## OBSERVER MANUAL

## Teach Secondary




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## Teach Secondary

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## TEACH SECONDARY TEAM <br> Acknowledgments

Teach Secondary was prepared by a team led by Ezequiel Molina and Emma Carter. The core team was composed of Jenny Beth Aloys, Carolina Moreira Vásquez, Gabrielle Arenge, Gill Althia Francis, Maria Tsapali, Diego Luna-Bazaldua, and Estefania Avendano. The team would like to acknowledge the work of other team members that helped develop the framework on which Teach Secondary is built for their useful feedback. This includes Adelle Pushparatnam, Tracy Wilichowski, and Carolina Melo Hurtado. We would also like to thank Ana Teresa Del Toro Mijares and Carla Agustina Froy for their guidance and support with the development of Teach Secondary. Moreover, we would like to thank Nidhi Singal and the Inclusion Advisory Panel composed of Jo Westbrook, Rabea Malik, and Joshua Josa for their feedback and guidance on revisions to the instrument relating to inclusion.

Sarah Fuller Klyberg was the chief copy editor. The manual and observation instrument were designed by Danielle Willis. Janet Adebo provided administrative support.

The Teach Secondary team received guidance from a technical advisory panel composed of Kwame Akyeampong, Lindsay Brown, Daniel Muijs, Herine Otieno-Menya, Albert Paulo Tarmo, and Pauline Rose.

A number of colleagues provided insightful comments, feedback, and inputs on the tool, including Leandro Costa, Heather Hill, Carolina Melo Hurtado, Kenglin Lai, Kesha Lee, Rhiannon Moore, Charlotte Vuyiswa McClainNhlapo, Karthika Radhakrishnan-Nair, Sara Rimm-Kaufmann, Andrea Rolla, Caine Rolleston, Anusha Pudugramam Ramakrishnan, Shwetlena Sabarwal, and Bethany Wilinski.

In addition, the team is grateful to the Research for Equitable Access and Learning Centre at the University of Cambridge and Laterite that developed in collaboration with the World Bank's Teach team and applied a preliminary version of Teach Secondary in secondary mathematics classrooms in Rwanda for the Mastercard Foundation's Leaders in Teaching initiative. ${ }^{1}$ The team would particularly like to thank Collins Kweyamba, Ezron Mucyo, and Fabiola Niwenshuti from Laterite for their support with coding and providing feedback on revisions to the tool.

Overall guidance for the development and preparation of Teach Secondary was provided by Omar Arias, Practice Manager for the Global Knowledge and Innovation Team. The team acknowledges support from the Global Leads of the Curriculum, Instruction and Assessment Thematic Group; the Teachers Career and Professional Development Thematic Group; and the Inclusive Education Thematic Group for their guidance and advice throughout the process. The team is especially grateful to Jaime Saavedra, Senior Director of the Education Global Practice, for his leadership, direction, and relentless support.

The team is grateful for the generous support provided by Porticus, whose funding via the grant program Measuring and supporting effective teaching practices: The development of Teach Secondary and Coach, enabled the development of Teach Secondary.

The team apologizes to anyone inadvertently omitted from this list and expresses its gratitude to all who contributed to Teach Secondary, including those whose names may not appear here.

Lastly and most importantly, the team members would like to thank all the teachers who welcomed us into their classroom and supported our observations of their practice as part of this project.

HAVE QUESTIONS? Contact Us at teach@worldbank.org.

INTRODUCTION

## What does Teach Secondary Measure?

Teach Secondary² differs from other classroom observation tools in that it captures (i) the time teachers spend on learning, the extent to which students are on task, and whether students are actively participating in learning; (ii) the quality of teaching practices that help develop students' socioemotional and cognitive skills; and (iii) other aspects of the learning environment, such as the accessibility of the physical environment, including classroom setup and available materials.

As part of the Time on Task component, three "snapshots" of 1-10 seconds are used to record both the teacher's actions, the number of students who are on task throughout the observation, and if students are actively participating in learning. The Quality of Teaching Practices component, on the other hand, is organized into three primary areas: Classroom Culture, Instruction, and Socioemotional Skills ${ }^{3}$ (see graphic on page 3). These areas have 9 corresponding elements that point to 29 behaviors. The behaviors are characterized as low, medium, or high, based on the evidence collected during the observation. These behavior scores are translated into a 5-point scale that quantifies teaching practices as captured in a series of two, 15 -minute lesson observations.


CLASSROOM CULTURE: The teacher creates a culture that is conducive to learning. The focus here is not on the teacher's correction of students' negative behaviors, but rather the extent to which the teacher creates: (i) a supportive learning environment by treating all students respectfully, consistently using positive language, responding to students' needs, and both challenging gender and disability stereotypes and not exhibiting gender or disability bias in the classroom; and (ii) positive behavioral expectations by setting clear behavioral expectations, acknowledging positive student behavior, and effectively redirecting misbehavior.

INSTRUCTION: The teacher instructs in a way that deepens student understanding and encourages critical thinking and analysis. The focus here is not on content-specific methods of instruction, but rather the extent to which the teacher: (i) facilitates the lesson by explicitly articulating lesson objectives that are aligned to the learning activity, using multiple forms of representation to explain content, connecting the learning activity to other content knowledge, students' daily lives, or real-world experiences, and by modeling the learning activity through demonstrating or thinking aloud; (ii) does not simply move from one topic to the next but checks for understanding by using questions, prompts, or other strategies to determine students' level of understanding, by monitoring students during group and independent work, and by adjusting his/her teaching to the level of students; (iii) gives feedback by providing specific comments or prompts to help clarify students' misunderstandings or identify their successes; and (iv) encourages students to think critically by asking open-ended questions and providing students with thinking tasks that require them to analyze content actively. Students exhibit critical thinking ability by performing thinking tasks, explaining their thinking, or asking open-ended questions.

SOCIOEMOTIONAL SKILLS: The teacher fosters socioemotional skills that encourage students to succeed both inside and outside the classroom. To develop students' social and emotional skills, the teacher: (i) instills autonomy by providing students with opportunities to make choices and take on meaningful roles in the classroom, and students exhibit their autonomy by volunteering to participate in classroom activities; (ii) promotes perseverance by acknowledging students' efforts, rather than focusing solely on their intelligence or natural abilities, by having a positive attitude toward students' challenges by framing failure and frustrations as part of the learning process, and by encouraging students to set shortand long-term goals; and (iii) fosters social and collaborative skills by encouraging collaboration through peer interaction and by promoting interpersonal skills, such as perspective taking, empathizing, emotion regulation, and social problem solving. Students exhibit social and collaborative skills by collaborating with one another through peer interaction.

Finally, Teach Secondary is accompanied by a checklist to assess other aspects of the learning environment related to structural quality, including the accessibility of the physical environment and some aspects of classroom setup and available materials, which can be used together with the classroom observation components.
TEACH FRAMEWORK

TIME ON
TASK
+
+
QUALITY OF
TEACHING
PRACTICES

## How was Teach Secondary Developed?

To finalize a working version of the tool, the Teach Secondary development team rigorously researched, revised, and piloted different iterations of the tool over a 2-year timeframe.

The development of Teach Secondary began with testing an adapted version of Teach, developed by researchers at the Research for Equitable Access and Learning (REAL) Centre and Laterite in collaboration with the World Bank's Teach team, within 103 secondary mathematics classrooms in Rwanda as part of the Mastercard Foundation's Leaders in Teaching initiative. ${ }^{4}$ Revisions at this stage were limited to behavior examples, rather than the tool's core framework, and largely focused on the subject of mathematics due to the focus of the research. Based on this preliminary work, researchers from the REAL Centre joined as consultants with the Teach team to support further development of Teach Secondary for broader application across subjects and contexts.

The development team reviewed the theoretical and empirical evidence from low- and middle-income countries to further assess both the relevance of the existing Teach framework to the secondary level and additional classroom practices that were applicable to this stage of schooling but not captured in the existing tool. This review also included in-depth analyses of existing observation protocols that had been applied in secondary classrooms, with a focus on those used in the Global South. This review was complemented by in-depth discussions with academics and education practitioners, including those specialized in inclusive education, who provided invaluable feedback on the extent to which Teach was relevant to secondary school contexts and needed revision to improve its applicability to this stage of schooling. This process led to further changes to the tool and resulted in an extended framework of 10 elements and 34 behaviors.

This extended framework comprised the first working version of the Teach Secondary tool, which aimed to capture both the quality and frequency of teaching practices as measured by each element. This preliminary tool was then sent for internal review, a process involving numerous Teach colleagues who were instrumental in the development of the original observation protocol and its adaptation to other levels of schooling. This process led to further revisions and constructive discussions on changes to Teach Secondary that might also complement other versions of the tool.

The preliminary Teach Secondary tool was piloted through classroom video footage in Uganda, Tanzania, and Guyana. From these pilots, the team learned that several of the new behaviors had to be reworked due to coding challenges with establishing reliability and/or distinguishing practices from existing behaviors. This discovery led to a dynamic process of revision in which edits to behaviors and approaches to scoring were discussed, adapted, and tested to obtain clarity and reliability. When this outcome could not be achieved, items were omitted from the instrument. This process resulted in a tool comprised of 10 elements and 32 behaviors.

The development team convened a technical advisory panel, including Kwame Akyeampong, Lindsay Brown, Daniel Muijs, Herine Otieno-Menya, Albert Paulo Tarmo, and Pauline Rose, to provide written feedback on the tool. Their comments were compiled and addressed as part of a technical workshop, during which the experts clarified feedback points and advised the team on which issues to prioritize and how to incorporate the comments to further improve the tool.

## PROCEDURES FOR CODING

## Protocol

Before, during, and after an observation, observers should be cognizant and respectful of the school environment by following this protocol.

## BEFORE

## SUPPLIES:

Ensure you have the manual, observation packet, a pencil or pen, consent forms, ${ }^{5}$ and a watch or phone.

## ARRIVAL:

Introduce yourself to the principal and arrive at the designated classroom at least 10 minutes before class begins.

Introduce yourself to the teacher, explain the purpose of the visit, and remind the teacher of the confidential nature of the observation:
"Good morning, Mr./Ms. [teacher's surname], I work with [affiliate organization]. Your school has been randomly selected for a survey that includes classroom observations. The purpose of the survey is to learn about teaching practices in [district/city name]. As such, I'm here simply to learn from you-these observations will not be used for evaluative purposes, and your identity will remain entirely confidential. Please proceed with the lesson as you normally would."

## DISSENT:

If a teacher does not want to be observed, remind the teacher that the observation is not an evaluation, his/her identity will be kept anonymous, and no observation information will be shared with school authorities. A teacher cannot be forced to be observed. If the teacher declines consent, exit the classroom and document what happened on the observation sheet.

## CHECKLIST (If applicable):

Complete the "Fill in before the classroom observation" section.

Inform the teacher that you will have a checklist to fill out when class ends. Ask him/her to notify the students they must stay after class and follow your instructions.

## DURING

## SETUP.

Sit toward the back of the classroom to view the entire classroom; ensure your presence does not block students' view of the lesson.

If visiting a classroom with another observer, seat yourself separately and refrain from talking with the other observer at any point during the lesson.

Ensure your cellphone is muted and abstain from texting, phone calls, Facebook/Twitter, taking photos, and other distracting activities.

## OBSERVATION:

Begin the observation when class is scheduled to begin; if the teacher is delayed, wait until the teacher arrives and record the time on the observation sheet.

In the case of multigrade
classrooms, treat the observation as one grade and document it on the observation sheet.

## NO INTERACTION:

Avoid engaging with or distracting the students or teacher and do not participate in classroom activities, even if explicitly asked.

Do not check students' textbooks, worksheets, notebooks, or other classwork.

Avoid positive or negative nonverbal expressions and convey a neutral attitude to avoid inadvertently distracting the teacher.

Redirect the teacher and students to the lesson if they ask questions or focus their attention on your presence.

## AFTER

## CONCLUSION:

Thank the teacher for being able to conduct the observation.

When the second observation concludes, remain silently in the classroom and finish coding without distractions.

## DISCRETION:

Avoid discussing any of the scores with the teacher. If a teacher asks about his/her performance, politely remind the teacher that this observation is not a performance evaluation. For example:
"The goal of the observation was to learn about teaching practices; the notes from this observation will be used as part of a larger study on teaching practices in [district/city name]. I very much enjoyed watching your lesson and appreciate your allowing me into your classroom."

## Refrain from discussing the

 classroom scores with anyone. You can provide your supervisor's number if the teacher insists.Refrain from discussing what occurred during the lesson in a joking or disrespectful way.

This behavior may affect your credibility as an observer.

CHECKLIST (If applicable):
Complete the "Fill in after the observation" section.

With the assistance of the teacher, ask necessary questions such as "how many students have a pencil" and count. If you finish coding the second observation before the class is over you may begin other aspects of the checklist provided you are silent and not a distraction (standing up, moving around the classroom, etc.).

## Length of the Observation

Observations should be divided into two, 15 -minute segments. ${ }^{6}$ The first observation segment begins at the scheduled class time, but if the teacher or students are not present during the scheduled class time or the lesson is delayed, the observation begins when the teacher enters the classroom. After each 15-minute observation, observers should spend 10-15 minutes scoring the observation, depending on the length of the class. For example, in a 45-minute class, the first observation segment begins at the scheduled class time and is 15 minutes in length. The observer then stops (even though class is still going) and spends the next 15 minutes scoring segment 1 . The observer then spends the remaining 15 minutes of class observing segment 2. After the class has concluded, the observer spends another 15 minutes scoring segment 2 . Observers should always record the length of each observation segment on the scoring sheet. If the lesson ends before the predetermined length of the observation, observers should still code the segment. It is important to accurately record the information on segment length, delayed starts, and early finishes, as this information will be used in data analysis.

## Note-Taking

Once the observation begins, the observer uses the note-taking form to document what the teacher says by noting specific behaviors, questions, instructions, and actions. These notes are essential to code objectively and reliably since they provide evidence for the chosen scores. When note-taking, it is important to be as descriptive as possible. Observers will use their notes and compare them with the descriptions in the manual to determine the behavior quality ranges and assign an overall combined score for each element. As soon as observers finish an observation, every score should be justified with evidence from the observation.

