for ensuring if classroom assessment is curriculum based, vary in its mode, timely and followed by feedback and then present their respective strategies to the class. (10 minutes)
- 3. Ask the Trainees, who is responsible for the failing of learners in state or national exams? How? (15 minutes)
- 4. As a leader, how do you cross check if assessment is relevant to the new curriculum, prepare students for national assessment, and cover the whole curricula? (20 minutes)

Key Ideas (20 minutes)

It should be under scored that school leaders are key, if not indispensable for the effective implementation of assessment for learning, of learning and as learning. Principal as teacher leaders need to ensure if the classroom assessments are curriculum based and the assessment design are fit for purpose as assessment impacts positively on teaching and learning practices.

The main purpose of realizing curriculum based assessment is that it provides a measure of a student's progress through curriculum and whether that progress is adequate. Curriculum based assessment (CBM) is repeated, direct assessment of targeted skills in basic areas using materials taken from the teaching curriculum.

Implications (15 minutes)

School leaders need to carry out a sustainable follow to ensure if the assessment practices of teachers emanate from the curriculum. If the assessment practices are not related to learning competencies in the curriculum it lacks relevance. Considering this, how do school leaders ensure portion coverage, the three domain of learning, competency based goal oriented?

Take Away Resources

De Leeuw, J. (2016). Leading Assessment: The Triple-A Framework for Educational Leaders. In: Scott, S., Scott, D., Webber, C. (eds) Assessment in Education. The Enabling Power of Assessment, vol 2. Springer, Cham. <u>https://doi.org/10.1007/978-3-319-23398-7_8</u>

Session 2.4. Creating a Continuous Improvement Cycle (2 hours)

Introduction (25 minutes)

To improve teaching and learning we need to know the strengths and areas for development in teaching and learning in our classrooms. To do this we need to observe teaching and learning in all our classrooms and work with teachers to celebrate and share their strengths and support their areas for development.

We need to keep celebrating and improving regularly to ensure that we are providing the best possible learning opportunities for all children.

Objective



At the end of this session trainees will able to

- create a continuous teaching and learning improvement cycle
- they will understand how to set up a fair and transparent process that all staff can understand and trust.
- understand the stages of the improvement cycle

Activities

1. Discuss in group and put in the right order each activity diagram and reflect about the cycle and insights you have gained from thinking about it. (15 minutes)

Planning discussion with 39 teacher Provide support

?

2. Discuss with your peers the following activities. (15 minutes)

?

- How to create a continuous school improvement cycle for your school.
- Design strategies that help you to implement the continuous school improvement cycle.



?

- Identify the involvement of stakeholders in implementing the continuous school improvement cycle.
- Decide the monitoring and evaluation of the strategy that you will carry out during and after implementing a continuous school improvement cycle.
- **3.** Create a culture of professional learning by involving teachers in the improvement of teaching and learning.(10 minutes)
 - Develop a possible timeline for the activities needed to set up your timetable for each stage of the continuous cycle of improvement. Consider the activities you must do **before**, **during**, and **after** creating the timetable.
 - Here are tips that you must consider to develop your timetable

Questions to consider before creating your timetable: (10 minutes)

- When will you introduce the updated research on effective teaching?
- When will you explain the plan for continuous improvement?
- When will you share the process?
- How will you overcome resistance and build trust?

Questions to consider when creating your timetable (10 minutes)

- What time of the year/term will you be introducing it?
- Have you allowed enough time between observations for teachers to act/practicenew skills? (1/2 term)
- Which class/standard will you begin with?

- Why have you selected this?
- Which classes/standards will follow?
- Have you avoided holidays?
- Have you avoided exam times?

Questions to consider after creating your timetable: (15 minutes)

- How will the timing fit with and support the **School Improvement Plan** and the School Self Review?
- Who will provide the support required to teachers?
- When will this happen?
- Are there any costs involved?

Key Ideas (15 minutes)

Understanding the focus areas of classroom observation and how you evaluate its effectiveness. From the session another key point includes evaluating your ability as a school leader to plan, execute and evaluate the teaching-learning process in your school. It also will help you to map key responsible bodies within the school who take part in teaching learning observation process in your school. School leaders obtain key skill to evaluate the contributions of classroom observation in improving the actual learning outcomes in their school and utilization of teachers practice tool.

Implications (5 minutes)

It will enhance instructional leadership practice and improve teaching and learning process with the ultimate goal of enhancing student leaning outcome.

Take Away Resources

Ko, J., Sammons, P. and Bakkum, L. (2013). *Effective teaching: a review of research and evidence*. Reading: CfBT Education Trust.

Muijs, D., and Reynolds, D. (2018). *Effective teaching: evidence and practice* (4th Edition). Los Angeles: Sage.

Rosenshine, B. (1983) Teaching functions in instructional programs. *The Elementary School Journal*, 83 (4).

Rosenshine, B. (2010). *Principles of Instruction*. International Academy of Education, Brussels.

Session 2.5. Observation and Feedback on Teaching and Learning (2 hours)

Introduction (20 minutes)

This session is about how key leadership practices can have a stronger impact on student learning outcomes than others. Research have underscored that educational leaders influence a change and improved student learning outcomes by improving the quality of teaching. Teachers are the single strongest pedal to improve learning, while school leaders are playing the second strongest role as leaders of learning. Thus observation and feedback are key to improving the quality of teaching and learning in our schools.

Objectives

At the end of this session trainees will be able to:

- Review of the process for observing learning and teaching;
- Understand elements of the teachers practice tool;
- Recognize how teaching develops as described by the Quality Indicators in he Teacher Tool;
- Become familiar with evaluating teaching using the graded/incremental scale; and,
- Recognize what makes feedback effective.

Activities

- **1.** Reviewing the Process for Observing and Teaching Learning which you have developed during session 2.3. above (10 minutes)
- 2. Observing Teaching and Learning Offers Benefits across the School, spend some time to read and comprehend the following key benefits. (10 minutes)

Benefits to you as a school leader: (25 minutes)

- Privilege to be in the classroom with children this is what our job is about;
- Learn strengths of the teaching team: you can share and build on these;

- Identify areas where teachers lack confidence: you can use CPD to plan and deliver support;
- Informs your SIP and SSR: it helps you with these aspects of your leadership role;
- Builds trust and relationships;
- Allows you to practice coaching and mentoring; and,
- Allow you to see the impact of your efforts: improvement for learners.

Benefits to teachers:

- Receive time and insights shared by the most senior person;
- Recognition of their efforts;
- Builds trust and relationships;
- Receive mentoring/coaching professional support;
- Engage in CPD relevant to teaching and learning; and,
- Creates role satisfaction: they can recognize the improvements for learners.

Benefits for learners:

- Recognition of their efforts;
- Builds trust and relationships; and,
- As teaching becomes more effective their learning will be better supported.

Learning observations are always worrying for teachers. All teachers want to show their best teaching and want to impress whoever comes into their room.

It is critical to communicate with teachers throughout the process, so that all is clear and understood. This minimizes anxiety and emotion and can lessen resistance to change.

Preparing for Observations

- **Planning:** Block out the time before, during and after the observation.
- **Communicate** with the teacher being observed, and others so youare not disturbed.
- **Resources:** Have everything ready so you can arrive promptly
 - Observation Form, Teacher Tool, scrap paper, pen/pencil, space/room to giveconfidential feedback.

Getting the Most for Every One from Observations

• Agree, share, and remind the teaching team of the conventions for observing in a

classroom/learning environment. For example, the observer will:

- Enter the room quietly learning should not stop;
- Find somewhere to sit (or agree beforehand where you will sit); maintain silence with relaxed body language;
- Minimize eye contact with teacher or learners; watch and listen rather than write sentences; jot down single words to promptyour memory;
- Focus attention on the learners sit close enough to hear but to so as to inhibit children speaking; and,
- At end of the observation thank the teacher and children as you leave the room.

Post Observations (15 minutes)

Spend time drafting your observations. When you use any lesson observation tool, you are reflecting on what you saw and heard.

Some things to think about:

- What happened in the lesson?
- What was the attitude/ engagement of the learners?
- What did you notice about the engagement of learners of different genders/abilities?
- Who spoke the most? The teacher or the learners?
- What questions do you have about what you observed?
- What surprised you?
- What would you like to check with the teacher?
- Could you identify an aspect that the team/teacher had been working to develop?
- Identify a positive feature of what you observed.

3. Discuss to identify important tools that help to Lead Effective Teaching and Learning (10 minutes)

What do we need to do to lead learning in our schools? Specifically, what tools and frameworks will be needed to support the process and the continuous improvement cycle? These tools and frameworks might include the following:

- School Improvement Plan;
- School Self-Review;

- Tools to observe learning; and,
- Feedback forms (focusing on the specific development area).
- 4. Teachers practice tool and how to use it at your school context, discuss in group on the following points (please refer to Appendix 1 Education development Trust teachers practice tool) (5 minutes)
- How do you plan to use the Teacher Practice Tool in school?
- How will you introduce the Teacher Practice Tool to the teaching team? When will you introduce the Teacher Practice Tool?What CPD will you provide so they understand each of the sections?How will you keep and build trust?

5. Giving Feedback to the Teacher Following an Observation. Discuss in group on the following points. (5 minutes)

What do you want to achieve from your conversation with the teacher? What do you want to avoid?

6. Consider the following note to get more understanding while you give feedback to teachers (10 minutes).

Practical thoughts on Feedback in School

As a school leader, your role is very significant to teacher's development. They will remember how they felt when you discussed their practice, and it will have a significant impact on their professional view of themselves. Bear in mind the following key points:

- Every teacher who has been observed needs and deserves feedback.
- Make sure the feedback meeting is held within 24 hours of the observation.
- Plan in time to give feedback so that it is not rushed and is given in confidence.
- Plan what you will say, the questions you want to ask, and what you want to check.
- Begin with thanks and recognition.
- Plan your key messages what you want to recognize and praise.
- Identify ONE aspect you would like them to work on.
- Ask what support they would find helpful.
- Respect confidentiality and privacy do not discuss one teacher's performance with another.

Key Ideas (7 minutes)

The ultimate goal of any education reform should be to improve the outcomes of students. A key element of this is ensuring high-quality teaching and learning.

In order to measure the impact of our programs, we, therefore, need to evaluate their impact on the quality of teaching. It is not sufficient to evaluate the impact of the number of teachers reached or surface changes in teaching practice, however. Whilst this breadth (spread) of impact certainly needs to be evaluated, three other dimensions need to be considered: depth, sustainability, and ownership.

Coburn (2003) suggests that three elements relate to the depth of reform:

- Teachers' beliefs, in particular their beliefs about the subject they teach, howstudents learn and how they should teach.
- Norms of interaction: teachers' and students' roles in the classroom, and thepatterns of teacher and student talk.
- Enactment of pedagogical principles.

The *Teaching Practice Tool* aims to help us to evaluate the impact in relation to norms of interaction (teaching dialogically) and teachers' enactment of pedagogicalprinciples.

The tool has been designed to support:

- benchmarking of teaching practice and evaluation of impact;
- program design and the identification of appropriate teacher professionaldevelopment activities;
- on-going monitoring and review of teaching practice, informing adaptiveprogram management;
- the identification of 'bright spots' and effective teaching practices;
- teachers and those working with teachers to develop teaching practices;
- a growing database of evidence relating to teaching practice.

Simon & Tzur (1999). Argue that teachers' practice can only be understood by considering the relationships between teachers' beliefs and their behaviors'. This tool, when used alongside our *Teacher Mind-set Tool*, will support a comparative analysis of teachers' espoused beliefs and their practice, and thereby allow for a more comprehensive analysis of teaching quality.

Implications (3 minutes)

The level of mind set determine to what extent school leaders feel confident that they can do and change reality in school. So, how do you see your mind set from this perspectives? How you usually decide if you can or you cannot manage/make a difference on what happen in the school?

Take Away Resources

Christopher C. (2016). The Impact of Leadership on Student Outcomes: How Successful School Leaders Use Transformational and Instructional Strategies to Make a Difference, Educational Administration Quarterly, Vol. 52, Issue 2.

Coburn, C. E. (2003)Mov. ing beyond numbers to deep and lasting change. Educational Researcher, 32 (6), 3–12

Simon, M. A. & Tzur, R. (1999). Explicating the teachers' perspective from the researchers' perspective: generating accounts of mathematics teachers' practice. Journal for Research in Mathematics Education, 30, 252–264

Session 2.6. Leading with Evidence: Monitoring, Evaluation and Resource Mobilization for Instructional Leadership (1 hour)

Introduction (15 minutes)

Each **Monitoring, Evaluation** Plan should contain specific activities with corresponding output and result indicators. Both have baselines and targets, data sources, disaggregation, and frequency of data collection.

Performance Indicators: there are two types of performance indicators.

Result Indicator (measures the extent to which a project objective is being achieved. Results indicators often measure change, and Output Indicator (measures the products of planed activities, but it doesn't measure changes).

Both are used to observe progress being made towards anticipated results. Performance indicators should be linked to the planned activities and objectives. Measures should be in quantifiable terms and clearly defined. Qualitative indicators are acceptable if they provide a reliable means to measure a particular phenomenon or attribute.

Baseline measure for an indicator is collected before or at the start of a project and provides a basis for planning and/or assessing subsequent progress and impact.

Targets are reasonable estimates of the outputs or results to be achieved by the plan over its period of performance.

Data Source is the collection tool by which the project will obtain result indicator or output indicator information throughout the program. Data collection tools should be easy.

Data Disaggregation separates data into its component parts to look at how specific subgroups perform. It is important to consider only the information that you need to know as there are infinite ways to disaggregate information collected from program like in sex.

Frequency of Data Collection establishes schedule of when data will be collected (e.g., monthly, quarterly, and bi-annually) and validates its feasibility for program design.

Objectives

- Participants will understand the importance of monitoring and evaluation (M&E) in improving instructional practices.
- Participants will be equipped with basic M&E tools and strategies relevant to the Ethiopian school context.
- Participants will learn effective resource mobilization techniques to support school improvement initiatives.
- Participants will be able to connect M&E and resource mobilization to their role as instructional leaders.

Activities:

- **1. D**iscusses in a pair a time when data helped you make a positive change in your school. Pairs share their stories with the larger group. (10 minutes)
- Briefly define monitoring and evaluation (M&E) and its role in school improvement. Discuss the importance of M&E for instructional leadership - using data to inform decisions about curriculum, teaching practices, and resource allocation (10 minutes)

3. Discuss in a group on the given case study (Annex 2) and share your ideas and discuss the strengths and weaknesses of each approach. (8 minutes)

Discussion Points:

• How did Ms. Alemitu effectively utilize data from monitoring and evaluation?

- What challenges did Ms. Alemitu face in mobilizing resources?
- How can school leaders in similar situations adapt Ms. Alemitu's approach to their contexts?
- **4.** Explain the difference between monitoring and evaluation (2 minutes).

Comparison between M&E

Undertaken by	Schools leaders, teachers	External evaluators from WEO,		
	Supervisors, Community	MOE etc.		
	(beneficiaries), WEO Other	Community (beneficiaries) School leaders and Supervisors		
	Stakeholders			

Adapted from UNICEF, A UNICEF Guide for Monitoring and Evaluation: Makinga Difference

5. Introduce basic evaluation tools (e.g., pre- and post-tests) relevant your context

See a sample monitoring plan template and discuss each step (5 minutes)

Item	Monitoring	Evaluation		
Frequency	Regular, on-going	Periodic/intermittent		
Main action	Keeping track/oversight	Assessment		
Basic purpose	Improving efficiency			
Adjusting work plan	Improve effectiveness, impact, and future programming			
Focus	Inputs, process outcomes, outputs, work plans	Effectiveness, relevance, efficiency, impact, sustainability		
Information sources	Routine systems, field visits, stakeholder meetings, output reports, rapid assessments	Same plus Surveys (pre-post planning)		

- 1st Column insert your pre-determined time-bound objective.
- 2nd Column insert your pre-determined Intervention and the associated

Result Chain Factor

- **3rd Column** list 2 or more of the indicators you selected for the specific intervention-results chain factor set. Try to include an outcome indicator as wellas process indicators.
- 4th Column insert a performance target for each indicator e.g., quantitative estimate of the expected result by EOP
- 5th Column insert the Means (HOW) you will gather the information
- **6th Column** insert the Frequency of data collection (WHEN)
- **7th Column** Insert the name of the party/agency/person who will be primarilyresponsible for collecting/ reporting the information

Objective	Intervention/ Results Chain Factor	Indicator	Target(Projected Result on SIP of the school)	Means of Collection	Frequency	Responsible Party

5. Resource Mobilization: Building Your School's Capacity (3 minutes)

- Discuss the importance of resource mobilization for supporting school improvement initiatives identified through M&E.
- The school leader practices pitching an idea for a school improvement initiative and requesting support.

Key Ideas (5 minutes)

- M and E provides data to identify strengths and weaknesses in teaching and learning.
- Effective instructional leadership uses data to make informed decisions about school improvement.
- Resource mobilization allows schools to acquire the necessary tools and materials to implement changes.
- Building strong partnerships with parents, communities, and local stakeholders is crucial for successful resource mobilization.

Implications (4 minutes)

By integrating M&E and resource mobilization skills into their leadership practice, school leaders can become powerful agents of change, creating more effective learning environments for all students in their respective schools.

Case Study: Leading with Data - Abay High School in Addis Ababa

Context: Abay High School is a large public school located in Addis Ababa, Ethiopia. The school faced challenges with low student achievement.

Challenges:

- Low student achievement in science, especially in rural feeder areas.
- Limited access to technology and science resources.
- Difficulty engaging students in traditional, lecture-based science lessons.

Ms. Alemitu's Approach:

1. Monitoring and Evaluation:

- Ms. Alemitu initiated regular classroom observations to assess teaching methods and student engagement in science classes.
- Pre- and post-tests were implemented to track student progress in key science concepts.
- She analyzed student data disaggregated by location (urban vs. rural) to identify specific needs.

2. Findings and Decisions:

- Data revealed lower science scores in rural feeder areas, suggesting a need for more targeted support.
- Observations identified a reliance on rote memorization in some science classes, lacking hands-on learning opportunities.

3. Instructional Leadership:

- Ms. Alemitu used data to guide professional development sessions for science teachers.
- She encouraged teachers to incorporate more interactive activities and experiments into their lessons.
- She explored low-cost, locally available materials for science demonstrations.

4. Resource Mobilization:

- Ms. Alemitu presented data on rural student performance to the PTSA organized fundraising events and partnered with a local university to access science lab equipment.
- Ms. Alemitu secured a grant from an international organization to purchase educational tablets preloaded with offline science resources for rural students.

