© UNI369637

Teachers' Professional Development Modules:

Formative Assessment for Quality, Inclusive Digital and Distance Learning during and beyond the COVID-19 Pandemic

Trainer's Manual

unicef
for every child

Teachers' Professional Development Modules:

Formative Assessment for Quality, Inclusive Digital and Distance Learning during and beyond the COVID-19 Pandemic

Trainer's Manual

UNICEF Regional Office for Europe and Central Asia

Contents

Purpose of the Trainer's manual

The course *Formative Assessment for Quality, Inclusive Digital and Distance Learning during and beyond the COVID-19 Pandemic* and the accompanying *Learning Guide for Teachers* are designed to support teacher professional development on formative assessment across learning delivery modalities. The *Learning Guide for Teachers* can be used by teachers for independent, self-paced learning and is available in both print and digital formats. It can also be used to guide teachers' participation in a facilitated course.

This *Trainer's Manual* is designed for the latter. It offers **guidance to teacher trainers** on delivering the teacher professional development course, offered by the UNICEF Regional Office for Europe and Central Asia. The *Trainer's Manual* aims to support teacher trainers to deliver the course either in-person, or in distance or hybrid formats. As the course focuses on formative assessment in digital and distance learning, it is recommended that the facilitated course integrate digital learning (whether online or offline) or blended learning (using both traditional and digitally-supported methods). For definitions of these and other terms, see pages 6-7 of the *Learning Guide for Teachers*.

This manual explains how, when, where and with whom each stage of the facilitated course (referred to throughout this manual as "the training") should be undertaken. It offers details on the resources, training design, development, delivery, assessment and evaluation to support the training. The manual includes timelines for the delivery of the training it supports. The manual outlines the phases of the learning process, starting with the Programme Description. The purpose of the manual is to:

1. Familiarize teacher trainers deeply with the content of the *Formative Assessment for Quality, Inclusive Digital and Distance Learning during and beyond the COVID-19 Pandemic* teacher professional development course;
2. Provide guidelines, materials and checklists to support training providers and their trainers in the process of designing, developing, and delivering effective training for stakeholders, as well as monitoring and evaluating the trainings;
3. Guide trainers in delivering the training and accompanying support to teachers participating in the training; and
4. Outline a standard process for creating high-quality, learner-centered and experiential training and workshops for teacher professional development paired with ongoing support.

PART 1:
PROGRAMME DESCRIPTION

Introduction

The rollout of emergency remote and distance learning delivery during the COVID-19 pandemic in 2020 and 2021 shed light on the utility of digital technology for learning. For example, technology can support in-person, distance, and hybrid instruction with blended pedagogical methods, a range of tools, and personalized learning pathways. However, it has also excluded many of the most vulnerable children and created new challenges for teachers, such as ensuring that distance, digital and blended learning are inclusive and responsive to learners' needs, especially when new technologies are introduced.

Regardless of how education is delivered, teachers are required to identify and address gaps in students' knowledge, different levels of skills development, strengths and needs. Formative assessment enables teachers to gather this information and adjust their instruction to help move each student towards their learning goals. Digital technology can support formative assessment as a regular part of teaching. But gathering and using this information in digital and blended learning, especially at a distance, may be unfamiliar.

Overview of this course and trainer's manual

The teacher professional development course on *Formative Assessment for Quality, Inclusive Digital and Distance Learning during and beyond the COVID-19 Pandemic* is designed to provide guidance to teachers on using formative assessment to support inclusive learning across a variety of contexts, including in-person, hybrid, and distance learning, both online and offline. The *Learning Guide for Teachers* is available in print and digital formats, and provides the core content for the facilitated version of the course, which is **designed flexibly** for in-person, distance, and hybrid delivery.

The course integrates formal, non-formal and informal methods with support from you, the teacher trainer, to encourage teachers to further engage in reflection and discussion of the modules' main concepts. This *Trainer's Manual* offers guidance on a range of teaching methods and approaches for you to use as you offer this training to teachers. As the course focuses on formative assessment in digital and distance learning, **it is recommended that the facilitated course integrate digital and blended methods** to support training delivery. Moreover, it is critical that the trainings are delivered in accessible formats and with inclusive methods. It is recommended that as the teacher trainer, you familiarize yourself with and aim to incorporate, to the greatest extent possible, the principles of Universal Design for Learning in the design and delivery of your trainings. This will be discussed in more detail in Section A.5 Training Design, Methods and Delivery.

The accompanying *Learning Guide for Teachers* walks teachers participating in the course through each step and provides them with essential information, including the content of each session and how they should prepare for it. It offers formative assessment activities at the end of each module to assess their own learning and additional activities to support teachers' application of their learning. The *Learning Guide for Teachers* encourages teachers participating in the course to attend the sessions fully prepared, having completed the pre-readings and preparation activities, if requested by you, the teacher trainer. After each session, you should provide teachers with access to a discussion forum (if available), where they should be encouraged to post questions and reflections on the session and receive additional support from both other participants and from you.

PART 2:
PROGRAMME DELIVERY

There are two major parts and thirteen primary components in this training:

Part A – Training Content

1. **Course objectives**: What are the aims and intentions of this course and the trainings?
2. **Learning outcomes and key questions**: What are teachers expected to be able to do after completing the trainings? What key questions are addressed throughout the course to help them meet these objectives?
3. **Target audience**: For whom is the course designed? What teachers will attend the facilitated trainings?
4. **Structure and ways to develop the trainings**: What learning components are included in the course and the facilitated trainings? What do they involve and how should they be structured?
5. **Training design and methods**: What methods will be used so that teachers participating in the trainings effectively meet the learning objectives? How should the trainings be designed? Which assessment methods should be used? How should the design, methods and delivery be made accessible and inclusive based on Universal Design for Learning principles?
6. **Course delivery**: What should the trainer have in mind when organizing the delivery of the trainings?

Part B – Training Administration & Logistics

1. **Timescale and resources**: What are the dates of the trainings? When will the participants be informed? What are the resources to support the trainings and how will the trainer work with key actors, namely the body or institution offering the course, to ensure availability of these resources?
2. **Roles and responsibilities**: If there is a team of trainers, what are the roles and responsibilities of each member?
3. **Evaluation**: How can the effectiveness of the training be assessed? How will the necessary data be collected and analysed?
4. **Training administration**: What mechanisms does the trainer need to put in place to support this training? Which other technical and logistical considerations are needed?
5. **Reporting**: What other information, besides data on effectiveness, needs to be collected? How will this information be collected and reported to stakeholders?
6. **Quality assurance**: What mechanisms need to be in place for quality assurance? How will these be set up and used?
7. **Communications and stakeholders**: What specific communications materials, channels and plans are needed to support the delivery of these trainings and how will these be developed, set up, and implemented?

PART A:
TRAINING CONTENT

This section introduces the details of this course, including objectives, learning outcomes, structure and training design, and course delivery.

A.1 Course objectives

This course is firmly rooted in the view that all who are involved in teaching and learning must constantly improve their practice by collecting information on learning and using it in a timely and purposeful way to move learners closer towards their learning goals. The fundamental purpose of the course is to engage teachers in a regular, conscious and active process of formative assessment in order to improve their pedagogy and students' learning outcomes. The course presents a variety of purposes of, approaches to, and tools for formative assessment across a variety of delivery modalities. It gives particular attention to the inclusion of children with disabilities, regardless of whether learning takes place in-person or at a distance.

A.2 Learning outcomes and key questions

By actively participating in and completing this course, teachers will be able to:

- Integrate formative assessment as a regular and consistent part of teaching and learning, flexibly adapting it to various contexts;
- Ensure coherence in assessment across face-to-face and distance learning environments; and
- Use the results of formative assessment to identify and bridge knowledge and skills gaps and align their teaching to students' diverse strengths and needs.

Three key questions are addressed throughout the course to help teachers achieve the learning outcomes outlined above. These questions aim to link the topics explored in this course and therefore provide a holistic understanding of formative assessment. The key questions are:

1. What is formative assessment and why is it important for effective teaching and learning?
2. How can teachers apply formative assessment across a variety of learning delivery methods and modalities, including in-person, hybrid, and distance learning, both online and offline?
3. How can teachers use formative assessment to improve the quality of teaching and learning, no matter how it is delivered?

A.3 Foundational concepts

As you begin to plan for and deliver teacher training events for this course, it is important that you, as the trainer, have a solid understanding of the foundational concepts that will be covered in the course. It is recommended that you thoroughly review the *Learning Guide for Teachers.* You are encouraged to not only read the lesson content in each module but also complete the pre-readings, explore the additional materials presented after each module, respond to the reflection questions, and complete the suggested learning activities for all five modules. This will help you to develop a thorough understanding of the topics on which you will guide participants in your course. It will also help you to decide if the suggested readings, materials and activities in the *Learning Guide for Teachers* will be suitable for your participants or if you wish to provide alternatives that are perhaps more suited to the context(s) in which your participants teach.