When note-taking, it is important to look for specific student and teacher behaviors that are clearly included in the tool. All observers should create a note-taking system that works for them; below are some helpful note-taking techniques. ${ }^{7}$

| TECHNIQUE | WHAT IS OBSERVED | WHAT IS WRITTEN |
| :---: | :---: | :---: |
| SCRIPTING: <br> quotes by teachers ( T ) or students (S) | After a lesson on exponential numbers, the teacher asks students to relate the current lesson to a previous one by asking them to calculate a number to the power of 3. She asks, "Who can apply the rule we learned yesterday to calculate 3 to the power of 3 ?" A student raises her hand and responds, " 3 to the power of 3 is the same as $3 \times 3 \times 3$. So the answer is 27. ." | T: Who can apply rule from yesterday to calculate 3 to the power of 3 ? S: This is the same as $3 \times 3 \times 3=27$. |
| TALLIES: shortcuts for frequently used words or phrases | Throughout the lesson, the teacher says "very good" eight times in response to student participation and answers. | "Very good" $\sqrt{ } \sqrt{ } \sqrt{ } \sqrt{ } \sqrt{ } \sqrt{ } \sqrt{ }$ |
| SHORTHAND: <br> specific symbols or letters to represent behaviors | The teacher checks a student's solution to a mathematical equation and provides feedback by saying, "Great job on solving this equation. You remembered the order of operations well." | FB- T: Remembered order of operations. |
| ANECDOTES: <br> summaries of what was seen or heard | At the start of an activity, the teacher asks if everyone has a textbook. Six students raise their hands to indicate they do not. The teacher continues teaching at the board. Meanwhile, three students are playing with a ball of paper and distracting others. | 6 Ss no book, T cont. teaching at board, 3 Ss playing (disruptive). |

## Measuring Time on Task

For the Time on Learning element, observers will take three "snapshots," or 1-10 second scans of the classroom, and use only information gathered during the snapshot to code the behaviors. For the first behavior, observers will record whether the teacher is providing a learning activity for most students by indicating "no" if the teacher is not providing a learning activity and "yes" if the teacher is. If the teacher is providing a learning activity, scan the classroom from left to right to determine whether students are on task and actively participating. If 0 or 1 student is off task, score the second behavior high (H). If 2 to 5 students are off task, score it medium (M). If 6 or more students are off task, score it a low (L). If over two-thirds of the class are actively participating in learning, score the third behavior as "yes." If the teacher does not provide a learning activity for most students, record a "not applicable" (N/A) for the second and third behavior and continue coding the other elements of the tool. See page 17 for more details on the snapshot method and how to code this element.

|  | TIME ON LEARNING | ${ }^{\text {st }}$ Snapshot (4m) |  |  | $2^{\text {nd }}$ Snapshot (9m) |  |  |  | $3{ }^{\text {rd }}$ Snapshot (14m) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.1 | Teacher provides learning activity to most students |  | (Y) | N |  | Y | N |  |  | Y | N |  |
| 0.2 | Students are on task | N/A | $L$ M | H | N/A | L | M | H | N/A | L | M | H |
| 0.3 | Students are actively participating in learning tasks | (N/A | Y | N | N/A | Y |  | N | N/A | Y |  | N |

## Measuring Quality of Teaching Practices

## (i) Assigning quality ranges to each behavior

To assign the most objective score, the manual describes each behavior in three quality ranges: low, medium, and high. Each behavior includes a detailed description and examples that help observers decide which quality score best applies to each element. After the first observation segment concludes, the observer assigns a low, medium, or high rating to each behavior. To rate accurately, it is necessary to read the observer notes and compare them with the descriptions in the manual. It is very important for observers to adhere to the manual as closely as possible, whether or not they agree with it. This symbol ? signifies that the given behavior has a corresponding FAQ; observers should thoroughly familiarize themselves with the FAQs prior to carrying out observations and refer to the FAQs while coding to help clarify any confusion.

It is very important that observers give one score for every behavior. If observers want to change an answer, they must clearly remove the invalid score by fully erasing or striking through it. Some behaviors may not be observed. For those behaviors, the manual provides the option to write "N/A." Observers can only score N/A if presented the option on the scoring sheet (behaviors $0.2,0.3,1.3,1.4,4.2$ ). If a behavior is scored $N / A$, this behavior should not influence the overall score for the corresponding element. The following example shows what changing an answer and using an N/A score would look like in practice:

```
4. CHECKS FOR UNDERSTANDING
4.1 The teacher uses questions, prompts or other strategies to determine students' level of understanding
4.2 The teacher monitors most students during independent/group work
4.3 The teacher adjusts teaching to the level of students
```

| 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| $L$ | $C M$ | $H$ | $\square$ |  |
| $L$ | $M$ | $H$ |  |  |
| $L$ | $M M$ | $H$ |  |  |

## (ii) Assigning scores to each element

After assigning quality ranges to the behaviors, the element scores should be determined according to the overall quality of each element. Scores range from 1 to 5 , with 1 being the lowest score and 5 the highest. It is necessary to carefully read the descriptions for the different behavior levels and assign an element score that best describes the observed scenario in the classroom. While the final score should follow the calculated scores from the behaviors, observers should always go back and reread the element description and its corresponding behaviors to determine if the score fits the overall description of the element. For example, observers may score an element a 4 even if it contains high, medium, and low behavior scores if what was observed exceeds the overall medium description but does not meet a high description. The final score need not be a mathematical calculation, and it should reflect the evidence presented in the entire segment.
2. POSITIVE BEHAVIORIAL EXPECTATIONS
2.1 The teacher sets clear behavioral expectations for classroom activities
2.2 The teacher acknowledges positive student behavior
2.3 The teacher redirects misbehavior and focuses on an expected behavior, rather than the undesired behavior

| 1 | 2 | 3 | 4 | 5 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $L$ | $M$ | $H$ | $H$ |  |  |
| L | $M$ | $H$ | $L$ |  |  |
| $L$ | $M$ | $H$ | $M$ |  |  |

## (iii) Assigning scores for behavior 1.4

After assigning a low, medium, or high quality rating for the sub-behaviors 1.4 a and 1.4 b separately, an overall quality rating can be decided for behavior 1.4. In determining this overall quality rating, the following guidelines for different sub-behavior rating combinations should be followed:

If both $1.4 a$ and 1.4 b are assigned the same quality rating, this rating would constitute the overall quality rating for the behavior. For example, if 1.4 a and 1.4 b are both assigned a high rating, the overall quality rating for behavior 1.4 would remain as a high rating.

| 1.4 | The teacher does not exhibit bias and challenges stereotypes in the classroom | a. Gender <br> b. Disability | (L) $M H$ <br> (L) $M H$ | Sub-scores | $L$ $L$ | $\begin{gathered} \text { Determine } \\ \text { score } \end{gathered}$ | (L) | M | H | $L$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.4 | The teacher does not exhibit bias and challenges stereotypes in the classroom | a. Gender <br> b. Disability | $\begin{aligned} & L \mathbb{M} H \\ & \angle M H \end{aligned}$ | Sub-scores | $\begin{aligned} & M \\ & M \end{aligned}$ | $\begin{gathered} \text { Determine } \\ \text { score } \end{gathered}$ | L | (M) | H | M |
| 1.4 | The teacher does not exhibit bias and challenges stereotypes in the classroom | a. Gender <br> b. Disability | $\begin{array}{lll} L & M \\ L & M & H \\ \hline \end{array}$ | Sub-scores | H $H$ | $\begin{aligned} & \text { Determine } \\ & \text { score } \end{aligned}$ | L | M | (H) | H |

If a low rating were assigned to either 1.4a or 1.4b, the overall rating for the behavior would remain as a low rating, irrespective of the combination. For example, if 1.4 b were rated as low, this rating would take precedence in deciding the overall score, even if the rating for 1.4 a were rated as medium or high.

| 1.4 | The teacher does not exhibit bias and challenges stereotypes in the classroom | a. Gender <br> b. Disability | $\begin{aligned} & L(M) H \\ & \text { (L) } M H \end{aligned}$ | Sub-scores | $\underset{L}{M}$ | Determine score | (1) | M | H | $L$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.4 | The teacher does not exhibit bias and challenges stereotypes in the classroom | a. Gender <br> b. Disability | $\begin{aligned} & \text { (L) } M \quad H \\ & L M E H \end{aligned}$ | Sub-score | $\begin{gathered} \text { L } \\ H \end{gathered}$ | $\begin{aligned} & \text { Determine } \\ & \text { score } \end{aligned}$ | (L) | M | H | $L$ |

If one sub-behavior were rated as high and the other as medium, the high rating would take precedence. For example, if 1.4 a were rated as high and 1.4 b were rated as medium, the overall behavior score for 1.4 would be high.


## Common Challenges in Classroom Observations

Before coding with a classroom observation tool, it is crucial to understand the importance of inter-rater reliability, which describes the degree to which observers agree on the scores associated with a specific observation. For example, an observation is reliable if two observers use the tool to observe the same teacher and arrive at the same (or nearly the same) scores.

Observers should be aware of several challenges that have the potential to adversely affect objectivity and reliability when using the tool to conduct classroom observations:

## Personal Experiences

In some cases, past experiences and personal opinions influence how observers score the rubric. This situation is particularly problematic for people who have preexisting notions of what constitutes "good teaching." Moreover, their exposure to different teaching styles has the potential to influence their reliability. For example, some observers may think, "When I went to school, this is how we learned," or "My daughter's teacher does this." Despite this prior knowledge, it is important to remember that codes must be based solely on the manual, regardless of opinion or experience.

## Additional Information

In some cases, observers adjust their scores based on additional or preexisting information they have regarding the teacher, school, or students. Sometimes, they also assume certain behaviors by incorrectly inferring the teacher's intentions. For example, "I am going to give the teacher a 5 for positive environment, because even though she was impatient with the student, I know it is because she worked a double-shift today." This additional information should not influence the scoring of the observation as codes should solely reflect what happens in the classroom during the allocated observation time.

## Comparison

Often observers conduct several observations during a short timeframe and compare teaching styles and abilities across observations, which ultimately hinders the reliability of the tool. For example, an observer may rate a teacher lower on a behavior because in an earlier observation, s/he saw the same teacher, or a different teacher, use a better strategy to communicate the same information. To maintain reliability it is necessary to observe each segment independently and avoid comparisons to other situations or teachers.

## Separation of Elements

In some cases, separating the content of the elements can feel forced since everything that happens in the classroom is interconnected. That is, observers may strongly feel an action falls under more than one element. One observed action can serve as evidence for more than one Teach Secondary behavior or element, but the scoring of each must be done independently. For example, a teacher may provide feedback during the lesson so students reflect on their mistakes. This feedback may encourage students to think critically, but this activity does not mean the teacher automatically scores high on the critical thinking element since other behaviors in the critical thinking element may be absent. In this case, observers should keep both elements separate and score them independently.

## Weighing of Specific Events or First Impressions

In some cases, observers may witness a situation that surprises them or triggers a negative or positive impression. This incident may influence how they assess the entire observation. To maintain reliability, it is important to consider the event in the broader context of the observation and not let first impressions or salient events disproportionately influence the overall score. Therefore, observers should write detailed notes of the observation to determine how much weight to give a specific event.

Additionally, each segment should be considered in and of itself, and observers should focus on what occurs in the current segment. For instance, even if the teacher intends to do an activity later in the class, it is important for observers to score only what actually happens in that segment, rather than boost the score of one of the behaviors based on an intention that never occurred. This approach is particularly applicable for distinguishing what occurs in segment 1 versus segment 2 (i.e., what is observed in segment 1 may not be considered for scoring in segment 2 , and vice versa).

## Central Tendency

In some cases, observers assign medium-level scores more often than they should. Reluctance to assign high or low scores occurs (i) when observers are not confident in their ability to identify the appropriate level or believe that high or low scores are very rare and are largely unattainable; or (ii) due to the fear (for themselves or the teacher) of assigning more extreme scores. It is important for observers to score the behaviors exactly as defined in the manual without being influenced by how the scores may be used or how they reflect on the observer or the teacher.

## Observer Certification and Reliability Exam

A training participant must pass the Teach Secondary Reliability Exam before becoming a certified reliable Teach Secondary observer. Observer certification provides quality control and increases reliability of the Teach Secondary tool across observers. It ensures all certified observers can use the tool to score classroom observations accurately and consistently and in accordance with the Teach Secondary scale. The Teach Secondary Reliability Exam consists of watching and scoring three, 15 -minute video segments and scoring them according to the Teach Secondary rubric. Participants have 15 minutes to code each segment and cannot stop, rewind, or rewatch the videos during the exam. To pass the exam, participants must be reliable on 8 of the 10 elements for each segment. For example, if a prospective observer scores 100 percent on the first segment, 100 percent on the second segment, and 70 percent on the third segment, that participant would not pass the exam. For the Time on Learning element, participants are considered reliable if they are in exact agreement with the master score for 2 out of the 3 snapshots. For all other elements, participants are considered reliable if they score within one point of the master score. Participants who do not pass on the first attempt will be given feedback and allowed one additional opportunity to pass the exam. The second exam will consist of three different videos. Participants who do not pass the second attempt will not be certified as Teach Secondary observers. Teach Secondary certification is valid for one year.

| The Global Knowledge and Innovation Team proudly presents this Certificate of Reliability to |  |
| :---: | :---: |
| for successfully passing the <br> TEACH SECONDARY RELIABILITY EXAM [CITY, COUNTRY - DATE] |  |
|  |  |
|  | Teach Secondary |

## Endnotes

${ }^{1}$ Emma Carter and Pauline Rose, Teacher Practices in Rwandan Secondary Mathematics Classrooms: Findings from Classroom Observations, Leaders in Teaching Research and Policy Series, March 2021 (Laterite and REAL Centre, University of Cambridge, 2021), DOI; Emma Carter, Ezequiel Molina, Adelle Pushparatnum, and Pauline Rose, "Measuring Teachers' Encouragement of Socioemotional Skills in the Secondary Classroom," in NISSEM Global Briefs, Volume II: Educating for the social, the emotional and the sustainable: Pedagogy, practice and materials, ed. Andy Smart and Margaret Sinclair (NISSEM, 2020), https://nissem.org/NGB2.
${ }^{2}$ The current version of Teach Secondary will be applied for piloting and revised subsequent to this process.
${ }^{3}$ It should be noted that it is impossible to draw a clear line between teaching practices linked to academic versus socioemotional learning. Many teaching practices included in common professional teaching frameworks do affect students' socioemotional development, but they are usually thought of in terms of academic rather than socioemotional learning. Explicitly linking teaching practices with socioemotional outcomes in measures used for assessment will serve to increase the salience of students' socioemotional skills to teachers, as well as to other stakeholders and policy makers, thus ensuring a focus on both academic and socioemotional learning in the classroom.
${ }^{4}$ Carter and Rose, "Teacher practices in Rwandan secondary mathematics classrooms."
${ }^{5}$ Protocol to enter the classroom may vary from context to context, but it is important to have the necessary approvals in place before arriving at the school.
${ }^{6}$ These times may differ slightly from context to context.
${ }^{7}$ Adapted from Jeff Archer et al., Better Feedback for Better Teaching: A Practical Guide to Improving Classroom Observations (San Francisco, CA: Jossey-Bass, 2016).