Outcomes:

- Science test scores at Abay High School improved significantly, particularly in rural areas.
- Student engagement in science classes increased due to more interactive learning methods.
- Stronger collaboration developed between the school, PTSA, and the local community.

Conclusion:

This case study demonstrates how Mrs. Alemitu's leadership, combined with M & E data and resource mobilization, led to improved student learning in science at Abay High School. By

integrating these practices, school leaders can become data-driven decision-makers and create a more equitable and successful learning environment for all students.

Connecting the Case Study to the Training Session:

This case study demonstrates how Director Alemitu effectively used the skills covered in the training session:

- **M&E:** Data collection and analysis helped identify student needs and track learning progress.
- **Resource Mobilization:** By engaging the community and leveraging partnerships, the school acquired necessary resources for the program.
- **Instructional Leadership:** Director Alemitu's data-driven approach and focus on collaboration led to a successful instructional improvement initiative.

Take Away Resources:

Alpay Ersozlu (2016). School Principals' Reflective Leadership Skills through the Eyes of Science and Mathematics Teachers. International Journal of Environmental & Science Education, 2016, 11(5). Gazi University, Faculty of Education, TURKEY

Ethiopian Ministry of Education Guidelines on School Improvement Planning (consider searching online or contacting your local education office).

Websites with free M&E resources (consider international organizations like UNESCO or national organizations focused on education in Ethiopia).

UNIT THREE: LEADING EFFECTIVE STAFF PROFESSIONAL DEVELOPMENT (16 HOURS)

3.1 Introduction (45 minutes)

This unit presents identification of staff development needs, preparation of staff professional development plan, facilitate staff development actions, and sustaining staff professional development endeavor in schools and beyond. In principle, professional development is the act of doing any activity you can to get better at your job, outside of your normal day-to-day tasks.

It's similar to continuing education, but not exactly the same. Taking classes or reading the latest research can be professional development.

Investing in professional development for employees can grow an existing team's skills and entice new talent to join with the incentive of a clear learning and development plan. Industry trends move rapidly, and it's important for companies to keep pace with the times. Therefore, professional development is an important aspect of continuing ones career growth and striving to reach his/her goals. Staff professional development is gaining new skills through continuing education and career training after entering the teaching workforce.

This professional development can include taking classes or workshops, attending professional or sector related conferences or earning a certificate to expand your knowledge in you areas of interest. Some organizations offer on job opportunities for professional development, such as training sessions or mentoring programs, but many professional development programs are done independently.

3.2 Unit Objectives:

After completing this unit, trainees will be able to:

- Identify the benefits of professional development both for employees and the school as an organization
- Assess the professional development gaps of teachers

- Analyze the data collected on the professional development needs of teachers
- Develop comprehensive staff professional development plan
- Align the staff development plan with required teacher competency
- Establish a sustainable staff development implementation system
- Evaluate and prioritize the gaps teachers have
- Be reflective thinkers and leaders

Session 1. Assessment of Staff Professional Development Needs (4 hours) Introduction (45 minutes)

This session is about identification of staff professional development needs, stages of staff professional development and prioritizing the professional development needs. The first and most important stage in staff professional development needs assessment. In this phase, employees assess their interests and current skill set in order to potential future career paths.

In today's dynamic business environment, a training needs assessment is crucial for organizations seeking to optimize their workforce development strategies. It offers practical insights, methodologies, and best practices to identify knowledge and skill gaps within an organization. By following this step-by-step approach to how to conduct a training needs assessment, readers will learn how to establish objectives, collect and analyze data, and develop targeted training solutions.

School leaders are primarily expected to assess and identify the training needs of teachers on the 21st century pedagogical skills and personal development. Considering the significant roles teachers play in effective operation of the educational system, they need to be motivated, developed, and supported in order to retain them in the school. OECD (2011) underscored that teachers need to be furnished with the principles and methods of instruction to improve their skill for better classroom management activities.

The absence of professional development needs assessment for teachers coupled with insufficient facilities and teachers' incompetence in the use of available resources is an enemy to successful learning outcomes.

Considering the fact that teachers and school leaders in the secondary schools are key service providers in transforming teaching of students in the classrooms, assessing their training needs and support are obvious. This helps to avoid the one size fits all misconceptions of teacher training needs.

Objectives:

After completing this session, trainees will be able to:

- Articulate the strategies to identify their teachers professional gaps
- Use variety of sources to gather information on development needs of teachers
- Prioritize the challenges of staff professional gaps
- Align staff development needs with school goals
- Design a strategy on how to identify staff development needs
- Identify the characteristics of reflective Leaders

Activities:

- 1. Ask the trainees to elaborate individually and present to the class, as leaders why you should worry about teachers professional development gaps? Who are the key sources to provide information and data on staff development needs? (20 minutes)
- 2. Form a group and make a discussion on why CPD fail in our schools today? Who is responsible to reinitiate and strengthen school CPD? Then ask them to present their views to the class? (25 minutes)
- 3. Have you ever visited classroom as an instructional leader? What have you done with the feedback that you bring from the classroom visit considering curriculum as center of instruction? (20 minutes)
- 4. Are school leaders playing the roles of clinical supervision? How and what they can carry out these roles? How do you evaluate your roles as teacher development agent? (25 minutes)
- 5. Do you consider yourself as reflective thinker and leader? How do you model the way for teachers? (20 minutes)

Key Ideas (45 Minutes)

Professional development offers practical insights, methodologies, and best practices to identify knowledge and skill gaps within a school organization. Professional development needs assessment is a step-by-step approach to how to conduct a training needs assessment, leaders will learn how to establish objectives, collect and analyze data, and develop targeted training solutions.

One of the main ways to identify the professional development needs of teacher is clinical supervision. The principles of clinical supervision are made explicit by a clear contract of expectations, ongoing review and feedback, and a commitment to professional development. It is critical that both the supervisor and supervisee share their expectations about the process, method, and content of clinical supervision. This can advance the development and maintenance of a trusting, safe relationship. The following information should be discussed early in the working relationship:

- Models of supervision and treatment.
- Supervision methods and content.
- Frequency and length of supervisory meetings.
- Ethical, legal, and regulatory guidelines.
- Access to supervision in emergencies.
- Alternative sources of supervision when the primary supervisor is unavailable.

There are main actors at school-site level who have a role to play in indicating the professional development needs which include:

- the teachers;
- the learners;
- the parents; and
- the local community.

Reflective leaders encourage their followers/teachers to learn from their experiences and this occurs through reflective learning. A reflective school leader is a leader with high level of self-awareness and awareness regarding the people around, who can analyze how everyone in the school shall contribute to both school culture and effectiveness, find ways on how to naturally

channel those characteristics of people into the operation of the school, come up with efficient solutions to emerging problems during the entire process, and transform the school into a contented and productive environment.

Implications (40 minutes)

Sometimes the need for staff development may be so many. As a leader what do you do properly manage this? In your staff development effort, how do you identify who really needs what and how you plan to address it?

What efforts are exerted at school to develop self an others as school leaders need to work through others to build PLC that is focused on the continuous improvement of learning and teaching? When do you think developing self and others can be most effective? If you have taken training on certain topic are you going to share this with your teachers and students? Why and how?

For teachers and learners to be reflective, first school leaders need to be reflective and how do plan to cultivate a reflective culture in the school?

Take Away Resources

Michelle L. Casto (2022). "Get Smart! About Modern Career Development: A Personal Guide to Creating Your Life's Work.

National University of Educational Planning and Administration (2009). National Program Design and Curriculum Framwork. Delhi:NUEPA

Session 2. Prepare Competency Based Staff Development Plan, Implement and Evaluate (12 hours)

Introduction (1 hour 30 minutes)

This session is dealing with the major steps to be followed in order to develop and implement a comprehensive and competency oriented staff professional development plan at school. School leaders need to underline that being a teacher requires a commitment to lifelong learning. Because, as the education landscape changes, teachers must stay updated with new teaching tools, strategies, and resources to enhance their curriculum and create impactful classrooms.

The school principal as the instructional leader is entrusted with the responsibility of improving the quality of instructional delivery through adequate supervision of teachers. Instructional

supervision is the actions taken to mentor and monitor subordinates or teachers and provide supportive and conducive atmosphere for improvement on the instructional process.

Therefore, students learning and outcome of the learning are central in instructional leadership. Students are the ultimate beneficiaries of any educational and learning exercises. Effective instructional leadership which is a function of complex factors taking place outside and inside schools becomes instrumental.

Any staff development plan need to be properly implemented if they have to bring a difference on learning and teaching process and outcome as well. The development plans and programs have to be implemented to get the desired output. Then, the development activities should be evaluated to know whether the training program was effective. It is matter of assuring training and development utility in terms of effect of training on instruction and student performance.

Objectives:

At the end of this session trainees will be able to:

- Synthesize that staff development is a continuous process
- Develop a competence oriented staff development plan
- Identify what a well-structured professional development plan involves
- Know how to implement and evaluate the training program
- Reflect on the success and failure of each professional development approaches

Activities

- Ask the trainees to list down the major strategies used to identify the professional development needs of teachers. Then facilitate the trainees to reflect on their actual practices on the major strategies followed to the class. Where do you collect evidences about the improvement and enhancement gaps of your own and teachers? (45 minutes)
- 2. Be in group and discuss on, if the professional development needs of a teacher is found to be many, as leaders how do you entertain these? Then the trainer facilitates the presentations and debates on what is presented by each group. (45 minutes)
- 3. Ask the trainees to be in group and figure out what leadership competences they need to have to effectively facilitate teacher professional development. Then they articulate

and present their understanding to the class and discussions will be facilitated by trainer. (35 minutes)

- As school leader, how do you design your leadership and teachers development plan? (35 minutes)
- 5. Professional Learning Communities (PLC): A PLC is used to increase effective teaching, remove barriers to student learning enhance the instructional process to serve all, allow teachers to learn from and with each other and bridge the gaps between intention and reality. In light of the power of CTE, we may ask the following questions: (1 and 25 minutes)
 - 1. What is a Professional Learning Community?
 - 2. How does a PLC contribute to school improvement?
 - 3. How does a PLC support the improvement of learning outcomes?
 - 4. How can we develop joint practices as part of the leadership development programme to improve learning through PLCs?
 - 5. Are practicing and facilitating PLC and Community of Practices (CoP) in your school? Why?
- 6. Any implemented training and professional development practices have to be evaluated. So, how do you check if a given professional development activities are successful or not? What kinds of tools are used? (45 minutes)

Key Ideas (45 minutes)

There is a need to regularly conduct training needs assessment of teachers considering instruction often change fast and there is always a need for teachers to update their skills. It is always key to know instructional leadership is generally recognized as one of the important roles of the school principal.

Professional development is a tool for growth and improvement in the teaching profession. It begins with the creation of a professional development plan, which acts as a roadmap for achieving teachers learning objectives.

School leaders need to organize and facilitate a professional development plan of teachers as a document that assesses their current skill set, sets their career goals, creates strategies, and uncovers resources to help them achieve those goals. For school leaders to make a quality professional development plan for teachers and themselves, they must include several essential elements. These elements contribute to a comprehensive and impactful plan that supports continuous learning and development.

Mapping your leadership development starts with understanding yourself and where you and your teachers stand professionally. Taking stock of your strengths, weaknesses, and workplace tendencies can help identify areas for improvement and anticipate pitfalls that could arise on your journey to becoming a more capable leader.

School leaders can facilitate the staff professional development through various approaches where the outstanding ones are professional learning communities and community of practice. A Professional Learning Community (PLC) is a group of practitioners working together using a structured process of enquiry to focus on a specific area of teaching and learning to improve learner outcomes and so raise school standards." "A PLC is a group of educators that meets regularly, shares expertise, and works collaboratively to improve teaching skills and the academic performance of students" (adapted from: https://www.edglossary.org/professional-learning-community/). "PLCs are a structure used by the School Leadership Development Programme which will bring teachers, leaders and schools together to develop and amplify the effects of CTE, delivering proven improvements to learning outcomes for ALL learners."

PLCs build and strengthen collective teacher efficacy through the:

- Building relationships and improving communication and cooperation between teachers, schools, and school leaders
- Providing time for educators to discuss and address issues of learning
- Supporting the development of shared values, norms and expectations for effective teaching and learning
- Improving teacher confidence and the confidence of school leaders
- Encouraging educators to be 'thinkers' as well as 'doers'

Implications (35 minutes)

One of the major tools of evaluating teacher and teaching effectiveness is classroom observations which actually vary widely in how they are conducted and what they evaluate. So what is your plan in order to carry out a constructive and progressive classroom observation to identify and suggest a remedy?

To achieve the 21st century learning skills (critical thinking and the ability to communicate effectively, innovate and solve problems through negotiation and collaboration), teachers must deliver quality teaching. As teacher leaders how do you facilitate and ensure this?

Clinical supervisory sessions are recorded as notes that indicate the focus of the session, the issues discussed, and solutions suggested, and agreed upon actions. School leaders as supervisors will maintain a folder for each of their supervisees. The folder will contain the development plan, clinical supervision summaries, and personnel actions. How do you compare your practical experiences with these theoretical suggestions? What is your plan on this for next time?

As a school leader, how can we develop joint practices as part of the Leadership Development Programme to improve learning through PLCs? Any professional development program should well implement, monitored and evaluated and hence what is your experience in relation to this? What is your experience so far to sustainably practice professional development programs? Have you evaluated any professional development practices and took corrective actions? Why?

Take Away Resources

Brown, C. (2017). Research Learning Communities: How the RLC Approach Enables Teachers to Use Research to Improve Their Practice and the Benefits for Students That Occur as a Result. Research for All, 1 (2): 387-405.

Busher, H. (2006). Understanding Educational Leadership: People, Power and Culture. New York: Open University Press.

IES (2021). Continuous Improvement in Education: A Toolkit for Schools and Districts, U.S. DEPARTMENT OF EDUCATION

UNIT FOUR: PROMOTING A DIGITAL TECHNOLOGY LEADERSHIP CULTURE (8 HRS)

4.1 Unit Introduction (40 minutes)

When it comes to teaching and learning, educational technology can be quite helpful. In addition to improving academic performance, it increases student involvement, facilitates better communication and teamwork, increases accessibility to education, and provides more convenience and flexibility.

Thus, today's schools need leaders who can thrive in the rapidly evolving digital environment, in addition to being able to manage it. Using the techniques and tools outlined in the "promoting a Digital Leadership Culture" section, you can help your school community foster a culture of creativity and technological proficiency.

The Education and Training policy (2023) point out about the use of ICT in formal education and what is expected to bring about and supply an innovative generation of students to the work market where existing and emerging technologies are employed. Among others, digital literacy, which would enable learners to align digital technologies effectively and efficiently to their respective businesses to attain a competitive edge both nationally and globally, is on the top of the agenda. This requires the existence and proper management of accessible and equitable digital infrastructure, contents, and devices. The aim of ICT in formal education is to:

- Ensure pre-primary, primary, secondary, and Higher Education students, educators and administrators use ICTs in their teaching and learning, as well as administrative practices.
- ICT as a subject matter is required to be given to all levels of education; ICT related classes must get attention and relative priority;
- Ensure the value of integrating ICT into the curriculum and pedagogy through practical training and awareness creation;
- Promote open, distance and e-learning.
- Inculcate emergent ICT based pedagogical methodologies that are studentcentered and encourage research and collaborative learning;

- Facilitate access to digital contents and open data by promoting the establishment of new digital libraries and enhancing the traditional ones;
- Facilitate management information systems to all decision-making bodies and most importantly to ensure education quality through real-time data provision; and
- Ensure the availability of infrastructure that are critical to successfully integrate ICTs at all levels of education and enhance the existing School Net and EthERNet.

In this unit, we'll look at how to support the continuous integration of digital tools to improve teaching and learning, giving you and your teachers the tools they need to be change agents. You will also learn how to unleash the full potential of existing technology to create a more successful and engaging teaching and learning experience for all your teachers and students by establishing a collaborative and forward-thinking atmosphere.

At the end of this unit, you will be equipped with the knowledge and skills to support your own leadership capacity, improved teach CPD and your teachers will be effective enough to integrate compatible digital technologies to enhance student learning outcome.

4.2 Unit Objectives

By the end of this unit, school leaders will be able to:

- Articulate the benefits and challenges of integrating digital technologies into learning and teaching.
- Develop a vision for a digital leadership culture within their school.
- Identify strategies for supporting teachers in effectively using digital tools to enhance student learning.
- Create a plan for fostering collaboration and innovation in the digital world within the school community.

Unit Sessions:

Session 4.1. Building a Vision for Technology Integration

Session 4.2. Equipping the capacity of Teacher with technology skills

Session 4.3. Building a Sustainable Technology Infrastructure

Session 4.4. Evaluating the Impact of Technology Integration

Session 4.5. Advocacy and sustainability for Leading Change

4.1. Building a Vision for Technology Integration (1 hours and 30 Minutes)

Introduction (25 minutes)

This session explores the concept of a digital technology leadership culture and its impact on school improvement. School leaders will understand the core characters of digital technology and develop school specific vision for technology integration.

Objectives

- Understand the core characteristics of a digital technology leadership culture.
- Articulate a vision for technology integration in their schools.

Activities

- 1. In a pair brainstorming ways technology has impacted daily life in your respective areas. Discuss how this translates to the educational setting: **Icebreaker (15 minutes)**
- 2. In your group, please discuss on the following questions: Please capturing key ideas on a flipchart. (20 minutes)
 - What does a "digital technology leadership culture" mean to you?
 - What are the benefits of such a culture for schools?
- Read the below case study of a school that successfully implemented a digital technology leadership culture. In your group analyze the case and identify key strategies used. Case Study Analysis (10 minutes)
- 4. Now please draft a one-page vision statement outlining your ideal technologyintegrated school environment. **Vision Building (10 minutes)**

Key Ideas: (15 minutes)

- A digital technology leadership culture emphasizes integrating technology seamlessly into teaching and learning.
- Leaders who champion technology use create a supportive environment for teachers and students to explore its potential.
- Technology serves as a tool to enhance learning, not replace traditional methods.

Implications (15 minutes)

School leaders set the tone for technology integration. Their vision and support are crucial for creating a successful learning environment.

Take Away Resources:

- Sample Vision Statements for Technology Integration in Schools (<u>https://www.vhcs.us/domain/1370</u>)
- Framework for Effective Integration of Technology in Schools (<u>https://iste.org/blog/a-new-framework-for-digital-age-leadership</u>)
- ICT In Education policy for Ethiopia MoE September 2023

Session 4.2. Equipping the capacity of Teacher with Technology Skills (2 hours) Introduction (20 minutes)

This session explores strategies for equipping school leaders to support teachers with the skills and confidence to integrate technology effectively in their classrooms.