Engaging in the material actively and reflectively, including keeping your own learning journal as you progress through the content, will help you to identify remaining misunderstandings or gaps in your own knowledge that would be helpful to fill before you begin your training events. For example, the multiple-choice questions below and the explanations that follow them offer you a chance to reflect on what you currently know about formative assessment for quality, inclusive digital and distance learning. First, respond to the following diagnostic, multiple-choice questions without referring to the *Learning Guide for Teachers*:

1. What determines whether an assessment is formative?

    a. The activities used to carry it out.

    b. How the results are used.

    c. The technology or tools used to conduct the assessment.

    d. Whether it is conducted before, during, or after a lesson.

2. Which of the following is NOT an example of formative assessment?

    a. A teacher analyses the numerical data from students' responses to a series of multiple-choice questions. She uses this information to plan next week's lessons and create homogeneous groupings for differentiated activities.

    b. A teacher uses students' portfolios with work samples from throughout the year to assign a final grade for a course. He prefers this instead of a test because it allows him to see more holistically what students have learned.

    c. After a distance lesson, a teacher observes the interactions students have asynchronously with their peers in the class discussion forum. She takes notes and uses these to identify what misconceptions remain that she should address tomorrow in class.

    d. A teacher starts a lesson with an open-ended question to understand what students already know about a topic.

3. Which of the following statements are true?
    a. Formative assessment should be distinct from other activities and interactions in class. In order for teachers to gather useful information on their students' learning, they should allow time for the students to prepare and then should administer the assessment.

    b. Formative assessment takes place during class but must be done individually. Teachers should plan in advance to ask all students a question one-by-one to assess where they are in their learning.

    c. Formative assessment is integrated during the class. Because formative assessment takes a significant amount of time, teachers should plan one or two formative assessment activities towards the end of each week so as to not detract from other class time.

    d. Formative assessment is integrated with regular class activities and interactions. Even seemingly insignificant activities that are part of the teaching and learning process, such as small group discussions, can provide useful information about students' learning and can be considered formative assessment if designed well.

4. Which of the following most accurately describes how feedback should be used?
    a. The primary purpose of feedback is to communicate the results of the assessment to students and their parents. Therefore, the most effective way for teachers to give feedback is by providing exam and quiz results to students and their parents quickly after grades are available.

    b. The primary purpose of feedback is for students to inform the teacher about whether they enjoy the class and what they want to learn. Therefore, the most effective way for teachers to collect feedback is to ask students each month if they like the class, especially in distance learning where teachers may have less of an indication of this than from in-person learning.

    c. The primary purpose of feedback is for both teachers and students to receive information that helps to bridge gaps between where students are in their learning and where they need to go. Therefore, feedback should be regular, focused on the learning process (where students are in relation to their learning goals and what they need next to reach these goals), and based on evidence from formative assessment, as well as information gathered by speaking with parents, students themselves and other teachers.

    d. The primary purpose of feedback is to help students develop ownership of their learning. Therefore, teachers should give students rubrics, feedback matrices, and should ask all students the same prompts such as "Have you mastered this content? How do you know?" from the beginning of the year.

Now, compare your responses to the answers given in Annex A. Take a few moments to review the explanations of common misconceptions provided and try to identify which misconceptions you might still have about formative assessment. Return to the *Learning Guide for Teachers* to further review the key content as needed.

A.4 Target participants

The *Formative Assessment for Quality, Inclusive Digital and Distance Learning during and beyond the COVID-19 Pandemic* course was designed for teachers in public and private primary and secondary schools. They may teach in a variety of settings, including formal and non-formal education, and in diverse classes. Their students likely have diverse needs, abilities, strengths, and interests and might experience multiple barriers to inclusive, digital learning, including poverty and exclusion. Teachers themselves may come from diverse countries, backgrounds, years of experience, cultural and educational contexts, and levels of familiarity and experience with formative assessment and digital learning. This course is designed to provide a solid foundation in formative assessment for quality, inclusive teaching and learning, including when education delivery is supported by digital technology.

A.5 Structure and ways to develop this training course

This course is structured to cover five main topics, divided over five modules, as follows:

- **Module 1: Foundations of formative assessment for distance and blended learning** - This first module covers the purpose and types of assessment, the foundational principles of formative assessment, and fostering an environment conducive to assessment for learning.
- **Module 2: Implementing formative assessment in digital and distance learning** - This module addresses how to adapt the formative assessment cycle for different modalities in distance learning, including digital learning, as well as challenges to doing so.
- **Module 3: Formative assessment strategies for digital and distance learning** - The third module introduces various formative assessment techniques and dives more deeply into the types of questions to be asked during formative assessment.
- **Module 4: Carrying out formative assessment in distance and digital learning: Activities and tools** - This module aims to help you reflect on how to choose among the various options for asynchronous and synchronous formative assessment. It also provides examples of activities and tools to support formative assessment in distance and digital learning.
- **Module 5: Using the results of formative assessment to promote quality, inclusive learning** - The final module guides you on how to use the information that you collect from formative assessment to communicate with learners and parents, facilitate feedback and to make decisions about teaching and learning.

The modules are interconnected; each one builds on the skills strengthened in the module that precedes it. The modules are designed to be used to support sequential learning sessions. The content of each module is presented in the *Learning Guide for Teachers*, to be provided to all participants, which includes the following components for each module:

1. Aims and intended learning outcomes;
2. Teachers reflecting on what they already know by responding to a brief series of questions in their personal learning journal;
3. Essential pre-readings;
4. Key terminology;

5. Core module content;
6. Examples and key takeaways;
7. Activities, such as questions and self-assessment, for teachers to check their understanding, identify gaps in their knowledge, and apply what they have learned; and
8. Additional readings and materials, including videos, to support teachers in deepening their knowledge of the topics presented.

In addition to the components in the *Learning Guide for Teachers*, the facilitated training aims to offer participating teachers the following opportunities:

An opportunity to identify and investigate their own misconceptions about their role in formative assessment. With you, the trainer, taking on the role of coach rather than instructor, you will model for teachers what their role can look like with their own students, particularly as they develop a class culture that is learner-centered and formatively driven.

A space for teachers to practice and apply concepts. While part of each session will involve teachers' interaction with new content in a practical way, the majority of each session should focus on developing and co-developing approaches that they can use in their classes, and practicing these approaches, such as through role plays and simulations.
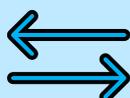
Feedback. Immediate, targeted feedback, including for participants about their own and each other's practice, will provide actionable guidance on what they can do specifically to improve their use of formative assessment. Feedback is an essential component of the formative assessment cycle; ensuring that the sessions include ample time for teachers to receive feedback on their progress towards the course outcomes, what they are doing well, and how else they can improve not only strengthens their skills but also models for them how they can use feedback with their own classes.

Peer interactions. Discussions among peers during the structured sessions will help to empower teachers as metacognitive learners themselves, as they identify and reflect on what they know. This can help to build confidence as teachers work together with their peers to troubleshoot challenges and recognize the deep and rich knowledge and competencies they already possess.

Ongoing support. This course is designed to be delivered in an ongoing manner rather than as episodic or interrupted sessions. While there may be days or weeks between sessions, it is important that you ensure learning and support continue in the interim. Coaching (ideally in school with the teachers but, where not possible, virtually) by you and members of your team and peer discussions outside of session hours, such as via an online forum, are both important if teachers are to successfully assimilate and take ownership of the concepts in this course. By encouraging and facilitating such interactions, the course also aims to support the development of a community of practice for teachers as they continue to learn and implement what they learn with peer support.

It will be important to plan in advance how many hours will be needed for each training. The below table suggests a possible schedule.

Sample training schedule		
Session 1	Introduction: Foundations of formative assessment (Module 1)	3 hours
Session 2	Implementing formative assessment in digital and distance learning (Module 2)	1.5 hours
Session 3	Formative assessment strategies, activities and tools for digital and distance learning (Modules 3 and 4)	3 hours
Session 4	Using the results of formative assessment for quality, inclusive learning (Module 5)	1.5 hours
Session 5	Conclusion: Putting formative assessment into practice	1.5 hours

The above table is a suggestion, but there are multiple alternatives for offering this course. You might choose to offer one training session per module and integrate the concluding practice with the session that covers the fifth module. You might offer one session per module each week for five consecutive weeks, for example. Such an approach would provide teachers an opportunity to practice what they are learning between sessions and to come to the next session with questions and authentic examples from what they experienced when implementing their learning and skills with their own classes. Alternatively, to address time challenges, you might offer two sessions per day, covering one module in the morning session and one in the afternoon session. In any arrangement, you might consider allowing extra time in the first session for participants to introduce themselves and get to know each other and extra time in the final session for any remaining questions. It will be necessary to schedule sessions in ways that best supports teachers, considers their other commitments and availability, and provides enough time for them to complete all required pre-readings and to practice and deepen their learning.

Remember that you do not need to cover all the content of each module in each session, especially if you use a flipped methodology, in which teachers will have already reviewed the content on their own before the session. The session time should instead be used for practice, application, deepening of knowledge, coaching and peer support. The following section explains this approach.

A.6 Training design, methods and delivery

A version of this course is available online for teachers' self-paced learning through Learning Passport in Europe & Central Asia (https://ecaro.learningpassport.unicef.org/). This guide, however, supports trainers to deliver the facilitated version of this course. This course aims to facilitate teachers' co-construction of knowledge and to support their action and implementation. It does not aim to transfer knowledge decoupled from the teaching context. Therefore, this guide encourages trainers to offer this course through blended learning, specifically a **flipped-classroom approach**.