## OBSERVER MANUAL

Teach Secondary OBSERVATION SHEET


$\underset{\text { Teacherl }: \text { : }}{\text { Teach }}$ Secondary $\quad$ OBSERVATION NOTES

## OBSERVER MANUAL TIME ON TASK

| TIME ON |
| :--- |
| The teacher maximizes time on learning. <br> The teacher maximizes time on learning by ensuring most students are on task and provided with <br> alearning activity most of the time. This practice can be observed in the classroom through the <br> following behaviors: |

## 0.1 ?

The teacher is teaching or provides a learning activity for most students

## LEARNING ACTIVITIES:

Learning activities include any activity that is related to class content, independent of its quality.
For example: Learning activities can include a teacher lecturing, small group/team work, or students working on a worksheet or reading independently. Note that if the teacher leaves the classroom, but has provided students with a learning activity, it would still count as a learning activity.

## NONLEARNING ACTIVITIES:

Nonlearning activities include any activity that is not related to class content, including activities related to classroom management, such as taking attendance or disciplining students, or any other activity that leaves students waiting.

For example: When the teacher is silently writing on the board without asking students to copy. Other examples of nonlearning activities include when a teacher takes attendance, the teacher may read student names individually; when students misbehave, the teacher may stop the lesson to redirect the misbehavior; when outside disruptions occur, the teacher may stop teaching to see what is going on; when checking homework, the teacher may check each student's work individually, while the other students wait with nothing to do. In addition, basic classroom processes may be prolonged, such as transitioning to a new activity, getting materials ready for a lesson, or completing administrative tasks.
LOW MEDIUM HIGH

6 or more students are off task
2-5 students are off task

All students are on task (one student may be off task)

## Students are on task ${ }^{1}$

## Students off task:

This behavior includes students who are not participating in the learning activity provided by the teacher either because they are quiet but distracted, or because they are disrupting the class. For example, in the first category, students may be staring out the window, resting their head on the desk, looking down to the floor or at the observer, or sleeping. In the second category, they may be passing notes, whispering, talking to another student during an activity that does not require talking, moving around the class, shouting, or in any other way disrupting the class.


## ACTIVE LEARNING ACTIVITIES:

Active learning activities include any activity that is related to class content where most students are actively involved.

For example: Active learning tasks can include students writing in their notebooks or reading their textbooks. It can also include a whole class discussion where students either have their hands up or are speaking. If working in groups, students may be actively participating by writing, drawing a diagram, or engaging in discussion with other class members. Note that if the teacher leaves the classroom, but most students are actively participating in a learning task, it would still count as active participation.

## PASSIVE LEARNING ACTIVITIES:

Passive learning activities include any activity that is related to class content where most students are passively involved.

For example: Passive learning activities can include a teacher lecturing while most students only listen. It can also include one student solving a problem on the board while the rest observe. If working in groups, students may also be passively participating by only listening and not writing or engaging in discussion with other class members. Note that if the teacher leaves the classroom, but most students are passively participating in a learning task, it would still count as passive participation.

[^0]
## OBSERVER MANUAL QUALTY OF TEACHING PRACTICES

# CLASSROOM CULTURE 

SUPPORTIVE LEARNING ENVIRONMENT POSITIVE BEHAVIORAL EXPECTATIONS



## CLASSROOM CULTURE

The teacher creates a supportive learning environment.

SUPPORTIVE LEARNING ENVIRONMENT

The teacher creates a classroom environment where students can feel emotionally safe and supported. Moreover, all students feel welcome, as the teacher treats all students respectfully. This practice can be observed in the classroom through the following behaviors:

| Score | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | LOW |  | MEDIUM |  |  |



In this classroom, the teacher is ineffective at creating a supportive learning environment.

In this classroom, the teacher is somewhat effective at creating a supportive learning environment.

In this classroom, the teacher
is effective at creating
a supportive learning
environment.
$1.1 ?$
The teacher treats all
students respectfully

## 1.2 (?)

The teacher uses positive language with students
1.3 (?

The teacher responds to students' needs ${ }^{2}$

The teacher does not treat all students respectfully.
For example: The teacher may yell at some students, scold them, shame/ ridicule them, or use physical punishment to discipline them.

The teacher does not use positive language in communication with students.

The teacher is not aware of students needs OR does not address the problem at hand.

For example: A student may be upset because of a bad grade, and the teacher ignores the student or is dismissive of the issue (e.g., the teacher tells the student to "get over it" or "pull yourself together").

Alternatively, a student may say to the teacher that s/he is struggling to see the text on the board, and the teacher ignores the student's comment and carries on with the lesson.

The teacher treats all students somewhat respectfully.
For example: The teacher does not treat students disrespectfully (e.g., does not yell at or ridicule students), but the teacher does not show outward signs of respect toward students, either (e.g., does not call students by their names; say "please," "thank you," or "sorry;" or use greetings such as "good morning students" or other culturally relevant signs of respect).

The teacher treats all students respectfully.

For example: The teacher uses students' names; says "please," "thank you," "good morning students," and "sorry;" or shows other culturally relevant signs of respect.

The teacher uses some positive language in communication with students.
For example: The teacher may say "well done," "exactly," or "good," although does so infrequently.
Alternatively, the teacher may use gestures such as clapping, thumbs up, or other culturally relevant signs of praise, although the teacher does so infrequently.

Teacher responds to students' needs but may not address the problem at hand.

For example: A student may be upset because of a bad grade. The teacher notices and asks the student if there is a problem, after which the student indicates that s/he is upset with his/ her grade. The teacher then asks the student to speak with the teacher about it at another time, therefore not addressing the problem at hand.

Alternatively, a student may say to the teacher that s /he is struggling to see the text on the board, and the teacher tells the student that s/ he needs to remember to sit closer to the front next time.

The teacher consistently uses positive language in communication with students.
For example: The teacher consistently uses encouraging phrases such as "Great job!" when students show their work, or "Very good!" or "Let's give Student A a round of applause."

Alternatively, the teacher may use gestures such as clapping or other culturally relevant signs of praise. Students may also use encouraging phrases or gestures toward their peers.
The teacher promptly responds
to students' needs in a way that
specifically addresses the problem
at hand.
For example: A student may be upset
because of a bad grade. The teacher notices
and asks the student if there is a problem,
after which the student indicates that s/he
is upset with his/her grade. The teacher then
speaks quietly with the student at his/her
desk, which appears to calm the student and
resolve the issue.
Alternatively, a student may be struggling
to see written instructions on the boord,
so the teacher rewrites it in larger text
and/or provides an alternative way for the
student to access the information (e.g., on a
separate sheet or orally).

[^1]
## CLASSROOM CULTURE

## SUPPORTIVE <br> LEARNING <br> ENVIRONMENT

## The teacher creates a supportive learning environment.

The teacher creates a classroom environment where students can feel emotionally safe and supported. Moreover, all students feel welcome, as the teacher treats all students respectfully. This practice can be observed in the classroom through the following behaviors:

| Score | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| LOW | MEDIUM | HIGH |
| :--- | :--- | :--- |

$1.4 ?$
The teacher does
not exhibit bias and
challenges stereotypes in
the classroom

## 1.4a

Gender ${ }^{3}$

## 1.4b

Disability

The teacher could show gender bias by providing students with unequal opportunities to participate in classroom activities or by expressing unequal expectations for students' behaviors or capabilities.
For example: A teacher calls only on boys or girls to answer difficult questions.
Alternatively, the teacher calls equally on students of all genders to answer difficult questions but only assigns girls to clean the blackboard or hand out learning materials (e.g., textbooks) to the class.

Other examples of gender bias are teachers scolding boys but not girls after incorrectly answering a question or misbehaving. Teachers may also give praise to girls but not boys after correctly answering a question.

The teacher provides students of all genders with equal opportunities to participate in the classroom and has similar expectations for all students.

For example: The teacher calls equally on all genders to answer difficult questions and praises both boys and girls after correctly answering questions.
The teacher asks boys and girls to clean the blackboard and distribute learning materials (e.g., textbooks) to the class.

The teacher provides students of all genders with equal opportunities to participate in the classroom, has similar expectations for all students, AND challenges gender stereotypes in the classroom
For example: The teacher calls equally on all genders to answer difficult questions and praises both boys and girls after they correctly answer questions. The teacher asks boys and girls to clean the blackboard and distribute learning materials (e.g., textbooks) to the class. The teacher also uses examples and explanations that portray female rather than male scientists, doctors, and astronauts and/ or encourages discussions with students about gender stereotypes and/or gender equality.
The teacher may also actively encourage equal participation through comments such as, "Let's hear more from the girls," or "Now that we have heard from a girl, let's hear from a boy."

The teacher may provide students with unequal opportunities to participate in learning activities, use stigmatizing terms, or express low expectations for students' behaviors or capabilities.

For example: The teacher seats students with disabilities separately from other students.
The teacher may use stigmatizing terms about people with disabilities, in general or express bias towards students with disabilities in the classroom through low expectations for their behavior or capabilities.

The teacher provides students of all ability levels with equal opportunities to participate in the classroom and has similar expectations for all students.
For example: The teacher enables students with disabilities to work with other class members during group work, provides opportunities for students with disabilities to ask questions, and participate in whole class learning activities.

Alternatively, the teacher praises students with disabilities in the same manner as other students in the classroom.

The teacher provides students of all ability levels with equal opportunities to participate in the classroom, has similar expectations for all students, AND challenges disability stereotypes in the classroom.

For example: The teacher has students with disabilities work with others during group work AND uses examples and explanations that portray people with disabilities in important positions.

[^2]
## POSITIVE <br> BEHAVIORAL EXPECTATIONS

The teacher promotes positive behavior in the classroom.
The teacher promotes positive behavior by acknowledging students' behavior that meets or exceeds expectations. Moreover, the teacher sets clear behavioral expectations for different parts of the lesson. This practice can be observed in the classroom through the following behaviors:

| Score | $\mathbf{1}$ | $\mathbf{2}$ |  | $\mathbf{3}$ | $\mathbf{4}$ |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | $\mathbf{5}$ |
| Behavior | LOW | MEDIUM | HIGH |  |  |  |  |  |

## Quality Range

## 2.1 ?

The teacher sets clear behavioral expectations for classroom activities

In this classroom, the teacher is ineffective at promoting positive behavior.

In this classroom, the teacher is somewhat effective at promoting positive behavior.

In this classroom, the teacher is effective at promoting positive behavior.

The teacher does not set behavioral expectations for classroom tasks and/or activities.

For example: The teacher says, "Work on your reading comprehension skills," without providing instruction on what the expected behavior is for the activity.

The teacher sets unclear or superficial behavioral expectations for classroom tasks and/or activities.

For example: The teacher says, "Please complete this assessment on your own," or "Let's discuss this as a group and don't talk all at once," without clarifying what such behavior would entail as students complete the activity.

## 2.2

The teacher acknowledges positive student behavior

The teacher does not acknowledge student behavior that meets or exceeds expectations.

## 2.3 ?

The teacher redirects misbehavior and focuses on an expected behavior, rather than the undesired behavior ${ }^{4}$

The teacher's redirection of misbehavior is ineffective and focuses on misbehaviors rather than on the expected behavior.
For example: If s/he notices a distracted student, the teacher stops lecturing and calls out the name of the student, asking her, "Why are you not paying attention in class?" Alternatively, the teacher continues to ignore the student who is distracted, but the distracted student begins to tease and argue with the peer sitting next to her. This shifts the focus of the entire class away from the lesson and onto those two students.

The teacher acknowledges some students' behavior but is not specific about their expected behavior.
For example: If a group is following behavioral expectations, the teacher says, "This group is working well together," or "This group is doing a good job," without clarifying why or how.

The teacher sets clear behavioral expectations throughout the lesson for classroom tasks and/or activities

For example: The teacher says, "Please complete this assessment on your own. Keep your eyes on your own work, and do not speak to your neighbor during the assessment," before students begin to work independently. Upon introducing a group activity to the class, the teacher says, "Let's discuss this as a group, and don't talk all at once. Remember to speak one at a time, and to raise your hand if you would like to contribute."

Alternatively, the teacher is not observed setting clear behavioral expectations, but students are wellbehaved ${ }^{4}$ throughout the lesson.

The teacher acknowledges students' positive behavior that meets or exceeds expectations.
For example: If a group is following behavioral expectations, the teacher says, "I like how the students in Group A each shared their different strategies for finding the missing angle while the rest of the group listened and asked questions," "This group paid close attention to each step in the procedure," or "I like how responsibly your group handled the equipment during that experiment."

When a problem arises, the teacher's redirection of misbehavior effectively addresses the problem at hand and focuses on the expected behavior.

For example: Upon noticing that two students are talking loudly after finishing their partner activity, the teacher says, "Remember to speak quietly so others can concentrate on their work." Following this direction, the students lower the volume of their voices. In another scenario, the teacher says, "Now that you have finished, can you share your approach for solving the problem with Group A?" Following this request, students stop talking loudly to each other and begin to share their approach with the group next to them.
Alternatively, the teacher is not observed redirecting students' behavior, but the students are wellbehaved throughout the lesson.

The teacher's redirection of misbehavior is effective but focuses on misbehaviors rather than on the expected behavior. Alternatively, redirection of misbehavior is somewhat effective and focuses on the expected behavior.

For example: Upon noticing that two students are talking loudly after finishing their partner activity, the teacher says, "You both need to stop talking now, you are making too much noise." This statement focuses on the disruptive students' negative behavior rather than on what is expected of them. Consequently, the disruptive students quiet down. In another scenario, the teacher redirects the students by stating, "Now that you have finished, can you share your approach for solving the problem with Group A?" Even though the teacher focused on a positive behavior expected from the students, for the most part, they continue to talk loudly to each other when joining Group A.

