

CPD EST

Classroom Observation Tool



Classroom Observation Tool (COT)

PART 1: PRE-OBSERVATION				
General Information				
School name		EMIS code		
Teacher name		CNIC		
Name of observer		Observation Date		
Observer designation (circle one)				
About the lesson you observe				
Grade(s)		Number of children in class today		
Subject				
Topic				
Main SLO				
Observation start time		Observation end time		

PART 2: CLASSROOM OBSERVATION (General Practices)						
	Score (5 is high)					
Lesson Facilitation	n/a*	1	2	3	4	5
1. The teacher explicitly articulates the objectives of the lesson and relates classroom activities to the objectives.						

2. The teacher's explanation of content is clear and correct.						
3. The teacher makes connections that relate to students' daily lives or other content knowledge.						
4. The teacher models by enacting, thinking aloud or showing a final product expected of the students.						
Checks for understanding						
5. The teacher uses questions, prompts or other strategies to determine students' level of understanding.						
6. The teacher monitors most students during individual or group work.						
7. The teacher adjusts teaching to the level of the students.						
Feedback						
8. The teacher provides specific comments to help students clarify misunderstandings and understand successes.						
Critical Thinking						
9. The teacher asks thinking questions.						
10. The teacher provides thinking tasks.						
Classroom Culture						
11. The teacher responds to students' needs.						

* NA = Not applicable. Selecting this option means you did not observe the practice in the lesson and it was not required.

PART 2: Subject Specific Practices (English)

	Score (3 is high)			
	n/a*	1	2	3

12. The teacher builds on previously learnt English Language using innovative teaching strategies for richer learning experiences.				
13. The teacher enables the students to respond critically and creatively to the given text type.				

Scoring Rubric for the Classroom Observation Tool with Examples

The rubric describes the practice at three levels, low, medium and high. Note that the rating scale in the classroom observation tool allows observers to rate the practice from 1(low), 2 (medium low), 3 (medium), 4 (medium high) and 5 (high).

	Low (1)	Medium (3)	High (5)
Lesson facilitation			
1. The teacher explicitly articulates the objectives of the lesson and relates classroom activities to the objectives.	The teacher does not state the lesson objective(s), nor can an objective be guessed from the lesson activities. <i>For example: The teacher asks students to take turns reading a text about planting and harvesting crops. S/he then spends the rest of the lesson discussing farming and the specific processes involved. The teacher does not state a lesson objective, and it is difficult to infer a lesson objective from the activities as the objective could be developing oral reading fluency, developing vocabulary, or learning about agriculture.</i>	The teacher explicitly states a broad classroom objective and the lesson activities are somewhat aligned to the lesson objective(s). <i>For example: The teacher says, "Today we're going to learn about multiplication," without further specification. Alternatively, the lesson activities may clearly work toward how to divide whole numbers, but this is not explicitly articulated by the teacher.</i>	The teacher explicitly states the objective for this lesson the lesson activities closely align to the lesson objective(s). <i>For example: At the start of class the teacher states, "Today we're going to learn to multiply fractions. First, we are going to practice some examples together on the blackboard. Then you are going to work with a friend". Each lesson activity is clearly related to the objective of multiplying fractions.</i>

2. The teacher's explanation of content is clear and correct.	The teacher's explanations of the content are confusing or incorrect or content is simply not explained. <i>For example: The teacher uses too many technical terms without explaining what s/he means and/or may explain ideas without a logical order or connection. Moreover, the teacher may say, "A fraction is a combination of a numerator and denominator, without saying what either of those words mean. Alternatively, the teacher may not provide any explanation of content.</i>	The teacher's explanations of the content, when they occur, are correct and somewhat clear. <i>For example: While reading a story, the teacher identifies difficult words and defines them, but does not relate them to what is happening in the story.</i>	The teacher's explanations of content are clear, correct and easy to understand. The teacher makes sure to explain meaning of technical terms; the explanations are logical and may be accompanied by graphic representations or examples. <i>For example: In a lesson on fractions, the teacher provides a clear and thorough definition of a fraction, including defining "numerator" and "denominator." S/he has drawn several fractions on the board as examples.</i>
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Lesson facilitation

3. The teacher makes connections that relate to other content knowledge or students' daily lives.	The teacher does not connect what is taught to other content knowledge or to students' daily lives. <i>For example: During a lesson on fractions the teacher uses a picture of a cake and divides it into fourths but does not make a connection to students' experience with slicing cake. Alternatively, the teacher says, "Remember, yesterday we learned about whole numbers? Today, we</i>	The teacher attempts to connect the lesson to other content knowledge or to student's daily lives but the connections are sometimes unclear. <i>For example: When introducing a lesson on fractions, the teacher says, "When we cut a cake, we use fractions" and go on to explain fractions. The connection to students' lives is superficial and nonspecific. Alternatively, the teacher says, "Remember</i>	The teacher meaningfully connects the lesson to other content knowledge or to student's daily lives. <i>For example: When teaching a class on fractions, the teacher relates the content to students' experiences by asking, "Who has had to slice a birthday cake? How did you make sure there were enough slices for everyone? Learning about fractions can help us divide a cake between people." The teacher also connects the lesson</i>
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	are going to learn how to add fractions.”	yesterday we learned the rules for adding whole numbers? Now we are going to use those rules and apply them to adding fractions.” However, when explaining how to add fractions, the teacher does not link the rules back to the rules for adding whole numbers.	to a prior lesson on halves by saying, “Remember yesterday when we learned about halves? We learned that when we cut a cake in half, we can share it equally between 2 people. Today we will learn how to divide the cake into fourths, so 4 people can share the cake. When we were forming halves we made sure we had 2 halves of identical size. The same thing is true when we are forming fourths: we have to make sure to keep slices of the same size.” The connection between the current lesson and other content knowledge and/or students’ daily lives is clear.
4. The teacher models by enacting or thinking aloud or by showing a final product expected of the students.	The teacher does not model.	The teacher partially models the learning activity. <i>For example: In an English class where the objective of the activity is to write a paragraph, the teacher only demonstrates how to write a topic sentence. In a math class, the teacher shows (enacts) how to draw a bar graph but does not clarify how s/he extracted the data from the text to create the bar graph.</i>	The teacher completely models the learning activity by enacting or demonstrating all parts of the procedure and/or by thinking aloud. <i>For example: The teacher demonstrates different ways to solve a math problem (enactment of a procedure) and while doing so, s/he says what s/he is thinking at each step of the equation (think aloud). Or if students are calculating the area of their desk, the teacher demonstrates each step in the process</i>