Objectives:

- Identify key areas for continuous professional development to support teachers with technology integration.
- Develop strategies for providing ongoing professional learning opportunities for teachers.

Activities:

1. Reflect on the following questions. What are the biggest challenges teachers face when integrating technology in the classroom? Then, in pairs, discuss and brainstorm

solutions. Share key challenges and solutions as a large group. Think-Pair-Share (20 minutes)

- In a group develop draft professional development strategy (e.g., workshops, online courses, peer coaching). Each group research, plans, and presents a brief outline of their chosen strategy, considering its benefits and challenges in the Ethiopian context.
 Professional Development Strategies (25 minutes)
- Develop individual action plan outlining specific professional development activities for teachers on technology integration for your respective school. Action Planning (25)

Key Ideas (20 minutes)

- Effective technology integration requires ongoing support for teachers through professional development.
- Professional development should address teachers' specific needs and be tailored to the Ethiopian/regional context.
- A variety of approaches can be used for professional development, catering to different learning styles and preferences.

Implications (10 minutes)

School leaders play a key role in facilitating and supporting professional development initiatives for teachers regarding technology integration.

Take Away Resources:

- Sample Needs Assessment Tools for Technology Integration (https://nces.ed.gov/pubs2003/2003313.pdf)
- Guide to Effective Professional Development (<u>https://www.ascd.org/professional-</u> <u>learning-services</u>)

4.3. Building a Sustainable Technology Infrastructure (1 hours and 30 minutes) Introduction (20 minutes)

Technology can be a powerful tool to improve teaching and learning. This guide introduces Ethiopian school leaders to using technology effectively in their schools.

Objectives:

School leaders will be able;

- to use Technology for Learning, Not Just Fun: Choose tools that support the curriculum and learning goals, not just games.
- **To Focus on Access and Equity:** Ensure all students have access to technology, considering factors like electricity and devices.
- **To Support Teachers:** Train teachers on using technology effectively in their lessons.
- **To Start Simple, Grow Gradually:** Begin with basic tools like educational apps and gradually introduce more complex options.

Activities:

- Activity 1: Technology Inventory: List all existing technology in your school (computers, tablets, projectors) and identify any gaps.(15 minutes)
- Activity 2: Choose a Learning Goal: Select a specific learning goal you want to improve with technology (e.g., English language, math problem-solving). (10 minutes)
- Activity 3: Find Educational Apps: Search online for educational apps related to your chosen learning goal. (15 minutes)
- Activity 4: Teacher Training Session: develop a plan to organize a training session for teachers on using the chosen educational app in their classrooms using available infrastructure.(10 minutes)
- Activity 5: Parent-Teacher Meeting: plan to organize and discuss with parents how technology can be used for learning at home and encourage their support. (5 hours)

Key Points:

- Engaged Students: Technology can make learning more interactive and engaging.
- **Improved Learning Outcomes:** Technology can help students learn more effectively and efficiently.
- **Collaboration and Communication:** Technology can facilitate collaboration among students and teachers, both inside and outside the classroom.

• Access to Information: Technology provides access to a vast amount of information and learning resources.

Remember: Technology is a tool, not a replacement for good teaching.

Take Aways Resources:

- Look for resources from the Ethiopian Ministry of Education on integrating technology into schools and the ICT Guideline 2023
- Websites like <u>https://www.commonsense.org/education</u> offer reviews of educational apps that can be helpful.

Session 4.4. Building a Sustainable Technology Infrastructure (1 hour)

Introduction (15 minutes)

This session explores the importance of building a robust and sustainable technology infrastructure to support a digital technology leadership culture. It focuses on the practical considerations of maintaining technology within a school environment.

Objectives

- Identify key components of a sustainable technology infrastructure in schools.
- Develop strategies for securing resources and maintaining technology equipment.

Activities

- On a flip chart among the listed aspects of technology infrastructure such as hardware, software, network connectivity, technical support write down your thoughts on what makes these elements sustainable. (15 minutes)
- In groups identify existing resources (financial, human) within your schools and communities that can support technology infrastructure. This could include partnerships with local organizations, grants, or in-kind donations. Resource Mapping (15 minutes)
- 3. Develop an action plan for building and maintaining to sustain available technology infrastructure in their schools. This might involve budgeting strategies, creating

maintenance schedules, or establishing partnerships with technology providers such as Ethio telecom and safari com. Action Planning (5 minutes)

Key Ideas (6 minutes)

- A well-maintained and reliable technology infrastructure is essential for successful technology integration in schools.
- School leaders must consider long-term sustainability plan for the available technology investments.

Implications (4 minutes)

School leaders play a key role in securing resources, advocating for technology budgets, and establishing partnerships to ensure the sustainability of the school's technology infrastructure.

Take Away Resources

Guide to Building a Sustainable Technology Infrastructure in Schools (https://www.cosn.org/environmental-sustainability/)

Sample Budget Template for School Technology (<u>https://tech.ed.gov/netp/</u>)

Session 4.5. Advocacy and sustainability for Leading Change (1 hour) Introduction (10 minutes)

This concluding session explores strategies for advocating for technology integration and ensuring its sustainability within the school community.

Session Objective:

Participants will:

- Develop strategies for communicating the benefits of technology integration to stakeholders.
- Create a plan for securing ongoing support and resources for technology initiatives.

Activities:

- 1. In your group identify your key stakeholders (e.g., teachers, parents, administrators) and brainstorm communication strategies for each group to highlight the positive impact of technology integration. This could involve presentations, newsletters, or showcasing student work created with technology. **Developing a Communication Plan (5 minutes)**
- 2. Discuss how to build partnerships with external stakeholders (e.g., technology companies, NGOs, local businesses) who can provide support and resources for technology initiatives in schools. **Building Partnerships (5 minutes)**
- Discuss how to create a plan for ensuring the long-term sustainability of technology integration in your schools. This might involve developing a budget for ongoing maintenance, establishing professional development plans for teachers, and securing buy-in from staff and community members. Developing a Sustainability Plan (15 minutes)
- Review the key takeaways from the training unit and refine their action plans based on the learnings from all sessions and commit to specific steps they will take to promote a digital technology leadership culture in your schools. Action Planning and Reflection (15 minutes)

Key Ideas: (5 minutes)

- Successful technology integration requires ongoing advocacy and securing support from all stakeholders.
- School leaders must consider long-term sustainability strategies to ensure continued benefits from technology investments.

Implications (5 minutes)

School leaders play a critical role in leading the change process and fostering a culture of innovation around technology integration.

Take Away Resources:

5 Ways to Advocate for Better Technology in Schools - Education and Career News

<u>Sustainability | Free Full-Text | Integration of Technology to Learning-Teaching Processes and</u> <u>Google Workspace Tools: A Literature Review (mdpi.com)</u>

UNIT FIVE: CROSS CUTTING AND EMERGING ISSUES (9 hrs)

5.1. Introduction (45 minutes)

Cross cutting and emerging issues are issues that touch a number of different aspects of a society, on general principles such as gender equality, child right, poverty alleviation, population and family life education, environment, and development to mention but a few. This unit is about gender equity, inclusion and diversity of leadership in schools to promote a diversity responsive school leadership practices. The reason is that school leadership has a crucial influence on inclusive leadership practices as it is both directly and indirectly connected with positive outcomes for learners.

Diversity, equity and inclusion are the ethos that recognizes the value of diverse voices and emphasizes inclusivity and employee well-being as central facets of success. To bring those values to life, companies must implement programs and initiatives that actively make their offices more diverse, equitable and inclusive spaces.

Diversity, equity and inclusion (DEI) refers to the practices and policies intended to support people who came from varying background and give them the resources they need to thrive in the work place. A DEI framework takes in to account factors like race, gender, people who are marginalized, students with special needs (talented, difficulty to learn and disability) so as to help all can succeed.

Besides the concrete professional skills school leaders also need to have psychosocial skills that enable them to be resilient. The impact of conflict or disaster on individuals depends upon their natural resiliency, exposure to disturbing events and the type of support they receive following the experience.

5.2 Unit Objectives:

At the end of this unit trainees will be able to:

- Identify the major cross cutting issues to be integrate in the leadership practices
- Articulate how to facilitate an inclusive school environment for teachers and students
- Design a strategy on how to create student friendly space, communities, schools and classrooms

Session 1. Facilitating Equity, Inclusion and Diversity (3 hours)

Introduction (30 hours)

This session is leadership roles in creating and facilitating conditions that effectively responds to the needs of different groups of school community. Gender equality, inclusion and diversity are about giving equal access and opportunities and removing the barriers of discrimination towards woman and other marginalized and vulnerable population.

Objectives:

After completing this lesson trainees will be able to:

- Analyze the conceptual implications of inclusion and diversity in schools and classrooms
- Identify the nature of diversity in their school
- Articulate strategies to create equal access for everyone in school

Activities

- 1. Ask the trainees to be in group and elaborate what they have done so far to ensure that school systems are able to respond to diversity and to achieve meaningful learning outcomes for all children. Do you still ready to commit yourself to address gender equality and reduce inequality to ensure the inclusion of all? How? (30 minutes)
- 2. How do you think schools can become a gender responsive organization both for teachers and students? Are really, our school leaders creating an inclusive culture in which all staff feels valued, recognized and appreciated, and fostering a true sense of belonging and purpose? The same group has to discuss and present their positions to the class. (35 minutes)

 Diversity and inclusion in school also involves talented and gifted students. As school leader what is your experience to address the needs of such students? Let you prepare an action plan to include such students? (25 minutes)

Key Ideas (30 minutes)

School leaders are considered to be diversity and gender responsive when they can develop a gender and diversity equality strategy, policy, and an action plan on how to achieve specific targets. On top of this school leaders are expected to incorporate gender equality and inclusion in their core values. This allows them to fully enjoy their human rights and taking or joining action to tackle the root causes of discrimination.

What is needed to be realized in school system today include but not limited to just, fair, dignified and school communities/ society where all people have equal rights, responsibilities and opportunities.

Implications (20 minutes)

The ways school leaders incorporate gender equality, diversity and inclusion in their human resource management process and policies matter a lot. This implies, school leaders need to provide women and men or other bases of differences with equal opportunities to access training and development to extend and achieve their full potential.

The only way to ensure and recognize equal access and opportunities and resources for people who might otherwise be excluded is to root out all forms and combinations of discrimination in policy and practices. So, do you have any strategy in your mind to curb such challenges?

Take Away Resources

Kate H. (2024). What Does Diversity, Equity and Inclusion (DEI) Mean in a Work Place?, An HR expert explains diversity, equity and inclusion and the importance of practicing this methodology in the tech industry.

Session 2. Supporting Learners and Teachers with Disabilities (3 hours)

Introduction (45 minutes)

Leadership is one of the main drivers of teaching quality, which is the most important school level influence on learner achievement. Therefore, this session addresses how leadership in school sets direction with a focus on values and discourses underscoring support for teachers and learners with disabilities.

School leaders and leadership teams are responsible for maintaining a school culture that is collegial, interactive and focused on teachers and learners with special support need.

Objectives:

At the end of this session trainees will be able to:

- Formulate a strategy to support teachers and learners with special needs (gifted, slow learners, with disability, marginalized and/or based on socio-economic status)
- Establish a culture and ethos of respecting and responding positively to diversity in all senses
- Support teachers to adapt lesson to individual needs in their class
- Prepare an action plan to cultivate the 21st knowledge and skills of students

Activities

- Ask the trainees articulate on how do school leaders interact with different key actors to promote the inclusion of people with special needs? What are the implications for leadership development and coordination skills? (25 minutes)
- 2. As a school leader, reflect on your school communities efforts in creating an environment responsive to people with physical special needs? Please, list and prioritize the efforts made with specific justification.(20 minutes)
- How you used to ensure that teaching learning materials take in to account the specific learning needs of students with disability in the classroom/school? Present your action plans to the class. (20 minutes)
- As leaders what strategic action you have in place to cultivate and promote the 21st c skills of students and teachers. (10 minutes)

Key Ideas (5 minutes)

Exploring and cultivating a leadership practices that enhance the performances of teachers and learners with disabilities are the key issues today. The culture and organization of too many schools is still to focus on the best teachers on those students with the highest abilities. However, we also need the best teachers and better targeted resources to those most in need. Therefore, now it is high time to challenges and changes the current culture of low expectation of students and teachers with special need.

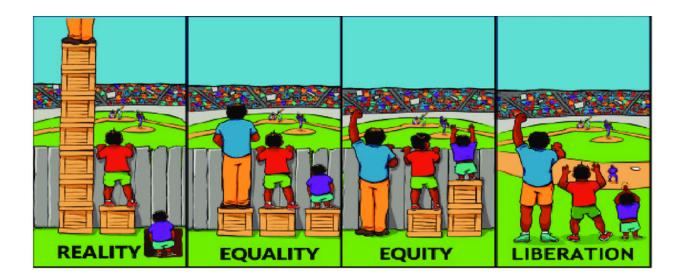
Today more than any time before, school leaders is also responsible to enhance the 21st c knowledge and skill of students. They need to encourage their teachers to support and cultivate the student's global awareness, entrepreneurial literacy, civic, health and environmental literacy, information literacy, creativity and innovation, collaboration and communication skill, flexibility and adaptability skills, social and cross cultural skills, initiative and self-direction, as well as leadership and responsibility. The roles of school leader are paramount in facilitating conditions and support teachers so that they focus and work on these student behavior.

Implications (5 minutes)

Teachers and school leaders are proud of their success in improving the achievement of their students if it is irrespective of their characteristic, circumstances and impairments. Diversity, equity, and inclusion (DEI) are school organizational frameworks which seek to promote the fair treatment and full participation of all people, particularly groups who have historically been underrepresented or subject to discrimination on the basis of identity or disability.

Therefore, how do you address the need for talented students in your school? What about those with learning difficulties? Are you taking the gender issues while you assign people to various positions in the school?

Look at the picture below and try to analyze how you are addressing it in the school leadership. Are these the realities in schools today? Why?



Take Away Resources

- Kate H. (2024). What Does Diversity, Equity and Inclusion (DEI) Mean in a Work Place?, An HR expert explains diversity, equity and inclusion and the importance of practicing this methodology in the tech industry.
- CIPD (2015). Managing an Age Diverse Workforce: What Employers need to know. Chartered Institute of Personnel and Development: London

Session 3. Psychosocial and Psychological Support (3 hour)

Introduction (40 minutes)

The third session of unit five is about the provision of psychosocial support for students and teachers who have psychosocial needs due to stressors, vulnerabilities and challenges. Specially, students need support for coping with normal developmental issues such as wanting to feel normal, and accepted and wanting to fit in with peers. The word 'psychosocial' is a combination of the concepts of the individual 'psyche' and the 'social' community in which the person lives and interacts. If students or teacher lack psychosocial wellbeing, this may cause a greater deal of anxiety, stress and/or depression.

Psychosocial support recognizes the importance of the social context in addressing the psychological impact of stressful events experienced in emergencies. In practice, this means facilitating the reconstruction of local social structures (family, community groups, schools) which may have been destroyed or weakened by an emergency, so that they can give appropriate and effective support to those suffering severe stress related to their experiences (Nicolai, 2003a: 117).

School leaders need to have a strategy to identify a common psychosocial need, recognize the psychosocial challenges, conduct the psychosocial needs assessment, and design a support action plan for the schools. For education professionals, psychosocial work is nothing new as good teaching and learning practices are good psychosocial practices. Educators should strive to create a comfortable and supportive learning environment where learners feel safe, and should recognize that learners affected by conflict may especially need frequent breaks and a nurturing atmosphere to help them recover from the conflict.

Objectives:

At the end of this session trainees will be able to:

- List common psychosocial needs of students
- Conduct a psychosocial support need assessment in school
- Design strategies to support students with psychosocial challenges
- Identify approaches to address the needs of students and or teachers with psychosocial problems

Activities:

- Ask the school leaders to brain storm and reflect on their prior experience on the practices of psychosocial support in their school. As each to present their school readiness and in psychosocial support (35 minutes)
- Let the trainees be in group and discuss on how they approach stigma, discrimination and social isolation in their school. Then present their ideas and prior experiences to the class.(35 minutes)
- 3. What coping mechanisms are in place for students or teachers who faced crises like conflict, international displacement, or pandemic? (20 Minutes)
- **4.** As a leader, how do you determine the causes of stress for teachers and learners? Why it is important to identify the causes? (25 minutes)

Key Ideas (15 minutes)

In leading schools, it should be remembered that, in conflict situations, or following natural disaster, educators and students also have their own physical and psychosocial needs. These needs in turn add additional stress to an educator's life and may lead to absenteeism, burnout and leaving the profession unless school leaders closely support them.

In order to create a stable condition for needy teachers and students, school leaders need to provide necessary support to teachers so that they can support distressed students, begin structured education activities as soon as possible in order to mitigate the psychosocial impact of the emergency on student and staff, in protracted emergencies, support parents, families and communities with activities to address stress and also stablish programmes that focus on longer-term concepts of justice, peace and democracy.

The best practices in providing psychosocial support to students and staff through education are often indicative of effective classroom practices in general. For this school leaders need to determine whether educators feel confident in providing psychosocial support by posing questions like are regular meetings held so that teachers can discuss how psychosocial support is given within the schools.

Implications (10 Minutes)

In general, school leaders are expected to train teachers to monitor children and identify those who may be experiencing special difficulties when they are in school. What is your practical reality in relation to this?

Since, school leaders are responsible to ensure the psychological and psychosocial support of students, how do you monitor the practices of psychosocial support? Psychosocial support should be culturally appropriate. What is the implication of this statement to the school leaders? How do you ensure this in your school?

Take Away Resources

Duncan, J.; Arntson, L. (2004). Children in crisis: good practices in evaluating psychosocial programming. N.p.: The International Psychosocial Evaluation Committee and Save the Children. Retrieved 6 September 2009 from http://siteresources. worldba nk.org / INTMH/ Resources / Evaluating _ Psychosocial_Programming.pdf

IASC (Inter-Agency Standing Committee). (2007) IASC guidelines on mental health and psychosocial support in emergency settings. Geneva: IASC.