[^3]
# INSTRUCTION 

LESSON FACILITATION
CHECKS FOR UNDERSTANDING
FEEDBACK
CRITICAL THINKING


## The teacher facilitates the lesson to promote comprehension.

The teacher facilitates the lesson to promote comprehension by explicitly articulating the objectives, explaining the content using multiple forms of representation, and connecting the lesson with other content knowledge, students' experiences or real-world issues. This practice can be observed in the classroom through the following behaviors:

| Score | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |

## Behavior <br> 

## LOW

MEDIUM

In this classroom, the teacher is ineffective in facilitating the lesson to promote comprehension.

In this classroom, the teacher is somewhat effective in
facilitating the lesson to promote comprehension.

In this classroom, the teacher is effective in facilitating the lesson to promote comprehension.

## 3.1 ?

The teacher explicitly articulates the objectives of the lesson and relates classroom activities to the objectives

## 3.2 ?

The teacher explains content using multiple forms of representation

The teacher does not state or write on the board the lesson objective(s), nor can one be inferred from the lesson activities.

For example: For the entirety of the lesson students work independently in their notebooks. Nothing is visible on the board, and the teacher spends the class time circling and checking students' work. The teacher does not state a lesson objective, and it is difficult to infer a lesson objective from the activities.

The teacher either explicitly states and/ or writes a broad lesson objective, OR the objective is not explicitly stated and/ or written, but can be inferred from the lesson activities.

For example: The teacher says, "Today we are learning about statistics," or "We are focusing on writing," without further details.
Alternatively, lesson activities may clearly focus on finding the mode of a data set, but the teacher does not explicitly articulate the objective.

The teacher explicitly states and/or writes a specific lesson objective (e.g., a learning goal), and the lesson activities align to the stated objective.

For example: Near the beginning of class the teacher states, "Today we are going to learn how to find the mode of a data set." Each lesson activity is clearly related to this objective.

The teacher explains content using two forms of representation.
For example: While teaching the equation for finding the area of a circle, the teacher verbally explains that the radius is "half a circle" and provides a visual representation of this by drawing a diagram on the board. Or in a biology lesson, a teacher verbally explains the function of a microscope and its different parts. The teacher later points to a diagram showing the different parts of a microscope cell on the board.

The teacher's explains content using one form of representation, OR content is simply not explained.
For example: The teacher says, "To find the area of a circle, multiply pi by the square root of the radius," and does not provide written or visual representation of this process. Or in a biology lesson, a teacher verbally explains the function of a microscope without using any written or other visual form of representation to facilitate students' understanding.

Alternatively, the teacher does not provide any explanation of content.

## 3.3 ?

The teacher makes connections in the lesson that relate to other content knowledge, students' daily lives, or real-world issues

The teacher does not connect what is being taught to other content knowledge, students' daily lives, or real-world issues. The teacher may use examples related to other content, students' lives, or real-world issues, but the teacher does not attempt to connect them to the learning activity. For example: During a chemistry lesson, the teacher describes different causes of air pollution but does not relate these to students' daily lives or to real-world issues.
Alternatively, the teacher says, "Remember, yesterday we learned how to translate shapes? Today we are going to learn how to find the mode of a data set," without attempting to connect what is being taught to other content knowledge.

The teacher does not model.
For example: The teacher spends the entire class lecturing, and there are no procedural activities for the teacher to model, or the teacher assigns individual work but does not model for the students.

The teacher may attempt to connect the lesson to other content knowledge, students' daily lives or real-world issues, but the connections are superficial, confusing, or unclear.
For example: During a chemistry lesson, the teacher describes different causes of air pollution. The teacher says, "Exhaust gases from vehicles are one cause of air pollution that can cause many problems." The connection to students' lives or real-world issues is superficial and nonspecific.

Alternatively, the teacher says, "Remember yesterday when we learned how to group data? Now we are going to find the mode of our data set." When explaining how to find the mode, the teacher does not relate the process to content in the previous lesson.

The teacher meaningfully connects the lesson to other content knowledge, students' daily lives, or real-world issues.
For example: During a chemistry lesson, the teacher relates causes of air pollution to students' daily lives and real-world issues. The teacher says, "Exhaust gases from vehicles cause problems in our environment. In our city, diesel smoke pollutes our air, water, and soil." Connections between the lesson and content knowledge, students' daily lives, and/or real-world issues are clear.
Alternatively, the teacher connects the lesson to content learned in a prior lesson on statistics by saying, "Remember yesterday when we collected data on what each student had for lunch, and we found the mean of the data? Today we are going to learn how to find the mode. The mode is another summary statistic that represents a typical value in our data set."

## 3.4 ?

The teacher models by demonstrating or thinking aloud ${ }^{5}$

The teacher partially models the learning activity.
For example: In a math class, the teacher demonstrates how to draw a bar graph but does not clarify how the data were extracted from the text to create the bar graph. Or in a language arts lesson, the teacher shows students how to write their address and date in a formal letter but does not model other rules or features of formal letter writing (e.g., use of a greeting).

The teacher explains content using three or more forms of representation.
For example: While teaching the equation for finding the area of a circle, the teacher verbally explains and writes on the board that the radius is "half a circle." In addition, the teacher draws a diagram on the board showing the radius of a circle. Or in a biology lesson, a teacher verbally explains the function of a microscope and its different parts. The teacher then demonstrates how to use a microscope using a real-life instrument. Later in the lesson, the teacher points to a diagram of a cell on the board.

The teacher models the learning activity by demonstrating all parts of the procedure or by demonstrating the procedure and thinking aloud.
For example: The teacher shows ways to solve a math problem (demonstrates a procedure) and while doing so, says what they are thinking at each step (thinks aloud). Or if students are calculating the area of a circle, the teacher shows each step (full demonstration of a procedure) with visual diagrams or other local materials and says what they are thinking at each step.

[^4]
## INSTRUCTION

## CHECKS FOR

UNDERSTANDING

## The teacher checks for understanding for most students.

The teacher checks for understanding to ensure most students comprehend the lesson content. Moreover, the teacher adjusts the pace of the lesson to provide students with additional learning opportunities. This practice can be observed in the classroom through the following behaviors:

| Score | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Behavior Quality Range

LOW

In this classroom, the teacher does not check for any student's understanding. MEDIUM

In this classroom, the teacher is effective at checking only a few students' understanding.

In this classroom, the teacher is effective at checking for most students' understanding.

## 4.1 ?

The teacher uses questions, prompts, or other strategies to determine students' level of understanding

## 4.2 ?

The teacher monitors most students during independent/group work ${ }^{6}$

The teacher does not ask questions or prompt students at all, or when the teacher does so, the class responds in synchrony, which is accepted without further checking for understanding.
For example: When explaining a concept, the teacher asks, "Do you all understand how to identify a reflex angle?" The students respond in unison, "Yes, we have." Or the teacher inquires, "This is a reflex angle, right?" after drawing an angle on the board. The class or an individual student replies, "Yes, it is."

The teacher uses questions, prompts, or other strategies that are effective at determining only a few students' level of understanding.
For example: The teacher asks, "Who can give me an example of a reflex angle?" Only a few students respond by raising their hand, a group from which the teacher calls on 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, instead allowing students to willingly volunteer their answers.

The teacher uses questions, prompts, or other strategies that are effective at determining most students' level of understanding.
For example: The teacher says, "Please raise your hand if you agree with this statement: A reflex angle is one that is greater than 180 degrees." The teacher also asks students to demonstrate their knowledge by having all students share their answers (e.g., by having each student share their drawing of a reflex angle).

The teacher monitors some students when they are working independently or in groups to check their understanding.
For example: The teacher observes some student work for accuracy, listens to some discussions when students work in groups, clarifies concepts, or asks questions.

The teacher does not adjust teaching for students and continues to follow the curriculum even when students indicate they are unable to keep up. ${ }^{7}$

The teacher slightly adjusts teaching, but this adjustment is brief and superficial.
For example: As students complete a series of equations involving multiplication of decimal numbers, the teacher notices they are not including decimal points in their answers. In response, the teacher briefly reminds the class to include decimal points in their answers. Or when a teacher asks a student to explain the function of the central (axial) human skeleton and a student struggles to recall this fact, the teacher tells the student to refer to a section in their textbook.

The teacher systematically monitors most students by circulating the classroom and approaching individual students or groups to check their understanding.
For example: When students are working, the teacher walks around the room, systematically approaching students or groups, to observe most students' work, listen to most group discussions, clarify concepts, and/or ask questions.
4.3 ?

The teacher adjusts teaching to the level of students

The teacher does not monitor students when they are working independently or in groups.

For example: The teacher sits at his/her desk or remains standing in front of the class when students are working.

## INSTRUCTION

## FEEDBACK

The teacher provides feedback to deepen student understanding.
The teacher provides specific comments or prompts ${ }^{8}$ to help identify misunderstandings, understand successes, and guide thought processes to promote learning. This practice can be observed in the classroom through the following behaviors:


[^5]CRITICAL THINKING

The teacher builds students' critical thinking skills.
The teacher builds students' critical thinking skills by encouraging them to actively analyze content. This practice can be observed in the classroom through the following behaviors:

| Score | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |

## Behavior Quality Range

$\square$ LOW MEDIUM HIGH

## 6.1 ?

The teacher asks openended questions
that require reasoning, explanation, or generalization or have more than one correct answer
6.2 ?

The teacher provides thinking tasks
that require students to actively analyze content, as opposed to simply receiving information or building fluency (i.e., rote learning)

## 6.3 ?

The students perform thinking tasks
6.4 ?

Students explain their thinking to the teacher or ask open-ended questions

In this classroom, the teacher is ineffective at developing critical thinking skills.

In this classroom, the teacher is In this classroom, the teacher somewhat effective at developing is effective at developing critical thinking skills.
critical thinking skills.

The teacher does not ask openended questions OR asks only one open-ended question. The teacher may ask closed-ended questions that have a predetermined answer.
For example: In a math lesson, the teacher asks, "Which is greater, 3 , or $83 \%$ ?" Or in a biology lesson, the teacher asks, "Who can tell me the name of the molecule that an enzyme reacts with?"

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.
For examples, refer to the thinking task table on the next page.

The teacher asks students at least 2 open-ended questions but does not build on student responses, $\underline{O R}$ the teacher asks 2 open-ended questions and 1 of them is a follow-up to a student response.
For example: In a biology lesson, the teacher asks, "Why are enzymes important?" Later in the lesson the teacher inquires, "What factors affect enzyme activity?" Or in a language arts lesson, the teacher asks, "You have exams next week. What do you feel most worried about?" After a student responds, the teacher follows up by asking, "What are you going to do this week to make sure you are prepared for the exam?"

The teacher asks students 3 or more open-ended questions, AND at least 1 of them builds upon student responses by asking students to justify their reasoning, further explain, or clarify their ideas.
For example: In a chemistry lesson, the teacher asks, "How might we approach setting up this science experiment?" Later in the lesson, the teacher inquires, "What do you think will happen is this experiment?" After the student responds, the teacher follows up by asking, "Why do you think that?"

The teacher provides superficial thinking tasks. Superficial thinking tasks are tasks such as matching sets of items, identifying concepts or key pieces of information, and comparing and contrasting characteristics. They also include applying learned information or techniques to tasks similar to those the teacher has already demonstrated.
For examples, refer to the thinking task table on the next page.

Less than two-thirds of students in the class perform thinking tasks.
For examples, refer to the thinking task table on
the next page.

The teacher provides substantial thinking tasks. Substantial thinking tasks might include students making predictions, identifying patterns, making connections, and interpreting information. They also include having students applying learned information or techniques to new tasks the teacher has not demonstrated, making inferences, evaluating, designing, or creating based on information learned.
For examples, refer to the thinking task table on the next page.

Students do not perform thinking tasks.

For examples, refer to the thinking task table on the next page.

Most students perform thinking tasks.

For examples, refer to the thinking task table on the next page.

## Students do not explain their

 thinking to the teacher during class activities, nor do they ask openended questions. They respond to questions and/or contribute to discussions briefly by saying "Yes" or "No" or by offering a simple fact.For example: In a math lesson the teacher says, "What is the probability of rolling two sixes when two dice are thrown?" The student answers, "1/36" but does not explain how they worked out the answer. Or in a science lesson, the teacher says, "What are the three temperature scales that are in use today?" The student answers, "Celsius, Kelvin and Fahrenheit" but does not explain why different scales are applied.

Students explain their thinking to the teacher during class activities or ask open-ended questions, although this happens infrequently (only once).
For example: A student explains how they worked out the answer to a math problem by stating, "I worked out that the probability of rolling two sixes when two dice are thrown is $1 / 36$ by multiplying the probability of rolling a six when one die is thrown by the same number. So, I multiplied $1 / 6 \times 1 / 6$ and this gave me the answer $1 / 36$." Or during a science lesson, a student asks, "Why are there different scales for measuring temperature?"

Students frequently explain their thinking to the teacher during class activities or ask open-ended questions (more than once).
For example: A student explains how they worked out the answer to a math problem by stating, "I worked out that the probability of rolling two sixes when two dice are thrown is $1 / 36$ by multiplying the probability of rolling a six when one die is thrown by the same number. So, I multiplied $1 / 6 \times 1 / 6$, and this gave me the answer $1 / 36$." Another student then explains their approach to finding the answer by stating, "I worked this out by drawing a table which had all the possible outcomes of rolling two dice. I worked out that there were 36 possible combinations, and that only one of these combinations was two sixes."

## Thinking Task Table

These examples are intended to help observers decipher what constitutes a thinking task and to differentiate between the quality levels. It is important to note that these examples are not comprehensive. In addition, context and students' learning levels should be weighed considerably when scoring behaviors 6.2 and 6.3 .

## LOW <br> MEDIUM

1. Understanding text structure

Students copy an example of a book review in their notebooks.

The teacher explains the structure of a book review and asks students to read an example and identify the different parts (e.g., introduction, body, evaluation, conclusion).
2. Letter writing

## 3. Listening skills

The teacher lectures on letter writing and writes on the board a list of reasons the students might want to write a letter. The teacher then tells the students to copy the list into their notebooks.

The teacher works with students to create a list of reasons one might write a letter, writing the examples on the board. The teacher then asks students to copy the list into their notebooks and to add one additional reason they might want to write a letter.

The teacher explains what is meant by formal and casual listening and writes definitions of these terms on the board. Students are then asked to copy definitions in their notebooks.