In this flipped approach, direct instruction on the modules' core content that focuses on remembering and understanding is transferred outside of synchronous group sessions to teachers' independent learning time. This allows synchronous group sessions to be used to provide a dynamic, interactive learning space in which you, the trainer, guide teachers in applying concepts and engaging more deeply with the content.[i] It then encourages you to provide ongoing support through small-group or one-to-one coaching (if resources allow) and to facilitate opportunities for teachers to offer peer support, including through a discussion forum. The sections below provide suggestions for learning components before, during and after sessions to offer this course using a flipped pedagogical approach.

While the facilitated trainings are not primarily classroom-based, you are encouraged to consider offering classroom-based support, if personnel and resources are available, such as if coaches or mentor teachers are able to visit teachers' schools and classrooms for observation and experiential practice. Alternatively, virtual coaching if resources are available could be considered. The aim of such support is to connect learnings from the training sessions with teachers' daily practices.

Importantly, Universal Design for Learning is a foundational set of principles underlying the Formative Assessment course. Universal Design for Learning is an approach to teaching and learning that designs learning content and its delivery so as to be accessible to all learners from the outset, no matter how they learn, by providing multiple means of engagement, representation, action and expression. The trainings that you offer to teachers are a key opportunity to model Universal Design for Learning principles so that teachers can become familiar with them, practice applying them, and reflect on their implementation of these principles for supporting inclusive learning and assessment with their own classes.

Figure 1. Universal Design for Learning principles

Multiple means of ENGAGEMENT	Multiple means of REPRESENTATION	Multiple means of ACTION & EXPRESSION
• **Recruit interest** (individual choice; optimized relevance and value to learners; minimize threats and distractions)	• **Options for perception** (how information is displayed; customization; alternatives for auditory and visual information)	• **Options for physical action** (very response methods; Integrate tools and assistive technology)
• **Sustain effort & persistence** (prominent learning goals; varied demands and resources; collaboration and community; mastery-oriented feedback)	• **Options for language and symbols** (clarify vocabulary and symbols; clarify syntax and structure; support decoding; promote understanding; use multimedia)	• **Options for expression and communication** (multiple media and tools for communication and construction)
• **Self-regulation** (promote expectations that optimize motivation; coping skills; self-assessment)	• **Options for comprehension** (activate background knowledge ; Highlight patterns, big ideas and relationships; Model information processing and visualization; Support transfer of knowledge)	• **Options for executive functions** (goal setting; planning and strategizing; managing information and resources; monitoring and self-monitoring progress)

Source: CAST (2018)[ii]

In addition, as this course focuses on formative assessment, it is recommended that formative assessment be integrated throughout all phases of the trainings offered, both to support teachers' learning while moving them towards their learning goals and to model these practices for teachers. The sections below also include information on integrating Universal Design for Learning principles and formative assessment throughout this course.

Before the course:

- **Preparation**. The main aim is to develop a thorough understanding of the concepts of each module individually and of the series, including how each module fits into and supports the delivery of the entire series. You may think carefully, for example, about how each module helps to build a holistic understanding of formative assessment that enables you to respond to the key questions. It might be particularly useful to reflect on how formative assessment and the key learnings from the course support quality, inclusive learning, regardless of whether the training is delivered in-person or at a distance.

- **Schedule**. Consider the most appropriate schedule to ensure the training does not create an unnecessary burden on schools or teachers. It might be necessary to consult schools or education decision-makers to understand when the training would be welcome and most appropriate according to existing schedules, resources, and other considerations and whether back-to-back trainings (e.g., one session per day for a week) or distributed sessions (e.g., one session per week for five weeks) would be ideal, keeping in mind both time constraints and the benefits of allowing teachers to practice what they learn between sessions. Consider competing demands, such as the beginning and end of terms, assessments, holidays, and other ongoing professional development. Ensure the availability of both you and the participating teachers for sequential training sessions.

- **Prepare materials**. Have digital or print copies of all materials, including pre- and post-readings, the *Learning Guide for Teachers*, and any other materials you wish to provide, to ensure that all participants receive them. Whenever possible, offer materials in multiple formats, across multiple media, in formats that are accessible, such as materials that support the use of assistive technology, translation and closed captioning. For some training sessions and their corresponding modules, you might consider alternative delivery methods to the print content in the *Learning Guide for Teachers.* For example, you might create an audio recording or a video of yourself teaching the core content as you enrich it with examples. If you offer such recordings, it is recommended that you develop them in advance of the course, so they are ready to send to participants as needed and to enable closed captioning. If you develop your own materials to accompany training delivery, it is recommended that you follow accessibility guidelines for their development. When possible, consider producing print materials in accessible EPUB formats.

- **Distribute materials**. Provide all participants with a copy of the *Learning Guide for Teachers,* readings, videos, self-created materials, and any other materials you wish them to access. You will need to decide in advance which materials you share ahead of the course and which materials you provide before each training session, based

on the training schedule, to ensure they have adequate time to access and review them. It is better to provide materials in advance than to offer them with insufficient notice. Be sure to communicate to participating teachers all the accessibility features that are available and all formats in which the materials can be accessed.

- **Personal learning journal.** Throughout the course, teachers should be encouraged to use a personal learning journal to record their observations about their teaching, questions they have, responses to questions and prompts posed in the course, and reflections on their growth. These will serve as personal learning logs for them to assess their personal practice and growth. A physical or digital notebook of their responses, reflections and thoughts may be useful. Teachers might also wish to make brief audio recordings of themselves reflecting on the questions posed and to organize these by date, module or session. The key questions posed in section A.2 are a starting place. Invite teachers to record both these questions and their responses to them prior to the course, during the course, and at the end of the course. Invite them to pay attention to new understandings that they develop, and particularly to how their reflections change throughout the five modules. More uses for the personal learning journal will be noted in the following sections.

- **Discussion forum.** Each teacher should also be provided a link (and, if necessary, log-in credentials) that enables them to access the discussion forum. Ideally, the forum (such as a group in Microsoft Teams, for example), will be accessible only to participants in the course. It is also critical that you ensure the protection of teachers' data and privacy and the security of the discussion group. You may invite teachers to join the group in advance of the first session to introduce themselves to each other and to introduce yourself as the trainer. Consider how this forum can be designed and offered inclusively according to Universal Design for Learning principles. Encourage multiple means of engagement by providing a variety of opportunities for participation, collaboration and community – and by allowing teachers to respond to those discussion prompts most relevant to the contexts in which they teach. Follow accessibility recommendations regarding layout and the use of media and interactive features. Make sure that teachers can make contributions and interact with content in multiple ways (e.g., Can they make and listen to recordings? Can they record themselves physically acting out a class scenario rather than writing about it? Is the technology screen-reader friendly? Is alt text (a brief description of an image) used on images? Are participants encouraged to vary the ways in which they make contributions, such as via recordings, video and text?). Encourage and support teachers to monitor their own participation in the forum and to note the progress they are making.

Before each session

A flipped approach is most successful when teachers come to the facilitated sessions having already reviewed the core learning content. Before each session, it will be important for you to:

- **Familiarize.** As the trainer, it is important to have a thorough understanding of the aims and intended learning objectives of each module relevant to the upcoming session. Reviewing how this session supports the series can help. Have you reflected on and responded to the questions in the module? Assess yourself against the identified learning objectives.

- **Pre-questions**: Each module presents pre-questions to teachers, to which they should be encouraged to respond in their personal learning journal before completing the pre-readings or reviewing the core content. You may also extract these questions and share them with participants via email prior to each upcoming session.

- **Pre-readings and materials.** Share the pre-readings with teachers for their completion prior to the session. If all readings and relevant materials were shared prior to the course, remind teachers which are relevant for the upcoming session and share the links again. Remind teachers of the availability of accessible content and how they can access it (see "Prepare materials" and "Distribute materials" in the previous section).

- **Core content**. Ensure each teacher has a copy of the *Learning Guide for Teachers* and instruct them to view the relevant module's key terms and core content. Teachers may review content via the print or online version of the *Learning Guide for Teachers*. For some modules, you might have considered alternative delivery methods, such as creating an audio recording or a video of yourself teaching the content as you enrich it with examples, keeping in mind Universal Design for Learning principles. If this is the case, share these materials well in advance and provide clear instructions on how teachers should use them to learn the core content prior to the next training session.

- **Teachers' self-assessment**. Each module includes self-assessment and application questions and activities following the core content. Review these questions and activities carefully and determine which to ask teachers to complete in advance and which you will do together during the session. For example, you might ask teachers to respond to some questions in their personal learning journal. You might ask them to choose some to discuss in small groups during the session. Other activities might require teachers to assess lesson plans to identify opportunities for formative assessment. In this case, you might decide to undertake this activity during the session, for which you will need to ask teachers to bring a recent lesson plan that they taught to the upcoming session. Alternatively, you might facilitate self- and peer-assessment of their formative assessment practices during the session and might ask teachers to bring a 10-minute recording of a recent lesson they taught to the session.

Regardless of whether you decide to use these self-assessment activities for teachers' individual learning or as activities during facilitated sessions, you must provide clear instructions for teachers so that they know what is expected and can come prepared. Moreover, it is important to model Universal Design for Learning principles by providing multiple means of accessing information, multiple means of interacting with that information, and multiple means by which teachers can communicate their learning – including options for physical action.