INEE(2004). Minimum standards for education in emergencies, chronic crises and early reconstruction. Paris: INEE. Retrieved 10 September 2009 from www.ineesite.org/minimum_standards/MSEE_report.pdf INEE (Inter-Age

Part II – Educational Technology

Part II – Educational Technology

Introduction

This Educational Technology training manual is developed by EdTech Hub ET in collaboration with the Ministry of Education (MOE) to empower general education teachers to leverage technology effectively in their teaching and learning practices. Built upon the UNESCO ICT Competency Framework for Teachers (2018), MoE Digital Competency Framework and the TPACK model of technology integration as its conceptual framework, the manual provides practical guide on how to integrate technology in secondary school teachings. Further contextual factors have been considered, and several consultative workshops were conducted to develop the material.

This professional development resource aims at entrenching digital literacy in teaching and learning, equipping teachers, and learners with ICT skills, and enhancing their capacity to use technology in their day-to-day activities. Above all, it helps teachers to consider and use any locally available technologies for teaching and learning purposes.

The manual helps teachers and practitioners in secondary schools to practice creative use of technology in their classrooms. However, the material is not a comprehensive how-to guide, rather it provides initial possible strategies and practical exercises for schools to consider integrating technology in their lessons. Teachers are encouraged to further explore on EdTech subjects to have a detailed knowledge and skills in their efforts to leverage technology in their lessons through participating in continuous professional development activities.

The first unit of the material details educational technology related concepts, locally available digital resources and their practical implication at the school level. The second unit looks at the basic digital skills needed in our daily life which encompasses through navigating computer and smartphones, connecting to the internet, using the worldwide and web and google educational apps. The subsequent units' contents (units three through five) are intended to help teachers explore various digital tools and resources that will assist them in incorporating technology into their lessons. The emphasis has been on how to help teachers improve both subject knowledge and digital literacy simultaneously. Each unit's sessions feature practical suggestions for the classroom and out-of-school practices, as well as explorations of free webbased resources and activities for preparing. The final unit focuses on the safety and security procedures that should be implemented when using digital resources and working online to preserve teacher data and safety.

The module is suitable for both new and experienced general education teachers, offering comprehensive coverage of essential topics such as an introduction to educational technology, digital technology tools, open educational resources, and digital citizenship. To fully grasp the material, participants can expect to invest approximately two full days in face-to-face setting or two weeks of online teaching in completing the course.

Pedagogical Approach

The pedagogical approach employed in developing this module aligns with the experiential learning model. Learners actively engage with new information through a variety of interactive methods, including discussions, demonstrations, question-and-answer sessions, and other activities. These experiences serve as the foundation for their learning journey, providing concrete encounters that facilitate understanding.

After these initial experiences, learners enter a reflective phase. During this stage, they contemplate their encounters, draw connections to existing knowledge, and conceptualize the newly acquired concepts. Often, this reflective process leads to the understanding of the educational implication and development of novel ideas based on their experiences. Finally, learners are encouraged to engage in a self-assessment to measure and test their understanding and skills within their own context, reinforcing the learning process.

The sessions within this module are thoughtfully organized. They include a brief introduction to the topic, expected learning outcomes, specific activities, key ideas, implications for learning, and takeaways. Teachers are prompted to respond to key questions and note down

activity points for future reference. Consider recording these insights in your portfolio using the provided handout. This structured approach serves as a quick reference for understanding digital literacy and its practical application in teaching and learning. The key ideas highlight essential information related to the topic, enabling educators to apply their learning



Figure 1: Experiential Learning Cycle; Source: Bing

effectively. Additionally, supplementary reading resources are provided for offline activities and further practice. Overall, this process reflects the experiential model of learning.

Training Delivery Methods

In this digital skills training, we leverage a variety of online platforms to facilitate our sessions. Engaging in numerous activities across these platforms offers dual advantages. Firstly, it enhances the interactivity and user-friendliness of our training sessions. Secondly, it grants participants hands-on experience with diverse educational tools, which they can then seamlessly integrate into their teaching practices upon returning to their respective schools. Facilitators are advised to familiarize themselves with these digital tools in advance, ensuring a smooth guidance process for the participants. Facilitators are also required to complete the online EdTech course in advance as it enables them practice with different online training tools and the content of the training. A link to the online training is provided in unit five of this material.

Materials needed to during the Training

As a trainee, you'll require a copy of the trainees' guide (this document), a general lesson plan for each day and an accompanying PowerPoint slideshow to deliver this course. During the training, refer to the relevant slides in the manual. Many of the notes from the manual are also included directly in the slides. Ensure that participants have access to an internet connection for optimal course delivery. Some parts of the course will require participants to use a computer (PC or laptop) with a slideshow program and internet access. Encourage participants to bring tablets or smartphones. Ideally, all participants should have smartphones, but if not, at least one internet-connected tablet or smartphone should be available in each group setting, as practical exercises are an integral part of the course.

Before starting the course, create a working Telegram Group among participants. The group page will serve as our online dashboard for sharing documents and information. We strongly recommend utilizing all available digital resources during course delivery and minimizing paper use.

Learning Outcomes

After completing this module, you will be able to:

- Explain importance of educational technology and its applications their subjects.
- Design technology enhanced lesson plans that can address specific learning objectives.
- Take advantage of locally available digital tools to increase student engagement and active participation.

- Engage in different online and offline educational tools to enhance students' learning outcomes and professional development.
- Use digital resources safely and securely to ensure operational efficiency and data security.

Total Allotted Time to Each Unit (Face-to-Face)

S/N	Unit	Content	Number of Sessions	Allotted Time	Remark
1	One	Understanding Educational Technology	Two	1hr 5'	
2	Two	Basic Digital Skills	Two	1hr 10'	
3	Three	The use of social media for Education Purpose	One	1hr 25'	With practice
4	Four	Online Educational Tools	Three	3hr 20'	With practice
5	Five	Accessing and Creating Digital Content	Three	3hr 50'	With Practice
6	Six	Digital Citizenship	Two	1hr 10'	

UNIT ONE: UNDERSTANDING EDUCATIONAL TECHNOLOGY Introduction

This unit provides you with a set of activities designed to explore the concept of educational technologies and digital literacy. It supports you to understand digital literacy in light of its implications for classroom teaching and learning. You will delve into the concept of educational technology and discuss its impact on how students learn and how you can teach. In addition, you will also explore any possible technologies available in their local areas. Further, it will enable you to explore the concept of Teaching and Larning Using Locally Available Resource (TALULAR) as a framework for identifying technology-based learning resources. This includes digital resources within your schools and towns, tech-savvy colleagues, and even relevant institutions. Think of this session as a springboard for seamlessly integrating technology into your learning environments.

Learning Objectives

At the end of this unit, you will be able to:

- Explore digital resources in your school and consider their use for teaching and learning activities.
- Explain the concept of educational technology and its application in teaching and learning practices.
- Identify key digital literacy skills and its implication for teaching and learning.

Key Topics

Session One: Locally available digital resources and their function

Session Two: The concept of educational technology and digital literacy

Session One: Locally available digital resources and their function.

Introduction

This session contains activities that are designed to provide you with an opportunity to explore any possible technologies available in your school and local areas. It will provide a useful starting point to think of using locally available digital resources in your classroom instruction and professional development. They will further explore the concept of TALULAR for technology-related learning resources. TALULAR is an acronym that stands for Teaching and Learning Using Locally Available Resources. There are different technological resources available in your local context that can be used for teaching and learning. These resources might include any digital resource in your schools.

Activity 1.1. Individual Task (10 minutes)

Individually, list down all digital resources you might know and their possible uses in our daily lives. Consider how technologies are being used in your town, country, and the world at large.

NB: Use Slido/Menti.com to respond (your facilitator will give you a link to Slido.com or Menti.com). After all your peers share their answers on a link shared by your trainer a word cloud will be created as shown figure 1.

Facilitator Notes

Generate a link to <u>https://www.slido.com/</u> or <u>https://www.mentimeter.com/</u> and distribute it to participants. Then direct them to submit their responses via the chosen platform. They will also learn how to create word clouds and use the platforms by doing so. In the event of offline sessions or connectivity issues, provide participants with sticky notes to jot down their responses.

You can create a word cloud like the below one through different online tools like menti.com, kahoot.it, and other related apps. Step-by-step guidelines have been provided in the digital tools' session.



Figure 2: Word Cloud

Activity 1.2. Group Discussion on your digital experience (15 minutes)

In groups of four to six, share your experience of using digital content or resource in your classroom or elsewhere for teaching and learning purpose.

- What was the topic of your lesson?
- How you use digital content or digital resource?
- How do you prepare or from where did you get the content or the resource?

NB: Share your response to the wider team (whole class) through one of the interactive online tools or use a flipchart to share your group discussion.

Facilitator Notes

Provide participants with a link to an online collaboration dashboard, such as Padlet or Jamboard, and instruct them to post their group discussions on the platform. In cases of connectivity issues, participants may use a flipchart to present their discussions. However, they are encouraged to utilize digital platforms for their presentations to foster creativity. Emphasizing the educational benefits of technology, such as reducing paper usage, encourages participants to employ all available digital resources to disseminate their discussion outcomes. For instance, they could photograph their discussion and upload it to the Telegram group page. The facilitator can then display these images via a projector for the entire class to view.

Activity 1.3. Explore Digital Experience of a Teacher (15 minutes) Case Story 1

At Sendafa Secondary School, Mr. Menberu, a dedicated physics teacher, sought to enhance student engagement through interactive learning. Despite resource constraints, his ambition to incorporate technology into his teaching led him to utilize locally available digital tools. Mr. Menberu identified several underused assets within the school, including desktop computers, plasma TVs, tablets, and his personal smartphone. Conversations with the school principal, Mr. Aman, and the ICT teacher, Mr. Naol, revealed that these tools could be effectively employed for educational purposes with minimal maintenance. Recognizing Mr. Menberu's enthusiasm, the school also provided him with complimentary Wi-Fi access to facilitate the use of online educational resources. To Mr. Menberu's surprise, he discovered that many students had access to smartphones and TVs at home. After assessing all available digital resources, he collaborated with Mr. Naol and his department colleagues to devise strategies for leveraging these technologies to make physics more engaging and understandable. Mr. Menberu's initiatives included:

- ✓ Establishing a Telegram group for his class to distribute educational content and maintain communication with students and parents.
- ✓ Offering downloadable video lectures for students to view on any accessible device.
- ✓ Encouraging students to engage with educational TV programs, providing them with specific channel recommendations.
- ✓ Introducing students to physics simulations via the PhET app in the school's digital hub.
- ✓ Utilizing the classroom's plasma TVs to display images and videos that complemented his lessons.

✓ Creating PowerPoint presentations to further enrich his teaching materials. Mr. Menberu's Educational Technology use not only revitalized his physics lessons but also ignited a newfound appreciation for the subject among his students. The positive shift in student performance was evident, and his classroom soon became an exemplar for fellow educators, inspiring them to harness the power of technology in their teaching practices.

Read case story 1 and reflect on the following questions based on Mr. Menberu's experiences:

- What did you learn from his approach to digital integration in his teaching?
- Identify the types of digital content/tools he discovered to aid his students' learning?
- What are the effects of Mr. Memberu's using of digital resources in his classroom?
- How can you apply his experience to your own teaching and learning context within your subject areas?

Session Two: The Concept of Educational Technology

Introduction

In this session, you will investigate various definitions of educational technology and interpret the concept through practices. You will also explore what does not constitute Educational Technology and address common misconceptions within the educational context. They will formulate their personalized definition of educational technology, having examined different concepts in the area. Finally, they will explore key concepts of digital literacy and their implication for teaching and learning.

Activity 2.1. Individual activity on myths about Educational Technology (10 minutes)

This activity helps trainees to identify and explore what is commonly referred to as digital literacy or educational technology but in actual teaching and learning, they are not. Post agree and disagree signs on the wall and read aloud the below sentences then ask participants whether they agree or not. Then, ask them why they agree or disagree.

Facilitator Notes

Read out the below statements one at a time and ask participants to agree or disagree giving reason for their choice. Alternatively, you can attach 'agree' and 'disagree' signs on the opposite walls and conduct the activity in groups. Participants need to have a clear understanding of the various concepts of educational technology particularly as they relate to teaching and learning practices.

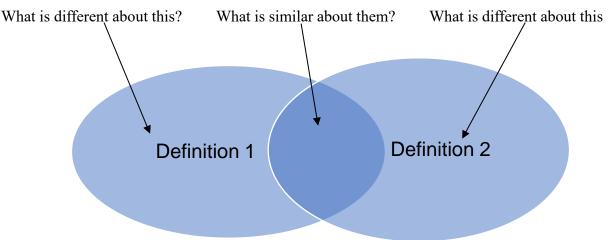
Educational Technology

• Educational Technology is merely the ability to use digital technologies (disagree)

- Being able to understand how a tool works do not tell us how effect it is being used, or the value or purpose for which it is being used.
- Educational Technology is just a set of basic computer skills related to the use of hardware, software, and online resources (disagree). EdTech is the use of hardware, software, and online resources to improve students learning outcomes.
- Digital literacy includes the ability to use digital technology safely and securely (agree). But, while e-safety and security are essential aspects of digital literacy, this is far from the whole picture; it also encompasses the use of technology as methodology, assessment tools, classroom management and to access to digital contents.
- The ultimate purpose of Educational Technology practices is to use different online and offline educational resources (disagree). The ultimate purpose of EdTech is to improve students' learning outcomes through using any available technology. We use technology not for the sake of using it, but only to improve learning outcomes.

Activity 2.2. Define Educational Technology (Individual task 10 minutes)

Individually go to the list of definitions in the 'key ideas' below, then choose two of the definitions provided, the one you are most drawn to and the one which you think is more related to teaching and learning. Then, compare the two definitions. Take the parts of each definition that make the most sense to you and write your definition of educational technology. Share your definition on <u>https://jamboard.google.com/</u>. A specific link to Jamboard will be provided by the facilitator. You might also share your definitions on Telegram group page.



Take the parts of each definition that make the most sense to you and write your own definition of educational technology.



Facilitator Notes

This activity provides practitioners with several definitions of educational technology and supports them to identify common futures among the definitions. They will review the definitions considering their usefulness in teaching and learning. Finally, they will develop their definition of digital literacy.

Key Ideas

In today's digital age, educators have access to a variety of resources, but it's essential to recognize that not all schools or educational settings have equal access to high-tech gadgets or sophisticated digital tools. In many cases, locally available resources play a crucial role in enhancing the teaching and learning experience. Traditional media such as television and radio remain relevant even in the digital era. For instance, Plazma TVs allow teachers to display visual content by project educational videos, animations, or slideshows to enhance explanations and engage students. Again, almost every teacher carries a smartphone these days, even including students. Teachers can use their phones to look up information on the spot, for capturing photos or videos during field trips or experiments and other activities as well. Besides, teachers might also consider using radios for audio-based learning and access to educational broadcast programmes. Similarly, teachers might consider using other digital resources to improve their teaching and learning practices. let's not overlook the value of familiar tools like TVs, radios, and mobile devices. By thoughtfully harnessing these resources, teachers can create dynamic and engaging learning environments that benefit all students.

Definitions of Educational Technologies

- Educational Technology is the use of technology in the instructional processes to enhance both teaching and learning.
- Educational Technology is the use of multimedia to create engaging, effective learning experiences.

- Educational technology is the use of available technological tools for pedagogical purposes and motivation.
- Educational technology is the l use of technology, such as computers, digital technology, and networked digital devices as well as theories for educational purpose in ethical way.
- Educational technology is the use of digital technology in teaching and learning as methodologies, classroom management, formative assessments, teachers' training, etc tools.

Implication to Teaching

Record your responses to the following questions as your key learning areas and future consideration on your handout.

- What did you learn about Educational Technology and how are you going to apply it in your practice?
- What digital resources are easily available in your school and how are you going to use them next year?
- What adjustment you would do to your practice to integrate technology into your lesson based on the above activities?

Self-Assessment (Unit One)

- 1. What is the acronym TALULAR and how does it relate to technology-based learning resources?
 - A. Teaching And Learning Using Locally Available Resources; it helps identify technology-based learning resources
 - B. Technology And Learning Using Local Applications; it focuses on digital literacy skills
 - C. Teaching And Learning Using Advanced Resources; it emphasizes online educational resources
 - D. Technology And Learning Using Global Tools; it highlights the use of international digital resources
- 2. What is the importance of digital literacy in navigating the digital landscape?
 - A. It equips individuals to evaluate information critically
 - B. It focuses on technical proficiency only
 - C. It enhances personal and professional development
 - D. It is a luxury rather than a necessity
- 3. How can teachers leverage digital literacy skills to enhance their teaching and learning activities?

- A. By accessing a vast library of online content
- B. By collaborating with students on digital platforms
- C. By sharing engaging resources
- D. All of the above
- 4. What is the role of technology in our daily life?
 - A. Technology is irrelevant in our daily routines
 - B. Technology enhances connectivity and productivity
 - C. We can live without technology
 - D. Technology benefits only specific group of people
- 5. One of the following is very important to integrate technology into lesson?
 - A. Level of advance of technology
 - B. Availability of online resources
 - C. Learning outcomes
 - D. None of the above

Reference Materials

Туре	Resources
Read	Making Teaching from Locally available resources
Read	We are Teachers online Resources
Read	Definition of Educational Technology
Watch	What is Digital Literacy?
Watch	Why Digital Literacy matters?

UNIT TWO: BASIC DIGITAL SKILLS

Introduction

This unit delves into basic digital skills such as basic organisation of computers, connecting to the intermate, using search engines, and email account creation. The sessions in this unit provides you an overview of the fundamental components of a computer followed by bridging the gap between your computer and the vast world of information. Mastering internet connectivity helps you to access a universe of resources at your fingertips. No exploration of the digital world is complete without harnessing the power of search engines. Here, you'll gain the expertise to navigate these powerful tools effectively, allowing you to locate information with precision and efficiency.

Finally, you will build the skills to create and manage email accounts, transforming them into valuable tools for communication with students, colleagues, and anyone in your professional network. You will also explore the role of email as a tool for teaching and learning.

Learning Objectives

At the end of this chapter, you will be able to:

- Identify different parts of computers and their functions.
- Use the Internet, the World Wide Web, and search engines.
- Create your own personal email account and start using it to improve your teaching and learning practices.
- Exercise using Google Educational Apps for classroom instruction.

Key Topics

Session One: Computers and Smartphones

Session two: Using Web Browser and Email

Session Three: Google Educational Apps

Session One: Computers and Smartphones

Both computers and smartphones are powerful tools that have revolutionized the way we live, work, and communicate. However, they have distinct differences in terms of functionality, portability, and processing power. In this session, you will explore different parts of a computer and its function. Computers, including desktops and laptops, offer greater processing power and storage capacity compared to smartphones. They are ideal for demanding tasks like video editing, gaming, and running complex software.