The teacher gives students three different examples of a book review. The teacher then asks students to analyze the common structural features of the reviews (e.g., introduction, body, evaluation, conclusion). Students are then asked to write their own book review following the structure.

During a lesson on letter writing, after introducing the topic, the teacher says, "Everyone take two minutes to think of at least three reasons you might want to write a letter and write them in your notebook. You will then share the reasons you might want to write a letter with the rest of the class."

After explaining what is meant by formal and casual listening, the teacher provides an example of each. Students are then asked to write in their notebooks examples of when they have listened formally and casually.

After explaining what is meant by formal and casual listening, the teacher lists a number of different scenarios on the board. The teacher then asks students to write in their notebooks whether each scenario is an example of casual or formal listening and to write a reason for each example as to why they think this. Students then share their work and justifications with their partner.

## Math <br> Classes

## LOW

## 1. Learning how to graph algebraic equations

## 2. Learning about probability

## 3. Finding the area of a rectangular prism

## 4. Methods of prime factorization

In an algebra lesson, students listen to the teacher explain the process of graphing equations and then copy examples from the board.

Students listen to the teacher explain the concept of probability and then copy examples of words used to describe the chance of an event happening (e.g., impossible, even chance, certain).

On the board, the teacher calculates the surface area of a rectangular prism and then has students copy the information into their notebooks.

After explaining how to find the surface area of a rectangular prism, the teacher draws a prism on the board, gives measurements, and has students use the formula they know to determine the area.

The teacher explains and models on the board, using a diagram, how to use a factor tree to determine prime factors of the number 48 . Students then copy the same diagram into their notebooks.

In an algebra lesson, the teacher writes an equation and then applies it to a Cartesian graph. After explaining the process, the teacher then asks students to plot several equations in their notebooks.

In an algebra lesson, the teacher writes an equation and then applies it to a Cartesian graph. The teacher then asks students to work in pairs to interpret the graph of the equation, linking parameters of the equation with the graph. After discussing the process as a class, the teacher asks students to write their own equation and plot it on a graph.

The teacher asks students to copy examples of words used to describe the chance of an event happening (e.g., impossible, even chance, certain). The teacher then describes an event and asks students to choose the word that best describes its chance of occurring (e.g., the teacher asks students, "What is the chance that you toss a coin and obtain a head?").

The teacher asks students to copy examples of words used to describe the chance of an event happening (e.g., impossible, even chance, certain) The teacher asks students to provide their own examples of events that represent each word (e.g., the teacher asks students, "Who can give me an example of an 'impossible' event?"). The teacher then asks the class if they agree or disagree with the examples given.

The teacher draws the measurements of a rectangular prism on the board and explains that the class will determine the surface area of the shape. The teacher asks students discuss in pairs how the answer might be found. The teacher then asks students to share their ideas and from this discussion, the class derives a formula

The teacher explains and models on the board, using a diagram, how to use a factor tree to determine prime factors of the number 48. The teacher then asks students to work with their partner to determine another method for finding the prime factors of the number 48 . Students are later asked to share their method with the class.

| Science Classes | LOW | MEDIUM | HIGH |
| :---: | :---: | :---: | :---: |
| 1. Biology Learning about cells | Students copy a diagram notebooks. | After describing the parts of a plant cell and their unctions, the teacher asks students to match parts of a plant cell with their functions on a worksheet. | After describing the parts of a plant cell and their paragraph describing the difference between a plant cell and a human cell. |
| 2. Biology Using laboratory apparatuses |  | The teacher asks students to identify and discuss what they know about different laboratory apparatuses, such glass | The teacher gives new laboratory apparatuses to studuents and asks them to explore them and try to discover their function. Students document their experiments and discoveries. |
| 3. Chemistry Understanding properties of salts | The teacher demonstrates an experiment to show whether different salts are insoluble or soluble. results and a conclusion students copy into their notebooks. | The teacher demonstrates an experiment to show whether different salts are insoluble or soluble. The teacher then writes the results and a conclusion on the teacher then asks students to carry out the exact same activity with any discussion. | The teacher asks students to carry out an experiment to show whether different salts are describe what they observed and record results in their notebooks. Students then discuss and interpret to show their understanding of the experiment. |
| 4. Chemistry Learning about waste materials | The teacher asks students to read aloud a page from that describes different types of waste materials such as solid waste, and hazardous waste. | The teacher writes the different types of waste materials, such as solid and hazardous waste, on the board. The teacher then writes a list of waste examples and has students categorize them. |  |
| 5. Physics Converting between temperature scales | The teacher writes on <br> the board the formula <br> Celsius and Kelvin <br> The teacher models an <br> example of converting <br> which students c their notebooks. | The teacher writes on the board the formula for Converting between Celsus and Kelvin temperature scales. The teacher then asks students to apply the formula to a a number of different examples written on the board. | The teacher writes on the board the formula for scales. The teacher then asks students to apply the formula to a number of different examples written table to indicate the advantages and disadvantages of using the different scales. |
| 6. Physics Understanding types of errors in measurement |  | The teacher explains different types of errors in measurement (e.g., random, systematic, and examples of an error and asks students to identify which type it is. | The teacher explains different types of errors in measurement (e.g., random, systematic, and write down different examples of terror types and ways in which these errors can be minimized. |

# SOCIOEMOTIONAL SKILLS 

AUTONOMY
PERSEVERANCE
SOCIAL AND COLLABORATIVE SKILLS


SOCIOEMOTIONAL SKILLS

## AUTONOMY

The teacher allows students to make choices and encourages students to participate in the classroom.
The teacher provides students with opportunities to make choices and take on meaningful roles in the classroom. Students make use of these opportunities by volunteering to take on roles and expressing their ideas and opinions throughout the lesson. This practice can be observed in the classroom through the following behaviors:

| score | 2 |  | 45 |
| :---: | :---: | :---: | :---: |
| Behav/or | LOW | MEDIUM | HGH |
|  | In this classroom, the teacher is ineffective at developing students' autonomy. | In this classroom, the teacher is somewhat effective at developing students' autonomy. | In this classroom, the teacher is effective at developing students' autonomy. |
| 7.1 $\qquad$ <br> The teacher provides students with choices | The teacher does not explicitly provide students with choices. The teacher decides how learning activities should be completed, without providing different options for how students can approach the task. <br> For example: Students are asked to complete a set of mathematical equations following a prescribed set of steps. Or the teacher tells students to write an argumentative essay with a partner without providing any choice regarding the person with whom the student will work or the topic. | The teacher explicitly provides students with at least one superficial choice that is not related to the learning objective. <br> For example: The teacher allows students to choose the order in which to complete activities (e.g., complete a set of mathematical equations or independently practice timetables) or to choose their own partner when asked to write an argumentative essay. | The teacher explicitly provides students with at least one substantive choice that is related to the learning objective. |
|  |  |  | For example: The teacher allows students to use their own methods for solving mathematical equations (e.g., by using concrete materials, diagrams, or written formulas) or lets students choose which mathematical problem to solve from several examples. Or the teacher allows students to choose the topic of their argumentative essay or choose between writing an essay, giving a talk, or doing a visual presentation. |
| 7.2 <br> The teacher provides students with opportunities to take on roles in the classroom | The teacher does not provide students with opportunities to take on roles in the classroom. <br> For example: The lesson is primarily lecture-based and highly structured, and students' participation is limited to copying information. In this lesson, students never get the chance to come to the board or read a text aloud. | The teacher provides students with opportunities to take on limited roles in the classroom. <br> For example: Students take attendance, assign tasks, pass out materials, or write on the board. Limited roles also include housekeeping tasks such as wiping the board. | The teacher provides students with opportunities to take on meaningful roles in the classroom, in which they are responsible for parts of a learning activity. <br> For example: The teacher gives a student the opportunity to solve an equation on the board and explain to the class how the student tackled the main challenges of the problem. Or the teacher may assign a student the role of a peer tutor to help support another student's learning or the role of group leader to help facilitate group discussion and participation. |
|  |  |  |  |
| 7.3 ? <br> The students volunteer to participate in the classroom | Students do not volunteer to participate in the classroom. | Only a few students volunteer to participate by expressing their ideas and taking on roles. | Most students volunteer to participate by expressing their ideas and taking on roles. |
|  |  | For example: When the teacher asks a question, only a few students put their hand up to answer; later when the teacher asks another question, the same few students put their hand up. <br> Alternatively, when the teacher asks students to stand up if they would like to take part in a class debate, only a few students stand and state their arguments to the class. | For example: When the teacher asks a question, most students put their hand up to share their answers. The students could also volunteer without the teacher asking (e.g., a student offers to share a related experience when the teacher is explaining a concept). <br> Or when the teacher asks students to stand up if they would like to take part in a class debate, most students stand and state their arguments to the class. |
|  |  |  |  |

## SOCIOEMOTIONAL SKILLS

PERSEVERANCE

The teacher promotes students' efforts, has a positive attitude toward challenges, and encourages goal setting.
The teacher promotes students' efforts toward the goal of mastering new skills or concepts, instead of focusing solely on results, intelligence, or natural abilities. In addition, the teacher has a positive attitude toward challenges, framing failure and frustrations as useful parts of the learning process. The teacher also encourages students to set short-and/or long-term goals. This practice can be observed in the classroom through the following behaviors:


In this classroom, the teacher In this classroom, the teacher is ineffective at developing students' perseverance.
is somewhat effective at developing students' perseverance.

In this classroom, the teacher is effective at developing students' perseverance.

## 8.1 ?

## The teacher acknowledges students' efforts

rather than focusing only on results, intelligence, or natural abilities

The teacher does not acknowledge student efforts. Although the teacher may praise students for "being smart" or "intelligent," the teacher does not focus on students' efforts or work.
For example: The teacher says, "Very good! You're the smartest student in the class!" or "Well done! You're so smart!"

## The teacher has a negative attitude

 toward students' challenges.For example: The teacher explicitly scolds students for making mistakes or becomes impatient with a student for taking time to understand a new concept.

In this classroom, the teacher sometimes acknowledges student efforts, but most praise is focused on outcomes or student intelligence.
For example: When a student does well on a test, the teacher says, "Good effort," or when a student attempts to answer a question but is incorrect, the teacher says, "Well tried" but does not explicitly identify what these efforts involved.

In this classroom, the teacher
frequently acknowledges students' efforts toward mastering new skills or concepts, and identifies these efforts explicitly.
For example: When students solve a difficult problem with which they had been struggling, the teacher praises and highlights the efforts they made to solve it. The teacher says, "You have progressed so much in your understanding of algebra. If you keep practicing and using the strategies we learned in class, you'll master them all very soon!"

## 8.2 ?

The teacher has a positive attitude toward students' challenges ${ }^{9}$

The teacher has a neutral attitude toward students' challenges. Although the teacher does not penalize a student for making mistakes or struggling with a new concept, the teacher does not make it clear that failure and frustration are normal parts of the learning process.
For example: When a student makes an error when solving a math equation on the board, the teacher simply gives the student the answer in a neutral manner (i.e., not in an angry or impatient manner)

The teacher has a positive attitude toward students' challenges and helps students understand that failure and frustration are normal parts of the learning process.
For example: When a student makes a mistake while solving an equation on the board, the teacher says, "Remember, it's okay to make mistakes and feel frustrated when we're trying to do something new! Let's think about how we can solve this equation." The teacher also encourages students to think through different resources to which they can turn for help (e.g., asking a friend, looking for answers in the textbook, using concrete materials or diagrams when solving math problems).

## 8.3

The teacher encourages goal setting

The teacher does not encourage students to set short- OR long-term goals. ${ }^{10}$

The teacher encourages students to set either short- OR long-term goals.
For example: For short-term goal setting, the teacher asks, "How many chapters of the book will you read this week?" or "How many elements of the Periodic Table will you memorize this week?" For long-term goal setting, the teacher says, "I want you to write down how much progress you've made on the goals we set at the start of the school year."
Alternatively, the teacher may talk about the importance of setting goals in a general way.
For example: The teacher says, "It's important to think about what you want to do when you finish school." Or the teacher highlights how characters in a book set a short- or long- term goal for themselves and how they worked toward it.

The teacher encourages students to set short- AND long-term goals. The teacher may reference both long- and short-term goals at the same time, particularly when encouraging students to set a short-term goal as part of their planning to achieve a long-term goal.
For example: The teacher says, "Let's think about the goals we set for ourselves at the beginning of the school year. What is one thing you will do this week that will get you closer to that goal?" $\underline{O R}$ the teacher talks about short- and long-term goals separately (as in the examples for a medium rating).

[^6]
## SOCIOEMOTIONAL SKILLS

SOCIAL \& COLLABORATIVE SKILLS

## The teacher fosters a collaborative classroom environment.

The teacher encourages students' collaboration with one another and promotes students' interpersonal skills. Students respond to the teacher's efforts by collaborating with one another in the classroom, creating an environment free from physical or emotional hostility. This practice can be observed in the classroom through the following behaviors:

In this classroom, the teacher is ineffective at developing students' collaborative skills.

In this classroom, the teacher is somewhat effective at developing students' collaborative skills.

In this classroom, the teacher is effective at developing students' collaborative skills.

## 9.1

The teacher promotes students' collaboration through peer interaction

The teacher does not promote collaboration among students.

For example: The teacher does not provide any opportunities to work in groups or pairs.

The teacher promotes superficial student collaboration through sharing opinions, materials, or ideas.
For example: The teacher asks students to share textbooks or swap their work with a partner for marking.

The teacher does not promote students' interpersonal skills.

The teacher promotes students' interpersonal skills in a brief or superficial manner.
For example: The teacher tells students to "Help each other," asks a student to respect the ideas of other classmates, or encourages students to contribute equally during a group activity. However, the teacher does not explain why these behaviors are important.

The teacher promotes substantial student collaboration by asking them to work together to produce a product, help another student, solve a problem, complete a worksheet, or present a new idea.

For example: The teacher asks students to form pairs or groups to complete a task that requires collaboration, such as planning an experiment or collecting data and creating a graph. Alternatively, a teacher may ask a student with a good understanding of a concept to help another student is having difficulty.

## 9.2 ?

## The teacher promotes students' interpersonal skills

such as perspective taking, empathizing, emotion regulation, and social problem solving ${ }^{11}$

## 9.3

Students collaborate with one another through peer interaction

Students do not collaborate, OR when students interact with one another, they display negative behaviors.
For example: When asked to pick partners for an activity, students do not interact with their peer and work independently. They may also display at any point during the observed lesson segment negative behaviors such as pushing, bullying, or purposely excluding one or more of their peers.