> ⚠️ Make sure to offer adequate time for teachers to respond to pre-questions, complete the pre-readings, review material, and complete any other activities requested in advance of the session. Consider teachers' competing demands, both at work and at home, especially if this course is offered during the academic year.

During each session

Throughout the course, it will be important for you to support teachers' learning and their ability to implement the concepts and approaches autonomously. Supporting teachers (in this case, as learners) to progress from what they cannot yet do, to what they can do only with guidance, to finally what they can do independently, requires guided practice within their zone of proximal development.[iii] To the greatest extent possible, each learning session should be an opportunity for teachers to actively co-design their learning based on their existing knowledge, experience and needs with structured support that moves them towards independent mastery of the learning goals.

Figure 2. Zone of Proximal Development[iv]

Learner can do without guidance

Learner can do with guidance

Learner cannot yet do
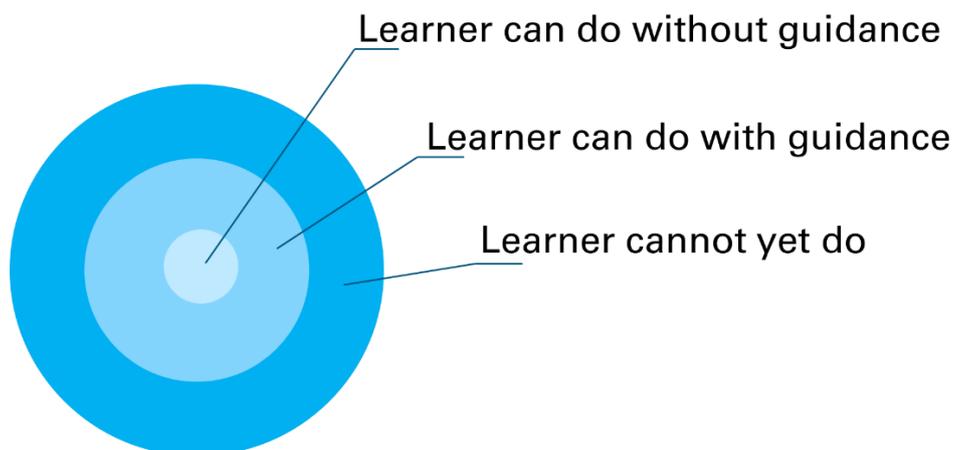
The activities below are offered for your consideration as you plan for sessions that build on teachers' existing knowledge to move them towards mastery through guided support and practice. You will need to carefully choose activities that are most relevant to teachers' contexts. Moreover, you will need to prepare to use a variety of materials so that you can be flexible and meet the emerging needs of those teachers you are training.

- **KWL charts**: KWL charts are completed by learners to note what they know (K), want to know (W), and what they have learned (L). At the beginning of the session, you might invite teachers to complete the first column of a KWL chart and then share what they know now that they have completed the readings and core content for the corresponding module. Provide multiple ways to contribute, such as allowing teachers to share their input verbally, or in the chat while you or another participant write it on the chart, or written by participants on a shared virtual whiteboard. You might take a few minutes to discuss what they share and how it relates to the module's key concepts, making sure that teachers' voices are primarily heard in this discussion. If teachers reveal any misconceptions about the key ideas covered in the corresponding module, you should take note of these and ensure that the session addresses them. You can also invite teachers to complete the second column at the beginning of the session by sharing what they still want to know about the topics covered by the readings and content of the module. This can provide helpful information that you can use to shape the session's activities. Towards the end of the session, you can return to the KWL chart to invite teachers to complete the third column on what they have learned. This is an opportunity to make sure that misconceptions expressed at the beginning of the session have been addressed. What teachers say they still want to learn can also be used as prompts for the discussion board.

- **Questions and answers**. Invite teachers to share – in advance or at the beginning of the session – questions they had after having reviewed the core content verbally, in writing, or via video recording. If helpful, you might also do this anonymously, such as by inviting teachers to post a question in a shared document or to submit questions anonymously via a link that you make available. Take some time at the beginning of class to respond to these by first inviting other teachers to respond. You might also plan a few minutes dedicated to Q&As throughout each session (at the beginning, middle and end, for example).

- **Personal examples**. Inviting teachers to share personal examples aloud is a great opportunity to centre their voice and experiences in the sessions. Again, you might invite them to share verbally, to write a comment in the chat, or to submit a video recording (for the latter option, having given them advanced notice). Each module includes examples throughout, presented as characters with speech bubbles, that could provide a starting point for discussion. You might remind teachers of the examples from the module and ask them to share if they have had similar experiences. Invite them to focus on what worked, what did not work, how they know, and how they addressed any challenges. Consider which setting – whether whole-group, small-group or paired discussions - would be most fitting for sharing

and discussing these examples. Vary the formats through which examples are shared, include options, and encourage self-reflection.

- **Jigsaw groups**. In this activity, you split the participants into small "expert" groups and assign each group a key topic from the module. They should spend a portion of time (e.g., 10 minutes) deepening their knowledge on that topic by reviewing the relevant content, looking for examples, discussing as a small group, and preparing to teach the topic to their peers. Encourage them to use multiple media and a variety of digital tools as far as possible. After this time has passed, form new groups, each containing one member from the expert group. The number of members in each of the new groups will correspond to the number of expert topic groups.[v]

- **Purposeful dialogue**. Just as purposeful dialogue is a technique presented in the formative assessment modules to be used with students, teachers can benefit from purposeful dialogue during facilitated sessions of this course. Purposeful dialogue aims to bring multiple ideas to the surface and challenge learners' understanding.[vi] It is more than just discussion and requires careful planning on your part to link open-ended questions with the intended learning outcomes of the session. As the facilitator, you can challenge what teachers have said to help them clarify their own thinking, restate their input as needed, and link comments from different teachers under common themes.[vii] One option for linking teachers' independent study of the core content to the class sessions is to use the self-assessment questions at the end of each module as prompts for these discussions.

- **Case studies.** During the sessions, it might be helpful to present longer examples than those in the modules. You might prepare these examples for the participants in your course, or you might invite teachers to come to the session with a problem they would like to collectively troubleshoot and solve. Ensure case studies are available in multiple formats (e.g., a recording, in print). Consider what grouping would be most beneficial in which to discuss these case studies or vignettes. Small groups may better facilitate discussions. Large groups may be useful to address a shared misconception among many teachers. You can develop a list of rich questions from which teachers can choose several to answer in their discussion, and which encourage them to think deeply, to connect their thinking to the course material, to cite specific examples from the case study or vignette to back up what they say, and to challenge each other's ideas based on their knowledge, experience, and learning from this course. If using a brief video of a classroom interaction, you might pause it at key moments and ask teachers what they would do if they were in that situation, then continue playing the clip to see how the teacher in the video handled it. Encourage teachers to reflect on what is similar and what is different between what they would do and what the teacher in the vignette does.

- **Self- and peer assessment.** As with case studies, teachers can apply what they are learning by assessing examples of themselves and their peers teaching. This can be done in multiple ways. You might ask teachers to bring a recent lesson plan that they taught and use session time to identify moments throughout it for formative assessment. You might ask teachers to bring to the session a 5-10-minute clip of a

recent lesson they taught that they believe integrates the concepts they are learning in this course. In pairs or small groups, teachers who are comfortable can share their video clips with their peers, receive feedback regarding what worked well and what needs more attention, and discuss alternative ways to approach similar situations in their classes. It must be noted that not all teachers will feel comfortable recording themselves in the classroom (see "Self-observation" below for more information about how to instruct teachers to record themselves in the classroom).

Regardless of whether teachers come with a recording, a lesson plan, or other evidence of their action in the classroom, it could be helpful for teachers to also come prepared with a description of their students' strengths and needs. Teachers should be careful not to share any identifying information or their faces of their students if consent from parents/guardians has not been obtained! In reviewing lesson plans or recordings, teachers can then ask others on the course to focus on the reactions of students to the class. It is important you make clear that the focus should not be to assess the teachers as performers but instead to assess the lesson plan they are following and to identify ways they are working to support students, along with any improvements that could be made. Therefore, the focus should be on students' reactions to the lesson plan, for instance, their behaviour and speech, and their participation and interaction. You might support teachers to make specific comments to each other about what works, what might not work, and what could also work based on what they observe. The aim is to create a safe space in which teachers can share and receive feedback tailored to their students' needs and strengths.

- **Simulations and role play.** An alternative to a pre-recorded video clip is to divide teachers into pairs or small groups and invite them to take turns acting as the teacher and the student. It might be most helpful to focus on one specific skill, such as facilitating a discussion on a digital learning platform or differentiating instruction during a lesson based on students' responses to multiple-choice questions.

- **Ordering, grouping, and identifying**. Brief activities in which you ask teachers to identify, order or group items - for example, to identify what type of assessment an activity is, to group classroom practices according to whether or not they support a learner-centred and formatively-driven environment, or to assess the characteristics of a class described in an example or showed in a vignette – are some of the ways in which you can assess teachers' current level of understanding, identify any misconceptions, and make decisions about upcoming activities.