Smartphones on the other hand, are small, portable devices that offer a wide range of features, including communication, entertainment, and productivity tools. They are powered by mobile operating systems like Android and iOS, and their processing power has significantly increased in recent years.

Activity 1. 1. Navigating Computer (Peer work – 15 minutes)

Take a moment to observe the computer or laptop you are currently using at school or plan to use in the future. Answer the following questions by discussing with your peer.

- What are the different parts of your computer/laptop/desktop? Categorize the hardware parts of the computer into input, process, and output devices.
- What do you do with your computer (Desktop or laptop) you bring with you or find at your schools?
- Are you using computers as teaching and learning tools in your teaching and learning? For what purpose did you use them in teaching and learning?

Activity 1.2. Navigating your phone (Think Pair Share – 10 minutes)

Mobile phones are emerging to be strong learning tools if used appropriately. Still, some educators believe that using cell phones might be a distraction in schools and classrooms as students might use them inappropriately. While still, this remains true, educators and teachers found that phones can be turned into learning tools by putting in place good school rules and policies. Phones have evolved over the years into powerful teaching aids that, when used appropriately, can improve learning outcomes.

Take a time to observe your phone's functions. Consider how you could use your cell phone to assist your students learn better in class. (Consider your local environment) What types of tasks can you complete with your phone as a teacher? Pair your answer with your peer sitting next to you, then share with the whole class what you both have discussed and matched.

Session Two: Using Web Browsers

In this session, you will explore the internet and its use to connect you with a global network which allows for communication and resource sharing across the world. World Wide Web, also known as the web, is a system which contains resources that are accessed through the internet. The World Wide Web uses website sites to create virtual spaces on the internet where videos, files, images, and other digital resources are stored so that you can view, store and retrieve them.

Activity 2.1. Connecting to the Internet (Individual Practice – 5 minutes)

- How would you connect to the internet through your phone or computer?
- Using any digital device you have on your hand, please connect to the internet, and do something. And then show it to your friend or Facilitator?

Facilitator Note:

Conclude the discussion by mentioning that we can connect to the internet in different ways including through data on your phone, WIFI or cables. Wi-Fi is a wireless technology that enables electronic devices with wireless adapters such as laptops, mobile phones, TVs, and tablets to connect to the internet.

Activity 2.2. Using a Web Browser (Group discussion – 15 minutes)

In a group of four to six, engage in a discussion about the following questions:

- What is a web browser?
- Which web browsers do you typically use?
- How have you utilized web browsers to enhance your teaching and learning processes?

NB: Share your response to the wider team (whole class) through one of the interactive online tools or use a flipchart to share your group discussion.

Activity 2.3. Use of Emails (Group Discussion – 10 minutes)

This activity introduces participants to email ultimately aiming at helping them use email as a

communication tool.

Group Discussion (10 minutes)

In groups of four to six, discuss the following questions.

- What is email and how does it function?
- What are the benefits of using email in educational settings?
- What are your current email habits and challenges? How often do you check your emails?



Figure 4:Email; Source@pixabay



- With whom do you usually use emails and for what purposes?
- How can teachers use email for teaching and learning?

Activity 2.4. Create your email (Demonstration - 25 minutes)

Click on this (<u>How to create a gmail account</u>) and watch the video about email creation and then create your email. You can also follow the steps provided in the box below as you create your email. Once, you watch the demonstration, create at least two email accounts on Gmail and Outlook email platforms.



What to do:

To create gmail account follow the following steps.

- Go to the Google Account sign in page.
- Click Create account.
- Enter your name.
- In the "Username" field, enter a username.
- Enter a secured password and confirm your password.

Outlook

What to do:

To create an Outlook email account, you need to follow these steps.

- Go to the Microsoft Outlook website and select Create free account.
- Click Get a new email address. You can choose between @outlook.com or @hotmail.com as your domain name.
- Choose a username that is unique and easy to remember. If your username is already taken, you will need to pick another one.
- Create a password that is strong and secure. You can use a combination of letters, numbers, and symbols.
- Enter your personal information, such as your name, birthdate, and country or region.
- Verify your account by entering the code that is sent to your phone number or alternate email address.

Activity 2.5. Send email messages (Individual Task - 15 minutes)

Now you have already created an email account, please send a message to at least five participants including your facilitator. Then in a group, reflect on the following questions:

• How do you find your experience? Was it difficult or easy?

• What are the common features you saw on the email page? List down all the features on the email page?

Facilitator Notes

Following participants reflection, please show them the main features on email page such as new email (compose new email), inbox, outbox, sent items, delete, etc.

Activity 2.6. Accessing and Navigating Google workspace

Google Workspace for Education provides free educational apps for students and educators. These tools cover various learning needs and include popular options like Google Docs, Sheets, and Slides for collaborative document creation; Google Classroom for managing online classes, Google Search for finding information, and Google Scholar for academic resources. In this activity, you'll learn how to access these tools easily. Later, we'll explore the use of some of these tools in more detail.



Figure 5: Google Apps

Open the Google Chrome website (Google website) and explore the page. Specifically, open the nine dots you see in the top right corner of the Google Chrome browser which represent the app launcher or app grid. When you click on these dots, it opens a menu that provides access to various Google apps. You can find shortcuts

to apps like Gmail, Google Drive, Google Form, and more. This is a convenient way to quickly access your favourite Google tools.

Demonstration-20 Minutes

Use the following what to instruction and access different google apps using the app grid, Navigate the app, list different apps you accessed and state their function. Practice adding and removing different apps into the app launcher.

What to do:

Follow the below guide to access different Google apps either on your computer or phone.

- Make sure you have a Google account: If you use Gmail, YouTube, or other Google services, you already have one.
- Open Chrome browser and go to a Google website.
- Log in to your Google account (if not already signed in)
- Look for the App Launcher icon: It's a grid of nine small squares, usually located in the top right corner of the webpage.
- Click on the App Launcher icon. This will display a list of various Google Apps you can access.
- Choose the Google App you want to use: Click on the icon for the desired app (like Docs, Sheets, Slides, Classroom, etc.) to launch it within the Chrome browser window.

Facilitator Note (Optional): Show participants a five-minute video taken from the reference section. Then ask participants to access google apps through app launcher or app grid on chrome/google website either through their phone or laptop. Give them some time (10 minutes) to do this.

Key Ideas

Computers



Figure 6; Source @Google Image

A computer, typically positioned on a desk, is specifically crafted for individual use. It comprises various interconnected components, functioning as a cohesive unit. Computer hardware parts are categorised into three parts:

• Input Devices: These are the tools that allow you to interact with your computer. Think keyboards, mice, touchscreens, webcams, and microphones. How do you use

these to provide instructions and information to your computer?

- Processing Unit: Imagine this as the brain of your computer. It receives your instructions from the input devices, processes them, and generates the desired results.
- Output Devices: These are the components that display the results of your computer's work. Monitors, printers, and speakers fall into this category. How do they translate the computer's calculations into a form you can understand and interact with?

Computers can be powerful tools that can revolutionize teaching and learning, offering a range of benefits for both students and educators. From providing access to information to fostering

collaboration and developing digital skills, computers have become an integral part of the modern educational landscape.

Smartphones

Smartphones serve as powerful educational tools, providing a portable repository of information and interactive learning possibilities. Smartphones can be utilized both in the classroom and for personal learning for the following activities:

- Access to Information: Students and teachers can instantly tap into the vast internet resources for research, answering questions, and exploring new topics.
- Educational Apps: Numerous subject-specific apps cater to various age groups and learning styles. These apps offer interactive exercises, simulations, and engaging games.
- Collaboration Tools: Communication apps allow students to form study groups, collaborate on projects, and share ideas beyond the classroom.
- Creative Learning: Teachers can use smartphones to create educational videos, presentations, or podcasts, reinforcing their understanding and showcasing their learning.

World Wide Web and Browsers

The World Wide Web, commonly known as the web, is a vast system that houses resources accessible through the internet. Websites create virtual spaces on the web where videos, files, images, and other digital content are stored. As users, we can view, store, and retrieve these resources. Connecting to the internet via Wi-Fi, data, or cable allows our electronic devices such as laptops, mobile phones, TVs, and tablets to access this wealth of information.

As educators, the internet provides us access to information on nearly any subject matter. Whether you're researching, learning, or exploring, the web is a treasure trove of knowledge. Beyond information, the internet enhances our ability to communicate and collaborate with people worldwide.

Web Browsers

A web browser is application software that enables you to access resources and websites on the World Wide Web. Several popular browsers include Google Chrome, Mozilla Firefox, Apple Safari, and Microsoft Edge. These browsers operate similarly and share common controls. Once you master one browser, you'll find it easier to navigate others as well.

Email

Email (electronic mail) is the exchange of computer-stored messages from one user to one or more recipients via the internet. Emails are a fast, inexpensive and accessible way to communicate for business or personal use. Users can send emails from anywhere as long as they have an internet connection. Emails are a great way to communicate with colleagues, students, and parents, as well as to share information, resources, and feedback.

Besides communication, you need an email to access and use the majority of educational tools. Therefore, it is advisable for teachers to have two email accounts: one on Gmail and one on Microsoft. The Gmail account allows you to use Google's free products, while the Microsoft account enables you to access Microsoft's products.

Implication to Teaching

Please note down your reflections on the following prompts, which will serve as key takeaways and future action points:

- Reflect on the insights gained from the session, including any new abilities and knowledge acquired. How do you intend to integrate these into your teaching methods?
- Share your discoveries about the use of email. How do you foresee implementing email communication moving forward?
- List down at least five educational applications provided by Google.
- How would you intend to use different web browsers for educational purposes?

Self-Assessment

- 1. How does a monitor help you interact with your computer?
 - A. It translates calculations into a visual form.
 - B. It allows you to type instructions.
 - C. It processes information.
 - D. It stores data.
- 2. Smartphones can be used for educational purposes by:
 - A. Restricting access to certain websites.
 - B. Downloading social media apps.
 - C. Providing access to educational apps and the internet.
 - D. Making phone calls.
- 3. Web browsers allow you to access:
 - A. Your computer's files
 - B. Websites on the World Wide Web
 - C. Only educational resources
 - D. Video games

- 4. Which of the following is NOT a popular web browser in Ethiopia?
 - A. Google Chrome
 - B. Mozilla Firefox
 - C. Microsoft Edge
 - D. None of the above
- 5. Email is primarily used for:
 - A. Storing documents online
 - B. Sending messages electronically
 - C. Playing games
 - D. Watching videos
- 6. Why might a teacher need two email accounts (Gmail and Microsoft)?
 - A. To separate personal and professional emails.
 - B. To access specific educational tools.
 - C. Because Gmail is free and Microsoft is not.
 - D. There is no specific reason; one account is sufficient.

Reference Materials

Туре	Resources
Watch	Components of Computer System
Watch	Usage of Smartphones
Read	Computer Organisation and Design Books
Read	Set up Google Workspace on an Android device - Google Workspace Learning Center
Read	Microsoft Support
Watch	What is Web Browser?
Watch	How to create email account on Outlook?
Watch	Google Workspace Beginner Guide

UNIT THREE: THE USE OF SOCIAL MEDIA FOR EDUCATIONAL PURPOSES

Introduction

In this unit, you will explore the possibility of leveraging social media platforms, specifically Telegram and Facebook, for educational purposes. These platforms offer a myriad of possibilities for enhancing teaching and learning experiences. By harnessing their features, educators can engage with students, foster collaborative learning environments, share resources, and facilitate discussions. Whether it's creating study groups, disseminating course materials, or encouraging peer interaction, these social media channels hold immense potential to enrich educational practices. Participants will explore strategies, best practices, and activities that demonstrate how these platforms can be effectively integrated into the teaching and learning process, ultimately contributing to improved learning outcomes.

Learning Objectives

At the end of this chapter, you will be able to:

- Explore the use of social media for educational purposes.
- Utilize social media platforms such as Telegram and Facebook to improve your teaching and learning practices.

Session One: Social Media for Educational Purpose

Introduction

In this session, we will explore the use of social media like Facebook and Telegram to facilitate communication between teachers, students, and parents. Using such platforms facilitate discussions, Q&A sessions, and announcements.

Social media can also liven up learning with interactive features like polls and quizzes, while sharing educational resources like videos and articles keeps students engaged. By integrating social media strategically in their teaching and learning, teachers can create a dynamic and engaging learning environment that fosters collaboration, critical thinking, and engagement

Activity 1.1. Using Telegram as Educational Tool (Group work – 10 minutes)



In group of four to six, discuss on the following questions.

• What are the benefits of using Telegram in educational settings?

Figure 7;Source@Google Image

learning?

• How can teachers use Telegram for teaching and

Demonstration (20 minutes)

Use the following Instruction and create a Telegram group. Add your peers or contacts from you address book as a member. Please practice sharing questions, videos and create poll in your telegram group.

What to do:

Step 1: Create Telegram Account

- Connect to the Internet/Turn on mobile phone data.
- Click on play store/App store.
- Download Telegram on your phone Step.
- Install Telegram application.
- **Step 2: Form Telegram Group**
 - Launch Telegram application.
 - Select new group.
 - Add your students by selecting from phone book.
 - Name the group.
 - Start posting learning materials in the form of images, documents or texts to the group.

Facilitator Note

Create a group of four participants (group them by subject matter) and take them through the telegram app. Assist them to create group, post assignment, videos, create poll and complete other functionalities on the app.

Optional: Show them the five-minute video on the use of the Telegram app and then ask participants to create group, post assignment, videos, create poll and complete other functionalities on the app.

Activity 1.2. Using Facebook for educational purposes (Group Work - 10 minutes)

Facebook can be utilized for educational objectives in various ways, enhancing interaction, involvement, and a sense of community beyond the traditional classroom setting. By establishing private groups for your classes, you can encourage ongoing discussions, host question-and-answer sessions, and share educational materials outside of regular school hours.



In groups of four to six discuss on the following questions:

• Do you have Facebook account? What is your experience of using Facebook?

• Have you used it for educational purposes? How Facebook will be used for educational purposes?

Figure 8;Source Google Image

Demonstration (10 minutes)

Demonstrate how to create private groups on Facebook and then support your trainees to do the same in groups. Follow the below steps as you create closed group on Facebook.

Activity 1.3. Creating Group or Page on Facebook (Group Work - 30 minutes)

Use the following instruction and create a Facebook Group Page in your specific subject matter expertise and share relevant resources, initiate chat among your students, run live Facebook videos and complete other activities which you might think are relevant for your teaching and learning.

What to do:

- Make sure you have a personal Facebook account.
- On your Facebook homepage, navigate to the "Groups" section if you want to open Facebook group or navigate to the "pages" section if you want to open Facebook page on the left-hand menu and click the 'create group' button on the page.
- Group Name: Choose a clear and appropriate name that reflects the class or subject.
- Privacy: Select "Closed" from the privacy options. This ensures only approved members can see the group's content.
- Description (Optional): Provide a brief description outlining the group's purpose and intended audience (e.g., students enrolled in Biology class).
- Start by inviting your students who have Facebook accounts (with parental permission if necessary). You can search for them by name or email address.
- As the group admin, you can approve membership requests, monitor discussions, pin important announcements, and manage content within the group.

Key Ideas

Telegram

Telegram is a software used for communication and instant messaging and offers many possibilities such as sending various media files, in addition to making voice or video calls. The Telegram program can be used in education in many ways and means, some of which can be mentioned as follows:

- Send assignments, reading materials and tasks by students to the teacher.
- Create groups and channels for classroom.
- Create polls and quizzes
- Communicate with students from other school.
- Parents communicate with teachers to follow their children performance
- Provide e-content for the home side in the reverse learning strategy.
- Make video, audio and text announcement, lecture, and resources, etc.

Facebook

Teachers might also consider using Facebook for educational purposes in several ways, fostering communication, engagement, and community outside the classroom. You can create private groups for your students to facilitate discussions, Q&A sessions, and sharing of resources beyond classroom hours. Through private group on Facebook, we will encourage the following activities among students.

- Collaborative Projects: Encourage students to work together on projects by using Facebook groups for brainstorming, sharing research findings, and coordinating tasks.
- Sharing Learning Resources: Post links to educational websites, articles, videos, or even create online document folders within the group for students to access relevant materials.
- Polls and Quizzes (informal): Conduct quick polls or quizzes (using third-party apps within Facebook) to gauge student understanding or gather feedback on topics.
- Announcements and Reminders: Share important updates, homework reminders, or upcoming events with the entire group or specific students through private messages.

- Virtual Field Trips and Events: Utilize Facebook Live or pre-recorded videos to share virtual tours of museums, historical sites, or connect with guest speakers remotely.
- Digital Citizenship Lessons: Facebook provides real-world context for teaching online etiquette, responsible content sharing, and critical thinking about information found online.

Important Considerations:

- Privacy is Key: Ensure groups are private and only accessible to students and parents/guardians with permission.
- Set Clear Guidelines: Establish ground rules for respectful communication and appropriate content sharing within the group.
- Parental Involvement: Keep parents informed about the group's purpose and encourage their involvement if necessary.

Additional Tips to create a Closed Facebook Group for educational purposes.

- Consider creating a separate Facebook account specifically for educational purposes, keeping it separate from your personal profile.
- Encourage students to add their full names for easier identification.
- Regularly post relevant resources and discussions to keep the group active and engaging.

Implication to Teaching

Please note down your reflections on the following prompts, which will serve as key takeaways and future action points:

- Reflect on the insights gained from the session, including any new abilities and knowledge acquired. How do you intend to integrate these into your teaching methods?
- Identify the features of Telegram that could be beneficial for educational activities?
- Outline your strategy for utilizing social media platforms like Facebook and Telegram to enhance educational experiences in the forthcoming period?

Self-Assessment

- Telegram Group Engagement Task: Post a welcoming message on your previously created Telegram group page or channel. Here's a suggested greeting: "Welcome, students! This is our dedicated space for learning and growth. Let's embark on this educational journey together with enthusiasm and curiosity." Share the Telegram link with your facilitator and peers.
- 2. Facebook Interaction Task: Initiate a discussion on your Facebook page by posting a topic related to your subject discipline.

Reference Materials

Read	Social Media in Education
Watch	The Use of Telegram for Educational Purposes
Watch	The Use of Facebook for instruction
Watch	Social Media in Education

UNIT FOUR: ONLINE EDUCATIONAL TOOLS

Introduction

This chapter will empower teachers to leverage technology in their classrooms. You will explore a variety of online educational tools that are suited for diverse subjects and learners. The session in this unit will help you to develop the ability to select the most appropriate platforms and resources for specific learning objectives. Teachers practice how the tools might be used appropriately and incorporated into teaching and learning in a way that supports students in developing both subject knowledge and digital literacy. You will need internet access to practice these tools. But you are encouraged to critically analyse the tools in terms of developing critical thinking, problem-solving, analytical skills, etc among students. As you review each tool, please think about how possibly you apply them in your classrooms or outside all aims at improving learning outcomes.