Students collaborate superficially. There are no displays of negative behavior.
For example: When working in a group, one student may clearly dominate the discussion while others are only passively involved. Alternatively, students share materials among themselves in a group, but they complete the activity independently and do not collaborate with one another when solving a problem.

The teacher promotes students interpersonal skills by encouraging perspective taking, empathizing, emotion regulation, or social problem solving.
For example: When a student is mocked by other classmates for giving an incorrect answer, the teacher promotes empathy by reminding the class that everyone makes mistakes and/or to consider how they would feel if they were the ones being teased. When a teacher notices that student are becoming competitive, the teacher promotes emotion regulation by saying, "We are not in a competition. Remember we are all a part of the same classroom and are supporting each other to learn and do our best." After reading a text about a character who is blind, the teacher asks students to imagine what it would be like if they could not see.
See FAQ 9.2 for more examples.

Students collaborate with one another by working together to produce a product, solve a problem, complete a worksheet, or present a new idea. There are no displays of negative behavior.

For example: Students work in pairs or groups to complete a task that requires collaboration, such as planning an experiment or collecting data and creating a graph. Alternatively, a student with a good understanding of a concept may help another student is having difficulty.

[^7]
## CHECKLIST: OTHER ASPECTS OF EDUCATONA QUALTY

## Overview

The Teach Secondary classroom observation tool is accompanied by a checklist that assesses other aspects of educational quality and inclusion. While the use of this checklist together with the classroom observation tool is suggested, its use is not mandatory.

The aim of this checklist is to 1) identify the number of students with disabilities in the classroom; 2) capture elements related to the accessibility of the physical environment; and 3) capture other elements related to educational inclusion, such as the availability of learning and teaching materials for all students. This data can be leveraged together with results from the classroom observation tool to provide a more comprehensive vision of the quality and inclusion of the education provided to students.

The checklist includes a set of questions that enumerators should complete before and after conducting the observations. If the checklist will be used, enumerators should share this with teachers upon their arrival at the classroom. Then, enumerators should complete the first section (Fill in before the classroom observation) at the start of their visit and complete the second section (Fill in after the classroom observation) after class has concluded. Some of the questions in the second section will require input from the teacher; these questions have been highlighted via asterisks (*) within the checklist.

A subset of the questions within the checklist focus on capturing the approximate number of students with a disability within the classroom. These questions have been adapted from the Washington Group Short Set on Functioning (WG-SS). We recommend using the original set of items (Washington Group/UNICEF Child Functioning Module-Ages 5-17 years) and its related protocols to collect more precise data on the number of students with disability in the classroom.

## Checklist: Other Aspects of Educational Quality

The following checklist is a proposed addition to be used together with the Teach Secondary Classroom Observation Tool; while its use together with the classroom observation component is suggested, it is not mandatory. The aim of the checklist is to assess additional elements related to educational quality, including but not limited to the accessibility of the physical environment. Items indicated with an asterisk are to be asked to the teacher.


| Scheduled class time* |  |  |  |
| :---: | :---: | :---: | :---: |
| Actual class time |  |  |  |
| Time the lesson started |  |  |  |
| Total class enrollment* | Female | Male |  |
|  | Female | Male |  |
| Grade/level of class* |  |  |  |
| Subject |  |  |  |
| Number of adults |  | Female | Male |
| assigned to work in this | Total number of teachers (not including number of assistants) |  |  |
|  | Total number of assistants |  |  |
|  | Number of assistants providing specialized support to one or a select group of students |  |  |
|  | Other (please specify role): |  |  |


| Fill in after the classroom observation |  |  |  |
| :--- | :--- | :--- | :--- |
| Time the lesson finished |  | Female | Male |
| $\begin{array}{l}\text { How many students have } \\ \text { access to the following } \\ \text { resources?* }\end{array}$ |  | A textbook for the class (e.g., language or mathematics) |  |$)$


| Compared with students of the same age, how many students enrolled in the class have the following difficulties? ${ }^{\text {12* }}$ |  |  |  | Female | Male |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A lot of difficulty seeing, even if wearing glasses? |  |  |  |  |
|  | A lot of difficulty hearing, even if using a hearing aid(s)? |  |  |  |  |
|  | A lot of difficulty walking or climbing steps? |  |  |  |  |
|  | A lot of difficulty remembering or concentrating? |  |  |  |  |
|  | A lot of difficulty with self-care, such as washing all over or dressing? |  |  |  |  |
|  | A lot of difficulty communicating (in his/her usual language), for example understanding or being understood? |  |  |  |  |
|  | A lot of difficulty managing their behavior (e.g., hitting students repeatedly, disrespecting the teacher)? |  |  |  |  |
| What is the official language of instruction?* |  |  |  |  |  |
| What proportion of enrolled students speak the same language at home as the official language of instruction?* (check one) | All the students speak this language at home. |  |  |  |  |
|  | More than half of the students speak this language at home. |  |  |  |  |
|  | Less than half of the students speak this language at home. |  |  |  |  |
|  | None of the students speak this language at home. |  |  |  |  |
| What language(s) did the teacher teach in?* |  |  |  |  |  |
| How many students have Individualized Education Plans (IEPs) or receive specialist support?* | Female |  | Male |  |  |
| Number of adults present in this classroom* |  |  |  | Female | Male |
|  | Total number of teachers (not including number of assistants) |  |  |  |  |
|  | Total number of assistants |  |  |  |  |
|  | Number of assistants providing specialized support to one or a select group of students |  |  |  |  |
|  | Other (please specify role): |  |  |  |  |
| Did you have to end an observation before the segment was finished for any reason? | Yes | If yes, indicate the following: Segment: End Time: | Reason: |  |  |
|  | No |  |  |  |  |
| Were the students left unsupervised? | Yes | for____ minutes |  |  |  |
|  | No |  |  |  |  |
| Were any severe negative verbal/ physical interactions observed? | Yes | Please describe what was observed: |  |  |  |
|  | No |  |  |  |  |

[^8]| Are the following resources available in the classroom? |  | Yes | No |
| :---: | :---: | :---: | :---: |
|  | A blackboard and/or whiteboard for the class |  |  |
|  | Chalk or a marker available for writing on the board during the lesson |  |  |
|  | Any other teaching and learning materials apart from textbooks (e.g., laboratory equipment/ manipulatives/ Information Communication Technology resources) |  |  |
| Can the following be observed in the classroom? | A weatherproof roof |  |  |
|  | A working electricity connection |  |  |
|  | Windows |  |  |
|  | Is there sufficient light and contrast for reading what is written on the board from the back of the room? <br> Enumerator Note: read chalk writing on the board from the back of the classroom |  |  |
|  | Is students' work displayed in the classroom? |  |  |
|  | Other than students' work, are other posters or charts displayed in the classroom? |  |  |
|  | Students who are not sitting at desks |  |  |
|  | If yes, how many? |  |  |
|  | Can the teacher reach all students' workspaces/desks in the classroom? |  |  |
|  | A main entrance which wide enough for a person in a wheelchair to enter |  |  |
| Can the following be observed outside of the classroom? | Steps leading up to the classroom |  |  |
|  | A proper ramp in good condition usable by a person in a wheelchair to access the classroom |  |  |

## FREQUENTLY ASKED QUESTIONS

## Time on Task

## (0.1a) When the class is in transition, how do I know when the transition has ended?

Transitions occur in most classes. As indicated in the manual, consider what more than two-thirds of the students are doing and if the teacher is providing opportunities to learn. A transition officially ends when more than two-thirds of the students are provided with the next learning activity. For example, if the teacher says, "Open your textbooks and complete the exercise on page 3," but students have not yet opened their textbooks at the time of the snapshot, this instruction is still considered a learning activity as the teacher has provided a learning activity for most students. However, the students may be off task. If more than two-thirds of the students do not have an activity or have finished the activity and are waiting for the last few students to finish, this situation is not considered a learning activity. Moreover, students who are taking out their notebooks but have not begun completing the exercise would be considered on-task as they are following instructions. However, if they are not following instructions (e.g., by talking to their neighbors or distracting other students), they are considered off task. Remember that actions such as clapping for classmates are not considered a transition as students are encouraging their classmate in their learning.
( 0.1 lb ) How do I code the snapshot if a learning activity happens concurrently with administrative activities?
Even though the teacher is doing administrative tasks (which are considered non-learning activities), the situation counts as a learning activity if most students are provided with a learning activity. For example, while taking attendance, a teacher may ask students to copy exercises from the board or complete exercises from a textbook.

## ( 0.1 c ) What is meant by "most students"?

The term "most students" is applied within the Teach Secondary manual at several points to help inform the coding of various behaviors. In all instances, "most students" should be considered as two-thirds or more of the students in the class.

## (0.2) Are students off task if they leave the room during the snapshot?

If students leave the room during the snapshot, they are counted as off task. If they leave the room before the snapshot, observers should not count them as off task.

## ( 0.3 a ) How do I code the snapshot if students' participation changes from active to passive or vice versa during the $\mathbf{1 0}$-second scan?

For visual instances (e.g., students putting their hands up), students' participation is counted in the same way as behavior 0.2 (on task versus off task). If, for example, a student is actively participating when the observer is scanning the room and then becomes passive after the scan, the observer codes this as active participation because at the moment of the scan the student was active. For audial instances, however, if over two-thirds of students respond in chorus (e.g., all singing, all reading, responding in synchrony) at any point throughout the scan, they are considered as actively participating.

## (0.3b) How do I code this behavior if students are looking at an object or their books?

If students are simply looking at the board or at the teacher while the teacher is talking, this activity is considered passive participation. However, if the teacher explicitly instructs students to actively observe or analyze something during the lesson segment (e.g., a text or object), this action is considered an active learning activity. For example, students who are observing a microscope can be considered actively participating if a teacher explicitly states that observation is the focus of the activity (e.g., learning about the different parts of a microscope). However, students who are looking in their books are not considered an active example of participation if the teacher has not instructed them to do so as part of a learning activity.

## Quality of Teaching Practices

## (1.1) Must a teacher use students' names to treat students respectfully?

In some cultures, the use of names may not be a common sign of respect. If the teacher does not use names but exhibits other signs of respectful behavior (e.g., the teacher uses terms of endearment or uses a respectful form of a word to refer to students), this behavior may still be scored as high.

## (1.2a) How do we count teacher- and student-initiated positive language and gestures?

Positive language or gestures that are initiated by the teacher can be counted separately as an instance of positive language. For example, if a teacher asks students to clap or give a thumbs-up for another student and students carry out the action, this sequence would be counted as two instances. Other examples of positive gestures by the teacher include giving prizes, fist bumps, pats on the back. Positive gestures may also be specific to the local cultural context. Note that smiling and nodding are not counted due to the ambiguity of meaning.
(1.2b) What is considered "consistent" positive language? Specifically, where should I draw the line between a medium and a high score?
Both the consistency and the quality of the comments should be taken into consideration. For example, if a teacher simply says, "You are bright students and are all very good at using your heads!" and "Awesome! You're all doing so well!" in a 15 -minute segment, it is weighted more heavily than if the teacher says "Good" 4 times. However, if the teacher says "Very good" 7 times, these comments would constitute a high rating. The following basic thresholds may be used as a loose guide to determine scoring: 0 instances of positive language constitute a low score, 1-4 instances a medium score, and at least 5 instances a high score.

## (1.3a) If a student needs to go to the bathroom, is that considered a need?

Yes, although the examples in the manual have to do with providing materials or emotional support, please remember that the examples are not comprehensive. Any observable emotional, material, or physical needs are captured under 1.3. If a student needs to go the bathroom, discomfort could affect how the student pays attention during the class, so it is important for the teacher to address. It is important to note that what is not captured in 1.3 is a student's need to understand academic content, which is captured when the teacher adjusts the lesson (behavior 4.3).

## (1.3b) During a partner activity, the teacher rearranges partners to include a student without a partner. Does

 this count as responding to a student need?Yes, although rearranging students in the classroom is not automatically considered responding to student needs, if a student does not have a partner or group for an activity and the teacher rearranges students to include the student, this action is considered to be addressing a student need. For this action to count, there must be an identifiable student need-e.g., the student either must visibly not have a partner, or the teacher might ask, "Who doesn't have a partner?" and the student responds that they do not have a partner.

## (1.3c) Does asking a student if they have a specific need automatically count as responding to a student need?

No, when a teacher simply asks if a student has a need, this question does not necessarily count as responding to a student need. For example, if the teacher asks if a student needs a pen, this question does not automatically count as responding to a student need. However, it is scored as medium if the student indicates the perceived need does indeed exist by indicating that they need a pen, or if it is clear that the student needs a pen. If the teacher addresses the problem by providing a pen, this action is scored as high.
(1.3d) If a teacher is observed as responding to some but not all student needs in the classroom, how should this behavior be scored?
If a mix of evidence is observed, whereby the teacher is seen to ignore one or more students' apparent needs at any point during the segment, this behavior should be scored as low and should take precedence, even if at a different point in the lesson the teacher is seen addressing other students' needs.
(1.4a) If a teacher uses explicit language that encourages equal opportunities in the classroom, but this
language is not reflected in other behaviors exhibited by the teacher, can this still be scored as high?

No. If a teacher says, "Now we have heard from a boy, let's hear from a girl," or "We have not heard from any girls, is there a girl who can answer the question?" but continues with the lesson by only giving opportunities for boys to participate in learning, this behavior would be scored as low. When explicit language that encourages equal opportunities is used within the classroom, it is important to observe whether the teacher's actions also reflect this language. If any clear indication of gender bias or stereotyping occurs, this behavior should take precedence in deciding the overall rating. For example, if the teacher is using language that indicates the promotion of equal opportunities such as, "I would like both boys and girls to answer," and proceeds with alternating between asking a boy then a girl when there is a clear gender imbalance in the classroom (e.g., 3 boys and 28 girls), this behavior would be scored as low because boys are clearly being given unequal opportunities to participate in the lesson.

## (1.4b) What happens if a student makes a remark that expresses gender bias or stereotyping?

If a student is observed making a comment in the classroom that expresses gender bias or stereotyping, such as "Girls can't do math!" or "Cleaning is not a boy's job!" and this language is not addressed by the teacher, this behavior would be scored as low. If the teacher responds by acknowledging the inappropriateness of the comment but does not challenge it, this behavior would be scored as medium. Alternatively, if the teacher acknowledges the inappropriateness of the comment and challenges the stereotype by saying, "That is not true, there are many boys who help their parents with cleaning at home," this behavior would be scored as high.