			(full enactment of a procedure).
Checks for understanding			
5. The teacher uses questions, prompts or other strategies to determine students' level of understanding .	The teacher either does not ask questions/prompt students at all OR when s/he does, the class responds in synchrony, which is accepted without further clarifying for understanding. <i>For example: When explaining a concept, the teacher asks, "Have you all understood?" The students in the class respond in unison, "Yes, we have." Another example is that the teacher inquires, "This is correct, right?" after completing a problem set. The class or an individual student replies, "Yes, this is correct."</i>	The teacher uses questions, prompts, or other strategies that are effective at determining only a few students' level of understanding. <i>For example: The teacher asks, "What is 7+8?" Only a few students respond by raising their hand, a group from which the teacher calls upon 1 or 2 students to provide an answer. Alternatively, the teacher asks the question but does not ask students to raise their hands in response and simply allows students to willingly volunteer their answers.</i>	The teacher uses questions, prompts or other strategies that are effective at determining most students' level of understanding. <i>For example: The teacher says, "Please put your hand up if you agree with this statement: Equilateral triangles have equal angles." The teacher also asks students to demonstrate their knowledge by having all students share their answers, e.g., by asking each student to read out the sentence s/he wrote using past tense verbs.</i>

6. The teacher monitors most students during individual or group work.	The teacher does not monitor students when they are working independently or in groups. <i>For example: The teacher sits at his/her desk or remains standing in front of the class when students are working.</i>	The teacher monitors some students when they are working independently or in groups to check their understanding. <i>For example: The teacher observes some student work for accuracy, clarifies concepts, or asks questions.</i>	The teacher systematically monitors most students by circulating the classroom and approaching individual students or groups to check their understanding. <i>For example: When students are working, the teacher walks around the classroom, making sure to approach students or groups in a systematic way. The teacher observes most students' work, clarifies concepts, and asks questions.</i>
Feedback			
7. The teacher is being inclusive and adjusts teaching to the level of the students.	The teacher does not adjust teaching for students. Content is either too easy or too difficult for most if not all students.	The teacher adjusts teaching for some students but there are still some students for whom content is too easy or too difficult. <i>For example: As students complete an alphabet worksheet, the teacher notices they are not dotting their 'i's. In response, s/he briefly reminds the class to dot their 'i's.</i>	The teacher differentiates teaching, adjusts content and is teaching at the right level for all students. <i>For example: As students complete an alphabet worksheet, the teacher notices they are not dotting their 'i's. In response, s/he briefly stops the activity and reviews the differences between capital and lower case 'i's before continuing with the alphabet activity. Alternatively, if the teacher notices that a student has already completed the worksheet, s/he may give that</i>

			<i>student another activity to complete while waiting for the rest of the class.</i>
8. The teacher provides specific comments to help students clarify misunderstandings and understand successes.	The teacher either does not comment gives simple, evaluative statements (e.g. “That is incorrect”) <i>For example: When a student answers a teacher’s question incorrectly, the teacher responds by saying, “That is not the correct answer,” and moves on.</i>	The teacher makes some specific comments and draws attention to misunderstandings but the comments are superficial. <i>For example: In a math class, the teacher says, “You forgot to include the negative sign,” without providing further information or prompts.</i>	The teacher consistently provides students with specific, timely comments about their work. These comments provide substantive information about what the students did well and/or help clarify students’ misunderstandings. <i>For example: If students are writing stories the teacher may say, “You do a good job getting the reader interested in this paragraph when you write ‘no one knew what would happen.’ This sentence makes me want to read more.” Moreover, the teacher may highlight some students’ work and say to the class “Look at the work of this classmate, see how s/he used the number line to solve this subtraction problem?” And then proceeds to explain how s/he solved it.</i>
Critical thinking			

9. The teacher asks thinking questions.	The teacher asks questions that demand a simple yes/no answer or the recall of facts. <i>For example: The teacher asks, “Who is the main character in this story?” or “Which is greater, -2 or -6?”</i>	The teacher asks questions that require more than recall or a simple yes/no answer. <i>For example: The teacher asks, “Why was the character unhappy? What makes you think that?” OR “Why is -2 greater than -6?” And then asks, “How do you use the number line to determine if -8 or -4 is greater?”</i>	The teacher asks questions throughout the lesson to promote high level thinking. <i>For example: The teacher asks, “How do you think the main characters in the story would prepare for the competition?” After a student responds, the teacher then follows up by asking, “What facts or ideas make you think that?” Then s/he asks another student, “What do you think happens next?” In a math class, the teacher asks, “How do you know -2 is greater than -6?” After the student responds, the teacher follows up by asking, “What would happen if the numbers were positive?” Later in the lesson, the teacher asks, “How do you use the number line to determine if -8 or -4 is greater?”</i>
10. The teacher provides thinking tasks.	The teacher does not provide thinking tasks. Classrooms with no thinking tasks include those where students simply listen to the teacher or perform rote tasks.	The teacher provides low level thinking tasks. Low level thinking tasks are tasks such as matching sets of items, identifying concepts or key pieces of information, and comparing characteristics.	The teacher provides high level thinking tasks. High level thinking tasks are tasks such as making predictions, identifying patterns, explaining thinking, making connections, interpreting information, applying learning in new situations.