Learning Objectives

By the end of this chapter, you will be able to:

- Identify different types of online educational technology tools that suits for teaching and learning.
- Select appropriate online tools and platforms for different purposes and audiences.
- Utilize communication, assessment and creative tools in their teaching and learning.
- Participate in online learning communities that foster digital skills among teachers, and other stakeholders.
- Utilize artificial intelligence tools during the preparation of lesson plans, assessments, and instructional materials.

Key Topics

Session One: Communication and Collaboration Tools Session Two: Assessment Tools Session Three. Creative Tools

Session One: Virtual Communication and Collaboration Tools

In this session, you will explore different communication and collaboration tools that help you facilitate online discussion and collaboration among students. These tools provide you with various functionalities such as live meetings, document sharing, collaborative works and many more tasks. In addition, you will explore possibilities of creating and managing your groups, and channels, share files and documents, and communicating with students.

Activity 1.1. Using Google Meet

Google Meet allows educators to easily connect and collaborate with students through links or codes, making it perfect for both planned lessons and quick discussions. This fosters remote learning by enabling online classes and virtual tutoring, regardless of location. Engagement is boosted through features like screen sharing and presentations. Google meet is accessible from both web browsers and mobile apps.



Figure 9. Google Meet; Source @Google Image

Question and Answer (5 Minute)

Could you share your experience and familiarity with Google Meet? Have you used it before or observed others

using it? Have you participated in online meetings organized through the Google Meet platform? What

was your experience?

Facilitator Notes:

Encourage participants to discuss their experiences with Google Meet. While it's not essential to pose every question listed previously, consider using them to guide the conversation and extract detailed insights regarding the participants' usage of Google Meet.

Demonstration (25 minutes)

Use the following instruction and demonstrate how to organize and schedule online meetings using Google Meet. Once you completed the demonstration, create your own instant meeting using Google Meet. Then allow share the meeting link with others/your peers and allow them to join the meeting and practice how you would potentially run an online meeting.

What to do: Starting a Google Meet Meeting:

There are two ways to start a Google Meet meeting:

- 1. From the Google Meet website:
- Go to <u>https://meet.google.com/</u>.
- Click "New meeting."
- Choose an option:
- Create a meeting for later: Get a meeting link to share and schedule the meeting for a specific time (optional).
- Start an instant meeting: Join a meeting directly without needing a link beforehand.
 - You'll be the host of the meeting, and others can join using the meeting link or code.
 - 2. From Google Calendar (if integrated):
- If Google Meet is integrated with your Google Calendar, you can schedule a meeting directly within Calendar.
- Create a new event or edit an existing one.
- Click "Add video conferencing" and choose "Google Meet."
- A meeting link will be automatically added to the event details.
- Invite participants to the event, and they can join the meeting using the link at the scheduled time.
 - 3. Basic Controls During a Google Meet Meeting:
- Microphone: Mute or unmute your microphone by clicking the microphone icon.
- Camera: Turn your camera on or off by clicking the camera icon.
- Chat: Send text messages to other participants in the chat window.
- Screen share: Share your entire screen or a specific window with other participants.
- Presentation: Present content from your computer (slides, documents, etc.).
- Leave meeting: End the meeting for yourself (if you're the host) or leave the meeting as a participant.

Additional Tips:

- You can adjust your meeting settings (background blur, captions, etc.) by clicking on the three dots in the bottom right corner.
- Google Meet works on most web browsers and also has mobile apps for Android and iOS.

Facilitator Notes

Please take few minutes to discuss about Google Meet and how to access the app with participants. While the trainees are trying to demonstrate and create an instance meeting or schedule using google meet please round about and assist them.

Activity 1.2. Group Discussion about your Google Meet Experiences (15 minutes)

Discuss the following questions with your group members.

- What are your thoughts on the app?
- In what ways do you intend to integrate Google Meet into your educational practices?
- Could you share your experiences with setting up and conducting an online session? Do you find Google Meet user-friendly?
- Would you be willing to take a lead in organizing concurrent online meetings via Google Meet within your department to facilitate the exchange of experiences and collaborative learning among your friends?

Activity 1.3. Exploring Padlet (Question and Answer - 10 minutes)



Padlet is a digital dashboard tool designed for online collaboration and information sharing. It works like a virtual wall where users can post various content, making it an asset in the educational landscape.

Figure 10;Padelt; Source @Google Image

• What is your experience of using Padlet as a

teacher? Have you used the app before or seen others use the app for educational purposes?

- How can teachers use Padlet to foster collaborative and engaging learning experiences?
- What tasks are well-suited for an online tool like Padlet in educational settings or during instructional processes?

Facilitator Notes:

Encourage participants to discuss their experiences with Padlet. After the discussion, summarize the session with the below information about the use of Padlet for instructional purposes. Demonstrate how to set up a free padlet account and share the link with your trainees. Then ask each participant to write two personal goals on the link provided. Setting personal learning goals is an important way to guide your progress and set expectations for yourself throughout this course. write two personal goals you hope to achieve while taking this course. (Click on the + sign to write your personal goals)

Example of Personal Goals:

1. Learn about education technology and its use in classrooms

2. Practice different online educational tools

Activity 1.4. Practising using Padlet (Individual Task 15 minutes)

Using your mobile phone, create free Padlet account and use the Padlet as online presentation board to discuss a topic or assignment from your specific subject area (If your mobile phone is not functional; please work in pairs or groups).

What to do:

- Go to <u>https://padlet.com/</u> and create a free account with your email address or sign in if you already have one.
- Click on "Create a Padlet" button.
- Choose a layout for your Padlet (Wall, List, Stream, etc.) based on your content and purpose.
- Give your Padlet a title and description (optional).
- Click "Create Padlet."
- Click the "+" button on your Padlet to add content.
- Choose how you want to add content:
- Text: Write directly on the Padlet.
- File: Upload an image, document, or other file.
- Link: Include a link to a website or resource.
- Video/Audio: Embed a video or audio clip from YouTube, Vimeo, etc.
- Add a title and description to your content (optional).
- Click "Save" or press "Enter" to add the content to your Padlet board.
- Click the "Share" button in the top right corner.
- Choose a sharing method:
- Copy Link: Share the link with anyone who has access.
- Embed Code: Embed the Padlet on a website or learning management system.
- Social Media: Share the Padlet on social media platforms.
- Set privacy options for your Padlet (public, private, password-protected).

Session Two: Assessment Tools

Introduction

In this session, we delve into a variety of online assessment tools designed to support teachers in the development of both formative and summative assessment questions for your classroom. Specifically, you will gain an understanding of diverse assessment tools and articulate their applications within an educational context. You'll also get hands-on practice with these tools, integrating them into your lesson planning. Additionally, you'll be guided through the process of creating accounts to access and utilize these various assessment tools effectively.

Activity 2.1. The use of Quizizz (Question and Answer - 5 minutes)



Quizizz is an online interactive tool to assign homework and provide feedback, present quizzes in the form of games and have a real-time understanding of students' academic progress.

Figure 11;Source @Google Image

- What is your experience of using QUIZIZZ as a teacher?
- Have you use the app before or seen others use the app for educational

purpose or in a training setting?

Activity 2.2. Online live activity using QUIZIZZ (20 minutes)

How much do you know about Educational Technology? Run the below assessment using

Quizizz platform

(https://quizizz.com/admin/quiz/6403b3ddfe08dd001db7681d?source=quiz_share)

Facilitator Notes

During the session, ensure to comprehensively demonstrate the app's functionalities, including its ability to generate complete graded reports for each student and how to access and edit premade questions from Quizizz library. Additionally, acquaint participants with the various modes of conducting the session, such as the 'assignment' feature and the paper mode, to provide a thorough understanding of the app's functionality in different contexts.

Activity 2.3. Create your personal free QUIZIZZ account (Individual task - 15 minutes)

Use your mobile phone to create a free quizizz account and explore resources in your subject area (If your mobile phone is not functional; please work in pairs or groups). You can also download the app from Play Store or App Store for optimal use of the app.

What to do:

- Go to https://quizizz.com and log in, or if you are a new user, click 'Get started' and create a new account by using your email address.
- To use an existing quiz, select the 'Search for quizzes' box and browse. If you want to create your own quiz, select 'Create a new quiz', enter a name for the quiz, and choose the relevant subjects. Choose a type of question and fill in the question, as well as answers.
- Add a title image if desired. Select the appropriate language and grade range and add tags to make it easier to search for.
- Either select 'Play live' or 'Assign HW' and choose the desired attributes. Then share the quiz with your students by sending them the link and 6digit code.
- Students can go to https://quizizz.com/join, click 'Join a game', and type in the 6-digit code to participate in the live quiz or complete

it at homework. Once the students are finished, the teacher can refresh the page to view the results.

• You can also access to several quizzes and assignments in the library. You just need to review the questions and use for yourself.

Activity 2.4. Introducing Slido (Question and answer – 5 minutes)



Slido is the ultimate Q&A and polling platform for live and virtual meetings and events. It offers interactive Q&A, live polls and insights

during your meetings/events. What is your experience in using slide for educational purpose or in any other setting?

Activity 2.5. Create free slido account (Demonstration - 15 minutes)

Using the following what to do instruction and create a free slido account and explore the different functionality of the app. Then, support trainees to create their accounts. After participants create their account ask them to design audience questions and provide answer links with their groups.

What to do:

- To create slido account follow the below easy steps:
- Go to https://www.slido.com/Links to an external site.
- Sign up for free
- Start using slido

Activity 2.6. Exploring Survey Collection Tools (Google Form)



From time to time, educators engage in research or action research to enhance their teaching methods and contribute to educational progress. Google Forms

Google Forms provides a convenient platform for creating online forms and surveys, complete with various question types. You can easily share these forms with your audience. Additionally,

Google Forms facilitates result analysis, allowing you to gain insights from your audience's responses. Furthermore, it's a useful tool for preparing quizzes for your classroom.

Question and answer (5 minutes)

Have you used Google Form before? When did you use it and for what purpose? What was your experience in using Google Forms?

Create survey or quiz with Google Form (Demonstration - 20 minutes)

Follow what to do instruction given below and please demonstrate how to create a survey or quiz using Google Forms or you can show participants a demonstration video. Once you completed the demonstration, ask participants to do the following:

- work in pairs and prepare a quiz using Google Forms; share it with at least 10 participants and present the result of your survey with your group members.
- Prepare a short survey using Google Forms and share it with your facilitator and students, then present the result of the survey to whole class (As you prepare the survey refer your specific learning area or subject matter).

What to do:

- Go to <u>https://docs.google.com/forms</u> in your web browser. You'll need a Google account to access it (same as Gmail or YouTube).
- Click the "+" button or choose "Blank form" to start from scratch.
- You can also choose a template for specific purposes like event registration or contact forms.
- Click on the "Untitled Question" box and type your question.
- Select the question type from the dropdown menu (multiple choice, short answer, checkbox, etc.).
- Customize the question further by adding answer choices, making it mandatory, or shuffling options.
- Drag and drop questions to rearrange their order.
- Add sections with titles to categorize related questions.
- Use images, videos, or descriptions to provide additional context.
- Click on the "Settings" tab to configure options like:
 - Who can access: Choose whether anyone can submit the form or require a Google account.
 - Collecting responses: Decide how to collect responses (one response per person or allow multiple submissions).
 - Quiz settings (if applicable): Set grading options, time limits, and feedback for quizzes.
 - Click on the "Send" button to share your form. You can:
 - Copy and paste the link to share anywhere.
 - Embed the form directly on a website.
 - Send the form via email with a personalized message.
 - All responses to your form are automatically collected in a Google Sheet.

- Access the sheet by clicking the "Responses" tab.
- You can view individual responses, analyze data with charts and graphs, and even export the data to other formats.

Facilitator Notes

Support participants as they create their own survey/quiz. Encourage them also to share the form through varies platforms like Facebook and Telegram pages.

Activity 2.7. Practicing Using EvalBee Application



1. Assume a mathematics teacher who teaches three sections of grade ten and two sections of grade eleven, for a total of five sections with an average of 45 students in each class. How long will it take the teacher to check a student answer sheet in an examination that encompasses 40 objective-type questions out of 50?

2. Using your smart phone download the Eval Bee android app from the Play Store, create account and Sign in. Then using the Instruction below practice using EvalBee Optical mark readers App.

What to do:

• Go to google play or app store on your smartphone and download Evalbee apk or <u>https://evalbee.com</u> on web browser and create an account.

Steps to create optical mark reader or recognition (omr)

- Decide the roll number digits (Make it 2)
- Insert an exam set (exam codes).
- Decide Exam Sets (Codes) and
- The number of subjects Make it 1
- Write the subject name in the subject box
- Decide the number of types of items on the section box
- Insert type of the item in sections 1,2 and 3

Section 1 :- Replace it with I. True or False

- True or False items in section 1
 - ✓ Decide number of questions for True or False items
 - ✓ Decide possible options from question type box
- You can allow partial marks (if necessary)

Section 2 :- Replace it with II. Matching

- Decide number of matching items
- Decide possible options
- You can allow partial marks

Section 3:- Replace it as III. Multiple Choice

- Decide number of matching items
- Decide possible options
- You can allow partial marks
- SAVE
- Write class name e.g Grade 10
- Exam Name:- Mathematics
- Select Exam Date It is mandatory
- Finally SAVE.
- Once you set answer sheet click on exam
- Go to Exam management
- Click on Answer Key and set it
- Finally Save it
- Download and print the answer sheet
- Administer the Exam
- Scan each answer sheet
- Go to report
- Record the each student result

Session Three: Creative Tools (Artificial Intelligence)

Introduction

Artificial Intelligence (AI) is a branch of computer science that deals with the creation of intelligent agents, which are systems that can reason, learn, and act autonomously. AI research has been highly successful in developing effective techniques for solving a wide range of problems, from game playing through enhancing services in varies sectors such as education, agriculture and health.

Activity 3.1. Understanding AI (Question and Answer -10 minutes)

- What is Artificial intelligence?
- Have you used it so far or seen while others use it for different purpose including teaching and learning?

Facilitator Notes

Show them AI videos on power point slides and provide highlight of the current development of AI globally. AI is bringing exciting possibilities to classrooms around the world. There are various AI tools available to help teachers with their tasks. We will explore some of the commonly used AIs in the below activity. As conclusion show the AI video on the power point.

Activity 3.2. Stream your task through AI (Gemini and Bing) Lecture - 5 minutes

Copilot/Bing and Bard/Gemini are the two popular apps easily accessible in Ethiopia for varies tasks. Copilot/Bing is developed by Microsoft and Bard is created by Google AI respectively. Both AIs focuses on generating text, translating languages, and answering questions in an informative way.

These AI tools can be a game-changer for teachers by:

- Simplifying lesson planning: Generate ideas, find relevant resources, and outline learning objectives with AI assistance.
- Crafting engaging assignments: Design interactive exercises, propose different question types, and personalize learning pathways for each student.
- Exploring innovative teaching methods: Discover new approaches to explain concepts, spark creativity in activities, and create a dynamic learning environment.
- Provide Educational resources such as images and videos for your lesson and other activities.

By harnessing the power of AI tools like Copilot and Bard, teachers can free up valuable time and focus their expertise on what matters most: guiding their students and fostering a love of learning.

Activity 3.3. Demonstrate how AI works for schools/teachers - 10 minutes

Demonstrate the use of Bing and Bard through performing the following activities:

• Prepare lesson plans, assessment questions and instructional resources for one of the subject matters using Bard?

• Prepare instructional resources for the above topic using Bing AI – ask the AI to provide you with pictures or simulation activities for the above topic?

Facilitator Notes

As you showcase the capabilities of AI, emphasize that it's incredibly user-friendly. Teachers can conveniently access the service via a mobile app, making it even more accessible. Encourage them to download the Bing app on their phones for future use.

Activity 3.4. Practicing the use of AI (Individual Activity - 20 minutes)

Go to Edge or Chrome browsers and use either Bing or Bard as you prepare your next week plan, please generate the following and share it with your group members.

- Lesson Plan for your next week classes.
- Assessment Questions for your next week classes.
- Ask Advise for Methodologies and Teaching aids you might use in your class.

Key Ideas

Communication and Collaboration Tools

Virtual classrooms can be transformed by online communication and collaboration tools, fostering richer educational experiences for students. Platforms like Google Meet, Microsoft Teams, and Zoom create virtual meeting spaces for live video sessions, real-time interaction, screen sharing, and even breakout rooms for focused group discussions.

These tools empower educators to conduct engaging lectures and discussions, address student queries, and facilitate collaborative projects where students can work together on assignments, share ideas, and develop teamwork skills. Additionally, inviting guest speakers from various fields becomes a possibility, enriching students' learning with diverse perspectives. Virtual field trips further broaden horizons, allowing students to explore museums, historical sites, or natural wonders from anywhere in the world. Assessment is also streamlined, with online quizzes, tests, and even oral exams conducted effectively.

Beyond video conferencing platforms, online tools like Padlet offer a dynamic digital canvas. Imagine a virtual bulletin board where students can brainstorm ideas, organize thoughts, create mind maps, share research findings, project summaries, and creative works. It's a space for collaboration, visual presentations, and receiving peer feedback or reflecting on learning experiences.

Similarly, Jamboard, Google's interactive whiteboard tool, fosters a collaborative environment for drawing, writing, and brainstorming. Students can use it to visualize complex concepts, problem-solve across various subjects, dissect scientific phenomena through visual aids, or even create engaging storyboards. From brainstorming sessions to collaborative problemsolving and visual storytelling, these online tools unlock new possibilities for enriching virtual classrooms. Below are easy guide on how to use some of these tools.

Assessment Tools

Interactive tools like Quizizz gamify quizzes, transforming them into game shows with competition and immediate feedback. Google Forms offer versatility, allowing the creation of quizzes, surveys, polls, and even short-answer assessments, with easy data analysis for personalized learning. Slido and Mentimeter prioritize real-time participation. Students can submit questions, participate in polls, and contribute to word clouds, keeping them engaged in lectures and presentations. Finally, Kahoot! takes gamification a step further, turning assessments into fast-paced game shows where students compete for the top spot. These are just a few options that can create a more engaging and data-rich learning environment, fostering interactive assessment platforms.