## (1.4c) Can a teacher's use of resources be counted as an example of challenging gender or disability stereotypes?

If a teacher uses resources or examples during classroom activities that challenge gender or disability stereotypes (e.g., text or image that shows a man cooking or cleaning for children, or a student with crutches playing a game with other students in the playground), this behavior can be counted as an example of challenging gender or disability stereotypes and would be coded as high.

## (2.1) How are behavioral expectations different from directions or instructions for an activity?

Behavioral expectations focus on the expected behavior during an activity, whereas instructions for an activity focus on the steps required to complete an activity. For instance, the teacher may provide instructions for an activity by saying, "Put one hand on page 123 in your textbook and your other hand on page 244." This direction tells students what they need to do to carry out the activity. On the other hand, the teacher may state behavioral expectations by saying, "If you have any questions, quietly raise your hand." This instruction sets clear behavioral expectations for students to follow during the activity.
(2.3) A student was sleeping in class, but I know he was up all night working. The teacher seems sympathetic toward him and is letting him sleep. Does this behavior affect the score?
This question illustrates two issues. First, observers need to be very careful not to let any outside information influence their coding. No matter what the reason, only code and score what is observed in the coding segment.

The second issue is the definition of misbehavior. Two factors may be considered when deciding if the student is misbehaving: if the student is causing a disruption in the classroom (distracting students who are trying to pay attention to the lesson), and if the teacher is bothered by this disruption. If neither the teacher nor the other students are bothered by the sleeping student, and the student is not disruptive to the flow of the lesson, the behavior 2.3 score could still be "high," depending on the other evidence in the classroom.

## (3.1a) How do I score this behavior when a teacher states or writes multiple lesson objectives in a single lesson?

It is fine for a teacher to state more than one lesson objective. However, the lesson activities must clearly relate to each stated and/or written objective. If the teacher includes more than one objective, lesson activities must relate to all stated or written objectives to be scored high. If activities relate to only one of the multiple objectives, score this behavior as medium.
(3.1b) How do I score this behavior when the lesson objective is very broad and/or may seem like an activity? If all the lesson activities are clearly related to the broad objective, this behavior can be scored as high. For example, if the teacher says, "Today we are going to look at the microscope," and the teacher shows a diagram of the microscope and invites students to view and label the parts of a microscope, this activity would be scored high. All activities relate to examining a microscope, and it is an appropriate objective in this scenario. However, if in the same class the students then use the microscope to compare plant and animal cells, the statement would then be considered a broad lesson topic and scored as medium, as there are additional activities not related to the stated topic. In a language arts class, if a teacher says, "We are learning about letter writing today," and all activities involve learning about the purpose and types of letter writing, this activity would be scored high.
(3.1c) If a student is observed as stating or writing the lesson objective, can this action still be counted?

Yes. In some cases, the teacher may ask students to derive a lesson objective for the class. If this practice is observed, and the objective is clearly stated to the class or written, then this activity can still be counted.

## (3.2a) What do we mean by a "form of representation"?

Forms of representation refer to the way in which teachers represent and explain lesson content. Examples of the six forms of representation commonly used by teachers in the secondary classroom include the use of:

- Spoken language - For example, the teacher verbally explains content to students. This practice includes when students listen to the teacher read a text, or when the teacher plays spoken language for the students which is heard via radio, video, or other technologies.
- Music - For example, the teacher uses singing, chanting, and/or other musical forms when explaining content to students. Students may or may not sing/chant along. This practice includes when students listen to music and/or sounds heard via radio, video, or other technologies.
- Text - For example, the teacher uses letters, words, numbers, and/or symbols on the board when explaining content to students. This practice includes when the teacher asks students to look at printed text on the board, posters, worksheets, and/or textbooks, or on a projected screen.
- Visual aids - For example, the teacher uses pictures, posters, images within books, and/or other graphics when explaining content. This practice includes other visual forms such as drawing on the board, sign language, and images found in video or other technologies.
- Concrete objects - For example, the teacher directly refers to and/or manipulates physical items such as objects and/or other materials when explaining content to students. This practice may include the use of Braille or other tactile-based languages.
- Movement - For example, the teacher uses dance, exercise, and/or other bodily movements when explaining content to students.

Remember that each of the above categories can only be counted once. If a teacher uses visual aids twice within the lesson, for example, by showing children an image of a cell on a poster and then later drawing for students a diagram of a cell on the board, these activities would only count as one form of representation.

## (3.2b) Can one example count as more than one form of representation?

Yes. A teacher can use one object to explain and represent lesson content in multiple, different forms.
For example, a teacher may read out loud from a textbook (spoken language) while students read along in their own textbook (text). A teacher may also hold the textbook up at the front of the classroom and point to a diagram (visual aid) when explaining lesson content (spoken language). If a teacher asks students to read or complete an activity from a textbook without using the textbook to explain lesson content, this activity is not considered a form of representation. Textbooks can count as a form of representation only when teachers use textbook content to explain lesson content.

## (3.2c) Do all forms of representation need to be displayed or initiated by the teacher?

No. A teacher may ask a student to come to the board to do an activity (e.g., solve an equation) and refer to this example in his/her teaching. In these cases, the student example to which the teacher is referring would also count as a form of representation.

## (3.2d) Do all forms of representation need to be seen by the whole class?

If a teacher explains content to a student during an independent activity or group work, and this activity can be seen or heard by the observer, forms of representation used in these instances would also count. For example, if a teacher refers to a diagram produced by a student while giving feedback to another student, this action can be considered as an example of a visual aid and can be counted as an additional form of representation, if no other examples of visual aids have been used within the lesson segment.

## (3.3a) What exactly counts as students' daily lives, and how is it determined to be "meaningful"?

The teacher needs to explicitly state how the content relates to students' lives, rather than the observer inferring what is related to students' lives. If the teacher only mentions objects students may encounter in their daily lives, such as, "Let's find the surface area of a cylinder," this statement is not considered a meaningful connection. However, if the teacher makes an explicit statement that connects to students' lives, such as, "Who can give me an example of a cylinder that we use in our everyday lives (e.g., cup, rubbish bin, bottle, chalk)?" that question would be an attempt to make a connection. In this example, barring other evidence, the behavior is scored as medium because it is not explicitly connected to the lesson objective. However, if after making the explicit connection to cylinders from students' lives the teacher connects the example to the lesson objective by saying, "So here we have a water bottle that belongs to Student A. How could I work out the surface area of Student A's) bottle?" this question constitutes a high score because the teacher explicitly relates the example to both students' daily lives and the lesson objective.

## (3.3b) What counts as teachers' making connections to real-world issues?

The teacher needs to explicitly state how the content is related to a past or present issue that affects the community and/or environment, such as environmental issues, a political crisis, or social issues. References to real-world figures or events do not constitute a connection to real-world issues unless they are explicit and specific. For example, if a teacher says, "Someone could write to a letter to a politician," this suggestion is not considered a meaningful connection to a real-world issue because the teacher does not connect the learning to a specific politician and related real-world social or political issue. However, if a teacher says, "Someone could write a letter to the UN Secretary General to express their opinions about the new global climate policies," this statement is considered making a meaningful connection to realworld issues and would be scored as high. In this example the teacher connects the lesson to a specific politician and a real-world issue.

## (3.3c) What counts as making connections to other content knowledge? Does recalling what was learned in a previous lesson count as a connection?

Recalling a previous lesson may count as a connection, particularly if the teacher attempts to explicitly connect the lesson to the past content knowledge. For example, if the teacher says, "Remember when we learned how to calculate a number to the power of 2? Today we are going to learn how to calculate a number to the power of negative 2," this statement is scored as medium because although the teacher explicitly connects new content to past content, the teacher only does so superficially. However, if the teacher further explains how to use students' knowledge of positive exponential numbers (i.e., numbers involving positive powers) to solve problems using negative examples, this practice is scored as high because the teacher not only recalls what was learned in a past lesson and connects to new content, but also builds upon past content to contextualize new material. If the teacher simply recalls what was learned in a previous lesson without making an explicit connection to the current lesson, this action is scored as low. For example, the teacher may say, "Remember how we learned about profits yesterday? Today we're going to learn about loss."

## (3.4a) I'm having trouble with modeling. How do I know when I see it? What should I specifically look for in modeling?

Modeling a procedure or skill mirrors an activity that students will be asked to do in that lesson or in the near future. Teachers can model by demonstrating the procedure (showing how to perform a task) or thinking aloud. When the teacher demonstrates a procedure, the teacher shows all, or some of, the steps in a process for a complete or partial model. Cognitive modeling, or a "think aloud," refers to when a teacher explicitly discusses a thought process or strategy with students by thinking through the challenge aloud (e.g., how to extract important information from a word problem, how to determine theme in a text). Showing the end product could look different across disciplines, but it essentially gives students an example for which to strive.

## (3.4b) Does modeling always have to happen before the activity?

Although the traditional idea of modeling is that the teacher demonstrates or thinks aloud a task, after which students complete the same activity, modeling does not always have to take place before the activity. Modeling can occur whenever the teacher demonstrates a procedure or thinks aloud regardless of whether it is at the beginning or end of the activity. For modeling to occur effectively, it is important that the demonstrated task or presented think aloud is the same as the task students are expected to perform or have performed. Modeling can occur at the end of class if the teacher walks students through the thinking process while solving a problem. However, simply revealing the answer to a learning activity or a math problem is not considered modeling.

## (3.4c) What is the difference between an instructional explanation and modeling?

To model for students, the teacher needs to perform the task or parts of the task that the teacher is asking students to do. This activity differs from giving students directions or explaining an activity because it involves teacher demonstration. The teacher may also demonstrate his/her thinking process as part of the model. If the task is to learn the meaning of new words in a text, and the teacher simply provides students with a definition of a word, this action may contribute to student understanding, but it does not necessarily constitute modeling. An example of modeling is if the teacher were to demonstrate how to use context clues to find the meaning of a word. For example, the teacher may say, "When I don't know the meaning of a word (in this case, "abrupt"), I reread the sentence, and think about the context, here I read......., therefore I know this word means something like sudden or unexpected."

In a math classroom, the teacher may be working with students to estimate the volume of different objects in standard units. The teacher may explain the size of a cubic centimeter and provide examples of common objects that are a cubic centimeter-this activity is part of his/her instructional explanation. To model, the teacher may show students how to estimate. For example, the teacher may show that a die is approximately one cubic centimeter, and that this knowledge can be used to try to estimate the volume of a box by thinking about (or measuring) how many dice would fit into the box.

## (3.4d) I'm still having trouble identifying modeling. Any other tips?

To determine whether the teacher has modeled, ask yourself:

1. What is the learning activity? What are students being asked to do or learn? Did the teacher show students what this process or skill looks like?
a. Is the thing students are being asked to do a process or a thinking skill?
b. If students are asked to do a thinking skill, the teacher must do a think aloud to be scored as high. If the task is procedural, the teacher should show students all steps in the process to be scored as high.
2. Students then complete a similar activity in that lesson or in the near future.

## (3.4e) If the teacher models a procedure-for finding prime factors, for example-but then students are requested to do a different activity involving prime factors, is it considered modeling?

If students do some of the procedure, it could be partial modeling. However, if what students do is unrelated to the procedure shown by the teacher, the teacher's behavior does not count as modeling. Therefore, while the activity does not need to be identical, some or all the modeled procedure needs to be included in the activity to be counted as evidence toward modeling.

## (3.4f) Can students and teachers co-construct a model or should it be entirely teacher-led?

Although we often think of a teacher presenting a model for the benefit of the students, some cases arise where modeling is not completely led by the teacher, and students may be a part of the process. For example, students and the teacher co-construct knowledge by demonstrating a procedure together to get to the final product.

## (4.1a) Can an activity be a way to check for understanding?

It is important to follow the manual by remembering that the teacher needs to ask questions to check for understanding. However, the questions asked by the teacher can be written or verbal, which would be inclusive of an activity. For instance, the teacher may pass out a written quiz to students and check their answers to determine their level of understanding. It is important to note that just giving a quiz is not a check for understanding; the teacher must check students' answers during the segment for it to count as a check for understanding. Additionally, checking homework (or work that was assigned prior to the observed segment) is not counted toward checking for understanding unless it is clear that the content of the work is related to the current lesson.

## (4.1b) How do I know what constitutes an "effective" check for understanding? Specifically, what is the difference between a medium score and a high score?

This behavior is designed to capture the extent to which the teacher makes an effort to check if students understand the content. In an effective check for understanding, the teacher gives individual students the opportunity to show what they know. For example, a highly effective way to check for understanding is by asking students to come to the board to complete a math problem. This activity is classified as such because the teacher can see the extent to which each individual student understands and is able to complete the task, but this system does not allow the teacher to gain information about more than two-thirds of students' understanding. What differentiates between a medium score and a high score is whether the teacher gains information on more than two-thirds of students' understanding over the course of the lesson. For example, a highly effective way in which a teacher could determine most students' understanding is by asking them to agree or disagree with statements by showing thumbs-up or thumbs-down, or by raising their hand or keeping it down. This behavior does not capture if the teacher does something with that information (which is captured in behavior 4.3). Moreover, the teacher can check more than two-thirds of students' understanding by asking representatives of small groups that have been working together on a task to share their answers with the class.

## (4.2a) During independent/group work the teacher walks around but does not approach or talk to students at all. Does this count as monitoring?

Yes. The teacher can verify students' understanding without providing comments; at times it is difficult to tell whether the teacher is looking at student work while walking around the classroom. Thus, if the teacher simply walks around the classroom during independent or group work, this behavior is scored as medium. Visual cues should also be considered. For example, the teacher points to students' work, leans in, or says something observers may not be able to hear. If the teacher is observed monitoring most students in this way, it may be scored as high.

## (4.2b) The teacher asks students to write their school name and the date in their notebooks. They spend a significant amount of time doing this. Does this activity count as independent work?

Yes, writing in their notebooks is a learning task for students who do it independently. Other examples of independent work include copying down examples from the board when the teacher asks them to and independently completing tasks given by the teacher (e.g., plot this equation on a graph, calculate the area of this object, complete these math equations, etc.).