11. The teacher responds to students' needs.	The teacher is not aware of students' needs OR does not address the problem at hand <i>For example: A student may not have the required supplies for the lesson, and the teacher does not notice or sees it and ignores it. Alternatively, a student may not be able to see the blackboard but the teacher does nothing.</i>	The teacher responds to students' needs but may not address the problem at hand. <i>For example: A student may be upset because s/he does not have a pencil, and the teacher asks another child to share his/her pencil, but s/he refuses. The teacher carries on with the lesson without solving the problem. Or the child cannot see the blackboard so the teacher tells the child to move but does not check that in the new position they can now see.</i>	The teacher promptly responds to students' needs in a way that specifically addresses the problem at hand. <i>For example: If a student does not have a pencil, the teacher allows the child to borrow one from his/her spare pencil box. If a student cannot see the blackboard, she suggests a new place for them to sit, asks other students to make space and makes sure that after the move, everyone can see the board.</i>
English Practices			
12. The teacher builds on previously learnt English Language using innovative teaching strategies for richer learning experiences.	The teacher employs formulaic and uninspiring strategies to assess students' prior knowledge and partially builds upon new concepts, but fails to make meaningful connections between the two or adequately address learning gaps and deficiencies.	The teacher employs targeted and effective strategies with some innovation to assess students' prior knowledge and effectively builds upon new concepts, although without addressing all learning gaps and deficiencies.	The teacher utilizes targeted and innovative strategies adeptly to assess students' prior knowledge, effectively building upon new concepts while addressing learning gaps and deficiencies as necessary.

13. The teacher enables the students to respond critically and creatively to the given text type.	The teacher faces challenges in fully engaging students in comprehending and responding critically and/or creatively to the given text type, requiring further support and development in this area.	The teacher somewhat enables students to comprehend and respond critically and/or creatively to the provided text type, although there may be room for improvement in fully engaging students in these aspects.	The teacher effectively facilitates students' comprehension and encourages critical and creative responses to the provided text type, fostering deep engagement and insightful interpretations.
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General Information				
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Observer designation (circle one)				
About the lesson you observe				
Grade(s)		Number of children in class today		
Subject				
Topic				
Main SLO				
Observation start time		Observation end time		

PART 2: CLASSROOM OBSERVATION (General Practices)						
	Score (5 is high)					
Lesson Facilitation	n/a*	1	2	3	4	5
1. The teacher explicitly articulates the objectives of the lesson and relates classroom activities to the objectives.						

2. The teacher's explanation of content is clear and correct.						
3. The teacher makes connections that relate to students' daily lives or other content knowledge.						
4. The teacher models by enacting, thinking aloud or showing a final product expected of the students.						
Checks for understanding						
5. The teacher uses questions, prompts or other strategies to determine students' level of understanding.						
6. The teacher monitors most students during individual or group work.						
7. The teacher adjusts teaching to the level of the students.						
Feedback						
8. The teacher provides specific comments to help students clarify misunderstandings and understand successes.						
Critical Thinking						
9. The teacher asks thinking questions.						
10. The teacher provides thinking tasks.						
Classroom Culture						
11. The teacher responds to students' needs.						

* NA = Not applicable. Selecting this option means you did not observe the practice in the lesson and it was not required.

PART 2: Subject Specific Practices (Math)

	Score (3 is high)			
	n/a*	1	2	3

12. The teacher creates meaningful linkages between previously acquired mathematical concepts and new learning through different teaching strategies i.e. inquiry- based, Math's Solutions, Discovery approach etc.				
13. The teacher helps students make sense of mathematical problems by enabling them to understand the meaning of a problem and identifying multiple solutions.				
14. The teacher provides sufficient opportunities for practice and problem-solving for key concepts (Content Strands: Number operations, Measurement and Geometry, Algebra and Data Handling) to encourage abstract and quantitative reasoning.				
15. The teacher concludes the mathematical problem by representing the concept through diagrams, two-way tables, graphs, flowcharts, and formulas and applying formative assessment strategies.				