Artificial Intelligence

The ultimate purpose of using AI in education should be to improve student learning outcomes. AI can be a powerful tool in this journey, but it's crucial to use it wisely. Here are some key points for teachers:

- Supportive Partner, not a Substitute: AI can assist with various tasks, from crafting
 lesson plans and designing exams to assessing student work and managing records.
 However, it shouldn't replace teacher expertise. Review and adapt AI-generated
 materials to fit your specific classroom context.
- **Combating Plagiarism:** Simply submitting student work generated by AI can lead to plagiarism. If you suspect AI use, consider using AI plagiarism detection tools to verify the originality of student responses.

123

- Empowerment, not Automation: AI is here to enhance, not replace, teachers. Be creative! Explore AI-powered apps to streamline grading and free up valuable time. This allows you to focus on what matters most: guiding your students and fostering a love of learning.
- **Strategic use of AI:** By using AI strategically and maintaining a critical eye, educators can leverage its potential to personalize learning, streamline processes, and ultimately, improve student outcomes.
- The Eval Bee application is designed to help teachers create and scan Optical Mark Recognition (OMR) answer sheets for objective types of examinations such as True or False, Matching, and Multiple Choice and generate result reports in real time by scanning the OMR sheet using their phone's camera. It is an Efficient App for Teachers that makes assessment Easy & Effective in No time. Creating answer sheet design in a few clicks, Scan answer sheets in real-time. Using Eval Bee allows the error-free scan and evaluation of printed OMR answer sheets through pre-trained AI and machine learning-based algorithms in real-time. This saves a lot of time and energy for teachers and makes it easy for students and parents to get quick evaluation results.

Implication for Teaching

Record your responses to the following questions as your key learning and future considerations on your handouts.

- What did you learn about communication and collaboration tools?
- What is your plan to communication and collaboration tools in your teaching and learning or any other related task in your school?
- What did you learn about online assessment tools?
- What did you learn about Artificial Intelligence?
- What is your plan to use AI like Bard and Bing in your teaching and learning or any other related task in your school?
- What new skills, experience, knowledge have you got?
- How would you like to apply the new skills in your subject teaching learning activities (consider also exploring anything you took as a learning apart from the platform)?

- 1. Which of the following is NOT a benefit of using online communication and collaboration tools in virtual classrooms?
 - A. Streamlined assessment through online quizzes and tests
 - B. Increased difficulty for students to brainstorm ideas
 - C. Enhanced real-time interaction with teachers and classmates
 - D. Broader learning experiences with virtual field trips
- 2. Platforms like Google Meet and Zoom primarily enable:
 - A. Individual research and writing assignments
 - B. Collaborative brainstorming and project work
 - C. Accessing and reading online textbooks
 - D. Taking timed multiple-choice quizzes
- 3. Jamboard, an interactive whiteboard tool, is most useful for:
 - A. Conducting live video sessions with guest speakers
 - B. Administering online polls and surveys
 - C. Visualizing complex concepts and problem-solving collaboratively
 - D. Providing individual feedback on written assignments
- 4. Which of the following statements accurately describes Quizizz?
 - A. It's a tool for creating traditional written quizzes.
 - B. It offers a game-show style format for assessments with immediate feedback.
 - C. It's primarily used for conducting online surveys.
 - D. It requires students to write code to answer questions.
- 5. Google Forms allows teachers to create all of the following EXCEPT:
 - A. Multiple-choice quizzes
 - B. Open-ended essay questions
 - C. Live word cloud activities
 - D. Short answer response assessments
- 6. The primary benefit of using tools like Slido and Mentimeter in the classroom is:
 - A. To assign homework for students to complete independently.
 - B. To facilitate real-time interaction and participation during lectures.
 - C. To provide in-depth feedback on written assignments.
 - D. To create static presentations for students to view at their own pace.

- 7. Which one of the following is true about Artificial Intelligence (AI) in education?
 - A. AI will replace teachers altogether in the future classroom.
 - B. AI tools like Gemini and Copilot will provide additional support to educators.
 - C. AI is not currently relevant to the field of education.
 - D. Students should be trained in AI development as the primary learning objective.
- 8. 8. Which one the following is not true about Eval Bee?
 - A. It generates error free or 100% accurate reports
 - B. Saves a lot of teachers time and Energy
 - C. It has room for various fractional markings
 - D. It has very limited contribution on avoid exam cheating

Reference Materials

Watch	Using Google Meet
Watch	Online Educational Communication Tools
Watch	The use of padlet for educational purposes
Watch	Online Assessment Tools for Teachers
Watch	The use of Quizziz for teaching and learning
Watch	AI for Educational Purposes
Watch	(690) HOW TO MAKE ANSWER SHEET IN EVALBEE - YouTube

UNIT FIVE: CREATE AND ACCESS TO DIGITAL CONTENTS

Introduction

In this chapter you will discuss on how to access, use, and create digital resources and contents for your teaching and learning. Digital contents can be accessed either online or through hard disks like CDs or flash cards. You will also cover different subject specific Open Educational Resources (OERs) and Ministry of Education digital library portals.

Learning Objectives

By the end of this chapter, you will be able to:

- Create engaging digital content using different platforms for your lesson.
- Explore basic Word and PowerPoint processers functions.
- Learn how to navigate the Ministry of Education's online library and find subjectspecific digital resources that will enrich your teaching.
- Explore innovative ways to integrate digital content both for classroom and remote teaching.
- Access different subject specific Open Educational Resources (OERs) for their classes.

Key Topics

Session one: Create Digital Contents

Session Two: Access Digital Contents

Session Three: Ministry of Education Digital Libraries

Session Four: Open Educational Resources (OERs)

Session One: Digital Contents

In this session, you will comprehend about digital content and explore your digital content experience on how to access authenticated resources from online sources.

Activity 1.1. What is Digital Content? (Question and Answer - 10 minutes)

Discuss with the whole class on the following questions:

- What is digital content?
- Give examples of digital contents?

Facilitator Notes

Ask participants the above questions; the objective of this activity is to provide some general understanding of digital content among participants. Finally, conclude the session by mentioning that digital contents can be produced and accessed in various ways and it encompasses materials published, distributed, and stored in electronic formats, including text, voice recordings, video clips, photographs, and animations.

Activity 1.2. Exploring your digital content experience (Group discussion - 15 minutes)

In group of four to six, discuss the following questions:

- Share your experience of using digital content in your classroom?
- What was the topic of your lesson? How you used the digital content?
- Where did you get the content (source)?

Activity 1.3. A Teacher's Journey

Case Scenario 2: Enhancing Learning with Digital Content (20 minutes)

Scenario: Mrs. Almaz's Biology Class

Mrs. Almaz, an experienced biology teacher, is passionate about creating engaging and effective lessons for her students. She believes that integrating digital content can enhance learning experiences and foster student engagement. Here's how she approaches this:

Mrs. Almaz starts by identifying the learning objectives for her lesson. She considers why the topic is important for her students and how digital content can support those objectives. She selects digital materials that align with the curriculum and provide relevant information. For example, she might use interactive maps, videos, or online simulations to illustrate cell concepts from MoE digital Library or authenticated open educational resources such as Khan

Acadamy. Mrs. Almaz evaluates the quality and accuracy of the digital resources. She checks the credibility of the sources, ensuring that the information is up-to-date and reliable. Mrs. Almaz believes that active student participation is crucial. She chooses digital materials that encourage interaction, such as quizzes, polls, or virtual field trips.

She ensures that the chosen digital content is accessible to all students. She considers factors like internet connectivity, device compatibility, and any necessary accommodations. She provides alternative formats (e.g., transcripts for videos) to accommodate diverse learning needs. After the lesson, Mrs. Almaz seeks feedback from her students. Did the digital content enhance their understanding? Was it engaging?

In small group, discuss about the criteria Mrs. Almaz took into account when selecting digital contents for her lesson? List down all the consideration she has made.

Facilitator Notes:

During the discussion on factors to be considered during digital content selection, inform participants to refer to a similar exercise in Chapter one. As you conclude the discussion, emphasize that teachers need to assess digital content based on at least the following criteria:

- Accessibility: Ensure that the content is accessible to all students.
- *Relevance: Consider whether the content aligns with the learning objectives.*
- Interactivity: Evaluate the level of engagement and interaction among students.
- *Production Quality: Check for high-quality visuals, audio, and overall presentation.*
- *License Information: Be aware of the content's licensing terms.*

Session Two: Creating Digital Contents

Digital content can be considered as any type of media that exists in the form of digital data, including text, images, audio, video, and more. It can be accessed and distributed through electronic devices and online platforms. In this session you will learn different mechanism to create digital contents for your classroom instruction.

Activity 2.1. Preparing PowerPoint Slideshow



Slideshows are very good way to present information in a visually engaging way. They can be used for anything from showcasing visual display of teaching and learning materials to delivering a compelling

presentation at work. In education, we don't use slideshow for only sake of presenting

information, rather the goal is to enhance the learning experience, not to overwhelm students with too much information or distract them with overly complex slides.

Questions and Answers (5 minutes)

What is your experience of using slides for teaching and learning? When did you use it? For what purpose? What was the challenge?

Lecture (10 minute)

Present the development of an educational slideshow (PPT). Creating a slideshow for teaching and learning purposes involves several key steps to ensure that the presentation is effective and engaging. Here's a guide to help you create an educational slideshow.

- Define the Objectives: Set clear learning goals for your presentation.
- Know the context: Understand the strengths, weaknesses, and needs of your students. Consider their age, language skills, accessibility and ability to interpret concepts.
- Plan Your Content: Think of what you want to put on your slide tables, charts, diagrams, or timelines, etc.
- Design the Slides: Use a clean and simple design. Use your placeholder wisely.

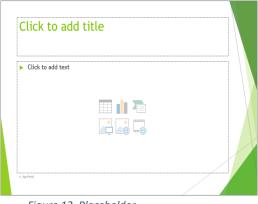


Figure 12. Placeholder

• Make It Interactive: Engage your students by incorporating questions, discussions, or problems to solve.

• Make it short: Don't overwhelm students with too much information or distract them with overly complex slides; use the general rule of 5/5/5. 5 words in each line, 5 lines in each slide, 5 text heavy slide on a subject.

Practice and Delivery: Rehearse your

presentation to ensure smooth delivery.

Demonstration (20 minute)

Demonstrate what you have explained. Open your slideshow, select a topic and create PowerPoint presentation; find an image and paste it as well. Add a caption to your image too. If you have time and think they are ready for it, you could show animation, design options and other functionality for the power point at this point too. Design options on PowerPoint will suggest designs for your slide given what you have put on it already. Alternatively, you can also show participants a five-minute video.

Once you completed demonstration, ask participants to create their slideshow with text and images. They should make no more than 3-4 slides here. Give them some time (10 minutes) to do this. Additionally, please ask participants to **record** themselves while presenting the slideshow. After recording, they should share the recordings with their respective groups.

Activity 2.2. Using Google Slide to Create a Presentation (10 minutes)



If you don't have access to a laptop or desktop; you can create PowerPoint using Google Slides with your phone. Follow the following steps to download and create PowerPoint using Google slide.

Creating a PowerPoint presentation using Google Slides on your phone is a convenient option when you don't have access to a laptop or desktop. Here's a simple guide to get you started:

- Go to your phone's app store (Google Play Store for Android or App Store for iOS).
- Search for "Google Slides".
- Download and install the app.
- Open the Google Slides app.
- Sign in with your Google account. If you don't have one, you'll need to create it.
- Tap on the "+" icon, usually located at the bottom right of the screen.
- Select "New Presentation" to start creating your slides.
- Google Slides will offer you a variety of themes to choose from.
- Select one that suits the style and purpose of your presentation.
- Tap on the slide where you want to add content.
- Use the toolbar to insert text, images, shapes, and more.
- You can add new slides by tapping on the "+" icon near the slides preview.
- Your presentation will be automatically saved to your Google Drive.
- You can share it with others by tapping on the "Share" icon and entering their email addresses.

Activity 2.3: Using Word Processing (Question and Answer – 5 minutes)

Word processing software is a powerful tool used for creating, formatting, and editing various types of documents. Whether you're jotting down thoughts, taking meeting notes, drafting emails, or writing standard operating procedures word offer much more than the typewriters of old.

- How comfortable are you with word processing programs?
- How often do you use them?

Activity 2.4: Practice using Word (20 minutes)

Go to this link <u>Basic Function of Word</u> and explore how to create a text document. Then using a Microsoft word prepare a text document based on the guidance on the resource. Align your document with your subject discipline.

NB: As they create their worksheet, don't forget to practice using features like select, copy, paste, and other functions of the Word.

Activity 2.5: Using Google Docs to create a Word document (20 minutes)

Google Docs is an online word processor that lets you create and format documents and work with other people using Google Docs. On your computer or phone open Google Docs. You can access Google Docs through the nine dots on Chrome browser (Please refer accessing Google Apps in unit two).

Activity 2.3. Accessing Image for your instruction (Group Discussion - 10 minutes)

This activity focus on how to find and copy images from the internet to use in your teaching as a resource. This can be a valuable way to enhance your lessons and engage students. In group of four to six, discuss on the following questions:

- Where did we get images for our worksheets? Or when we need images for different instructional purpose?
- How do we copy images?
- Do we need to consider anything as we copied images?





Microsoft Bing



Figure 13;Free Source of Images; Source @Google Image

Facilitator Notes:

Ask if participants have ever downloaded an image from the internet and where they sourced it from, with Google Images likely being a common response. Educate them on various platforms where teachers can access free and legal images, emphasizing the importance of looking for images with a Creative Commons (CC) license. Mention that search engines like Google Images and Bing Images allow users to filter for CC images.

Highlight that platforms such as Pixabay and Unsplash specialize in providing free images. Additionally, introduce the Noun Project as a valuable resource offering free icons for various purposes, particularly beneficial for educators creating worksheets or presentations.

Guide participants on how to search for legally usable images on search engines like Google by navigating to the Usage Rights menu and selecting Creative Commons Licenses. This filter ensures that only images with the CC license are displayed.

Demonstration (15 minutes)

Do an example with Google Images, Unsplash, Pixabay and Noun Project. Take participants through the steps of copying images and use on a working document.

Group Work (15 minutes)

In group of four to six, ask participants to access images from one of the above sources for a lesson in their specific subject area. Let groups work on different source of image such as Bing AI image, Google Images, Unsplash, Pixabay and Noun Project at a time. Finally, allow them to present their result to the whole class. Ask them also to reflect on their experience.

Session Three: Open Educational Resources

Open Educational Resources (OERs) are teaching, learning and research materials in any medium that can be found 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. Below are some educational resources for your consideration:

Subject specific open educational resources (OER) are learning materials that are tailored to a particular subject or discipline, such as mathematics, history, or engineering. They can include full courses, course materials, modules, textbooks, videos, tests, softwares, etc. Subject specific OER can help teachers and learners to find relevant and quality resources for their teaching and learning needs.

Some examples of platforms that offer subject specific OER are:

- <u>https://oercommons.org/</u>: A public digital library of OER that allows users to search and browse OER from various sources and subjects. Users can also create and publish their own OER using the Open Author tool.
- <u>https://merlot.org/merlot/.</u>A curated collection of free and open online teaching, learning, and faculty development services contributed and used by an international education community. Users can search for OER by discipline, material type, audience, language, and more.
- <u>https://phet.colorado.edu/</u>: Simulations and animations for STEM subjects.
- <u>https://literacy.concordia.ca/en/</u>: Resources for English Language.

Activity 3.1. How to Use OERs (Presentation/Lecture/ -10 minutes)

When we use resources from OERs, it is very important to ask ourselves the following questions:

- How does the content related to my learning outcomes?
- Who created the content? who is using the content?
- When was last updated?

It is also important to apply the 5R activities: retain, reuse, revise, remix, and redistribute as you plan to use contents from open educational resources.

- Retain a copy of an OER on your device or cloud storage for future use.
- Reuse an OER in its original form for your lesson, such as showing a video or assigning a reading.
- Revise an OER by modifying it to suit your needs, such as adding annotations, comments, questions, or feedback.
- Remix two or more OER by combining them to create a new resource, such as integrating a text with an image or a quiz.
- Redistribute an OER by sharing it with others, such as your students, colleagues, or online.

Group Discussion (20 minutes)

In small groups, review one of the examples of open educational resources provided in previous pages and explain on how to apply the 5R principles as you select content for your lesson.

Activity 3.1. Exploring Ministry of Education e-library Resources

Ministry of Education Ethiopia has established e-library for teachers and students to access relevant educational resources online through cloud technology. The e-library enable teaching and learning resources to be available online through computers and smart phones. Through this platform teachers and students will have access to approved resources for teaching and learning use.

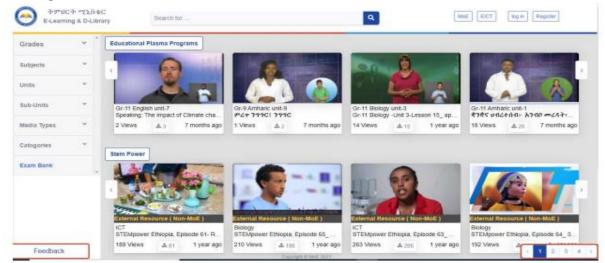


Figure 14. MoE Digital Library

Group Discussion (15 minutes)

In groups of four to six, discuss on the following questions:

- Have you ever utilized digital content from the MoE digital library portal?
- What specific topic or subject was covered in the lesson where you used digital content from the portal?
- Describe how you incorporated the digital content into your teaching.
- Was the content beneficial for enhancing your lesson?
- When selecting content from the portal, what criteria did you consider?

Demonstration (20 minutes)

Use the following what to do Instruction and Demonstrate how to access digital content from MoE Digital Library. Please select contents which are relevant to your subject matter area and describe to your colleagues on how you would use it in your lesson?

What to do: Step 1: Go to: http://elearn.moe.gov.et. Step 2: Select content of your choice based on grades, subjects, units, media types, and categories on the left side of the page.Step 3: Use selected content for the work at hand.

Activity 3.3. MoE Learn English Platform (https://learn-english.moe.gov.et/)

MoE learn English platform is a free of charge or **zero rate** site for learning English language and skills. It offers various resources and activities for different levels of learners, from grade KG to grade 12. You can find videos, podcasts, and quizzes on topics such as grammar, vocabulary, pronunciation, listening, writing, and more. You can also create an account to access the site and track your progress. The site is developed by Ministry of Education Ethiopia in partnership with ethiotelecom. The site is updated regularly with new content and features.



Figure 15. MoE Learn English Website

Group Work – Review MoE Learn English Website (20 minutes)

In group of four to six, review MoE Learn English Website (https://learn-english.moe.gov.et/)

- What are your impressions of the site?
- Does it use zero rating or charge you for data usage?
- Are the contents useful and relevant for your teaching and learning?