If students are reading something in unison (e.g., facts about angles), and while the teacher circulates the classroom approaches individual students and corrects them, this action would count as a whole-group activity. Thus, it does not count as independent/group work. The teacher's comments are captured under feedback (5.1) and/or adjusting (4.3).

## (4.3a) Most of the adjustment examples are about explanation of content. Are there other ways a teacher could adjust?

Although the teacher may effectively adjust by further explaining content, adjusting teaching means giving more opportunities for students to learn, which the teacher may also do in other ways. For example, the teacher may give more time to finish a task or provide students who finish early with additional or more advanced tasks. Sometimes an overlap between feedback and adjusting teaching may occur, since the teacher can comment on students' work and adjust the lesson, but not all feedback should be counted as adjusting.

The teacher may also adjust by making preparations before the activity to accommodate the different needs or learning levels of students. Such preparations could include initially providing some students with an easier or more complex task based on their level of understanding. A teacher may also provide an adapted activity for a student who has a particular learning need, such as through the use of Braille for a student who has low vision or sign language for a student who is hard of hearing. If a teacher asks a student to present information in a different way to facilitate other students' understanding (e.g., by writing larger text or speaking more loudly so other students can see or hear), this activity also counts as an adjustment to teaching.

## (4.3b) When can changing the language of instruction be counted as adjustment to teaching?

Another example of adjusting is changing the language of instruction to facilitate understanding of content. This adjustment can occur in response to a student misunderstanding or as part of the teacher's explanation of content when it is evident that students are having difficulty understanding a concept or skill (e.g., a teacher may ask a question and no student answers, prompting the teacher to change the language of instruction to facilitate understanding). In many multilingual contexts, it is not uncommon for teachers to move fluidly between languages, and in these settings the observer needs to be aware to only consider instances where the teacher makes a deliberate attempt to adjust teaching to facilitate understanding of content. Changing language of instruction as an example of adjustment to teaching can also only be scored as medium unless another example of adjustment is observed that is substantial. This rating is because observers may not understand the language of instruction to which teachers change and therefore cannot make a judgment on whether it is a slight or substantial adjustment to teaching.

## (5.1/5.2) There is only one instance where the teacher provides specific comments. Is one instance enough for scoring as high?

Yes, but it depends on the quality of the teacher feedback. If the teacher gives one comment and provides substantive information about what a student did well or to clarify misunderstandings, one instance could be scored as a high. For example, while giving feedback to a student, the teacher may say, "With what number should ascending order start? Biggest or smallest? The smallest. But you started with the biggest. Ascending order starts with smallest, so it has to be like this." However, if the comment is somewhat vague or in the form of a hint, this behavior would likely be considered a medium. For example, while students are completing independent work the teacher may circulate and tell a student, "Don't write it there, start writing it from here," or "Leave room for your words to breathe." These comments are not specific.

## (6.1a) The teacher asks many open-ended questions but does not give students a chance to respond or answers on behalf of students. How should I score this?

This example helps to identify what may distinguish an action between a high or a medium rating. If a teacher asks many open-ended questions but does not give students a chance to respond or answers on behalf of students, the teacher cannot build upon student responses. Thus, this behavior is scored as medium. To score as high, the teacher must ask 3 or more open-ended questions, and at least 1 of these questions should build upon student responses.

## (6.1b) What if the teacher asks an open-ended question, but evidence from the observation suggests the question has a predetermined answer? Is this question counted as an open-ended question?

It depends. Open-ended questions must require students to think critically, reason, explain, or make generalizations. If a teacher asks, "Why can't we divide 25 by 2?" this question would be considered an open-ended question because although it has a set of limited answers, it asks students to reason and explain.

If you are uncertain about whether a question is open-ended, consider how students respond to the question. For example, if a teacher asks, "What is the function of the eyepiece on the microscope?" and a student says, "It helps us see things in the microscope" this question would not be counted an open-ended question because the student offers a response that sounds predetermined and does not demonstrate reasoning, explaining, or thinking critically. Additionally, if the student responded by reading an answer from a textbook, this question would not be counted as an open-ended question because the student retrieved the answer and was not required to think critically. However, if a student said, "The eyepiece can help reduce visual distractions when examining a specimen. It helps to shut out light so we can better focus on what we're examining," this question would count as an open-ended question because the student's response demonstrates critical thinking and an explanation.

Observers should also consider the full exchange between a teacher and students to determine whether a question is open-ended. If a teacher says, "Oh yes. That's a good point," or, "That is a new idea," it suggests that the student reasoned critically and/or creatively and that the original question was open-ended and prompted the student to think critically and/or creatively.
(6.1c) If a teacher asks open-ended questions that are unrelated to lesson content such as, "How are you today?" is this counted as an open-ended question?
It depends. Open-ended questions that require a level of critical thinking, even if not related to lesson content, are considered open-ended questions. However, the full exchange of questions and responses between teachers and students should be considered. In the above example, if a student responds, "I'm fine," and the teacher accepts the response and moves on with the lesson, this question would not count as an open-ended question. If a student responds, "I'm nervous," and the teacher then asks, "Why? Why are you nervous today?" this exchange would count as two open-ended questions with a follow-up. The student's response demonstrates a level of critical thinking, and the teacher followed up with a second open-ended question that requires the student to explain why they are nervous.
(6.2/6.3a) How do I score this behavior if students are completing an activity from a textbook? How do I know if the textbook activity includes a thinking task?
If it is impossible to determine what is in the textbook, this activity would not count toward a thinking task. Remember, you can only score what you see or hear. If you receive some indication of what is in the textbook (e.g., through the teacher's instructions or students' questions), score the task according to the quality ranges outlined in the manual.

## (6.3b) Do more than two-thirds of students need to perform every thinking task for this behavior to be scored as high?

No. To score this behavior as high, over two-thirds of the class must perform a thinking task at some point during the 15 -minute segment. For example, if only one student solves an equation on the board, then all students are asked to complete activities in their books, this would be scored as a high.

## (6.3c/6.4a) Can thinking tasks be verbal?

Thinking tasks can be offered and completed verbally. For example, after modeling how to construct a sentence using present continuous tense, the teacher asks several students to think of and state their own sentence examples. For example, a student states, "I am reading in class" after which another responds, "I am talking to my friend." This activity would count as performing a thinking task as the student is applying learned techniques to a new task, namely, constructing a sentence using a particular grammatical feature which has been taught in the lesson. (Refer to the thinking task table on page 28 for more examples of thinking tasks.)

If the teacher asks a question, and students answer by repeating knowledge they have learned, it is not considered a thinking task. For example, the teacher may ask, "What is another way we could transform this shape?" If a student says, "We could rotate it," this activity does not count as a thinking task because the student is simply recalling information. Additionally, if a student answers an open-ended question or explains his/her thinking or how s/he solved a problem, these activities are not considered thinking tasks (student explaining is captured in 6.4).

## (6.4b) What if only one student is observed explaining his/her thinking or asking open-ended questions? Is this behavior scored as high?

In respect to students explaining their thinking, a high can still be given if one student is observed giving two explanations, but these instances need to be distinct. For example, if a teacher asks a follow-up question relating to a student's explanation and then the student continues explaining, this sequence is not counted as two instances of student explanation. The student's follow-up explanation is seen as a continuation of the initial explanation and is counted as only one example of explaining. However, if the lesson continues, and the same student explains his/her thinking in a separate instance, then two distinct examples of student explaining should be counted.

In terms of students asking open-ended questions, if one student is observed asking two open-ended questions and the second example is a follow-up open-ended question which builds upon the teacher's or a student's response to the first question, then two instances can be counted and this can be scored as high. This approach also aligns with the scoring guidelines for behavior 6.1, which considers a teacher follow-up open-ended question as a distinct example that should be counted when scoring.

## (7.1a) Can an open-ended question/task count as providing students with choices?

If the teacher asks an open-ended question, it would likely not count as a choice. An open-ended task could be counted toward the teacher providing students with choices if the teacher's instructions explicitly imply that the teacher intends for students to make a choice. For example, the teacher could say, "Select one of these topics for your essay," or "You can decide which method to use to solve the problem."

## (7.1b) How do I code this behavior if there is no clear learning objective?

If there is no stated learning objective, or if the objective cannot be inferred from the learning activities, this behavior cannot be scored as high. It is scored as medium if a choice is presented or as low if no choice is presented.

## (7.3a) What contributes as evidence toward volunteering?

What is captured under this behavior is whether students are volunteering information or simply doing as required in a certain situation. Reciting information in call-and-response fashion or responding in unison to the teacher's questions in a rehearsed or expected fashion (e.g., all students answering "Yes" when the teacher asks, "Do you understand?") does not count as volunteering to participate in the classroom.

Although the example in the manual is "students raise their hand," students are also volunteering information when they answer questions without being called upon. Therefore, even if they do not raise their hand, if most students volunteer answers in response to the teacher's questions, this behavior is still scored as high. For example, the teacher may ask, "Who knows the answer?" If most students call out their responses (with or without raising their hand, e.g., "The answer is $5!")$, then this behavior is scored as high; if only a few students answer, it is scored as medium. Note, most students need to volunteer throughout the class to be scored as high.

## (8.1) What is the difference between acknowledging students' effort (8.1) and using positive language (1.2)?

Acknowledging students' effort includes comments that focus specifically on the work and effort of the student, not the outcome or a student's intelligence. While acknowledging students' effort may also count as positive language, a comment that constitutes positive language does not necessarily constitute acknowledging students' effort. For example, "You have made so much progress in algebra! I can tell you have been practicing!" is a comment that counts toward positive language and acknowledging students' effort. "Good job! You are so fast at solving algebraic equations!" is an example of positive language, but it does not count toward acknowledging students' effort, as it is focused on the outcome.

## (8.2a) If no mistake is observed, how can I tell the teacher's attitude toward challenges?

As the 3 choices are low, medium, and high, the teacher's attitude will always fit into 1 of those 3 categories. Any question could be a challenge to students, so watching the teacher throughout the segment should provide enough information to code this behavior. If the teacher has a neutral attitude, does not get angry/impatient, does not scold or penalize students for making mistakes, and does not seem annoyed or display another form of negativity, the behavior is scored as medium. It is important to take cultural differences into consideration (as for 1.1).

## (8.2b) In scoring the teacher's positive attitude toward students' challenges, should I consider the "best" incident or the average over the course of the segment?

For this behavior, observers should consider the average attitude of the teacher over the course of the segment.
For example, the teacher might show a positive attitude toward students' challenges when a student makes a mistake and the teacher says, "It's okay, we're learning." However, if besides that isolated incident the teacher consistently and explicitly scolds or becomes impatient with students, this behavior is scored as low or as medium (depending on the balance of incidents over the segment). If no clear indications of a negative attitude arise, however, one instance of a positive attitude is enough to mark the score for this behavior as high.

## (9.2) How could a teacher promote perspective taking, empathizing, emotion regulation, and social problem solving?

An example of perspective taking is: A student gets upset because his classmates excluded him from an activity. The teacher encourages perspective taking by explaining to the student that his classmates might not have known that he wanted to join in the game, then encouraging him to ask them if he could participate.

An example of empathizing is: When a student says the incorrect answer and her classmates laugh, the teacher promotes empathy by saying, "Don't laugh; remember that we all get answers wrong sometimes, and we are all here to learn."

An example of emotion regulation is: When a student is nervous presenting to the class, the teacher promotes emotion regulation by saying, "It's okay to feel nervous when we stand up in front of the class but remember each time you try it gives you more confidence. So let's try by taking a deep breath, and remember I am here to help you," thereby providing strategies and support for the student to deal with his/her emotions.

An example of social problem solving is: There is a problem between two students. The teacher encourages social problem solving by acknowledging the issue, recognizing students' emotions, and suggesting they brainstorm a solution together. The teacher may also intentionally model interpersonal skills. For example, the teacher may demonstrate how to stand up to a bully.

## What if I still have a question?

Read, read, read the manual and these FAQs. If your question remains unanswered, ask your trainer or email teach@worldbank.org. It is much better to address your question than to make an assumption and incorrectly code an observation segment.
www.worldbank.org/en/topic/education/brief/teach-secondary-helping-countries-track-and-improve-teaching-quality


[^0]:    ${ }^{\prime}$ Behaviors 0.2 and 0.3 are scored as N/A if the teacher is not teaching or providing a learning activity (i.e., 0.1 is scored $N / A$ ).

[^1]:    ${ }^{2}$ This behavior is scored as N/A if there are no observable emotional, material, or physical needs.

[^2]:    ${ }^{3}$ Bias and stererotypes related to gender and disability can manifest differently according to culture and context. It is essential that these considerations are taken into account when using Teach Secondary and that behavior examples which reflect the local context are used when coding the instrument.

[^3]:    ${ }^{4}$ A misbehavior occurs when a student causes a disruption in the classroom that either interferes with the flow of the lesson, distracts other students, or upsets the teacher.

[^4]:    ${ }^{5}$ Modeling can take place at any time in the lesson (including at the end). If the learning activity is procedural in nature, modeling will include a demonstration of the procedure for students to observe; however, if the activity focuses on developing a thinking skill, a complete model will include a think aloud. An action is considered modeling so long as the teacher demonstrates/enacts procedures or thinking processes related to the learning activity.

[^5]:    ${ }^{8}$ Prompts are pieces of information, such as guiding hints or questions, which are given by the teacher and encourage students to think through misunderstandings or identify successes.

[^6]:    ${ }^{9}$ These challenges may include making mistakes, scoring low on a test, or feeling frustrated when trying to understand a concept.
    ${ }^{10}$ Short-term goals are goals that students aim to achieve within a month or less, and long-term goals are goals that span a longer timeframe (e.g., over the school year, when they grow up).

[^7]:    ${ }^{11}$ Perspective taking: The ability to consider a situation from a different point of view.
    Empathizing: The ability to recognize and share another's emotions.
    Emotion regulation: The ability to effectively manage and respond to an emotional experience.
    Social problem solving: The process that an individual goes through to solve an interpersonal problem.
    This may involve applying aspects of perspective taking, empathizing, or emotion regulation to a social situation.

[^8]:    ${ }^{12}$ These items represent adaptations of the Washington Group Short Set questions. Questions have been modified to facilitate application within the context of the Teach Secondary observation protocol and are intended to be posed collectively about all students in the classroom, rather than individually. More detailed data concerning students with disabilities may be obtained through application of the Washington Group/UNICEF Child Functioning Module-Ages 5-17 years.