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	Low (1)	Medium (3)	High (5)
Lesson facilitation			
1. The teacher explicitly articulates the objectives of the lesson and relates classroom activities to the objectives.	The teacher does not state the lesson objective(s), nor can an objective be guessed from the lesson activities. <i>For example: The teacher asks students to take turns reading a text about planting and harvesting crops. S/he then spends the rest of the lesson discussing farming and the specific processes involved. The teacher does not state a lesson objective, and it is difficult to infer a lesson objective from the activities as the objective could be developing oral reading fluency, developing vocabulary, or learning about agriculture.</i>	The teacher explicitly states a broad classroom objective and the lesson activities are somewhat aligned to the lesson objective(s). <i>For example: The teacher says, "Today we're going to learn about multiplication," without further specification. Alternatively, the lesson activities may clearly work toward how to divide whole numbers, but this is not explicitly articulated by the teacher.</i>	The teacher explicitly states the objective for this lesson the lesson activities closely align to the lesson objective(s). <i>For example: At the start of class the teacher states, "Today we're going to learn to multiply fractions. First, we are going to practice some examples together on the blackboard. Then you are going to work with a friend". Each lesson activity is clearly related to the objective of multiplying fractions.</i>

2. The teacher's explanation of content is clear and correct.	The teacher's explanations of the content are confusing or incorrect or content is simply not explained. <i>For example: The teacher uses too many technical terms without explaining what s/he means and/or may explain ideas without a logical order or connection. Moreover, the teacher may say, "A fraction is a combination of a numerator and denominator, without saying what either of those words mean. Alternatively, the teacher may not provide any explanation of content.</i>	The teacher's explanations of the content, when they occur, are correct and somewhat clear. <i>For example: While reading a story, the teacher identifies difficult words and defines them, but does not relate them to what is happening in the story.</i>	The teacher's explanations of content are clear, correct and easy to understand. The teacher makes sure to explain meaning of technical terms; the explanations are logical and may be accompanied by graphic representations or examples. <i>For example: In a lesson on fractions, the teacher provides a clear and thorough definition of a fraction, including defining "numerator" and "denominator." S/he has drawn several fractions on the board as examples.</i>
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Lesson facilitation

3. The teacher makes connections that relate to other content knowledge or students' daily lives.	The teacher does not connect what is taught to other content knowledge or to students' daily lives. <i>For example: During a lesson on fractions the teacher uses a picture of a cake and divides it into fourths but does not make a connection to students' experience with slicing cake. Alternatively, the teacher says, "Remember, yesterday we learned about whole numbers? Today, we</i>	The teacher attempts to connect the lesson to other content knowledge or to student's daily lives but the connections are sometimes unclear. <i>For example: When introducing a lesson on fractions, the teacher says, "When we cut a cake, we use fractions" and go on to explain fractions. The connection to students' lives is superficial and nonspecific. Alternatively, the teacher says, "Remember</i>	The teacher meaningfully connects the lesson to other content knowledge or to student's daily lives. <i>For example: When teaching a class on fractions, the teacher relates the content to students' experiences by asking, "Who has had to slice a birthday cake? How did you make sure there were enough slices for everyone? Learning about fractions can help us divide a cake between people." The teacher also connects the lesson</i>
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	are going to learn how to add fractions.”	yesterday we learned the rules for adding whole numbers? Now we are going to use those rules and apply them to adding fractions.” However, when explaining how to add fractions, the teacher does not link the rules back to the rules for adding whole numbers.	to a prior lesson on halves by saying, “Remember yesterday when we learned about halves? We learned that when we cut a cake in half, we can share it equally between 2 people. Today we will learn how to divide the cake into fourths, so 4 people can share the cake. When we were forming halves we made sure we had 2 halves of identical size. The same thing is true when we are forming fourths: we have to make sure to keep slices of the same size.” The connection between the current lesson and other content knowledge and/or students’ daily lives is clear.
4. The teacher models by enacting or thinking aloud or by showing a final product expected of the students.	The teacher does not model.	The teacher partially models the learning activity. <i>For example: In an English class where the objective of the activity is to write a paragraph, the teacher only demonstrates how to write a topic sentence. In a math class, the teacher shows (enacts) how to draw a bar graph but does not clarify how s/he extracted the data from the text to create the bar graph.</i>	The teacher completely models the learning activity by enacting or demonstrating all parts of the procedure and/or by thinking aloud. <i>For example: The teacher demonstrates different ways to solve a math problem (enactment of a procedure) and while doing so, s/he says what s/he is thinking at each step of the equation (think aloud). Or if students are calculating the area of their desk, the teacher demonstrates each step in the process</i>

			(full enactment of a procedure).
Checks for understanding			
5. The teacher uses questions, prompts or other strategies to determine students' level of understanding .	The teacher either does not ask questions/prompt students at all OR when s/he does, the class responds in synchrony, which is accepted without further clarifying for understanding. <i>For example: When explaining a concept, the teacher asks, "Have you all understood?" The students in the class respond in unison, "Yes, we have." Another example is that the teacher inquires, "This is correct, right?" after completing a problem set. The class or an individual student replies, "Yes, this is correct."</i>	The teacher uses questions, prompts, or other strategies that are effective at determining only a few students' level of understanding. <i>For example: The teacher asks, "What is 7+8?" Only a few students respond by raising their hand, a group from which the teacher calls upon 1 or 2 students to provide an answer. Alternatively, the teacher asks the question but does not ask students to raise their hands in response and simply allows students to willingly volunteer their answers.</i>	The teacher uses questions, prompts or other strategies that are effective at determining most students' level of understanding. <i>For example: The teacher says, "Please put your hand up if you agree with this statement: Equilateral triangles have equal angles." The teacher also asks students to demonstrate their knowledge by having all students share their answers, e.g., by asking each student to read out the sentence s/he wrote using past tense verbs.</i>