- **Collaborative development of products and an assessment toolkit for authentic practice.** In addition to reflecting on their skills, observing themselves and peers and providing feedback, it will also be helpful for teachers to come away from sessions with a thorough understanding of how they can practically apply what they have learned in their own classes. One way to support this is to initiate such thinking during the session, where teachers can build their confidence in developing their own formative assessment repertoire in the safety of peer and trainer support.

You can allow time during certain sessions for teachers to develop draft activities or lesson plans that demonstrate the skills and concepts covered in that session (and then to finalize them prior to the next session). For example, you might invite teachers to develop a sample dialogue that they could use with students to focus on metacognitive skills in the context of their grade, subject, and the topic they are currently teaching. You might allow time for teachers to draft a brief lesson plan for their subject and grade that clearly incorporates multiple-choice questions or a certain technological tool for assessment. You might also decide to have teachers return to such products during a subsequent session in order to improve them as their understanding of formative assessment evolves throughout the course.

- **Practice with tools.** As in the above examples, it will be valuable for teachers to have time during the sessions to practice using tools to implement formative assessments. The opportunity should be made available for teachers to practice using strategies and tools for assessment using both non-digital and digital formats, and to develop familiarity with using these strategies and tools during in-person, distance and hybrid learning using face-to-face, digital and blended approaches. As this may be new for many teachers, allow enough time for adequate practice and to answer questions teachers may have. Another option is to guide teachers towards such tools and encourage experimentation with them between sessions, inviting them to post questions to the discussion board and to come to the next session with any unresolved challenges. As an assignment prior to the next session, particularly after Module 4 (Carrying out formative assessment in distance and digital learning: Activities and tools), you might ask teachers to develop a list of tools and activities that they find that they would like to use (or are already using) with their classes. This should include digital tools, as well as assessment strategies and activities for both offline and online (including asynchronous and synchronous) learning. It can form the basis of a toolkit to which teachers can individually and collectively contribute over the course of the training and beyond. Encourage teachers to work together, especially on the toolkit, via the discussion forum as they build their community of practice.

At the conclusion of each session, you should also provide all participants in the course with a link to the discussion forum and a list (or directions on where to access the list) of questions from which they can choose a certain number to answer. Invite a combination of individual responses in personal learning journals and shared responses in the discussion forum. Provide multiple options for responding, including multiple ways of representing their knowledge and ideas. Share any other information necessary for the next session (such as date and time), which should also be shared in writing (e.g., via email) ahead of the next session.

After the session

After the session, it is important that teachers practice what they learned. The following are activities that can support teachers in implementing their learning outside of session times.

- **Peer and coach observation**. Observation, while it can be conducted informally with little or no preparation, can also be structured and carefully planned to ensure that it leads to relevant, meaningful, and useful feedback for helping teachers to improve their practice. Teachers may observe one another (peer observation), or they may be observed by a coach (you, a member of your team, or a mentor teacher from their school, for example). Either way, it should be emphasized that the observation is not to "score" a teacher, evaluate their performance, or to tell teachers what to do. Rather, it is to involve teachers in a collaborative process to support them to be aware of what they are doing in terms of what works and what does not work, and to incorporate ways to improve their practice.

  Before the observation, encourage teachers to meet with the observer to discuss how the observation will take place, what the observer will look for, specific areas where the teacher would like the observer to pay close attention, and tools the observer will use (e.g., a recording, pictures, students' work samples, anecdotal notes, a checklist, or a rubric).[viii] The observer should look and listen for specific things that the teacher does and says that demonstrate the skill(s) for which they are observing.

  The teacher and observer should meet as soon as possible after the observation occurs to discuss what they both noticed. The observer should first invite the teacher to share their reflections on how the lesson or activity went, specific things they think they did well, others they felt less comfortable with, and why, using specific examples from the lesson/activity. The observer should then share their reflections, specifically linking them to what they saw and heard and to the rubric, checklist or other protocol. This feedback should be specific, supportive, and actionable. Finally, the teacher and observer should discuss how they can build on what they are doing that works well to address remaining challenges and improve their practice. This should take the form of specific steps, identified by the teacher but supported by the observer.

- **Personal learning journal.** As mentioned previously, teachers should be encouraged to use a personal learning journal throughout the course to record their observations, questions, responses to questions and prompts, and reflections. This does not need to be a written journal but should, instead, be in any format that is accessible and meaningful to each individual teacher. In addition to the pre-questions noted above, each module presents self-assessment questions at the end. You might invite teachers to choose a certain number of self-assessment questions and record their responses to them in their personal learning journal before sharing their thoughts on the discussion forum or discussing in groups.

  The personal learning journal can also be an important opportunity for teachers to enhance their own metacognition (the strategies they use to actively think about, monitor, control, and reflect on their approaches to using new information, addressing challenges, and assessing their own success). For example, after peer, coach, or self-observation, you can invite teachers to reflect on the observation process in their personal learning journal, including what they noticed during the

lesson/activity, the observer's notes, and their discussion and decisions for next steps. They should be encouraged to return to these reflections often to note improvements that they are noticing in their practice and remaining needs for support.

- **Self-observation.** The goal of self-observation is self-assessment to help teachers play an informed and active role in improving their professional practice. Self-assessment helps teachers to build critical reflection in their daily decisions and actions. It can help teachers to take greater responsibility for their own work and ownership of their professional development. Self-assessment can help teachers to recognize their own strengths and areas for further practice and to identify ways to seek the support and the practice that they need.

  For self-observation, teachers can use a video camera (such as one on their mobile phone) and place it in a corner of the classroom. It doesn't need to be recording at the perfect angle or catch every detail. Teachers can start the recording at the beginning of the lesson and stop it whenever they wish. The aim is to watch that video recording (by themselves or with other colleagues) and collect, record, and analyse what happened in the lesson, so they can make improvements where necessary. Teachers can compare students' reactions throughout the implementation of the lesson plan to the lesson's objectives. Teachers might reflect on the following questions: How did students react to certain activities? How do their reactions support or not support the achievement of the lesson's objectives? What did the teacher do or not do that influenced these reactions? What parts of the lesson plan attracted students' attention? Were there other parts that discouraged some students? What were possible reasons for this discouragement, and how do you know? Reflecting on these questions can help teachers to identify possible ways to improve that and similar lesson plans and to make adjustments in the future to meet these students' needs.

- **Co-teaching.** If teachers from the same school are participating in the training, you might invite them to co-teach a lesson. Co-teaching is possible even if teachers are not physically together, using video conferencing technology, if available. Invite each pair of teachers to divide the lesson into two to four parts and take turns teaching while the other observes. Teachers should focus on modelling formative assessment practices, closely observing where they and their colleague demonstrate effective behaviours and practices for formative assessment, noting where they encounter challenges and identifying what these challenges are, what preceded them, and how the teacher responded, and sharing their observations through specific feedback for themselves and each other.

Assessment

In addition to the above examples which provide opportunities for you to assess teachers' knowledge and understanding of the course content during each session, you should consider how to inform and improve your practice as a trainer throughout the course to move teachers closer towards their learning goals. Use formative assessment methods to inform your practice and improve its effectiveness, such as:

- **Diagnostic questions**. Diagnostic questions can be used to get a snapshot of what teachers currently understand, whether they are ready to move on, what they may need in order to bridge any misconceptions and what content or activities you should use next to help them achieve their learning goals. Diagnostic questions are often meaningful multiple-choice questions with options that include the correct answer and very carefully selected distractors. If offering this course online, you may use the polling feature of various videoconferencing platforms to quickly check teachers' understanding and decide what to do next. Be sure to model for teachers the type of support they can provide to encourage them to make such assessment strategies accessible to their students. For example, you might provide additional information, such as definitions of key words or descriptions, context or extra detail if the question includes an image. You should provide step-by-step instructions on how teachers can access the question, read it, select a response, and submit their answer. Maintaining the same format and page layout when showing these questions is helpful too. Additional accessibility considerations are available [here].

- **Observation**. While you, other coaches and teachers' peers, can all conduct formal observations of teaching in action, you can also use observation during your course to gather information about how teachers are interacting with and responding to the content, types of questions they ask, the depth of understanding they show, and skills and needs they demonstrate during group work or discussions. You might create a checklist of behaviours that would show teachers' achievement of the session's objectives and create a spreadsheet with teachers' names in rows and these behaviours in columns so you can quickly and easily mark which students demonstrate these behaviours. Make sure to include multiple means via which teachers might express their knowledge and understanding so that you are ready to identify it when they do. You might keep anecdotal notes during the session. If sessions are recorded, you also have the option to return to the recording at a later point – soon after the session concludes – to observe behaviours, conversations and interactions during the session and to take note of how you responded. Make sure that teachers always know and give the required consent to being recorded. Observing teachers' discussions on the discussion forum might also be helpful.

- **Rich questions**. Rich questions require deep thought and the testing and integration of multiple ideas. They encourage teachers to challenge each other and explain their reasoning. You should ask purposeful questions oriented towards each session's learning goals. Ensure adequate time for thoughtful, reflective responses, and be prepared to challenge what teachers say. Teachers may first respond that they do not know the answer or do not use such strategies with their students. But by providing support (asking what makes them think that they do not know or

prompting teachers to provide evidence that supports what they say), as well as multiple ways for teachers to engage with the questions and share their responses, you can help teachers tap into the wealth of knowledge and experience that they possess.