Activity 3.4. Review Khan Academy Resources (https://www.khanacademy.org/)

Khan Academy is one of the examples of open educational resources that deliver high-quality educational content across multiple disciplines. This platform provides on its website, or on the Khan Academy's YouTube[™] channel, an advanced learning analytics module with useful visualizations. The Khan Academy platform enables online courses in which lessons are produced in the form of videos, interactive activities, and challenges.

Courses 🔺	Search	Q	🚫 Khan Academy
MATH (NCERT)		MATH FOUNDATIONS	PACE (SOE PUNJAB)
Class 1		Class 6	Math
Class 2		Class 7	Science
Class 3		Class 8	English
Class 4		Class 9	SCIENCE (NCERT)
Class 5		Class 10	Class 9 Phy

Figure 16. Khan Academy

Students can watch videos and solve supplementary practice exercises to understand various lessons and concepts more easily. Also, teachers can make use of Khan Academy to supplement the teaching process and provide extra content to learners to enhance learning.

Individual Task (15 minutes)

Go to <u>https://www.khanacademy.org/</u> and identify content related to your subject area. Which content do you identified? How are you going to use the content to enhance learninig outcomes among students? How do you explain the whole experiences of accessing content from Khan Academy?

Activity 3.5. YouTube as Source of Educational Contents

YouTube is not open educational resources, but it can be a powerful tool for teachers to enhance their lessons and cater to different learning styles. Here are some ways teachers can leverage YouTube for educational purposes:

- Finding educational content: YouTube offers a vast library of educational videos on almost any subject imaginable. Teachers can find documentaries, lectures, experiments, simulations, and instructional videos created by educators or educational institutions.
- Visualizing complex concepts: Scientific phenomena, historical events, or abstract ideas can be brought to life through engaging and informative videos. This can be particularly helpful for students who learn better visually.
- Introducing new topics: A captivating and well-made video can spark students' curiosity and introduce a new topic in a stimulating way.
- Flipped classroom approach: Teachers can use YouTube videos for students to watch at home, freeing up classroom time for discussions, activities, and deeper exploration of concepts.

Additional tips for teachers using YouTube for Educational Purpose:

- Carefully curate content: Since not all YouTube content is created equal, teachers need to preview videos and choose those that are accurate, age-appropriate, and meet learning objectives.
- Consider copyright: Copyright laws apply to YouTube videos. Teachers should be familiar with fair use guidelines to ensure they are using content legally.
- Engage students with the video: Simply showing a video isn't enough. Teachers should prepare discussion questions or activities to help students process the information and connect it to the lesson.

Individual Task (15 minutes)

Go to YouTube and identify content in your subject matter for any topic you might think to explore further. Which content do you identified? How are you going to use the content to enhance learning outcomes among students? How do you explain the whole experience of accessing content from YouTube?

Activity 3.6. Exploring Digital Skills Training for Educators (EdTech 101 online course)

The EdTech 101 Course has been thoughtfully prepared as a complement to the face-to-face digital training. Its primary purpose is to allow educators (teachers, principals and supervisors) to continue practising the use of digital tools and platforms once they return to school. In addition to the content covered during in-person sessions, this online course provides additional

insights on how to seamlessly integrate digital technologies into teaching and learning practices.

The course is suitable for both new and experienced teachers, offering comprehensive coverage of essential topics. Participants will explore an introduction to educational technology, delve into various digital platforms, discover open educational resources (OER), and gain an understanding of digital citizenship. To fully grasp the material, participants can expect to invest approximately two weeks in completing the course. However, the flexibility of the course allows educators to take it at their own pace, anytime and anywhere that suits them. Based on their choice, teachers can also choose to focus on specific sections that interest them once they joined the course.

Join the training on Canvas with the following steps:

- Open a Browser and Go to: <u>https://canvas.instructure.com/enroll/CX4AC8</u>
- Complete the Request Form: Fill in the required information:
 - New user details (if applicable).
 - Full name.
 - Email address.
 - Agree to the terms of use.
 - If there's a Captcha form, complete it as well.
 - After submitting the form, you'll be directed to the course dashboard.
 - Here, you'll find information related to the training course.
- Activate Your Account via Email:
 - Check your email inbox for an activation email from Canvas.
 - Click the activation link provided in the email.
 - You'll be taken to a page where you can set your password.
- Access the Course:
 - Now that your account is activated, you can log in to Canvas using your email and the password you just set.
- Mobile Access:
 - For convenience, you can also download the Canvas Student App from the App Store or Google Play Store on your phone.
 - Use the app to attend the course on the go.

Individual task (45 minutes)

Get registered yourself on the course. Please follow the link provided to register for the course. Explore the course features, check your email, and activate your account using the activation email. Your facilitator will guide you through the registration process.

Key Ideas

Digital Content

Digital content can be a useful tool if teachers use it appropriately in improving learning outcomes among students. Digital tools might be employed in diverse ways to enhance learning experiences. One significant advantage of using digital content is its capacity to explain complex concepts in a more captivating manner. Teachers leverage interactive tools, simulations, and educational games to simplify the topic under discussion. Moreover, digital content facilitates differentiation, catering to students with varying learning styles and paces. Learners can revisit lessons and access supplementary resources online, fostering a self-directed learning environment. Additionally, digital content streamlines tasks for teachers—pre-made materials, online assessments, and grading software save valuable time, allowing personalized feedback to students.

Below are some of the factors we might consider as we select digital resources for our lesson.

- Learning outcomes: What knowledge, skills and attitudes do you want the learners to achieve? In fact, technology should not drive learning but rather the set learning outcomes.
- Age of learners: the technology tools to be used should consider learner development stage and their readiness to use it.
- Access to technology: What technology is available for use in the teaching and learning process.
- Learner centeredness: Does the technology chosen allow the learners to learn collaboratively on their own and can they be able to use it without depending on the teacher.
- Creativity and innovation: does the technology arouse creativity and innovation in the learners? Can the learners suggest other ways in which they can use the technology?
- Safety of learners: This should be a paramount importance especially when learners are expected to use online tools and resources.
- Teacher competence: How the teacher use the technology with confidence as he facilitates learning.
- Inclusiveness: technology instructional design should be accessible to all learners including those with special needs.

Images

Using visuals such as images play a crucial role in enhancing both teaching and learning. They capture students' attention, simplify complex ideas, and act as translators for abstract concepts. Thought-provoking images also stimulate discussions and critical thinking. For younger learners and those acquiring a new language, pictures bridge the gap between words and their meanings, reinforcing vocabulary acquisition. By incorporating a variety of visuals, teachers create an inclusive learning environment that fosters deeper understanding and a lifelong love of learning.

Power Points

Teachers and educators often utilize presentation tools like PowerPoint and Google Slides to create educational content for their students. These platforms allow them to save time and seamlessly incorporate various resources into their materials. Additionally, some educators choose to record their presentations using PowerPoint's recording feature, making it convenient to share with students for future reference.

Ministry of Education e-Library

Ministry of Education e-Library provides a wealth of educational content, most of them verified and approved. Access a variety of engaging formats to suit your learning style, including educational videos, audiobooks, and textbooks. Follow the below steps to access resources from MoE e-Library.

Open Educational Resources (OERs)

Open educational resources (OERs) are transforming classrooms by offering teachers a treasure of free and adaptable learning materials. These resources, which can include digital textbooks, interactive exercises, and multimedia content, empower teachers in several ways. Firstly, OERs tackle the issue of cost. By incorporating them, teachers can reduce the financial burden on students who might otherwise struggle to afford traditional textbooks. Secondly, OERs are incredibly flexible. Many come with open licenses, allowing teachers to modify and tailor them to their specific curriculum and student needs. This fosters a more personalized learning experience. Additionally, OERs can tap into the power of collaboration. Teachers can share and adapt resources developed by colleagues around the world, promoting innovation and the exchange of best practices. Ultimately, OERs empower teachers to create dynamic and engaging lessons that cater to diverse learning styles, all while promoting a more equitable and accessible learning environment for all students.

Implication for teaching

Record your responses to the following questions as your key learning and future considerations on your handouts.

- What did you learn about digital content and how are you planning to use them in the future?
- What is your plan to use images from different sources for your teaching and learning or any other related task in your school?
- What is your plan to use slideshow presentations in your teaching and learning or any other related task in your school?
- What did you learn about MoE e-Libraries and Learn English platforms?
- What are Open Educational Resources and How are going to use them going forward?
- What is your plan to use MoE Digital Library and Learn English Platform for your teaching and learning or any other related task in your school?
- How are you going to encourage your students to access the MoE digital libraries and other OERs?
- What did you learn about Khan Academy and YouTube?
- How are you going to encourage your students to access digital content from YouTube and Khan Academy Sources?

Self-Assessment

- 1. What is one significant advantage of using digital content in education?
 - A. It saves teachers time by automating grading.
 - B. It fosters self-directed learning among students.
 - C. It replaces traditional textbooks entirely.
- D. It simplifies complex ideas through interactive tools.
- 2. How do images enhance teaching and learning?
 - A. By providing pre-made materials for teachers.
 - B. By bridging the gap between words and meanings.
 - C. By automating assessments.
 - D. By replacing traditional textbooks.
- 3. Which presentation tools are commonly used by educators?
 - A. Google Sheets and Excel
 - B. PowerPoint and Google Slides

- C. Word and Notepad
- D. Prezi and Keynote

4. How can teachers create a PowerPoint presentation using Google Slides on their phones?

- A. By downloading the Google Slides app and signing in with their Google account.
- B. By using a laptop or desktop computer.
- C. By searching for "Google Slides" in the app store.
- D. By selecting a theme from a variety of options.
- 5. What does the Ministry of Education e-Library provide?
 - A. Free laptops for students
 - B. Educational videos, audiobooks, and textbooks
 - C. Online assessments
 - D. Grading software

Reference Materials

Read	Importance of Using PowerPoints and Word as a Teacher
Read	The Basics of Word
Read	The Basics of PowerPoints
Watch	How to use Google Docs and Slides
Watch	Creating Quality Digital Contents
Read	Best Practice for Teaching with Digital Content
Read	How to use image effectively in your lesson
Read	Why Should I use OERs?
Watch	Impactful use of OER
Read/Watch	http://elearn.moe.gov.et.
Watch	https://learn-english.moe.gov.et/
Read	How to join online course on Canvas

UNIT SIX: DIGITAL CITIZENSHIP

Introduction

In this chapter, you will discuss about safe use of technologies such as mobile phone, computers, tablet, and the internet. Specifically, you will discuss on risks in connection with internet use and safety measures.

Learning Objectives

By the end of this chapter, you will be able to:

- Explore safe and responsible behaviour in using internet and communication technologies.
- Explain the risks associated with using the internet and communication technologies.
- Contextualize e-safety rules and guidelines for their schools.

Key Topics

Session One: Internet Risks and e-Safety

Session Two: Computer and Smartphones Safety

Session One: Internet Risks and e-Safety

Activity 1.1: Exploring the concept of e-Safety. Think Pair Share (10 minutes)

What is e-Safety? With what concept or term does e-Safety connected?

e-Safety is often synonymous with online, or internet safety and it is concerned with being safe and appropriate use of technologies without compromising personal security and safety.

Activity 1.2: Unpacking Risks Associated with Internet

Group Discussion (15 minutes)

Students are often unaware of the potential danger in relation to internet and are susceptible to unsafe online behaviour. Now, in group of four to six, discuss on potential e-Safety risks. After you finish your discussion, share with your facilitator on any convenient platform for you.

Activity 1.3: Exploring e-safety risks.

Group Discussion (15 minutes)

In small groups, discuss on the following potential e-safety risks. (Each group might discuss at least on two of the risks mentioned below). Then, prepare online presentation using Google Slides or any convenient platform and present for the whole class.

1. Social Networking Risks	6. Cyberbullying
2. Age restrictions	7. Copyright
3. Sharing Online profiles/Security risk	8. Exposure to inappropriate online content
4. Publishing content	9. Excessive time online

5. Uploading Photos and Videos

Activity 1.4: Fake News

Being online exposes children to number of fake news and unverified information which put them and even others to risks of different kind.

Whole class discussion (5 minutes)

- What is fake news? what is news?
- Give examples of fake news on digital platforms?

Facilitator Notes

- *News* is factual information about a recent event that is new to people and will be of interest to them.
- **Fake news** is lies and/or propaganda told for a political or commercial purpose and influence millions of people. It's often deploying through digital technology, social media, news networks to go viral and reach people very quickly.

Activity 1.5: Fact, Opinion and Fake news

Whole class discussion (10 minutes)

- What is the difference between facts and opinion?
- Give some examples of facts, opinion and fake information on the similar topic?

• How can we help students to differentiate between facts, opinions, and fake information?

Example of Fact and Opinion

- Fact: Ethiopia is one of the Country in East Africa.
- **Opinion:** Ethiopia will soon become middle income Country.
- **Fact:** Abebech Gobena has provided education opportunity for many Ethiopians through her NGO.
- **Opinion:** Abebech Gobena is a well-remembered person in Ethiopian philanthropy work. Fact: Addis Ababa is the capital of Ethiopia.
- **Opinion:** Pollution is the main problem facing Addis Ababa.

Media Detection questions

Always encourage your students to ask themselves the following questions as they come across media contents.

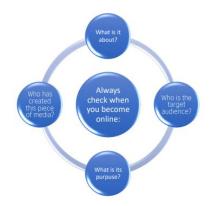


Figure 17. Media detection questions

Activity 1.6: Adopting e-Safety rules for your school

Group Discussion (15 minutes)

Do you have e-safety rules at your school? In small group discuss on possible e-Safety rules for students and teachers in your school. Then, post your answers with your group name on top of it on one of interactive platforms.

Facilitator Notes: Basic e-safety rules

Social networking poses little risk if students follow basic e-safety 'rules' such as:

• *keeping personal information private*

- respecting the rights and feelings of others
- Stick to the given assignment (importance of providing specific links)
- thinking about the long-term consequences of what you post online
- reading and adhering to the terms and conditions of use

Session Two: Computer and Smartphone safety

Activity 2.1. Using Computer and smartphones safely (15 minutes)

Make a group of four to six members and discuss on the following issues.

- 1. How do you give care and protect your devices from malfunctioning and break?
- 2. What safety measures due you take to protect and secure your devices from an allowed users, virus and cyber-attacks?

Key Ideas

Internet Risks

The following are common internet risks that we should be aware of and also educate our students.

- Social Networking Risks:
 - Social media platforms can expose users to cyberbullying, inappropriate content, and privacy breaches.
 - Discuss how to manage privacy settings, avoid sharing personal information publicly, and recognize fake profiles.
- Age Restrictions:
 - Many online services have age restrictions to protect children from inappropriate content.
 - Explore the importance of adhering to age limits and the risks associated with underage access.
- Sharing Online Profiles/Security Risk:

- Sharing personal information online can lead to identity theft, phishing attacks, and stalking.
- Highlight the need for cautious profile sharing and strong passwords.
- Publishing Content:
 - Posting content online (blogs, videos, etc.) can have unintended consequences.
 - Discuss responsible content creation, copyright awareness, and avoiding harmful material.
- Uploading Photos and Videos:
 - Sharing images and videos can lead to privacy breaches or misuse.
 - Talk about consent, geotagging, and the impact of sharing visual content.

- Cyberbullying:
 - Online harassment affects mental health and well-being.
 - Address strategies to prevent and respond to cyberbullying.
- Copyright:
 - Using copyrighted material without permission can lead to legal issues.
 - Educate about fair use, Creative

Commons licenses, and proper attribution.

• Exposure to Inappropriate Online Content:

- Children may accidentally encounter harmful or explicit material.
- Discuss safe browsing habits and parental controls.

• Excessive Time Online

- Spending too much time online can impact physical health, sleep, and social interactions.
- Explore healthy screen time practices and digital balance.

Safe Use of Computers and Smartphone

Maintaining clean digital devices is crucial for both the longevity of the devices and our own well-being. Let's explore some reasons why it's essential to keep your electronic equipment clean:

1. Device Performance and Longevity:

- Regular cleaning helps prevent dust buildup and clogged fans, which can lead to overheating and damage to internal components.
- Clean devices run more smoothly, ensuring optimal performance and extending their lifespan.

2. Improved Appearance:

- A clean device looks better and is more pleasant to use.
- Considering how much time we spend interacting with our devices, an improved appearance positively impacts our daily experience.

3. Health Protection:

- Think about all the surfaces you touch throughout the day. Now imagine transferring that to your devices—keyboards, screens, and touchpads.
- If you don't clean your devices, they can harbour bacteria and germs, posing health risks when you touch your face or hands.
- Safe use of devices helps your eye from being damage due to inappropriate use.
- 4. Avoiding Constant Replacements:
- Regular cleaning reduces wear and tear, preventing premature device failure.
- Frequent replacements are inconvenient and costly, so maintaining your devices can save you time and money.

Implication for Teaching

Record your responses to the following questions as your takeaway and future consideration on your handouts.

- What did you learn e-safety?
- What are the potential risks in using digital technologies (internet)?

- What new skills, experience, knowledge have you got?
- How would you like to apply the new skills in your subject teaching learning activities?

Self Assessment

1. What is the difference between facts and opinions?

- A. Facts are subjective statements, while opinions are objective.
- B. Facts are based on evidence and can be verified, while opinions are personal beliefs.
- C. Facts and opinions are interchangeable.
- D. Opinions are always accurate, while facts can be misleading.
- 2. Which of the following statements is an opinion?
- A. Ethiopia is one of the countries in East Africa.
- B. Addis Ababa is the capital of Ethiopia."
- C. Abebech Gobena has provided education opportunities for many Ethiopians through her NGO.
- D. Ethiopia will soon become a middle-income country.
- 3. What risks are associated with social networking platforms?
- A. Exposure to cyberbullying and inappropriate content
- B. Increased privacy and security
- C. Enhanced communication skills
- D. Improved mental health
- 4. Why is it important to keep digital devices clean and in good working order?
- A. To prevent identity theft
- B. To avoid copyright infringement
- C. For the health of the device and the user
- D. To enhance internet speed

Reference Materials

Read	Smart Phone Use Safety Tips	
Read	Parental Guide to Smartphone Safety	
Read	How to secure your devices	
Read	e-Safety Tips	
Watch	Safe Online	
Watch	Digital Footprint	
Watch	Four Reasons to care about your digital footprint	
Watch	How Fake News Spread	
Watch	Fact vs Fake	

Well done! You've made it to the end of the Module! We hope you've found it useful, and you'll join us Canvas Online Digital Skills Training.