6. The teacher monitors most students during individual or group work.	The teacher does not monitor students when they are working independently or in groups. <i>For example: The teacher sits at his/her desk or remains standing in front of the class when students are working.</i>	The teacher monitors some students when they are working independently or in groups to check their understanding. <i>For example: The teacher observes some student work for accuracy, clarifies concepts, or asks questions.</i>	The teacher systematically monitors most students by circulating the classroom and approaching individual students or groups to check their understanding. <i>For example: When students are working, the teacher walks around the classroom, making sure to approach students or groups in a systematic way. The teacher observes most students' work, clarifies concepts, and asks questions.</i>
Feedback			
7. The teacher is being inclusive and adjusts teaching to the level of the students.	The teacher does not adjust teaching for students. Content is either too easy or too difficult for most if not all students.	The teacher adjusts teaching for some students but there are still some students for whom content is too easy or too difficult. <i>For example: As students complete an alphabet worksheet, the teacher notices they are not dotting their 'i's. In response, s/he briefly reminds the class to dot their 'i's.</i>	The teacher differentiates teaching, adjusts content and is teaching at the right level for all students. <i>For example: As students complete an alphabet worksheet, the teacher notices they are not dotting their 'i's. In response, s/he briefly stops the activity and reviews the differences between capital and lower case 'i's before continuing with the alphabet activity. Alternatively, if the teacher notices that a student has already completed the worksheet, s/he may give that</i>

			<i>student another activity to complete while waiting for the rest of the class.</i>
8. The teacher provides specific comments to help students clarify misunderstandings and understand successes.	The teacher either does not comment gives simple, evaluative statements (e.g. “That is incorrect”) <i>For example: When a student answers a teacher’s question incorrectly, the teacher responds by saying, “That is not the correct answer,” and moves on.</i>	The teacher makes some specific comments and draws attention to misunderstandings but the comments are superficial. <i>For example: In a math class, the teacher says, “You forgot to include the negative sign,” without providing further information or prompts.</i>	The teacher consistently provides students with specific, timely comments about their work. These comments provide substantive information about what the students did well and/or help clarify students’ misunderstandings. <i>For example: If students are writing stories the teacher may say, “You do a good job getting the reader interested in this paragraph when you write ‘no one knew what would happen.’ This sentence makes me want to read more.” Moreover, the teacher may highlight some students’ work and say to the class “Look at the work of this classmate, see how s/he used the number line to solve this subtraction problem?” And then proceeds to explain how s/he solved it.</i>
Critical thinking			

9. The teacher asks thinking questions.	The teacher asks questions that demand a simple yes/no answer or the recall of facts. <i>For example: The teacher asks, "Who is the main character in this story?" or "Which is greater, -2 or -6?"</i>	The teacher asks questions that require more than recall or a simple yes/no answer. <i>For example: The teacher asks, "Why was the character unhappy? What makes you think that?" OR "Why is -2 greater than -6?" And then asks, "How do you use the number line to determine if -8 or -4 is greater?"</i>	The teacher asks questions throughout the lesson to promote high level thinking. <i>For example: The teacher asks, "How do you think the main characters in the story would prepare for the competition?" After a student responds, the teacher then follows up by asking, "What facts or ideas make you think that?" Then s/he asks another student, "What do you think happens next?" In a math class, the teacher asks, "How do you know -2 is greater than -6?" After the student responds, the teacher follows up by asking, "What would happen if the numbers were positive?" Later in the lesson, the teacher asks, "How do you use the number line to determine if -8 or -4 is greater?"</i>
10. The teacher provides thinking tasks.	The teacher does not provide thinking tasks. Classrooms with no thinking tasks include those where students simply listen to the teacher or perform rote tasks.	The teacher provides low level thinking tasks. Low level thinking tasks are tasks such as matching sets of items, identifying concepts or key pieces of information, and comparing characteristics.	The teacher provides high level thinking tasks. High level thinking tasks are tasks such as making predictions, identifying patterns, explaining thinking, making connections, interpreting information, applying learning in new situations.

11. The teacher responds to students' needs.	The teacher is not aware of students' needs OR does not address the problem at hand <i>For example: A student may not have the required supplies for the lesson, and the teacher does not notice or sees it and ignores it. Alternatively, a student may not be able to see the blackboard but the teacher does nothing.</i>	The teacher responds to students' needs but may not address the problem at hand. <i>For example: A student may be upset because s/he does not have a pencil, and the teacher asks another child to share his/her pencil, but s/he refuses. The teacher carries on with the lesson without solving the problem. Or the child cannot see the blackboard so the teacher tells the child to move but does not check that in the new position they can now see.</i>	The teacher promptly responds to students' needs in a way that specifically addresses the problem at hand. <i>For example: If a student does not have a pencil, the teacher allows the child to borrow one from his/her spare pencil box. If a student cannot see the blackboard, she suggests a new place for them to sit, asks other students to make space and makes sure that after the move, everyone can see the board.</i>
Math Practices			
12. The teacher creates meaningful linkages between previously acquired mathematical concepts and new learning through different teaching strategies i.e. inquiry- based, Math's Solutions, Discovery approach etc.	The teacher struggles to establish connections between previously learned mathematical concepts and new material. The attempts are limited, inconsistent, and fail to contribute significantly to students' understanding.	The teacher makes some effort to link current lessons with prior knowledge. While there are moments of connection, they may lack depth or consistency, resulting in a moderate impact on students' understanding.	The teacher excels in creating strong and consistent linkages between previously acquired mathematical concepts and new learning. These connections are well-developed, meaningful, and contribute significantly to enhancing students' understanding, fostering a cohesive learning experience.