- **Exit tickets.** Include a brief question at the conclusion of a session. This might look like a diagnostic question and be delivered via a poll. You might invite students to share their responses to a brief, open prompt. Whichever format, exit tickets should integrate ideas and concepts from the session, require careful thought, and provide insights into what teachers have learned and if their misconceptions were addressed. They are both formative – in that they help you understand where teachers are and to plan for the upcoming session – and are summative, in that they provide evidence about the effectiveness of the present session against the learning objectives.

- **Portfolios, products, and assignment.** Throughout the course, as shown in the previous section, you might offer teachers opportunities to develop activities, lessons, and dialogues that they can use with their classes. Collecting a copy when teachers first develop these, as well as of the versions that teachers edit and improve, can provide evidence of teachers' growing understanding throughout the course. You might also create an assignment for teachers to complete individually or in small groups, such as a presentation with evidence from their own classes, a longer unit with formative assessment moments clearly and carefully planned, question banks of carefully planned diagnostic questions for a specific grade, subject and topic, or detailed plans for how they will differentiate a lesson for the students in their classes based on information gathered through formative assessment. In these larger projects (i.e., that span the duration of the course), invite submissions of sub-components throughout the course. Provide feedback on each, with clear guidance on what teachers should do next to improve. These submissions along the way should not be used to assign grades but to support teachers in their learning and development of a final, quality product, which can be assessed summatively. Such products can be used formatively to improve learning during the course and summatively to evaluate learning and progress made once the course has finished.

- **Question series.** Question series can be used formatively by providing progressively more challenging multiple-choice or single-word-response questions and inviting teachers to complete them until they feel they are no longer able to answer. The results can help you to decide if additional practice is needed, what to offer in an upcoming session, and what type of support certain teachers might need. They can also be used summatively to compare what teachers are able to answer at the end of the course versus what they were able to answer at the beginning.

As a facilitator, it is also your responsibility to clarify how teachers will be assessed, if their learning in this course is to be certified. Often, this requires summative assessment. Some formative assessment methods can be used summatively to provide evidence on the effectiveness of the session and course for helping teachers to achieve the intended learning objectives. You should think carefully about whether the above methods can satisfy

any reporting requirements you might have for the course or whether a different assessment might be needed.

A.6 Course Delivery

As mentioned in the previous section, as the trainer you should *prepare* to facilitate the learning-development process by familiarizing yourself thoroughly with the learning modules to help the teachers achieve the learning goals and objectives. It is important that you pay close attention to varying the type and sequence of learning activities in order to enhance the participants' engagement and respond to their needs. Universal Design for Learning principles are key to achieving this. In addition to the materials available to support the learning process in the *Learning Guide for Teachers*, you as the course trainer can increase the effectiveness of the teaching approach by considering the country's education system, the school's needs, the social and cultural context, and the most challenging barriers to quality, inclusive teaching and learning in the country. You can also create supporting documents, such as a daily programme for teachers, and, if needed, guides for your co-facilitators.

In the *delivery* phase of the learning-development process, you should organize the learning environment and create a learner-centred, inclusive, and positive climate that engages the teachers as learners and promotes progress towards and the achievement of the learning objectives. In the role of facilitator, you can position the training content effectively by explaining its relationship to the teachers' background and priorities. You should use verbal and even visual transitions to create logical links between parts of the sessions, activities and modules. Moreover, effective interaction skills and group-process skills are required to keep the learning on track.

A.6.1 Course opening guidelines

You should anticipate the answers to teachers' questions. Answer these in a clear and logical way within the first few minutes of the course:

- Explain the purpose of the course from the teachers' point of view. What is the main value or utility of this course? What are they expected to achieve?
- List the learning objectives and explain how these support the purpose.
- Describe the agenda of the course and how the learning objectives will be achieved. Do the same at the beginning of each session for that session's agenda and objectives.
- Establish the credibility of the course by mentioning how it was designed and developed. Include the results of any needs assessment that might have identified the need for the skills this course develops, as well as your expertise as a facilitator.
- Ask participants to introduce themselves in a way that allows them to explain their background and knowledge.
- Consider doing a small-group discussion where participants discuss and list their expectations for the course. Post these, whether on a physical wall if in person or a virtual whiteboard or in a chat if in a virtual environment, so they can be followed up during the session and course. Make them available in multiple formats, such as an audio recording as well.

- Explain guidelines for each session in the course. Set clear expectations, such as about staying on time, the use of smartphones, and managing interactions. Ask teachers to commit to these guidelines and discuss if there are any concerns.
- Centre teachers as co-creators in the course. Ensure they are aware of expectations for their active participation throughout the course, reiterate that all experience is valid, and that the learning environment is a safe space for peers to share openly (one in which confidentiality is also respected). Ask them to agree to respect confidentiality and uphold the trust of their colleagues and peers.

A.6.2 Conducting a learning activity: Ensuring a smooth flow

During the course, you should ensure a logical sequence of learning activities that build on – or scaffold – teachers' knowledge and abilities to apply what they learn. Provide transitions between activities so teachers understand how each activity fits within the sequence designed to achieve the learning outcomes. During each session, you should:

- Mention a need or issue that the teachers face. Ideally, this will be based on information you have recently gathered from them, such as through a formative assessment activity.
- Explain the benefit of the upcoming activity and how it will help them address the need.
- Give a name to the activity and explain how it relates to the course content.
- Explain the expectations for the activity and link them explicitly with the session and/or course learning objectives.
- Ensure that all participants are clear on what they are expected to do and what success looks like in this activity. You might even invite some teachers to explain the expectations in their own words.
- Group teachers according to the grouping you identify as being most effective for this exercise, activity or discussion. While you might not know until during the session which teachers will be in which groups, you should plan ahead of time the type of groupings you will use. Will you group teachers by the grade they teach? The subject they teach? Challenges they face that are similar? Current levels of understanding? Vary your groupings to ensure that group work can not only provide targeted support according to teachers' experience and needs but also gives them a chance to work with teachers whose experience and viewpoints might be different from their own. Provide groups with various options for engaging with the content and representing their learning.
- Check in with groups often to support them as needed, but also give them space to freely discuss and work together without feeling that they are being evaluated.
- Notify teachers when the finishing time for any designated discussion, group work, or other activity is approaching so they have time to wrap up their thoughts.

A.6.3 How to make an activity meaningful

As you can see, there are many kinds of learning activities, with different aims and procedures. Other relevant activities are also listed in Appendix B. Importantly, there are several general principles for making an activity meaningful and increasing its impact.

- Start by asking teachers: "What went well? What could you have done differently? What might you do differently next time?"
- Get their feedback. You can ask: "What stood out for you? What was most effective? How could this have been even more effective?" Ensure feedback is focused on both strengths and needs and that it aims to help teachers improve their teaching. Help teachers to stay on course by modelling feedback that is specific, is linked to the learning goals or intended outcomes, and is actionable – perhaps pointing out that this is how they should be engaging with feedback with their own learners. Remember that feedback should focus on information received rather than given – information that helps teachers to improve their practice.
- Synthesise comments by asking the group to summarize what they have learned. Ask: "What are some points to remember for the future?" "How will you apply this in your work?" You might encourage teachers to contextualize how they will apply the learning by thinking of specific moments during a lesson in which they could implement what they have learned, or reflecting on a lesson they have recently taught that they would now change.
- Post teachers' comments on a flipchart or a virtual whiteboard. This can help to "focus" the learning for later recall.

A.6.4 Closing workshop guidelines

At the close of the training, the main task is to set the teachers up to apply what they have learned from the course in their work.

- Provide a summary of the training: Review the purpose, the agenda that has been followed, and the intended learning objectives.
- In addition to the activities in section A.5, you might encourage teachers to self-assess their learning after the course. Ask them to review their entries in their personal learning journal throughout the course and to use what they have learned to complete a worksheet on their strengths and areas for further development.
- Ask teachers to write an action plan. Suggest that they write down their objectives, including timeframes and opportunities for practicing them. You might also suggest that they continue to develop their toolkit and to improve it by testing some of the strategies, activities and tools that they included in it, and reflecting on what works and what does not, along with how it can be improved.
- Provide a list of available resources for continuing their development. Let them know how to access coaching or one-to-one or small group mentoring, if available.
- Encourage teachers to connect with each other after the workshop to continue building their community of practice and to share with each other their successes and progress. You might keep the discussion board for the course active or encourage teachers to connect with each other in other ways.

PART B:
TRAINING ADMINISTRATION & LOGISTICS

B.1 Timescale and resources

As the trainer, you need to have a clear time schedule and know the following:

- The key dates for the training;
- Dates that are not feasible for teachers because of national holidays, school breaks, testing periods, or other demands that affect those teachers hoping to participate in the course; and
- How far in advance end users will need to register for the sessions.