13. The teacher helps students make sense of mathematical problems by enabling them to understand the meaning of a problem and identifying multiple solutions.	The teacher struggles to guide students in understanding the meaning of mathematical problems. The assistance provided is minimal, and there is a lack of emphasis on exploring multiple solutions.	The teacher makes some effort to help students make sense of mathematical problems. There is partial success in enabling students to understand problem meanings, and some exploration of multiple solutions is encouraged, but it may lack depth or consistency.	The teacher excels in helping students thoroughly understand the meaning of mathematical problems. They effectively guide students in identifying multiple solutions, fostering a deep comprehension of problem-solving strategies and encouraging a flexible approach to mathematical challenges.
14. The teacher provides sufficient opportunities for practice and problem-solving for key concepts (Content Strands: Number operations, Measurement and Geometry, Algebra and Data Handling) to encourage abstract and quantitative reasoning.	The teacher provides no or limited opportunities for practice and problem-solving related to key concepts (content strands). The exercises lack depth, and there is minimal encouragement for abstract and quantitative reasoning skills.	The teacher offers some opportunities for practice and problem-solving for key concepts (content strands), but there is room for improvement. The exercises are moderately engaging, and while there is an attempt to encourage abstract and quantitative reasoning, it may not be consistently integrated.	The teacher excels in providing ample and well-structured opportunities for practice and problem-solving related to key concepts (content strands). The exercises/activities are designed to encourage and develop abstract and quantitative reasoning skills, contributing significantly to students' proficiency in the subject.
15. The teacher concludes the mathematical problem by representing the concept through diagrams, two-way tables, graphs, flowcharts, and formulas and applying formative	The teacher struggles to effectively conclude mathematical problems using visual representations and formulas. The use of diagrams, tables, graphs, flowcharts, and formulas is limited, and there is	The teacher makes some effort to conclude mathematical problems by incorporating visual representations and formulas. While there is moderate use of diagrams, tables, graphs, flowcharts, and formulas, the application of formative assessment strategies may be inconsistent.	The teacher excels in concluding mathematical problems by skillfully utilizing a variety of visual representations such as diagrams, two-way tables, graphs, flowcharts, and formulas. Formative assessment strategies are applied effectively, enhancing students' understanding and providing valuable

assessment strategies.	minimal evidence of formative assessment strategies.		feedback for ongoing learning.
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Classroom Observation Tool (COT)

PART 1: PRE-OBSERVATION				
General Information				
School name		EMIS code		
Teacher name		CNIC		
Name of observer		Observation Date		
Observer designation (circle one)				
About the lesson you observe				
Grade(s)		Number of children in class today		
Subject				
Topic				
Main SLO				
Observation start time		Observation end time		

PART 2: CLASSROOM OBSERVATION (General Practices)						
	Score (5 is high)					
Lesson Facilitation	n/a*	1	2	3	4	5
1. The teacher explicitly articulates the objectives of the lesson and relates classroom activities to the objectives.						

2. The teacher's explanation of content is clear and correct.						
3. The teacher makes connections that relate to students' daily lives or other content knowledge.						
4. The teacher models by enacting, thinking aloud or showing a final product expected of the students.						
Checks for understanding						
5. The teacher uses questions, prompts or other strategies to determine students' level of understanding.						
6. The teacher monitors most students during individual or group work.						
7. The teacher adjusts teaching to the level of the students.						
Feedback						
8. The teacher provides specific comments to help students clarify misunderstandings and understand successes.						
Critical Thinking						
9. The teacher asks thinking questions.						
10. The teacher provides thinking tasks.						
Classroom Culture						
11. The teacher responds to students' needs.						

* NA = Not applicable. Selecting this option means you did not observe the practice in the lesson and it was not required.

PART 2: Subject Specific Practices (Science)

	Score (3 is high)			
	n/a*	1	2	3

12. The teacher explains the fundamental concepts, principles, and interconnections of the life sciences, the physical sciences, the environmental sciences, and earth and space science using scientific terminologies.				
13. The teacher uses strategies to engage students in scientific method of studies enabling students to develop solutions to problems through observation, reasoning and investigation.				
14. The teacher demonstrates principles and procedures related to the design and implementation of scientific investigations incorporating safety practices.				
15. The teacher fosters a deep understanding among learners about the intricate connections between science, technology, and society (STS connections) in present-day situations, emphasizing the effects of science and technology on society by cultivating STS connections in current contexts.				

Scoring Rubric for the Classroom Observation Tool with Examples

The rubric describes the practice at three levels, low, medium and high. Note that the rating scale in the classroom observation tool allows observers to rate the practice from 1(low), 2 (medium low), 3 (medium), 4 (medium high) and 5 (high).

	Low (1)	Medium (3)	High (5)
Lesson facilitation			
1. The teacher explicitly articulates the objectives of the lesson and relates classroom activities to the objectives.	The teacher does not state the lesson objective(s), nor can an objective be guessed from the lesson activities. <i>For example: The teacher asks students to take turns reading a text about planting and harvesting crops. S/he then spends the rest of the lesson discussing farming and the specific processes involved. The teacher does not state a lesson objective, and it is difficult to infer a lesson objective from the activities as the objective could be developing oral reading fluency, developing vocabulary, or learning about agriculture.</i>	The teacher explicitly states a broad classroom objective and the lesson activities are somewhat aligned to the lesson objective(s). <i>For example: The teacher says, "Today we're going to learn about multiplication," without further specification. Alternatively, the lesson activities may clearly work toward how to divide whole numbers, but this is not explicitly articulated by the teacher.</i>	The teacher explicitly states the objective for this lesson the lesson activities closely align to the lesson objective(s). <i>For example: At the start of class the teacher states, "Today we're going to learn to multiply fractions. First, we are going to practice some examples together on the blackboard. Then you are going to work with a friend". Each lesson activity is clearly related to the objective of multiplying fractions.</i>