It is important to identify the resources needed to support the training programme, and to ensure the availability of such resources. For example, you, whether working alone or with another body offering the course, should consider:

- **Venues with appropriate equipment**: Are the venues accessible? Are they located near the target group of teachers? Are there any prohibitive factors (e.g., travel restrictions, limited transportation availability) that unintentionally exclude the most marginalized teachers? Is equipment, reflective of that used in the workplace, available for the training? Does the training environment resemble the classroom environment, or can it be set up to do so? Is the course as it is offered fully accessible to and inclusive of all teachers' needs? Is assistive technology available and can it be integrated with the course as it is? What accommodation is available for teachers with disabilities? Is simultaneous translation and live captioning available for teachers who speak other languages?

- **Systems and technical infrastructure** that need to be in place. Do they have access to appropriate hardware and software, if required, which meets the minimum specifications recommended for this course? For example: are teachers expected to bring their own devices? If so, which types of devices should be used to access and participate fully in the training? What operating system requirements are there, if any? Are teachers encouraged to have antivirus protection and security software installed and updated? Do they need headphones? Be sure to communicate all device and other resource requirements to teachers with plenty of notice.

  If the course will be offered virtually, what ICT infrastructure is available that is accessible, inclusive, and reliable for the training? How will teachers access the course if offered virtually, and what implications will this have for the course design and teachers' participation?

- **Trainers, facilitators and other support**: Explain how many additional trainers are needed and what skillsets are required. If you will not be offering the training alone, who will join you as co-facilitators? How will they be recruited? Is their experience fitting for the topic, teachers, and context? Will the course involve mentor teachers to provide additional support to participants during and between sessions, as well as after the course? Consider if sign language or translation support will be offered for the course and make sure it is planned.

- **Administrative support**: Who will provide support with registration, attendance, and records? Who will provide support with the learning management systems, if one is used? What are the reporting requirements and to whom will this information be reported?

- **Data privacy and security**: How will teachers' data be protected and privacy upheld, according to the laws and regulations of the country in which the course is offered, particularly if this course is offered online?

B.2 Roles and responsibilities

You and, if relevant, your fellow trainers need to have a clear understanding of the roles and responsibilities of you, your team, and any others involved in supporting the training outside their direct team (e.g., translators). For example, who will provide the training? Have the trainers been trained in delivering the training (soft skills)? Who will develop the training materials? And who needs to review, approve, sign off on, and, if needed, certify the training materials?

B.3 Training Administration

You will need to put in place different mechanisms to support the training logistics. These include, among other things:

- How will you or the body offering the training notify key actors (Ministry of Education, universities, private and public institutes responsible for teacher professional development, professional organizations and representative bodies for teachers, schools, non-formal education centres, etc.) of the course offering and confirmed dates of training?

- How will any certification or professional development credits be offered, confirmed in advance with the necessary partners (e.g., the accrediting body) and be received by participants? How will the opportunity to earn such credits through the course be advertised to potential participants?

- How will the training be reserved? How will the body that is offering the training reserve the dates of the venue, if needed? How will participants register? How will they communicate necessary details, such as travel, lodging or other information for an in-person training or instructions for joining a virtual training and accessing other resources, such as the *Learning Guide for Teachers*, the pre-readings and the discussion forum?

- Minimum and maximum number of participants: how will these be set? Will this number be based on financial resources, available personnel, or other factors? How will teachers who are in most need of this training be prioritized? How will priority be given to teachers from marginalized communities and teachers without other opportunities or means to access such a course?

- Cancellation policy: If the course is paid, what will the cancellation policy be? If the course is free, is there a cancellation policy? How is it decided? Is there a waiting

list? According to what system is it formed (e.g., priority given to certain schools or communities, first-come, first-serve, etc.)?

- How will training attendance records be maintained? What mechanisms are in place to ensure they are accurate and complete? How will participants' private information be kept safe and secure?

- What is the attendance policy? How many sessions in the course can be missed? How will non-attendance be addressed? Who – whether you the course trainer, the offering body, or other administrative unit – will be responsible for reaching out to participants who do not attend? How will make-up assignments be given and evaluated?

B.4 Evaluation

It is recommended to have mechanisms in place to assess the effectiveness of the training and to evaluate whether the set objectives have been achieved. Assessment data can help, for example, to improve the delivery of the course in the future and identify related skills for which teachers might need additional support. Evaluation data might be used to certify teachers' skills.

One possible method for evaluating teacher professional development is the use of Guskey's five levels of impact.[ix] This evaluation model covers the following five levels: participants' reactions; participants' learning; organization support and change; participants' use of new knowledge and skills; and student learning outcomes. More information on how information can be gathered across each level, what is measured, and how information can be used is available in Appendix C. Trainers participating in training facilitated by UNICEF will receive more information on assessment and evaluation during the training.

B.5 Reporting

You will need to know how you will collect information about the training and report this to stakeholders. You may want to consider:

- **Records of attendance and non-attendance rates**. If you deliver training for a project or deployment, you may want to consider reporting on training delivery against project timescales, in case the project timescales change.

- **Results of assessment and evaluation**. You may wish to consider whether assessment results of each session, of the overall course, or both will be reported and, if so, how.

- **Training outcomes, both immediate and in the short- to medium-term**. How will these be monitored? Is monitoring aligned with the initial learning outcomes for teachers set by the course? How are training outcomes evaluated alongside their impact on teaching practices?

B.6 Quality Assurance

As Frazer[x] described, quality in education embraces, but is not synonymous with, effectiveness, efficiency and accountability. It comprises five stages:

Quality control	Internal quality	External quality	Quality assurance	Quality systems
•A system based on feedback - gaining information so that mistakes can be corrected (for example, formative assessment procedures).	•A control mechanism - includes reviews and assessment of learners' work.	•A control mechanism - includes tests, visits from external bodies to observe and offers of feedback.	•Looking at the aims, content, resourcing and projected outcomes of courses to ensure that course delivery effectively matches learners' needs.	•Organization-wide arrangements to ensure that quality processes happen, are understood and applied by all staff. They are linked to the organization's mission and strategy.

You, as the trainer, should be able to answer the following:

- Who will be involved in the implementation of your training? Does this include input from subject-matter experts?

- If so, how will subject-matter experts be recruited and involved?

- How will quality be assessed as an ongoing process at all stages of course delivery?

- Which internal control mechanisms are in place for reviewing and assessing participant outcomes? Who is accountable for these outcomes? To whom are they accountable (e.g., teachers participating in the course, schools, the ministry of education)?

- Which external control mechanisms are in place and which external bodies are involved in these processes? What is their involvement and to whom are they accountable (e.g., you/the trainer, the teachers participating in the course, partners supporting the course delivery)?

- Who will certify your training as a trainer for this course? How is this certification recognized by relevant bodies (e.g., the ministry of education or schools in your country)?

- Who will sign off on the delivery of this course to participants, particularly if it occurs at multiple stages of development or delivery? Will participants' completion of the course be certified? If so, how? What is your role in this process?

Trainers participating in the training of trainers offered by UNICEF should contact their UNICEF Education focal points in the country in which the training is offered for more information on available certification. Validation of certificates is an important consideration that should be made possible through a certificate coding scheme that offers a unique certificate code to each participant.

Finally, just as the teachers participating in this course would benefit from a personal learning journal, you should consider setting up log of lessons learned during your training, preparation and conducting of the course so that these can be considered and integrated into future training plans. A sample log of lessons learned is provided in Appendix D.

B.7 Communications & Stakeholders

You should think carefully about specific communication with various stakeholders needed to support the delivery of the trainings. This might be different depending on whether the trainings are offered in-person, at a distance or in a hybrid format. How will resources be requested, acquired and allocated for this training, and how will communication about this process take place and who will lead it? How will possible participants and their departments, schools or institutions know about the training, when it is available and how to access it?

It is important for you to:

- Be fully informed about all the stakeholders involved in this course at every level, from the children whose learning the professional development aims to ultimately impact, to the ministry of education whose education of highly qualified teachers this course might aim to support. List all the stakeholders and how they are affected.
- Clarify with whom you are responsible for communicating, what information they need and how you plan to communicate. Who is accountable for the successful delivery of the course? Its impact?
- Plan carefully how and when you will communicate with these stakeholders and how you will keep them informed of progress.

APPENDICES

Appendix A. Answers to diagnostic questions on key concepts

This appendix presents the answers and explanations to the diagnostic questions on key concepts presented in section A.3. Compare your responses to the answers below, and try to identify what misconceptions you might have based on the responses that you gave.

1. **What determines whether an assessment is formative?**
   a. The activities used to carry it out.
   b. How the results are used.
   c. The technology or tools used to conduct the assessment.
   d. Whether it is conducted before, during, or after a lesson.

Correct answer: B.

A common misconception is that the tool that teachers use for assessment determines what type of assessment it is. Some might believe, for example, that exams are always summative while questions in class are always formative. Similarly, some might believe that any assessment conducted before a lesson or term is diagnostic, any assessment conducted during a lesson is formative, and any assessment conducted after a lesson is summative. However, this is not the case. An exam, for example, can be used formatively if the information collected is used to improve teaching and learning outcomes for those students. Assessment at the end of a lesson may be used to inform teachers how to structure the next lessons activities in a way that better supports students. As you can see from both of these examples, it is how an assessment's results are used that determines if it is formative.

2. **Which of the following is NOT an example of formative assessment?**
   a. A teacher analyses the numerical data from students' responses to a series of multiple-choice questions. She uses this information to plan next week's lessons and create homogeneous groupings for differentiated activities.
   b. A teacher uses students' portfolios with work samples from throughout the year to assign a final grade for a course. He prefers this instead of a test because it allows him to see more holistically what students have learned.
   c. After a distance lesson, a teacher observes the interactions students have asynchronously with their peers in the class discussion forum. She takes notes and uses these to identify what misconceptions remain that she should address tomorrow in class.
   d. A teacher starts a lesson with an open-ended question to understand what students already know about a topic.

Correct answer: B.

Option A might have been chosen if you believe that numerical data or multiple-choice questions are not part of formative assessment. However, this is not the case. Formative assessment can generate numerical data that helps teachers to make decisions about teaching and learning, such as to plan upcoming lessons, to create groupings or develop activities. You might have selected option C if you believe that observation of students is

not a form of formative assessment. However, student observation provides teachers with valuable information based on what students say and how they act that can help determine what they do and do not yet know or can and cannot yet do. Option D reveals the misconception that formative assessment cannot be used at the start of a lesson nor to understand what students already know. As the *Learning Guide for Teachers* discusses further, this is not the case. Given it is how information from assessment is used that determines if it is formative, an open-ended question may very well be formative if it guides the teacher's decisions about what and how she teaches next. Option B Is the correct answer, but it may not have been selected by those who incorrectly believe that the use of a portfolio automatically makes the assessment formative.

3. Which of the following statements are true?
   a. Formative assessment should be distinct from other activities and interactions in class. In order for teachers to gather useful information on their students' learning, they should allow time for the students to prepare and then should administer the assessment.
   b. Formative assessment takes place during class but must be done individually. Teachers should plan in advance to ask all students a question one by one to assess where they are in their learning.
   c. Formative assessment is integrated during the class. Because formative assessment takes a significant amount of time, teachers should plan one or two formative assessment activities towards the end of each week so as to not detract from other class time.
   d. Formative assessment is integrated with regular class activities and interactions. Even seemingly insignificant activities that are part of the teaching and learning process, such as small group discussions, can provide useful information about students' learning and can be considered formative assessment if designed well.

Correct answer: D.

A common misconception about assessment is that it must be distinct from other classroom interactions. Instead, even the smallest of activities can provide useful information about students' learning. These formative assessment activities may seem like part of regular classroom interaction because they often are. Option A reveals the misconception that formative assessment activities must be distinct rather than integrated with regular, ongoing activities. Option B reveals the misconception that formative assessment must be individual. It is not necessary for teachers to pull each student aside and ask them questions one-to-one to obtain useful information. Nor is it necessary for formative assessment activities to take a significant amount of time or distract from the main teaching and learning activities. Rather they should be part of these activities and interactions – such as through dialogue, observations of how students interact in group work, or simple multiple-choice questions during a lesson – as presented in option D.

4. Which of the following most accurately describes how feedback should be used?
    a. The primary purpose of feedback is to communicate the results of the assessment to students and their parents. Therefore, the most effective way for teachers to give feedback is by providing exam and quiz results to students and their parents quickly after grades are available.
    b. The primary purpose of feedback is for students to inform the teacher about whether they enjoy the class and what they want to learn. Therefore, the most effective way for teachers to collect feedback is to ask students each month if they like the class, especially in distance learning where teachers may have less of an indication of this than from in-person learning.
    c. The primary purpose of feedback is for both teachers and students to receive information that helps to bridge gaps between where students are in their learning and where they need to go. Therefore, feedback should be regular, focused on the learning process (where students are in relation to their learning goals and what they need next to reach these goals), and based on evidence from formative assessment, as well as information gathered by speaking with parents, students themselves and other teachers.
    d. The primary purpose of feedback is to help students develop ownership of their learning. Therefore, teachers should give students rubrics, feedback matrices, and should ask all students the same prompts such as "Have you mastered this content? How do you know?" from the beginning of the year.

Correct answer: C

While feedback can serve all of the purposes outlined above, the primary purpose is for teachers and students to receive information that helps them to bridge students' learning gaps. Option A ignores the importance of bidirectional communication (i.e., between teachers and students and between parents and teachers). While communicating exam results is important, feedback focuses on a more constructive dialogue that helps teachers to understand what they should do next to better support the student. Option B does not explain how this information will be used. While it is helpful for a teacher to know if students enjoy the class, what students enjoy might not always be what they need in order to learn best. A teacher might aim to understand students' interests to offer multiple means of engagement, but this is missing from option B.

It is important for students to develop ownership of their learning, but this is not the sole or primary focus of feedback. Students' ability to self-assess requires a clear understanding of learning goals and success criteria, as well as significant practice regularly and over time. Teachers should gradually build students' ability to conduct self-assessment, as well as to interpret the evidence collected against the set criteria, in order to participate in the feedback process. This participation may also look different for different students based on their current self-regulation skills and each student's unique support needs. Introducing self-assessment to students all at once and expecting immediate mastery is likely not appropriate nor supportive of their development of these skills. As outlined in option C, feedback aims for teachers and students to receive information that helps to bridge gaps between where students are in their learning and where they need to go. Therefore, feedback should be regular, focused on the learning process, and based on multiple sources of evidence, especially information gathered via formative assessment.

Appendix B. Examples of learning activities

Activity	Purpose
Application	Identify steps or actions to use in learners' own environment.
Case Study	Identify concepts and skills in a specific environment; apply knowledge
Demonstration	Observe skills in action, usually by instructor or experienced performer
Discussion	Draw on learner's experience; encourage application; identify challenges and obstacles
Fishbowl	Observe skills in action; provide feedback
Games and Simulations	Discover learners' habitual tendencies; establish a need to change; experience and analyse underlying issues; practice skills
Lecturette	Introduce new area of content; convey conceptual, historical or theoretical information
Pen and Paper Exercise	Identify concepts and knowledge; practice and test knowledge
Personal Reflection	Create awareness of concept; encourage learner's emotional involvement
Reading/ Self Study	Introduce new area of content; gain broader background on topic

Role Play	Establish the need to change; practice skills in a work-related context
Video Clip	Provide information; set a mood; demonstrate interaction
Visualization	Engage learners' imagination

Appendix C. Sample Evaluation Approach

Guskey's 5 levels of impact			
Evaluation level	**How information will be gathered**	**What is measured or assessed**	**How information can be used**
1) Participant's reaction	Questionnaires administered at the end of a session	Initial satisfaction with the experience	To improve programme design and delivery
2) Participant's learning	Demonstrations Participant reflections Participant portfolios	New knowledge and skills of participants	To improve programme content, format, organization
3) Organization support and change	Questionnaires Interviews School records Participant portfolios	The organization's advocacy, support, accommodation, facilitation and recognition	To document and improve organizational support To inform future change efforts
4) Participant's use of new knowledge and skills	Questionnaires Structured interviews Participant reflection Participant portfolios Direct observation	Degree and quality of implementation	To document and improve the implementation of programme content
5) Student learning outcomes	Student records School records Questionnaires Structured interviews Participant portfolios	Student learning outcomes: cognitive, affective, and psychomotor	To focus and improve all aspects of programme design, implementation and follow-up. To demonstrate overall impact of PD

Appendix D. Lessons Learned Log

Lesson ID	Date added	Contact	What happened?	Why did it happen?	What was the Impact?	Recommended action (actionable advice to avoid or repeat lesson)

Note: The lessons learned log should include observations and reflections on both what worked well, as well as what did not.

References

[i] Flipped Learning Network (FLN), The Four Pillars of F-L-I-P, 2014. Available at: https://flippedlearning.org/definition-of-flipped-learning/

[ii] CAST, *Universal Design for Learning Guidelines, version 2.2*, 2018. Retrieved from: http://udlguidelines.cast.org

[iii] Vygotsky, L., *Zone of proximal development*, 1978. Definition available at: https://www.sciencedirect.com/topics/psychology/zone-of-proximal-development

[iv] Ibid.

[v] University of Vermont Center for Teaching and Learning, *Flipped learning,* 2021. Available at https://www.uvm.edu/ctl/designing-and-teaching-courses/flipped-learning/

[vi] National STEM Learning Centre, *Assessment for Learning in STEM Teaching* (course), 2020. Available at: https://www.futurelearn.com

[vii] Witherspoon, M., Sykes, G., and Bell, C., 'Leading a classroom discussion: Definition, supporting evidence and measurement of the ETS National Observational Teaching Examination Assessment Series', *ETS Research Memorandum Series*, 2016. Available at: https://files.eric.ed.gov/fulltext/ED570574.pdf

[viii] Burns, M. 'Professional development alternatives to the workshop' [blog post], 12 July 2018. Available at: https://www.globalpartnership.org/blog/professional-development-alternatives-workshop

[ix] Guskey, T.R., Roy, P., and von Frank, V., *Reach the highest standard in professional learning: Data.* Thousand Oaks, CA: Corwin, 2014. Excerpted with permission. Available at: https://tguskey.com/wp-content/uploads/Professional-Learning-1-Gauge-Impact-with-Five-Levels-of-Data.pdf

[x] Frazer, M. J., 'Issues of Quality', *Higher Education in Europe*, 20(1-2), 1995, pp 13–17. Available at: https://www.tandfonline.com/doi/10.1080/0379772950200103