2. The teacher's explanation of content is clear and correct.	The teacher's explanations of the content are confusing or incorrect or content is simply not explained. <i>For example: The teacher uses too many technical terms without explaining what s/he means and/or may explain ideas without a logical order or connection. Moreover, the teacher may say, "A fraction is a combination of a numerator and denominator, without saying what either of those words mean. Alternatively, the teacher may not provide any explanation of content.</i>	The teacher's explanations of the content, when they occur, are correct and somewhat clear. <i>For example: While reading a story, the teacher identifies difficult words and defines them, but does not relate them to what is happening in the story.</i>	The teacher's explanations of content are clear, correct and easy to understand. The teacher makes sure to explain meaning of technical terms; the explanations are logical and may be accompanied by graphic representations or examples. <i>For example: In a lesson on fractions, the teacher provides a clear and thorough definition of a fraction, including defining "numerator" and "denominator." S/he has drawn several fractions on the board as examples.</i>
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Lesson facilitation

3. The teacher makes connections that relate to other content knowledge or students' daily lives.	The teacher does not connect what is taught to other content knowledge or to students' daily lives. <i>For example: During a lesson on fractions the teacher uses a picture of a cake and divides it into fourths but does not make a connection to students' experience with slicing cake. Alternatively, the teacher says, "Remember, yesterday we learned about whole numbers? Today, we</i>	The teacher attempts to connect the lesson to other content knowledge or to student's daily lives but the connections are sometimes unclear. <i>For example: When introducing a lesson on fractions, the teacher says, "When we cut a cake, we use fractions" and go on to explain fractions. The connection to students' lives is superficial and nonspecific. Alternatively, the teacher says, "Remember</i>	The teacher meaningfully connects the lesson to other content knowledge or to student's daily lives. <i>For example: When teaching a class on fractions, the teacher relates the content to students' experiences by asking, "Who has had to slice a birthday cake? How did you make sure there were enough slices for everyone? Learning about fractions can help us divide a cake between people." The teacher also connects the lesson</i>
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	<i>are going to learn how to add fractions.”</i>	<i>yesterday we learned the rules for adding whole numbers? Now we are going to use those rules and apply them to adding fractions.” However, when explaining how to add fractions, the teacher does not link the rules back to the rules for adding whole numbers.</i>	<i>to a prior lesson on halves by saying, “Remember yesterday when we learned about halves? We learned that when we cut a cake in half, we can share it equally between 2 people. Today we will learn how to divide the cake into fourths, so 4 people can share the cake. When we were forming halves we made sure we had 2 halves of identical size. The same thing is true when we are forming fourths: we have to make sure to keep slices of the same size.” The connection between the current lesson and other content knowledge and/or students’ daily lives is clear.</i>
4. The teacher models by enacting or thinking aloud or by showing a final product expected of the students.	The teacher does not model.	The teacher partially models the learning activity. <i>For example: In an English class where the objective of the activity is to write a paragraph, the teacher only demonstrates how to write a topic sentence. In a math class, the teacher shows (enacts) how to draw a bar graph but does not clarify how s/he extracted the data from the text to create the bar graph.</i>	The teacher completely models the learning activity by enacting or demonstrating all parts of the procedure and/or by thinking aloud. <i>For example: The teacher demonstrates different ways to solve a math problem (enactment of a procedure) and while doing so, s/he says what s/he is thinking at each step of the equation (think aloud). Or if students are calculating the area of their desk, the teacher demonstrates each step in the process</i>

			(full enactment of a procedure).
Checks for understanding			
5. The teacher uses questions, prompts or other strategies to determine students' level of understanding .	The teacher either does not ask questions/prompt students at all OR when s/he does, the class responds in synchrony, which is accepted without further clarifying for understanding. <i>For example: When explaining a concept, the teacher asks, "Have you all understood?" The students in the class respond in unison, "Yes, we have." Another example is that the teacher inquires, "This is correct, right?" after completing a problem set. The class or an individual student replies, "Yes, this is correct."</i>	The teacher uses questions, prompts, or other strategies that are effective at determining only a few students' level of understanding. <i>For example: The teacher asks, "What is 7+8?" Only a few students respond by raising their hand, a group from which the teacher calls upon 1 or 2 students to provide an answer. Alternatively, the teacher asks the question but does not ask students to raise their hands in response and simply allows students to willingly volunteer their answers.</i>	The teacher uses questions, prompts or other strategies that are effective at determining most students' level of understanding. <i>For example: The teacher says, "Please put your hand up if you agree with this statement: Equilateral triangles have equal angles." The teacher also asks students to demonstrate their knowledge by having all students share their answers, e.g., by asking each student to read out the sentence s/he wrote using past tense verbs.</i>

6. The teacher monitors most students during individual or group work.	The teacher does not monitor students when they are working independently or in groups. <i>For example: The teacher sits at his/her desk or remains standing in front of the class when students are working.</i>	The teacher monitors some students when they are working independently or in groups to check their understanding. <i>For example: The teacher observes some student work for accuracy, clarifies concepts, or asks questions.</i>	The teacher systematically monitors most students by circulating the classroom and approaching individual students or groups to check their understanding. <i>For example: When students are working, the teacher walks around the classroom, making sure to approach students or groups in a systematic way. The teacher observes most students' work, clarifies concepts, and asks questions.</i>
Feedback			
7. The teacher is being inclusive and adjusts teaching to the level of the students.	The teacher does not adjust teaching for students. Content is either too easy or too difficult for most if not all students.	The teacher adjusts teaching for some students but there are still some students for whom content is too easy or too difficult. <i>For example: As students complete an alphabet worksheet, the teacher notices they are not dotting their 'i's. In response, s/he briefly reminds the class to dot their 'i's.</i>	The teacher differentiates teaching, adjusts content and is teaching at the right level for all students. <i>For example: As students complete an alphabet worksheet, the teacher notices they are not dotting their 'i's. In response, s/he briefly stops the activity and reviews the differences between capital and lower case 'i's before continuing with the alphabet activity. Alternatively, if the teacher notices that a student has already completed the worksheet, s/he may give that</i>

			<i>student another activity to complete while waiting for the rest of the class.</i>
8. The teacher provides specific comments to help students clarify misunderstandings and understand successes.	The teacher either does not comment gives simple, evaluative statements (e.g. “That is incorrect”) <i>For example: When a student answers a teacher’s question incorrectly, the teacher responds by saying, “That is not the correct answer,” and moves on.</i>	The teacher makes some specific comments and draws attention to misunderstandings but the comments are superficial. <i>For example: In a math class, the teacher says, “You forgot to include the negative sign,” without providing further information or prompts.</i>	The teacher consistently provides students with specific, timely comments about their work. These comments provide substantive information about what the students did well and/or help clarify students’ misunderstandings. <i>For example: If students are writing stories the teacher may say, “You do a good job getting the reader interested in this paragraph when you write ‘no one knew what would happen.’ This sentence makes me want to read more.” Moreover, the teacher may highlight some students’ work and say to the class “Look at the work of this classmate, see how s/he used the number line to solve this subtraction problem?” And then proceeds to explain how s/he solved it.</i>
Critical thinking			

9. The teacher asks thinking questions.	The teacher asks questions that demand a simple yes/no answer or the recall of facts. <i>For example: The teacher asks, "Who is the main character in this story?" or "Which is greater, -2 or -6?"</i>	The teacher asks questions that require more than recall or a simple yes/no answer. <i>For example: The teacher asks, "Why was the character unhappy? What makes you think that?" OR "Why is -2 greater than -6?" And then asks, "How do you use the number line to determine if -8 or -4 is greater?"</i>	The teacher asks questions throughout the lesson to promote high level thinking. <i>For example: The teacher asks, "How do you think the main characters in the story would prepare for the competition?" After a student responds, the teacher then follows up by asking, "What facts or ideas make you think that?" Then s/he asks another student, "What do you think happens next?" In a math class, the teacher asks, "How do you know -2 is greater than -6?" After the student responds, the teacher follows up by asking, "What would happen if the numbers were positive?" Later in the lesson, the teacher asks, "How do you use the number line to determine if -8 or -4 is greater?"</i>
10. The teacher provides thinking tasks.	The teacher does not provide thinking tasks. Classrooms with no thinking tasks include those where students simply listen to the teacher or perform rote tasks.	The teacher provides low level thinking tasks. Low level thinking tasks are tasks such as matching sets of items, identifying concepts or key pieces of information, and comparing characteristics.	The teacher provides high level thinking tasks. High level thinking tasks are tasks such as making predictions, identifying patterns, explaining thinking, making connections, interpreting information, applying learning in new situations.

11. The teacher responds to students' needs.	The teacher is not aware of students' needs OR does not address the problem at hand <i>For example: A student may not have the required supplies for the lesson, and the teacher does not notice or sees it and ignores it. Alternatively, a student may not be able to see the blackboard but the teacher does nothing.</i>	The teacher responds to students' needs but may not address the problem at hand. <i>For example: A student may be upset because s/he does not have a pencil, and the teacher asks another child to share his/her pencil, but s/he refuses. The teacher carries on with the lesson without solving the problem. Or the child cannot see the blackboard so the teacher tells the child to move but does not check that in the new position they can now see.</i>	The teacher promptly responds to students' needs in a way that specifically addresses the problem at hand. <i>For example: If a student does not have a pencil, the teacher allows the child to borrow one from his/her spare pencil box. If a student cannot see the blackboard, she suggests a new place for them to sit, asks other students to make space and makes sure that after the move, everyone can see the board.</i>
Science Practices			
12. The teacher explains the fundamental concepts, principles, and interconnections of the life sciences, the physical sciences, the environmental sciences, and earth and space science using scientific terminologies.	The teacher demonstrates a clear understanding of the fundamental concepts across the various sciences.	The teacher effectively integrates relevant and meaningful examples and contextual references.	The teacher consistently and accurately employs scientific terminologies enhancing the precision and scientific rigor of their explanations.

13. The teacher uses strategies to engage students in scientific method of studies enabling students to develop solutions to problems through observation, reasoning and investigation.	The teacher cultivates curiosity among students by presenting scientific problem and issues from daily life.	The teacher selects and implements strategies that actively engage students in the scientific method consistently.	The teacher helps students developing their proficiency in solving daily life problems.
14. The teacher demonstrates principles and procedures related to the design and implementation of scientific investigations incorporating safety practices.	The teacher sensitized students about safety measures and hazards related to the activity.	The teacher adopted/ observed personal and students' safety measures during the activity.	The teacher guided students to practice all safety measures successfully during the activity.
15. The teacher fosters a deep understanding among learners about the intricate connections between science, technology, and society (STS connections) in present-day situations, emphasizing the effects of science and technology on society by cultivating STS connections in current contexts.	The teacher integrates STS connections in present-day situations and enhances students' learning by connecting the SLO with society & technology.	The teacher used technology i.e., AV aids like internet, computer, mobile, multimedia etc. during classroom instruction.	The teacher involved students by providing tangible gadgets/ IT equipment to boost their concepts.